

**AGENDA**  
**REGULAR BOARD MEETING OF THE**  
**SAN ELIJO JOINT POWERS AUTHORITY**  
**APRIL 16, 2024 AT 8:30 A.M.**  
**SAN ELIJO WATER CAMPUS – BOARD MEETING ROOM**  
**2695 MANCHESTER AVENUE**  
**CARDIFF BY THE SEA, CALIFORNIA**

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1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. ORAL COMMUNICATIONS/PUBLIC COMMENT PERIOD (NON-ACTION ITEM)
5. AWARDS AND RECOGNITION
  - 2024 Honor Award from American Council of Engineering Companies (ACEC) California
  - National Recognition Award from ACEC
6. \* **CONSENT CALENDAR**
7. \* [APPROVAL OF MINUTES FOR MARCH 19, 2024 MEETING](#)
8. \* [APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS – MARCH](#)
9. \* [WASTEWATER TREATMENT REPORT – FEBRUARY](#)
10. \* [RECYCLED WATER REPORT – FEBRUARY](#)
11. \* [REPORTABLE MEETINGS](#)
12. \* [SAN ELIJO JOINT POWERS AUTHORITY CONTRACT FOR PROCUREMENT OF CALCIUM NITRATE FOR FISCAL YEAR 2024-25](#)
13. \* [SAN ELIJO JOINT POWERS AUTHORITY CONTRACT FOR AS-NEEDED LABORATORY SERVICES FOR FISCAL YEAR 2024-25](#)
14. \* **ITEMS REMOVED FROM CONSENT CALENDAR**

*Items on the Consent Calendar are routine matters and there will be no discussion unless an item is removed from*

## **REGULAR AGENDA**

15. **[PRESENTATION OF SAN ELIJO JOINT POWERS AUTHORITY FISCAL YEAR 2024-25 RECOMMENDED BUDGET](#)**

1. Review the Fiscal Year 2024-25 Recommend Budget; and
2. Discuss and take action as appropriate.

Staff Reference: General Manager

16. **[SAN ELIJO OCEAN OUTFALL 2023 INSPECTION REPORT](#)**

1. Accept and file the San Elijo Ocean Outfall Year 2023 Inspection and Structural Integrity Assessment Report prepared by Marine Taxonomic Services, Inc and Carollo Engineers; and
2. Discuss and take action as appropriate.

Staff Reference: General Manager

17. **GENERAL MANAGER'S REPORT**

Informational report by the General Manager on items not requiring Board action.

18. **GENERAL COUNSEL'S REPORT**

Informational report by the General Counsel on items not requiring Board action.

19. **BOARD MEMBER COMMENTS**

This item is placed on the agenda to allow individual Board Members to briefly convey information to the Board or public, or to request staff to place a matter on a future agenda and/or report back on any matter. There is no discussion or action taken on comments by Board Members.

20. **CLOSED SESSION**

None.

21. **ADJOURNMENT**

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Tuesday, May 21, 2024 at 8:30 a.m.

NOTICE:

The San Elijo Joint Powers Authority's open and public meetings comply with the protections and prohibitions contained in Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C Section 12132), and the federal rules and regulations adopted in implementation thereof. Any person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in a public meeting of the SEJPA Board of Directors, may request such modification or accommodation from Michael T. Thornton, General Manager, (760) 753-6203 ext. 72.

The agenda package and materials related to an agenda item submitted after the packet's distribution to the Board are available for public review in the lobby of the SEJPA Administrative Office during normal business hours. Agendas and minutes are available at [www.sejpa.org](http://www.sejpa.org). The 2024 SEJPA Board meetings schedule is available at [SEJPA Board Meeting Dates](#).

AFFIDAVIT OF POSTING

I, Michael T. Thornton, Secretary of the San Elijo Joint Powers Authority, hereby certify that I posted, or have caused to be posted, a copy of the foregoing agenda on the SEJPA website at [www.sejpa.org](http://www.sejpa.org), and in the following locations:

San Elijo Water Campus (formerly known as San Elijo Water Reclamation Facility),  
2695 Manchester Avenue, Cardiff, California  
City of Encinitas, 505 South Vulcan Avenue, Encinitas, California  
City of Solana Beach, 635 South Highway 101, Solana Beach, California

The notice was posted at least 72 hours prior to the meeting, in accordance with Government Code Section 54954.2(a).

Date: April 11, 2024



Michael T. Thornton, P.E.  
Secretary / General Manager

SAN ELIJO JOINT POWERS AUTHORITY  
MINUTES OF THE BOARD MEETING  
HELD ON MARCH 19, 2024  
AT THE SAN ELIJO WATER CAMPUS

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Kellie Hinze, Chair

Kristi Becker, Vice Chair

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A meeting of the Board of Directors of San Elijo Joint Powers Authority (SEJPA) was held Tuesday, March 19, 2024, at 8:30 a.m., at the San Elijo Water Campus.

1. CALL TO ORDER

Chair Hinze called the meeting to order at 8:32 a.m.

2. ROLL CALL

*Directors Present:*

Kellie Hinze  
Kristi Becker  
David Zito

*Directors Absent:*

Allison Blackwell

*Others Present:*

General Manager  
Director of Operations  
Director of Infrastructure and Sustainability  
Interim Director of Finance  
Accounting Technician I

Michael Thornton  
Chris Trees  
Tom Falk  
Richard Duffey  
Maria Cruz

*SEJPA Counsel:*

Procopio

Merrick A. Wadsworth

*City of Solana Beach:*

Director of Engineering/Public Works

Mohammad "Mo" Sammak

*City of Encinitas:*

Senior Engineer

Dan Nutter

*San Dieguito Water District:*

Principal Engineer

Habib Hariri

3. PLEDGE OF ALLEGIANCE

Board Chair, Kellie Hinze, led the Pledge of Allegiance.

4. ORAL COMMUNICATION/PUBLIC COMMENT PERIOD

None.

5. AWARDS AND RECOGNITION

None.

6. CONSENT CALENDAR

Moved by Chair Hinze and seconded by Board Member Zito to approve the Consent Calendar.

- |                    |  |
|--------------------|--|
| Agenda Item No. 7  | Approval of Minutes for the February 20, 2024 Board Meeting  |
| Agenda Item No. 8  | Approval for Payment of Warrants and Monthly Investment Report – February  |
| Agenda Item No. 9  | Wastewater Treatment Report – January  |
| Agenda Item No. 10 | Recycled Water Report – January  |
| Agenda Item No. 11 | Reportable Meetings  |
| Agenda Item No. 12 | San Elijo Joint Powers Authority Contract for Procurement of Ferric Chloride and Sodium Hypochlorite for Fiscal Year 2024-25 |
| Agenda Item No. 13 | Agreement for Janitorial Maintenance Services  |

Motion carried with the following vote of approval:

AYES:	Hinze, Becker, Zito
NOES	None
ABSENT:	Blackwell
ABSTAIN:	None

15. CAPITAL PROGRAM UPDATE

Director of Infrastructure and Sustainability, Tom Falk, reviewed SEJPA's 3-year capital plan delivery schedule and cost summary. He also reviewed the status of ongoing projects, provided a 3-month lookahead for the upcoming quarter, and explained how staff are working to monitor and mitigate capital program risks.

No action required. This item was submitted for information only.

16. GENERAL MANAGER'S REPORT

General Manager Michael Thornton stated that he participated in a long-range planning session hosted by California Sanitation Risk Management Authority (CSRMA) in early March. General Manager Thornton shared a portion of a presentation provided by SEJPA's insurance provider, Alliant, reviewing interesting trends in the insurance industry.

16. GENERAL COUNSEL'S REPORT

None.

17. BOARD MEMBER COMMENTS

None.

18. CLOSED SESSION

None.

19. ADJOURNMENT

The meeting adjourned at 9:10 a.m. The next Board of Directors meeting is scheduled to be held on Tuesday, April 16, 2024 at 8:30 a.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "M. Thornton", written over a horizontal line.

Michael T. Thornton, P.E.  
General Manager

**SAN ELIJO JOINT POWERS AUTHORITY  
PAYMENT OF WARRANTS  
For the Month of March 2024**

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
43430	Sterling Infosystems, Inc	Preemployment Screening	New employee	\$ 170.20
43431	Abila	Licenses	Accounting software support and subscription	365.12
43432	Adam Kaye	Services - Professional	Public communications	500.00
43433	Akeso Occupation Health	Services - Medical	Covid - 19 test and new hire	831.00
43434	Albertsons Companies	Services - Medical	Flu vaccinations	225.00
43435	Allied Storage Containers	Equipment Rental/Lease	20' and 40' storage containers - 02/17/24 - 03/15/24	359.89
43436	Ardurra Group, Inc	Services - Engineering	Wanket tank refurbish support from 01/01/24 to 01/31/24	7,944.10
43437	Black & Veatch	Services - Engineering	Dewatering facilities upgrades through 12/01/23 - 02/02/24	24,867.50
43438	Boot World, Inc.	Uniforms - Boots	Safety boots - D. Kreinbring and M. Piper	428.60
43439	Brax Process and Pump Equip.	Capital Outlay	Replace filter feed pump	29,320.23
43440	Brenntag Pacific, Inc	Supplies - Chemicals	Citric acid	3,777.72
43441	California Water Technologies	Supplies - Chem - Ferric Chlo	Ferric chloride solution	11,445.46
43442	Consolidated Electrical Dist.	Repair Parts Expense	Surge protection device	2,588.80
43443	County of San Diego	Fees - Permits	Cardiff, Solana Beach, San Elijo Hills, Eden Gardens & Moonlight Beach P.	50.00
43444	CSMFO	Seminars/Education	Member - A. Chang conference	640.00
43445	Denali Water Solutions LLC	Services - Biosolids Hauling	Biosolids hauling and reuse - Oct and Dec	22,968.55
43446	Westbound Solar 2, LLC	Utilities - Solar Power	Solar - Jan	8,908.98
43447	EDCO Waste & Recycling Service	Utilities - Trash	Feb	485.95
43448	Environmental Sampling Supply,	Supplies - Lab	Various supplies	137.25
43449	Eurofins Calscience, LLC	Services - Laboratory	Testing water samples	1,378.00
43450	Excel Landscape, Inc.	Services - Landscape	Grounds maintenance service - Nov and Feb	8,764.00
43451	Winston Friedly	Direct Salaries and Wages	Employee reimbursement - health and wellness	120.00
43452	Grainger, Inc.	Repair Parts Expense	Boiler #1 motor	312.10
43453	Austin C Harp	Direct Salaries and Wages	Employee reimbursement - health and wellness	120.00
43454	Harrington Industrial Plastics	Repair Parts Expense	Drum filter parts	404.12
43455	Idexx Distribution, Inc.	Supplies - Lab	Enterococci	597.69
43456	Ironclad Env Solutions, Inc.	Equipment Rental/Lease	Digester cleanout equipment rental	2,369.66
43457	Lawson Products Inc.	Supplies - Shop & Field	Ceramic kit for draft tubes	365.49
43458	Leaf & Cole, LLP	Services - Accounting	Audit services	58,390.00
43459	Marine Taxonomic Services, LTD	Services - Contractors	Intensive WQ monitoring/plume tracking - Q1 Jan 2024	2,750.00
43460	McMaster-Carr Supply Co.	Repair Parts Expense	Various supplies	927.63
43461	MetLife - Group Benefits	Dental/Vision	Dental - Mar	3,144.23
43462	Mission Square	ICMA Retirement	ICMA - 401 a	6,232.11
43463	Mission Square - 304175	EE Deduction Benefits	ICMA - 457	10,111.36
43464	Motion Industries, Inc.	Repair Parts Expense	Primary part	4,791.84
43465	North County Transit District	Licenses	Annual license fee - 242.8-1215-PL-SEJP	1,268.13
43466	Napa Auto Parts	Vehicle Maintenance	Auto parts	153.48
43467	Nash Fabricators	Repair Parts Expense	Sand filter backwash stinger	1,389.00
43468	Noren Products, Inc	Repair Parts Expense	VFD AC unit	3,560.17
43469	Cosby Oil Company, Inc	Fuel	Fuel - Feb	1,193.46
43470	Olivenhain Municipal Water Dis	Services - Professional	NSDWRC Grant admin, Woodward and Currant grant admin and WINN NE	4,002.72
43471	OneSource Distributors, Inc.	Repair Parts Expense	Analog output card, conduit relays and product support	7,254.56
43472	Otis Elevator Company	Services - Maintenance	Elevator maintenance from 02/01/24 - 02/29/24	205.20
43473	ProBuild Company, LLC	Supplies - Shop & Field, Tools & Equip	Various supplies	1,017.16
43474	Radwell International, Inc.	Repair Parts Expense	PLC analog card repair	580.54
43475	RSF Security Systems	Services - Alarm	Cellular fire system monitoring	49.00
43476	San Dieguito Water District	Utilities - Water	Water	2,289.27
43477	Seacliff Mechanical Svc, LLC	Services - Maintenance	HVAC services	2,800.00
43478	Southwest Membrane Operation	Dues & Memberships	Membership - C. Trees	400.00
43479	Thatcher Company of California	Supplies - Chemicals	Aluminum sulfate	2,729.81
43480	Trussell Technologies, Inc	Services - Professional, Engineering	Design of bio treatment improvements and T1 - Operational support	40,305.75
43481	Unifirst Corporation	Supplies - Safety, Service - Uniforms	Uniform service and gloves	868.36
43482	UPS	Postage/Shipping	Shipping	89.80
43483	Underground Service Alert/SC	Services - Alarm	Dig alert and safe excavation board	129.64
43484	USA Bluebook	Supplies - Lab, Repair Parts Expense	Parafilm and transmitter	1,079.87
43485	Verizon Wireless	Utilities - Telephone	01/11/24 - 02/10/24	625.71
43486	Verizon Wireless	Utilities - Telephone	Cellphone service and equipment - 01/08/24 - 02/07/24	1,414.07
43487	Volt Management Corp	Services - Temp	Internship program and temp service	3,903.82
43488	WageWorks	Payroll Processing Fees	Admin fee - Feb	176.00
43489	The Water Research Foundation	Dues & Memberships	WRFMBR - Utility membership	2,287.00
43491	Liquid Environmental Solution	Services - Grease & Scum	Emergency septic disposal	2,200.00
43490	Collicutt Energy Services Inc	Services - Maintenance	Annual generator service	12,358.71
43492	Sterling Infosystems, Inc	Preemployment Screening	New hire	151.35
43493	Aflac	EE Deduction Benefits	Aflac - Mar	809.68
43494	Ahrens Mechanical	Services - Contractors	Moonlight Beach P.S. modifications - 02/01/24 - 02/29/24	27,059.89
43495	Allied Storage Containers	Equipment Rental/Lease	20' and 40' storage containers - 03/16/24 - 04/12/24	359.89
43496	AT&T	Utilities - Internet	01/28/24 - 02/27/24	2,679.50
43497	AT&T	Utilities - Telephone	Phone service - 01/13/24 - 03/12/24	1,447.39
43498	American Water Works Assoc.	Dues & Memberships	Membership - M. Piper	321.00
43499	Barrett Engineered Pumps	Repair Parts Expense	Submersible well pumps	3,424.30
43500	Boot World, Inc.	Uniforms - Boots	Safety boots - A. Schlenk, E. Fox, N. Holtz, D. McGinness	852.29
43501	Brenntag Pacific, Inc	Supplies - Chemicals, Chem - Odor	Sodium tripolyphosphate and Sodium hydroxide	4,731.02
43502	Corodata	Rent	Record storage - Feb	119.07
43503	County of San Diego	Fees - Permits	APCD2002-SITE-04513 - Eden Gardens generator permit	620.00
43504	County of San Diego	Fees - Permits	APCD2002-SITE-04514 - San Elijo Hills generator permit	620.00
43505	County of San Diego	Fees - Permits	APCD2002-SITE-04515 - Moonlight P.S. and generator permit	1,429.00
43506	County of San Diego	Fees - Permits	APCD2002-SITE-04516 - Solana Beach P.S. and generator permit	1,429.00
43507	CS-Amsco	Repair Parts Expense	MOV11 Actuator	7,344.19
43508	CA Sanitation Risk Mgmt Auth.	Workers Comp. Insurance	WC Audit - 07/01/22 - 07/01/23	5,004.00
43509	CWEA Membership	Dues & Memberships	Membership renewal - S. Best	221.00
43510	D&H Water Systems	Services - Maintenance	Chlorine analyzer maintenance	1,321.20

**SAN ELIJO JOINT POWERS AUTHORITY  
PAYMENT OF WARRANTS  
For the Month of March 2024**

<b>Warrant #</b>	<b>Vendor Name</b>	<b>G/L Account</b>	<b>Warrant Description</b>	<b>Amount</b>
43511	Dawn M Kubik	Services - Professional	Notary service - Easement deed	180.00
43512	Dept. of Industrial Relations	Fees - Permits	Inspection fees - 187178	225.00
43513	Westbound Solar 2, LLC	Utilities - Solar Power	Solar - Feb	9,100.29
43514	E & M Electric & Machinery, In	Licenses	Software support renewal	885.00
43515	City of Encinitas	Service - IT Support	Admin network - March	6,653.00
43516	City of Encinitas	Licenses	Zoom and Duo - Mar 2024	69.98
43517	Enthalpy Analytical, LLC	Services - Laboratory	Laboratory toxicity testing services for Jan 2024	1,050.00
43518	Environmental Express, Inc.	Supplies - Lab	Various lab supplies	1,201.80
43519	ERA	Supplies - Lab	Various lab supplies	281.05
43520	Eurofins Calscience, LLC	Services - Laboratory	Testing water samples	3,466.50
43521	Evoqua Water Technologies	Supplies - Chem - Odor	Bioxide	9,118.89
43522	GHE Repair Service, Inc.	Services - Maintenance	Preventative maintenance for lab	570.00
43523	Grainger, Inc.	Repair Parts Expense	Various supplies	695.04
43524	Hardy Diagnostics	Supplies - Lab	Various lab supplies	1,748.69
43525	Harrington Industrial Plastics	Repair Parts Expense	Micro - filter repair and odor scrubber #1 east pump	8,131.30
43526	Ironclad Env Solutions, Inc.	Equipment Rental/Lease	Digester cleanout equipment rental	1,085.66
43527	Casey Larsen	Supplies - Office	Employee reimbursement - USB flash drive	21.53
43528	Leaf & Cole, LLP	Services - Accounting	Audit services	578.00
43529	Liquid Environmental Solution	Services - Grease & Scum	Pumping service - 03/08/24	337.00
43530	McMaster-Carr Supply Co.	Repair Parts Expense	Various supplies	2,863.28
43531	MISCOWATER	Repair Parts Expense	Chemical pump tubing	825.47
43532	Mission Square	ICMA Retirement	ICMA - 401a	6,175.39
43533	Mission Square - 304175	EE Deduction Benefits	ICMA - 457	9,605.18
43534	Motion Industries, Inc.	Repair Parts Expense	Well pump parking lot	997.92
43535	Cosby Oil Company, Inc	Fuel	Fuel - Mar	542.19
43536	Olin Corp - Chlor Alkali	Supplies - Chem - Odor	Procurement of sodium hypochlorite	11,272.48
43537	Olivenhain Municipal Water Dis	Rent, Service - Prof. & Maintenance	Pipeline rental, NSDWRC grant admin, Woodward & Curran, Weigand Zon	4,242.70
43538	OneSource Distributors, Inc.	Repair Parts Expense	Various parts	4,624.54
43539	Pacific Pipeline Supply	Shop Tools and Equip.	Valve keys	440.93
43540	Polydyne Inc.	Supplies - Chem - Polymer	Clarifloc -WE - 007	16,356.45
43541	Procopio Cory Hargreaves	Services - Legal	General, Labor and employment	5,148.00
43542	Quality Microscope Service	Services - Maintenance	Service lab microscopes	150.00
43543	Rincon Consultants Inc	Services - Professional	As needed grant support and environmental services	5,171.00
43544	Rohan & Sons, Inc	Repair Parts Expense	Installation of heat pump condensing unit	8,689.00
43545	RSF Security Systems	Services - Alarm	Security - 03/01/24 - 05/31/24	1,776.00
43546	Rusty Wallis, Inc.	Services - Maintenance	Water softener , tank service and salt bags	363.80
43547	Santa Fe Irrigation District	Utilities - Water	Water	475.85
43548	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline reimbursement	1,086.78
43549	Sartorius Corporation	Repair Parts Expense	Water purification dispensing system	2,183.94
43550	San Dieguito Water District	Utilities - Water	Water	221.42
43551	Southland Manufacturing, Inc.	Supplies - Shop & Field	Stormwater erosion supplies	577.22
43552	SS Mechanical	Services - Maintenance	Installation of wear strip weld washer	3,500.00
43553	SWRCB	Dues & Memberships	Lead Operator certificate renewal - S. Best	150.00
43554	Terminix Processing Center	Services - Maintenance	Pest control service	549.88
43555	Trussell Technologies, Inc	Services - Professional	T1 - Operational support from 08/01/23 - 02/29/24	3,556.00
43556	Unifirst Corporation	Services - Uniforms, Supplies - Safety	Uniform service and gloves	553.98
43557	USA Bluebook	Repair Parts Expense, Supplie - Lab	Various lab supplies	4,549.91
43558	Valley CM, Inc.	Services - Contractors	Management and inspection service - 02/01/24 - 02/29/24	7,695.25
43559	VELLAB	Services - Maintenance	Preventative maintenance for lab equipment	792.50
43560	Verizon Wireless	Utilities - Telephone	Cell phone service - 02/08/24 - 03/07/24	1,003.24
43561	Volt Management Corp	Services - Temp	Internship program and temp service	2,664.06
43562	VWR International, Inc.	Supplies - Lab, Shop Tools and Equip.	Conductivity standards and thermometers	708.82
43563	World Water Works, Inc.	Capital Outlay	DAFT pump replacement	20,080.81
On-line 882	Michelle Pizer	Training	Executive coaching	2,250.00
On-line 883	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 02/03/24 - 02/16/24	21,275.83
On-line 884	ReadyRefresh	Supplies - Lab	Kitchen and lab supplies	1,031.95
On-line 885	WM Corporate Services, Inc.	Services - Sediment Disposal	10 yard roll off disposal	5,522.01
On-line 886	SWRCB	Fees - Permits	Contract operator registration for LWWD CPO program	600.00
On-line 887	BankCard Center	Capital Outlay	Various supplies	9,472.79
On-line 888	Home Depot Credit Services	Supplies - Safety	Various supplies	1,600.82
On-line 889	Public Employees- Retirement	EE Deduction Benefits	Retirement - 02/17/24 -03/01/24	21,293.15
On-line 890	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 03/02/24 - 03/15/24	21,112.69
On-line 891	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 02/07/24 - 03/07/24	66,062.86
On-line 892	Sun Life Financial	Life Insurance/Disability	Life and disability - Apr	2,563.98
On-line 893	WM Corporate Services, Inc.	Services - Sediment Disposal	Roll off bins - 02/09/24 - 02/29/24	195.00
	San Elijo Payroll Account	Payroll	Payroll - 03/08/2024	108,747.06
	San Elijo Payroll Account	Payroll	Payroll - 03/20/2024	111,367.68
				<b>\$ 919,156.12</b>



**SAN ELIJO JOINT POWERS AUTHORITY  
PAYMENT OF WARRANTS SUMMARY**

**For the Month of March 2024  
As of March 31, 2024**

PAYMENT OF WARRANTS \$ 919,156.12

I hereby certify that the demands listed and covered by warrants are correct and just to the best of my knowledge, and that the money is available in the proper funds to pay these demands. The cash flows of SEJPA, including the Member Agency commitment in their operating budgets to support the operations of SEJPA, are expected to be adequate to meet SEJPA's obligations over the next six months. I also certify that SEJPA's investment portfolio complies with the SEJPA's investment policy.



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C. Yani Barragan  
Accounting Technician III

**SAN ELIJO JOINT POWERS AUTHORITY**  
**STATEMENT OF FUNDS AVAILABLE FOR PAYMENT OF WARRANTS**  
**AND INVESTMENT INFORMATION**

As of March 31, 2024

<b>FUNDS ON DEPOSIT WITH</b>	<b>AMOUNT</b>
<b>LOCAL AGENCY INVESTMENT FUND</b> <i>(MARCH 2024 YIELD 4.232%)</i>	\$ 13,804,218.90
<b>CALIFORNIA BANK AND TRUST</b> <i>(MARCH 2024 YIELD 0.01%)</i>	531,522.69
<b>U.S. Bank</b> <i>(MARCH 2024 YIELD 4.40%)</i>	15,468,512.77
<b>PARS</b> <i>(FEBRUARY 2024 YIELD 0.04%)</i>	971,250.80
<b>TOTAL RESOURCES</b>	<u>\$ 30,775,505.16</u>

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SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: WASTEWATER TREATMENT REPORT - FEBRUARY

RECOMMENDATION

No action required. This memorandum is submitted for information only.

DISCUSSION

Monthly Treatment Plant Performance and Evaluation

Wastewater treatment for the San Elijo Joint Powers Authority (SEJPA) met all National Pollutant Discharge Elimination System (NPDES) ocean effluent limitation requirements for the month of February 2024. The primary indicators of treatment performance include the removal of Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD). The SEJPA is required to remove a minimum of 85 percent of the TSS and CBOD from the wastewater. Treatment levels for **TSS** and **CBOD** were **96.9** and **97.9** percent removal, respectively, during the month of February.

Exceptional Water Treatment

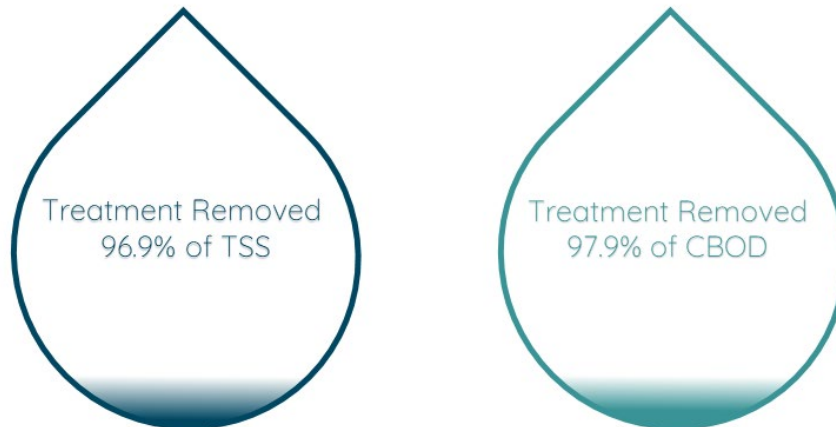
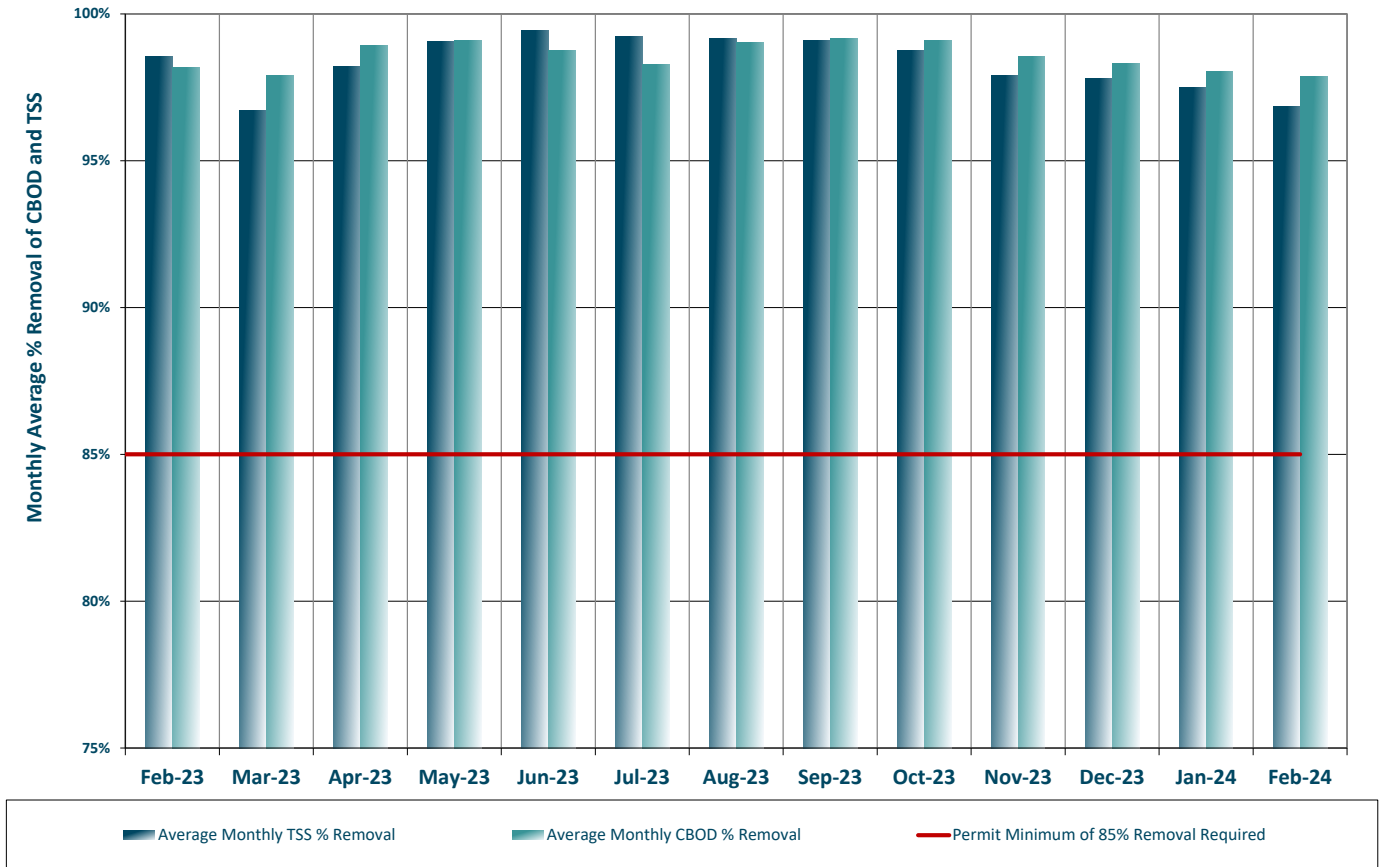


Figure 1 (below) shows historic treatment performance trends for the removal of TSS and CBOD over the last 13 months compared to the permit minimum removal requirement of 85%.

Figure 1: Wastewater Treatment Performance of the SEJPA % Removal of Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD)



Figures 2 and 3 (below) show historic influent vs effluent TSS and CBOD concentration fluctuations in the strength of the wastewater being received and discharged by the SEJPA.

FIGURE 2: TREATED EFFLUENT FLOWS REMOVAL OF TSS

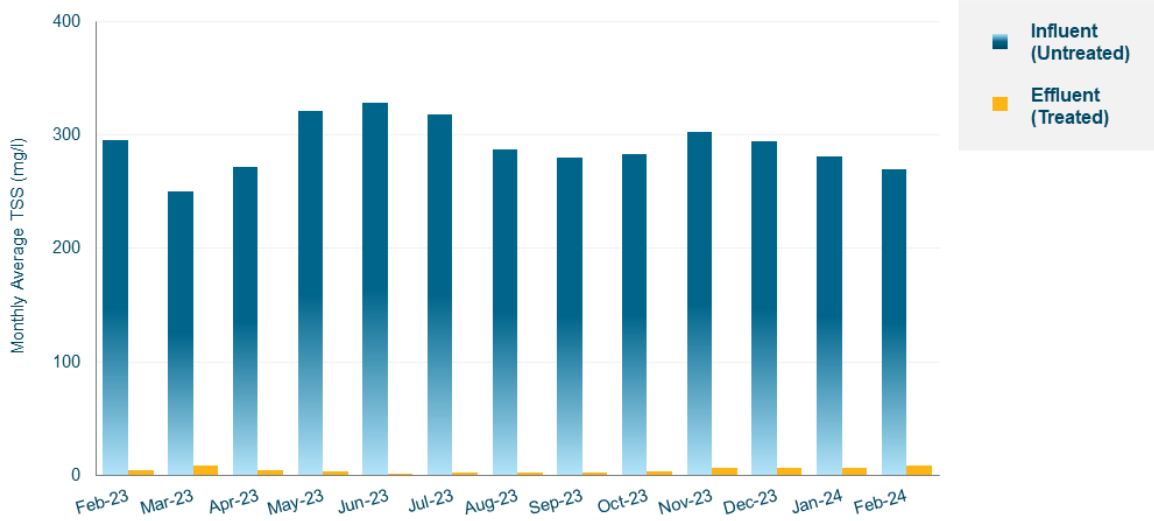
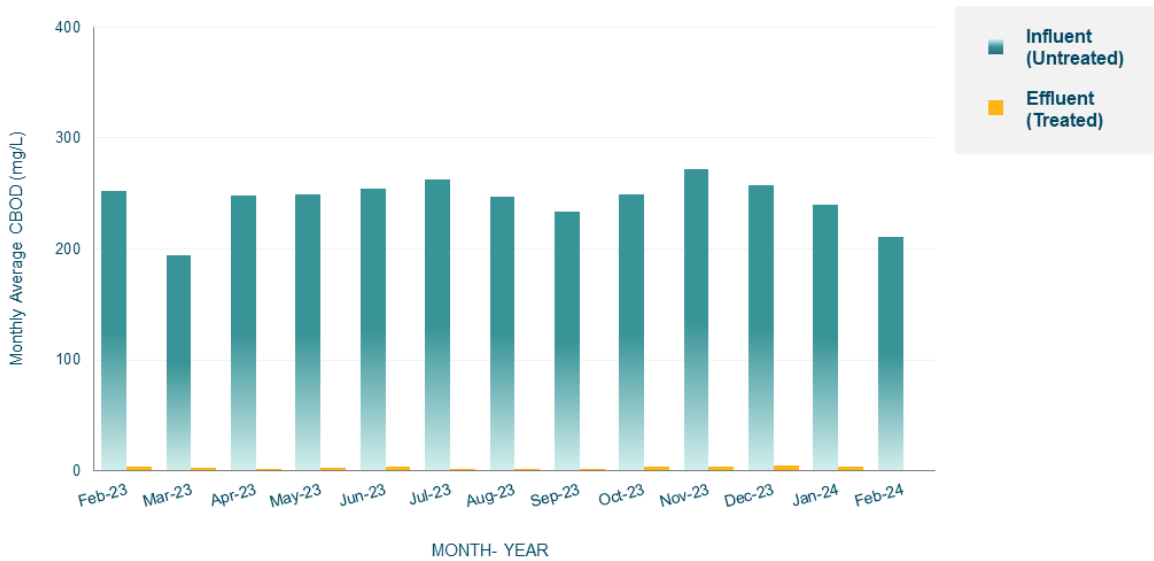


FIGURE 3: TREATED EFFLUENT FLOWS REMOVAL OF CBOD



## Member Agency Flows

Table 1 (below) presents the influent and effluent flows for the month of February. Average daily influent flows were recorded for each contributing agency. In February, about 8% of the incoming flow was repurposed as recycled water with the remaining flow discharged to the ocean.

TABLE 1 - INFLUENT AND EFFLUENT FLOWS IN FEBRUARY

FEBRUARY			
	Influent (mad)	Recycled Water (mad)	Effluent (mad)*
Cardiff Sanitaru Division	1.788	0.15	1.638
Citu of Solana Beach	1.099	0.092	1.007
Rancho Santa Fe SID	0.256	0.022	0.234
Citu of Del Mar	0.422	0.035	0.387
Total San Elijo Water Campus Flow	3.565	0.299	3.266

\* Effluent is calculated by subtracting the recycled water production from the influent wastewater.

Table 2 (below) presents the historical average and unit influent rates per month for each contributing agency during the past 3 years. It also presents the number of connected Equivalent Dwelling Units (EDUs) for each agency during this same time.

**TABLE 2 - SAN ELIJO WATER CAMPUS MONTHLY REPORT - FLOWS AND EDUS**

MONTH	AVERAGE DAILY INFLUENT FLOW RATE (MGD)					CONNECTED EDUs					AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDU/DAY)				
	CSD	RSF	SB	DM	TOTAL PLANT	CSD	RSF	SB	DM	TOTAL EDUS	CSD	RSF	SB	DM	TOTAL PLANT
Jan-21	1.238	0.150	0.909	0.323	2.620	8,543	579	8,110	2,616	19,848	145	259	112	129	132
Feb-21	1.224	0.151	0.926	0.306	2.607	8,548	579	8,110	2,616	19,853	143	261	114	121	131
Mar-21	1.291	0.160	0.968	0.332	2.751	8,548	579	8,110	2,616	19,853	151	277	119	131	139
Apr-21	1.232	0.160	0.925	0.320	2.637	8,552	579	8,110	2,616	19,857	144	277	114	129	133
May-21	1.189	0.157	0.932	0.323	2.601	8,552	579	8,110	2,616	19,857	139	271	115	130	131
Jun-21	1.218	0.148	0.938	0.358	2.662	8,554	579	8,110	2,616	19,859	142	256	116	145	134
Jul-21	1.183	0.144	0.972	0.435	2.734	8,554	579	8,124	2,616	19,873	138	249	120	178	138
Aug-21	1.178	0.150	0.966	0.480	2.774	8,556	579	8,124	2,616	19,875	138	259	119	196	140
Sep-21	1.153	0.129	0.948	0.353	2.583	8,557	579	8,124	2,616	19,876	135	223	117	144	130
Oct-21	1.225	0.126	0.885	0.329	2.565	8,557	579	8,124	2,616	19,876	143	218	109	139	129
Nov-21	1.156	0.131	0.911	0.329	2.527	8,557	581	8,124	2,616	19,878	135	226	112	135	127
Dec-21	1.264	0.145	0.913	0.310	2.632	8,557	581	8,124	2,616	19,878	148	250	112	127	132
Jan-22	1.174	0.140	0.906	0.357	2.577	8,557	581	8,124	2,616	19,878	137	241	112	145	130
Feb-22	1.113	0.158	0.929	0.300	2.500	8,557	581	8,124	2,616	19,878	130	272	114	120	126
Mar-22	1.176	0.142	0.946	0.307	2.571	8,557	581	8,124	2,616	19,878	137	245	116	123	129
Apr-22	1.134	0.140	0.875	0.315	2.464	8,557	582	8,124	2,616	19,879	133	241	108	129	124
May-22	1.146	0.140	0.877	0.301	2.464	8,557	582	8,124	2,616	19,879	134	241	108	123	124
Jun-22	1.133	0.138	0.921	0.452	2.644	8,557	583	8,124	2,616	19,880	132	237	113	184	133
Jul-22	1.124	0.129	0.948	0.438	2.639	8,557	583	8,142	2,616	19,898	131	221	116	179	133
Aug-22	1.163	0.133	0.929	0.448	2.673	8,557	583	8,142	2,616	19,898	136	228	114	185	134
Sep-22	1.139	0.125	0.904	0.381	2.549	8,557	584	8,142	2,616	19,899	133	214	111	158	128
Oct-22	1.083	0.128	0.890	0.295	2.396	8,557	584	8,142	2,616	19,899	127	219	109	122	120
Nov-22	1.205	0.124	0.879	0.336	2.544	8,557	585	8,142	2,616	19,900	141	212	108	138	128
Dec-22	1.186	0.133	0.906	0.374	2.599	8,557	585	8,142	2,616	19,900	139	228	111	151	131
Jan-23	1.630	0.200	0.979	0.379	3.188	8,557	585	8,142	2,616	19,900	190	342	120	153	160
Feb-23	1.323	0.167	0.930	0.371	2.791	8,557	585	8,142	2,616	19,900	155	286	114	149	140
Mar-23	1.892	0.255	1.044	0.392	3.583	8,557	585	8,142	2,616	19,900	221	436	128	154	180
Apr-23	1.244	0.187	0.915	0.303	2.649	8,557	586	8,142	2,616	19,901	145	319	112	123	133
May-23	1.184	0.167	0.879	0.295	2.525	8,557	586	8,142	2,616	19,901	138	285	108	120	127
Jun-23	1.185	0.144	0.891	0.413	2.633	8,557	586	8,142	2,616	19,901	136	282	109	171	132
Jul-23	1.160	0.146	0.949	0.446	2.701	8,557	586	8,166	2,616	19,925	136	249	116	182	136
Aug-23	1.242	0.177	0.954	0.494	2.867	8,559	586	8,166	2,622	19,933	145	302	117	200	144
Sep-23	1.161	0.161	0.885	0.371	2.578	8,559	586	8,166	2,622	19,933	136	275	108	152	129
Oct-23	1.125	0.163	0.870	0.308	2.466	8,559	587	8,166	2,622	19,934	131	278	107	125	124
Nov-23	1.246	0.186	0.961	0.409	2.802	8,559	588	8,166	2,622	19,935	146	317	118	149	141
Dec-23	1.313	0.173	1.011	0.377	2.874	8,559	588	8,166	2,622	19,935	153	294	124	133	144
Jan-24	1.416	0.190	1.055	0.380	3.041	8,569	588	8,166	2,622	19,945	165	323	129	134	152
Feb-24	1.788	0.256	1.099	0.422	3.565	8,569	588	8,166	2,622	19,945	209	436	135	151	179

CSD: Cardiff Sanitary Division

RSF: Ranch Santa Fe Community Service District

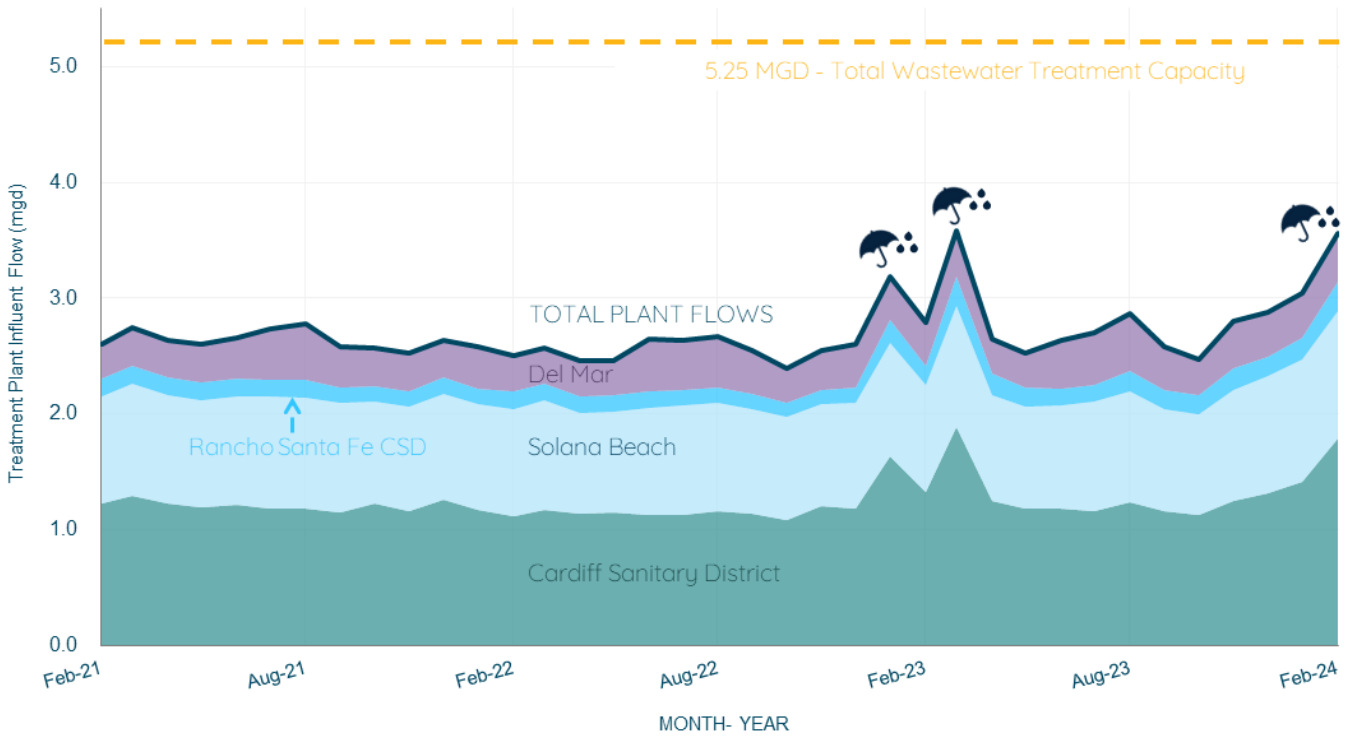
SB: Solana Beach

DM: City of Del Mar

EDU: Equivalent Dwelling Unit

Figure 4 (below) presents the 3-year historical average daily flows per month for each contributing agency. This is to provide a historical overview of the average flow treated for each agency. Also shown in Figure 4 is the total wastewater treatment capacity of the water campus, 5.25 mgd, of which the Cities of Encinitas and Solana Beach have the right to 2.2 mgd, Rancho Santa Fe Community Service District leases 0.25 mgd, and the City of Del Mar leases 0.60 mgd.

FIGURE 4: SEJPA AVERAGE DAILY FLOWS OVER THE PAST 3 YEARS





City of Escondido Flows

The average and peak flow rate for the month of February 2024 from the City of Escondido's Hale Avenue Resource Recovery Facility, which discharges through the San Elijo Ocean Outfall, is reported below in Table 3.

TABLE 3 - CITY OF ESCONDIDO FLOWS

	Flow (mgd)
Escondido (Average flow rate)	13.8
Escondido (Peak flow rate)	18.2

Connected Equivalent Dwelling Units

The Cities of Solana Beach and Del Mar updated the number of connected EDUs that are reported to the SEJPA in August 2023. The City of Encinitas updated their connected EDU report in January 2024. The Rancho Santa Fe CSD update their connected EDUs report every month. The number of EDUs connected for each of the Member Agencies and lease agencies is reported in Table 4 below.

TABLE 4 - CONNECTED EDUs BY AGENCY

	Connected (EDU)
Cardiff Sanitary Division	8,569
Rancho Santa Fe SID	588
City of Solana Beach	7,829
San Diego (to Solana Beach)	337
City of Del Mar	2,622
Total EDUs to System	19,945

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

\*

AGENDA ITEM NO. 10

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: RECYCLED WATER REPORT - FEBRUARY

RECOMMENDATION

No action required. This memorandum is submitted for information only.

DISCUSSION

*Recycled Water Production*

For the month of February 2024, recycled water demand was 14.5 acre-feet (AF), which was met using no supplemental water. February demand was 76.4% below budget expectations of 61 AF due to higher-than-normal rainfall.

For the first eight months of FY 2023-24, total recycled water production was 978 AF, which is below budget by 10.4%.

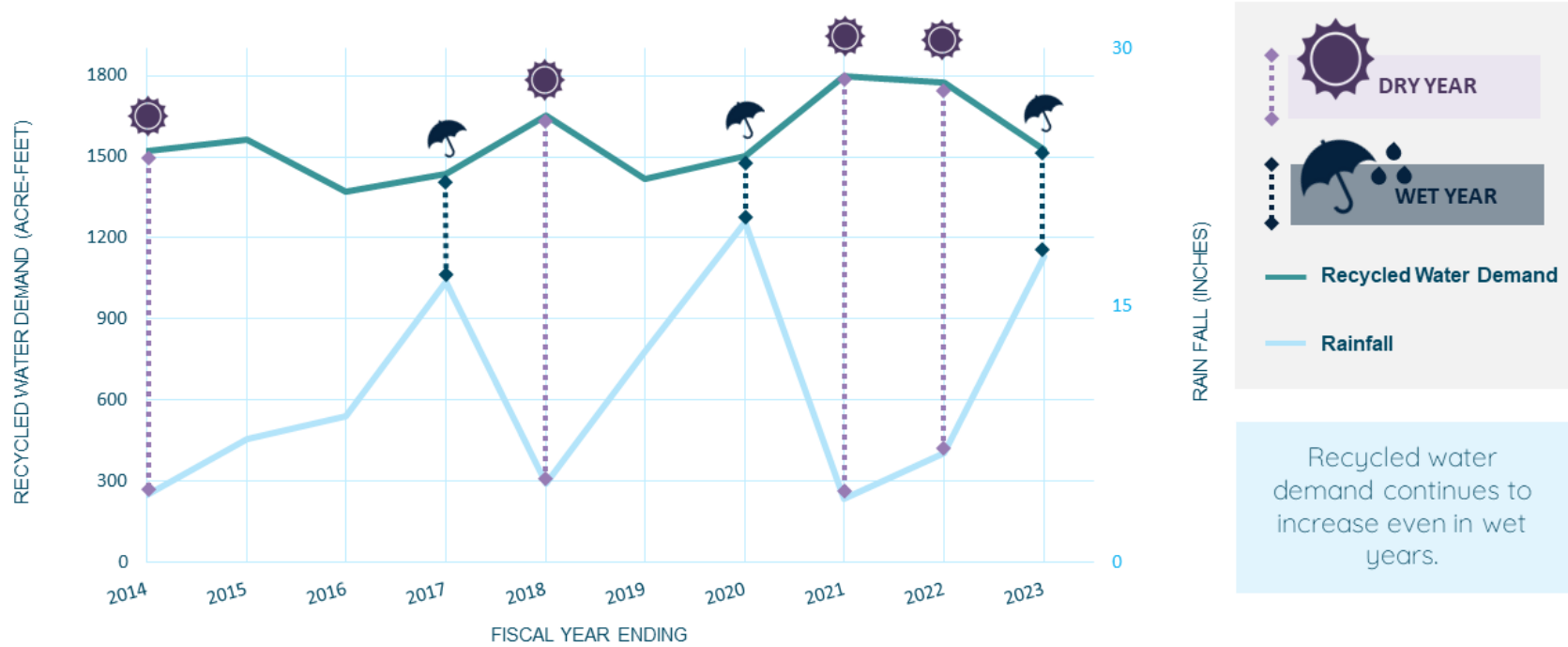
Figure 1 (attached) provides a graphical view of annual recycled water demand spanning the last 10 fiscal years, with the overlay of annual rainfall. Since the recycled water program primarily serves outdoor irrigation, annual demand is reduced during wet periods and increases during times of drought. Figure 2 (attached) shows the monthly recycled water demand for each February for the last ten years to provide a year-over-year comparison. Figure 3 (attached) compares budget versus actual recycled water sales for FY 2023-24.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

FIGURE 1: RECYCLED WATER DEMAND AND RAINFALL COMPARISON



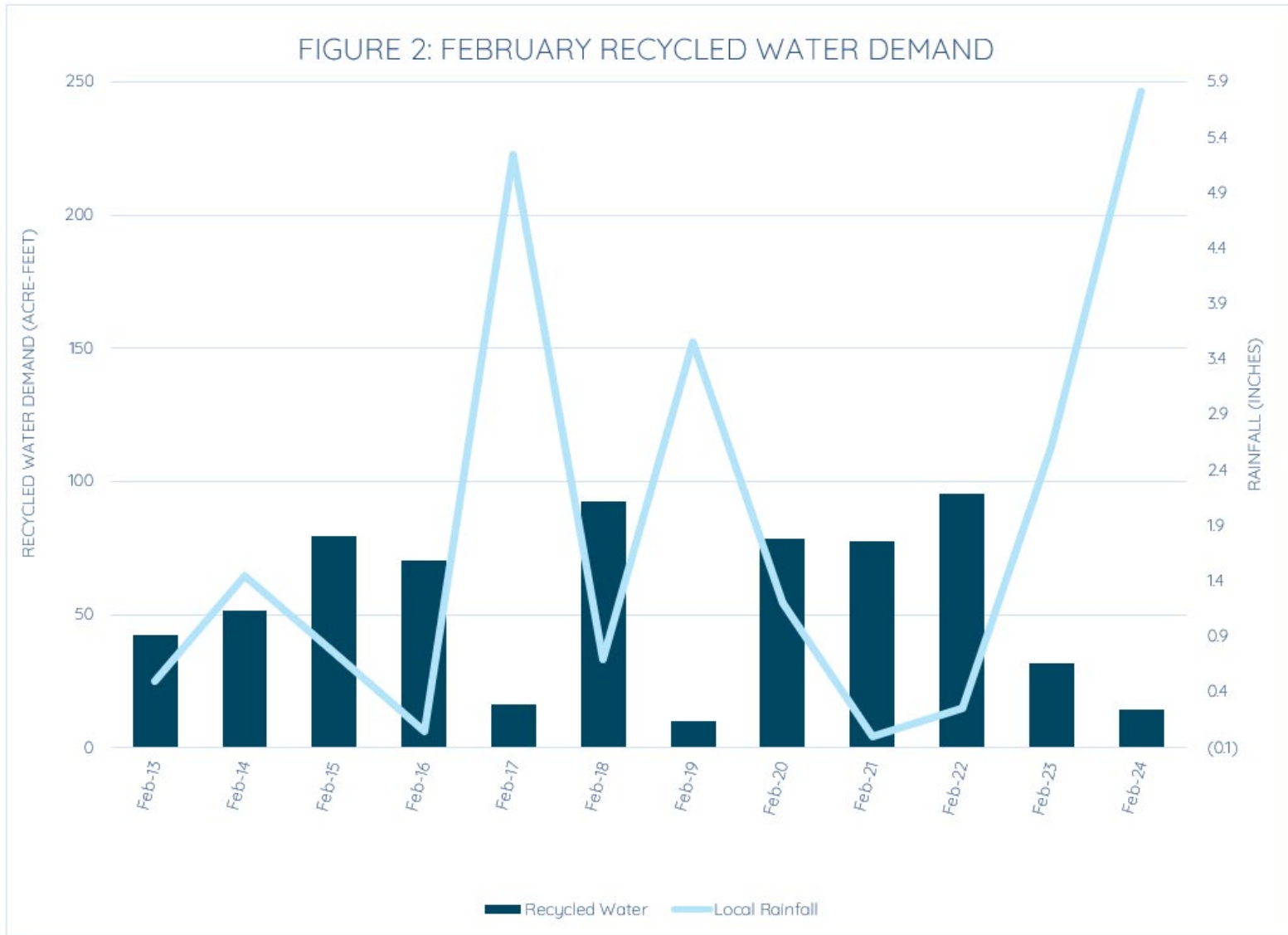
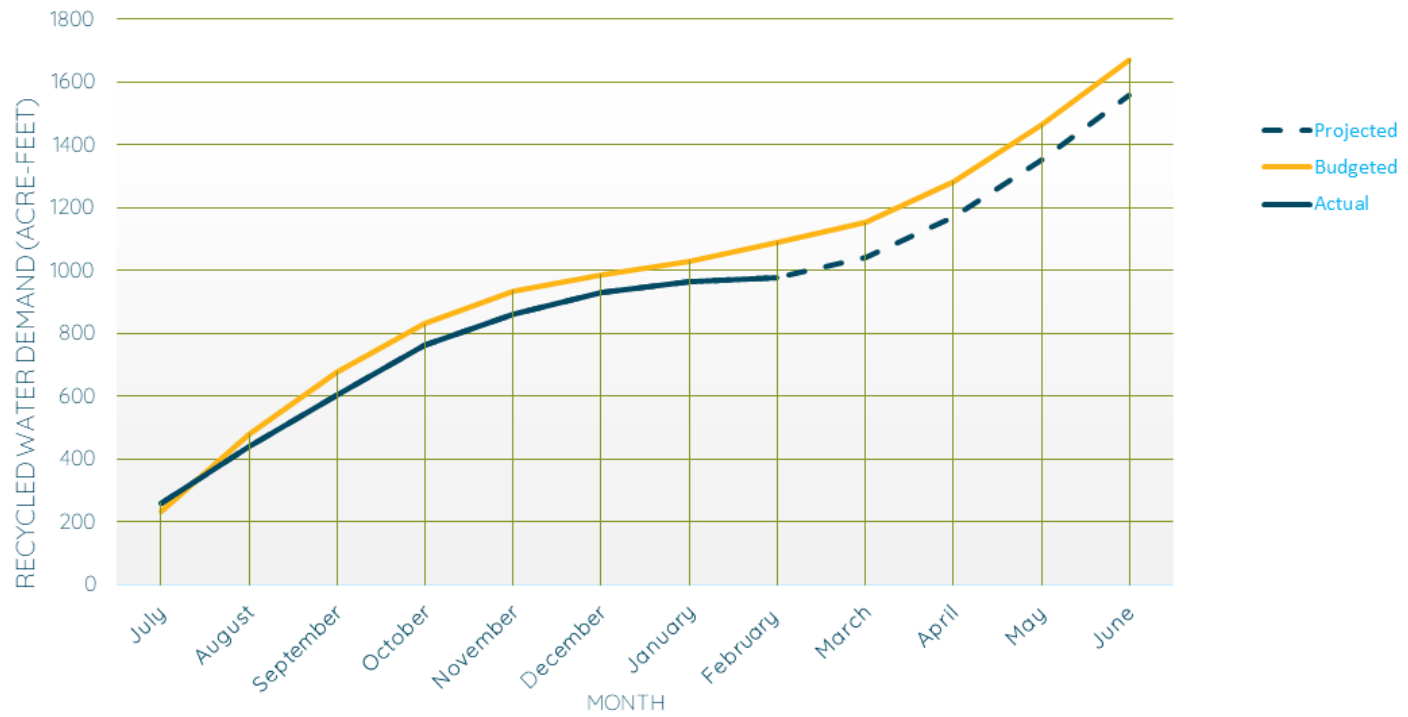


FIGURE 3: FY2023/24 CUMULATIVE DEMAND VS BUDGET



\*

AGENDA ITEM NO. 11

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: REPORTABLE MEETINGS

RECOMMENDATION

No action required. This memorandum is submitted for information only.

BACKGROUND

The General Manager or his designee may meet monthly with one or more Board Members in preparation for the Board Meeting.

DISCUSSION

The following meetings have taken place since the previous Board Meeting:

1. Meeting to review Board Meeting Agenda with Board Chair Hinze on March 18, 2024.

FINANCIAL IMPACT

Per the SEJPA Restatement Agreement, SEJPA offers the Board Member \$160 for each reportable meeting, which the Board Member may choose to accept or reject. These meetings are accounted for in our annual budget.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO JOINT POWERS AUTHORITY CONTRACT FOR PROCUREMENT  
OF LIQUID CALCIUM NITRATE FOR FISCAL YEAR 2024-25

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to amend the agreement with Evoqua Water Technologies for the procurement of liquid calcium nitrate for an amount not-to-exceed \$118,050 in FY 2024-25; and
2. Discuss and take action as appropriate.

BACKGROUND

Each year the San Elijo Joint Powers Authority (SEJPA) solicits bids for chemicals used in the treatment of wastewater and the production of recycled water in accordance with the procurement policy. Certain chemicals may have contract amounts above the General Manager’s signing authority of \$50,000 and require Board approval.

DISCUSSION

For fiscal year 2024-25, SEJPA will continue to use calcium nitrate (Bioxide) that requires Board purchasing approval. SEJPA adds liquid calcium nitrate to the collection system to interrupt the biological process that leads to septicity. Adding calcium nitrate to the collection system reduces odors and corrosion within the collection system, pump stations, and the treatment facility.

In March 2022, staff advertised and publicly bid via Planet Bids, the purchase of calcium nitrate as a turn-key system, including double-walled chemical storage tanks and dosing equipment. Evoqua Water Technologies, LLC (Evoqua) is the current provider of liquid calcium nitrate to SEJPA, and their service to date has met expectations. The initial contract term was for one year, with the option of two additional one-year terms. Evoqua has requested a price adjustment for the second of two additional one-year terms beginning July 1, 2024 to \$4.18 per gallon, a 3.8%

increase. This increase is based on the local CPI-U Index and is anticipated due to inflation and higher overall chemical prices in the marketplace.

### FISCAL IMPACT

The FY 2024-25 Recommended Budget, which is currently in development, will include \$118,050 for liquid calcium nitrate purchases.

### RECOMMENDATION

It is therefore recommended that the Board of Directors:

3. Authorize the General Manager to amend the agreement with Evoqua Water Technologies for the procurement of liquid calcium nitrate for an amount not-to-exceed \$118,050 in FY 2024-25; and
4. Discuss and take action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

Attachment 1: Amendment 2 – Evoqua Water Technologies, Renewal Letter





March 25, 2024

Chris Trees
Director of Operations
San Elijo JPA
2695 Manchester Avenue
Cardiff By the Sea, CA 92007-7077
Tel: (760) 753-6203 x 70
Email: treesc@sejpa.org

RE: 2024 2025 BIOXIDE® FSOC ODOR CONTROL PRICING – OPTION YEAR TWO – AGREEMENT # 2023-001SC SAN ELIJO, CA JPA Evoqua Quote No. Q240325DT1

Dear Chris:

Evoqua Water Technologies LLC thanks you for your business and we specifically appreciate your ongoing use of Bioxide®.

However, due to inflationary conditions in the market place, a price increase is necessary. Based on the local CPI-U Index, we would like to request a 3.8% per gallon price increase for the second option year of the contract. If accepted, the new price for Bioxide will be \$4.18 per gallon for minimum Bioxide load sizes of 1600 gallons including the use of the dosing equipment and tanks. This price will be effective starting July 1, 2024, through June 30, 2025.

Consumer Price Index for All Urban Consumers (CPI-U)

Series Id: CUURS49ESA0,CUUSS49ESA0
Not Seasonally Adjusted
Series Title: All items in San Diego-Carlsbad, CA, all urban consumers, not seasonally adjusted
Area: San Diego-Carlsbad, CA
Item: All items
Base Period: 1982-84=100

Download: xlsx

Table with 16 columns: Year, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec, Annual, HALF1, HALF2. Rows for 2023 and 2024.

A license to use Bioxide® products is included with the product sale. Patents that cover aspects of the use of Bioxide products include, but are not necessarily limited to, United States Patent Nos. 5,500,368, 6,309,597, 7,087,172 and 7,553,420 B2. Bioxide, Bioxide-AQ, Bioxide AE, AQUIT and Full-Service Odor Control are trademarks of Evoqua Water Technologies LLC.

The current contract Terms and Conditions are considered part of this proposal and shall prevail. The above prices do not include any applicable taxes.

**PLEASE NOTE:** Effective April 2022, you may be assessed a 3% fee if paying via Credit Card. Find more info on our website here > <https://www.evoqua.com/en/about-us/terms-conditions-sale-products-services/credit-card-fee-faqs>. Ask us how to avoid paying fees by migrating to ACH CTX payment type.

Evoqua appreciates your business and support and looks forward to continuing to provide you the quality products, services, and lowest cost solutions. If you have any questions, comments, or concerns, please give me a call at (909) 837-9908 or via email at [daniel.trybulski@xylem.com](mailto:daniel.trybulski@xylem.com). We look forward to providing you the "Best in Class" service for years to come.

Best regards,

**Evoqua Water Technologies LLC**

*Dan Trybulski*

Dan Trybulski  
Technical Sales Representative / Municipal Services

**RE: 2024 2025 BIOXIDE® FSOC ODOR CONTROL PRICING – OPTION YEAR TWO –  
AGREEMENT # 2023-001SC  
SAN ELIJO, CA JPA  
Evoqua Quote No. Q240325DT1**

Evoqua will process your order when we receive acceptance of this proposal, by signing below and returning to [municipalservices@xylem.com](mailto:municipalservices@xylem.com) or via fax to: (941) 359-7985.

Company Name: \_\_\_\_\_

This \_\_\_\_\_ day of \_\_\_\_\_ Month \_\_\_\_\_ Year

By: \_\_\_\_\_

Title: \_\_\_\_\_

EVOQUA WATER TECHNOLOGIES LLC

Standard Terms of Sale

1. **Applicable Terms.** These terms govern the purchase and sale of equipment, products, related services, leased products, and media goods if any (collectively herein "Work"), referred to in Seller's proposal ("Seller's Documentation"). Whether these terms are included in an offer or an acceptance by Seller, such offer or acceptance is expressly conditioned on Buyer's assent to these terms. Seller rejects all additional or different terms in any of Buyer's forms or documents.
2. **Payment.** Buyer shall pay Seller the full purchase price as set forth in Seller's Documentation. Unless Seller's Documentation specifically provides otherwise, freight, storage, insurance and all taxes, levies, duties, tariffs, permits or license fees or other governmental charges relating to the Work or any incremental increases thereto shall be paid by Buyer. If Seller is required to pay any such charges, Buyer shall immediately reimburse Seller. If Buyer claims a tax or other exemption or direct payment permit, it shall provide Seller with a valid exemption certificate or permit and indemnify, defend and hold Seller harmless from any taxes, costs and penalties arising out of same. All payments are due within 30 days after receipt of invoice. Buyer shall be charged the lower of 1 ½% interest per month or the maximum legal rate on all amounts not received by the due date and shall pay all of Seller's reasonable costs (including attorneys' fees) of collecting amounts due but unpaid. All orders are subject to credit approval by Seller. Back charges without Seller's prior written approval shall not be accepted.
3. **Delivery.** Delivery of the Work shall be in material compliance with the schedule in Seller's Documentation. Unless Seller's Documentation provides otherwise, delivery terms are ExWorks Seller's factory (Incoterms 2010). Title to all Work shall pass upon receipt of payment for the Work under the respective invoice. Unless otherwise agreed to in writing by Seller, shipping dates are approximate only and Seller shall not be liable for any loss or expense (consequential or otherwise) incurred by Buyer or Buyer's customer if Seller fails to meet the specified delivery schedule.
4. **Ownership of Materials and Licenses.** All devices, designs (including drawings, plans and specifications), estimates, prices, notes, electronic data, software and other documents or information prepared or disclosed by Seller, and all related intellectual property rights, shall remain Seller's property. Seller grants Buyer a non-exclusive, non-transferable license to use any such material solely for Buyer's use of the Work. Buyer shall not disclose any such material to third parties without Seller's prior written consent. Buyer grants Seller a non-exclusive, non-transferable license to use Buyer's name and logo for marketing purposes, including but not limited to, press releases, marketing and promotional materials, and web site content.
5. **Changes.** Neither party shall implement any changes in the scope of Work described in Seller's Documentation without a mutually agreed upon change order. Any change to the scope of the Work, delivery schedule for the Work, any Force Majeure Event, any law, rule, regulation, order, code, standard or requirement which requires any change hereunder shall entitle Seller to an equitable adjustment in the price and time of performance.
6. **Force Majeure Event.** Neither Buyer nor Seller shall have any liability for any breach or delay (except for breach of payment obligations) caused by a Force Majeure Event. If a Force Majeure Event exceeds six (6) months in duration, the Seller shall have the right to terminate the Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed prior to the date of termination. "**Force Majeure Event**" shall mean events or circumstances that are beyond the affected party's control and could not reasonably have been easily avoided or overcome by the affected party and are not substantially attributable to the other party. Force Majeure Event may include, but is not limited to, the following circumstances or events: war, act of foreign enemies, terrorism, riot, strike, or lockout by persons other than by Seller or its sub-suppliers, natural catastrophes or (with respect to on-site work), unusual weather conditions.
7. **Warranty.** Subject to the following sentence, Seller warrants to Buyer that the (i) Work shall materially conform to the description in Seller's Documentation and shall be free from defects in material and workmanship and (ii) the Services shall be performed in a timely and workmanlike manner. Determination of suitability of treated water for any use by Buyer shall be the sole and exclusive responsibility of Buyer. The foregoing warranty shall not apply to any Work that is specified or otherwise demanded by Buyer and is not manufactured or selected by Seller, as to which (i) Seller hereby assigns to Buyer, to the extent assignable, any warranties made to Seller and (ii) Seller shall have no other liability to Buyer under warranty, tort or any other legal theory. The Seller warrants the Work, or any components thereof, through the earlier of (i) eighteen (18) months from delivery of the Work or (ii) twelve (12) months from initial operation of the Work or ninety (90) days from the performance of services (the "Warranty Period"). If Buyer gives Seller prompt written notice of breach of this warranty within the Warranty Period, Seller shall, at its sole option and as Buyer's sole and exclusive remedy, repair or replace the subject parts, re-perform the Service or refund the purchase price. Unless otherwise agreed to in writing by Seller, (i) Buyer shall be responsible for any labor required to gain access to the Work so that Seller can assess the available remedies and (ii) Buyer shall be responsible for all costs of installation of repaired or replaced Work. If Seller determines that any claimed breach is not, in fact, covered by this warranty, Buyer shall pay Seller its then customary charges for any repair or replacement made by Seller. Seller's warranty is conditioned on Buyer's (a) operating and maintaining the Work in accordance with Seller's instructions, (b) not making any unauthorized repairs or alterations, and (c) not being in default of any payment obligation to Seller. Seller's warranty does not cover (i) damage caused by chemical action or abrasive material, misuse or improper installation (unless installed by Seller) and (ii) media goods (such as, but not limited to, resin, membranes, or granular activated carbon media) once media goods are installed. THE WARRANTIES SET FORTH IN THIS SECTION 7 ARE THE SELLER'S SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITATION OF LIABILITY PROVISION BELOW. SELLER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.
8. **Indemnity.** Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence. Seller shall have the sole authority to direct the defense of and settle any indemnified claim. Seller's indemnification is conditioned on Buyer (a) promptly, within the Warranty Period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.

9. **Assignment.** Neither party may assign this Agreement, in whole or in part, nor any rights or obligations hereunder without the prior written consent of the other party; provided, however, the Seller may assign its rights and obligations under these terms to its affiliates or in connection with the sale or transfer of the Seller's business and Seller may grant a security interest in the Agreement and/or assign proceeds of the agreement without Buyer's consent.

10. **Termination.** Either party may terminate this agreement, upon issuance of a written notice of breach and a thirty (30) day cure period, for a material breach (including but not limited to, filing of bankruptcy, or failure to fulfill the material obligations of this agreement). If Buyer suspends an order without a change order for ninety (90) or more days, Seller may thereafter terminate this Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed, whether delivered or undelivered, prior to the date of termination.

11. **Dispute Resolution.** Seller and Buyer shall negotiate in good faith to resolve any dispute relating hereto. If, despite good faith efforts, the parties are unable to resolve a dispute or claim arising out of or relating to this Agreement or its breach, termination, enforcement, interpretation or validity, the parties will first seek to agree on a forum for mediation to be held in a mutually agreeable site. If the parties are unable to resolve the dispute through mediation, then any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of this agreement to arbitrate, shall be determined by arbitration in Pittsburgh, Pennsylvania before three arbitrators who are lawyers experienced in the discipline that is the subject of the dispute and shall be jointly selected by Seller and Buyer. The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures. The Arbitrators shall issue a reasoned decision of a majority of the arbitrators, which shall be the decision of the panel. Judgment may be entered upon the arbitrators' decision in any court of competent jurisdiction. The substantially prevailing party as determined by the arbitrators shall be reimbursed by the other party for all costs, expenses and charges, including without limitation reasonable attorneys' fees, incurred by the prevailing party in connection with the arbitration. For any order shipped outside of the United States, any dispute shall be referred to and finally determined by the International Center for Dispute Resolution in accordance with the provisions of its International Arbitration Rules, enforceable under the New York Convention (Convention on the Recognition and Enforcement of Foreign Arbitral Awards) and the governing language shall be English.

12. **Export Compliance.** Buyer acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the Work provided under this Agreement, including any export license requirements. Buyer agrees that such Work shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Seller of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. BUYER AGREES TO INDEMNIFY AND HOLD SELLER HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.

13. **LIMITATION OF LIABILITY.** NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE WORK, INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR ALL WARRANTY CLAIMS OR FOR ANY BREACH OR FAILURE TO PERFORM ANY OBLIGATION UNDER THE CONTRACT, SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE WORK. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.

14. **Rental Equipment / Services.** Any leased or rented equipment ("Leased Equipment") provided by Seller shall at all times be the property of Seller with the exception of certain miscellaneous installation materials purchased by the Buyer, and no right or property interest is transferred to the Buyer, except the right to use any such Leased Equipment as provided herein. Buyer agrees that it shall not pledge, lend, or create a security interest in, part with possession of, or relocate the Leased Equipment. Buyer shall be responsible to maintain the Leased Equipment in good and efficient working order. At the end of the initial term specified in the order, the terms shall automatically renew for the identical period unless canceled in writing by Buyer or Seller not sooner than three (3) months nor later than one (1) month from termination of the initial order or any renewal terms. Upon any renewal, Seller shall have the right to issue notice of increased pricing which shall be effective for any renewed terms unless Buyer objects in writing within fifteen (15) days of issuance of said notice. If Buyer timely cancels service in writing prior to the end of the initial or any renewal term this shall not relieve Buyer of its obligations under the order for the monthly rental service charge which shall continue to be due and owing. Upon the expiration or termination of this Agreement, Buyer shall promptly make any Leased Equipment available to Seller for removal. Buyer hereby agrees that it shall grant Seller access to the Leased Equipment location and shall permit Seller to take possession of and remove the Leased Equipment without resort to legal process and hereby releases Seller from any claim or right of action for trespass or damages caused by reason of such entry and removal.

15. **Miscellaneous.** These terms, together with any Contract Documents issued or signed by the Seller, comprise the complete and exclusive statement of the agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Seller. No part of the Agreement may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the Agreement. To the extent the Agreement is considered a subcontract under Buyer's prime contract with an agency of the United States government, in case of Federal Acquisition Regulations (FARs) flow down terms, Seller will be in compliance with Section 44.403 of the FAR relating to commercial items and those additional clauses as specifically listed in 52.244-6, Subcontracts for Commercial Items (OCT 2014). If any of these terms is unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The Agreement shall be governed by the laws of the Commonwealth of Pennsylvania without regard to its conflict of laws provisions. Both Buyer and Seller reject the applicability of the United Nations Convention on Contracts for the international sales of goods to the relationship between the parties and to all transactions arising from said relationship.

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO JOINT POWERS AUTHORITY CONTRACT FOR AS-NEEDED  
LABORATORY SERVICES FOR FISCAL YEAR 2024-25

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to amend the agreement with Eurofins Environmental Testing Southwest, LLC for as-needed laboratory services in an amount not-to-exceed \$99,000; and
2. Discuss and take action as appropriate.

BACKGROUND

Each year the San Elijo Joint Powers Authority (SEJPA) solicits bids for laboratory services for testing that is not performed by our onsite laboratory in accordance with the procurement policy. The scope of services includes testing that the SEJPA laboratory is not certified for due to specialized equipment being required with a low number of tests being performed. Last year the contract amount for FY 2023-24 was within the General Manager’s signing authority at \$49,500.

DISCUSSION

For fiscal year 2024-25, SEJPA will continue to use Eurofins for outside laboratory services, however the extension of the contract will bring the total value to \$99,000 so the contract extension requires Board Approval.

In April 2023, staff advertised and publicly bid via Planet Bids, the as-needed laboratory services contract. Eurofins Environmental Testing Southwest, LLC (Eurofins) is the current provider of as-needed laboratory services to SEJPA, and their service to date has met expectations. The initial contract term was for one year, with the option of two additional one-year terms. Eurofins has agreed to extend the term for a second year at the same terms.

## FISCAL IMPACT

The FY 2024-25 Recommended Budget, which is currently in development, will include \$64,000 for outside laboratory services which includes the Eurofins contract and another laboratory that does toxicity testing.

## RECOMMENDATION

It is therefore recommended that the Board of Directors:

1. Authorize the General Manager to amend the agreement with Eurofins Environmental Testing Southwest, LLC for as-needed laboratory services in an amount not-to-exceed \$99,000; and
2. Discuss and take action as appropriate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. Thornton', written over a horizontal line.

Michael T. Thornton, P.E.  
General Manager

Attachment 1: Eurofins Renewal Email

**Chris Trees**

---

**From:** Sean Leffler <Sean.Leffler@et.eurofinsus.com>  
**Sent:** Friday, January 26, 2024 10:27 AM  
**To:** Daniel Verdon  
**Cc:** Donald Burley; Cecile L de Guia; Cynthia Jih; Chris Trees  
**Subject:** RE: SEJPA As-Needed Laboratory Services

Good morning, Daniel. Yes, we can agree to a 1 year extension on this contract. Thank you for checking, and yes I think an addendum is appropriate to extend the contract length.

-Sean

**Sean Leffler**  
Business Development Manager

Eurofins Environment Testing Southwest, LLC  
Mobile: 858-866-6645

---

**From:** Daniel Verdon <verdond@sejpa.org>  
**Sent:** Thursday, January 25, 2024 10:47 AM  
**To:** Sean Leffler <Sean.Leffler@et.eurofinsus.com>  
**Cc:** Donald Burley <Donald.Burley@et.eurofinsus.com>; Cecile L de Guia <Cecile.deGuia@et.eurofinsus.com>; Cynthia Jih <Cynthia.Jih@et.eurofinsus.com>; Chris Trees <treesc@sejpa.org>  
**Subject:** SEJPA As-Needed Laboratory Services

**CAUTION:** EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Sean/Don/Cecile,

Good morning! Chris and I noticed that our current Service Agreement is set to expire this June. Per Section 2.0 – TERM OF CONTRACT of the attached agreement, San Elijo would like to extend the service agreement for another year with the current prices that are listed in the Agreement.

We really appreciate the hard work and service Eurofins is providing San Elijo on all its analytical needs.

Please let me know if this is acceptable and if we need to sign an amendment to the agreement to move this forward.

Thanks,

**Dan Verdon**  
*Laboratory Manager*  
**San Elijo Joint Powers Authority**  
2695 Manchester Avenue | Cardiff by the Sea, California 92007-7077  
Office (760)753-6203 x39 | Fax (760)753-5935 | [verdond@SEJPA.org](mailto:verdond@SEJPA.org) | [www.SEJPA.org](http://www.SEJPA.org)

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: PRESENTATION OF SAN ELIJO JOINT POWERS AUTHORITY FISCAL YEAR  
2024-25 RECOMMENDED BUDGET

RECOMMENDATION

It is recommended that the Board of Directors:

1. Review the Fiscal Year 2024-25 Recommended Budget; and
2. Discuss and take action as appropriate.

DISCUSSION

The Fiscal Year (FY) 2024-25 San Elijo Joint Powers Authority (SEJPA) Recommended Budget has been prepared in accordance with SEJPA formation agreement and service agreements with other government entities. The budget estimates all expenditures necessary to provide wastewater treatment, waste disposal, water recycling, laboratory, ocean outfall, pump stations, and other services. The FY 2024-25 Recommended Budget Document is available on SEJPA's website at <https://www.sejpa.org/about-us/financials>.

The FY 2024-25 Recommended Budget consists of \$10,521,442 operating expense, \$3,666,000 capital appropriation, and \$2,373,604 debt service payments for a total budget of \$16,561,046. This amount includes the Recycled Water program, which has a total recommended budget of \$5,633,326 including operations and maintenance, capital projects appropriation, and debt service payments. In recent years, there has been the addition of several new programs. The budget for this fiscal year includes the expansion of the services provided for Del Mar Fairgrounds clean water program and Leucadia Wastewater District Technical Support Services.



**Operating Costs**

SEJPA staff has developed the recommended budget to ensure the agency’s ability to perform its vital functions, while providing value and cost effectiveness to our rate payers. The recommended operating budget for all programs will increase by \$546,819 or 5.5%. The increase primarily stems from an overall higher-than-normal inflationary trend affecting most budget categories. Specifically, areas such as labor, insurance, certain chemicals, and service contracts have been notably impacted.

<b>Program</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>	<b>Budget Change</b>	<b>% Change</b>
Wastewater Treatment	\$ 3,963,797	\$ 4,306,992	\$ 343,195	8.7%
Laboratory Services	955,076	1,050,738	95,662	10.0%
Ocean Outfall	1,031,231	1,070,306	39,075	3.8%
Cardiff Sanitary Division Pump Stations	376,169	405,554	29,385	7.8%
Encinitas Sanitary Division Pump Station	167,777	185,448	17,671	10.5%
City of Encinitas Urban and Stormwater Services	55,514	61,804	6,290	11.3%
City of Solana Beach Pump Stations	463,275	512,798	49,524	10.7%
City of Solana Beach Generator Maintenance Services	15,507	17,556	2,050	13.2%
City of Del Mar Pump Station	66,392	75,981	9,589	14.4%
22nd District Agricultural Association (Del Mar Fairgrounds)	136,953	172,371	35,417	25.9%
Leucadia WD Technical Support Services	22,800	28,209	5,409	23.7%
	<u>\$ 7,254,492</u>	<u>\$ 7,887,757</u>	<u>\$ 633,265</u>	<u>8.7%</u>
Recycled Water	2,720,132	2,633,685	(86,447)	-3.2%
Total Operating Expenses	<u>\$ 9,974,623</u>	<u>\$ 10,521,442</u>	<u>\$ 546,819</u>	<u>5.5%</u>

**Capital Improvement Program**

The SEJPA Capital Improvement Program includes both new and ongoing projects for the Wastewater Treatment, Laboratory Services, Ocean Outfall, and the Recycled Water programs. This program also contains pump station projects which are funded entirely by the owner of the pump station.

FY 2024-25 recommended Capital Improvement Program appropriation is set at \$3,666,000, including \$1,728,000 Recycled Water capital program projects (see Recycled Water Program section below) and \$1,938,000 capital improvements funded by agencies served by SEJPA using the pay-as-you-go (PAYGO) method or cash revenue for capital needs. PAYGO capital is budgeted at \$1,265,000 for Wastewater related improvements, \$125,000 for Laboratory improvements, and \$146,000 for Ocean Outfall capital reserve. SEJPA has budgeted \$100,000 in capital funds associated with the Olivenhain Pump Station inlet gate replacement and \$200,000 in capital funds associated with mechanical equipment replacement at the Moonlight Beach pump station. Also, this fiscal year, the Capital Improvement Program will see the addition of the Facility Plan Update, which will map out capital needs for the next decade. This project has a budget of \$453,000. The table below depicts the PAYGO capital requests for each agency served by SEJPA.

**CAPITAL IMPROVEMENT PROGRAM**

<b>Capital Project</b>	<b>Encinitas</b>	<b>Solana Beach</b>	<b>Del Mar</b>	<b>Rancho Santa Fe</b>	<b>Escondido</b>	<b>Recycled Water</b>	<b>Total</b>
Biological Treatment Improvements	\$ 303,810	\$ 303,810	\$ 82,857	\$ 34,524	\$ -	\$ -	725,000
Miscellaneous Projects	131,162	131,162	35,771	14,904	-	-	313,000
Laboratory Remodel	52,381	52,381	14,286	5,952	-	-	125,000
Outfall Reballast Reserve	4,412	4,412	1,176	490	39,510	-	50,000
Escondido Vault Rehabilitation	4,412	4,412	1,176	490	39,510	-	50,000
Olivenhain Inlet Gate Replace	100,000	-	-	-	-	-	100,000
Moonlight Beach PS Rehab	200,000	-	-	-	-	-	200,000
Wanket Tank Refurb & Pipeline	-	-	-	-	-	1,650,000	1,650,000
Facility Plan Update	137,402	134,402	54,539	12,308	36,349	78,000	453,000
<b>Total</b>	<b>\$ 933,578</b>	<b>\$ 630,579</b>	<b>\$ 189,806</b>	<b>\$ 68,669</b>	<b>\$ 115,369</b>	<b>\$ 1,728,000</b>	<b>\$ 3,666,000</b>

**Debt Service**

Debt service for SEJPA is budgeted at \$2,373,604. The planned debt service for the FY 2024-25 Budget is as follows:

**DEBT SERVICES**

<b>Expense</b>	<b>Adopted FY 2023-24</b>	<b>Recommended FY 2024-25</b>	<b>\$ Change</b>	<b>% Change</b>
Wastewater - 2017 Revenue Bonds	\$ 1,338,175	\$ 1,338,575	\$ 400	0.0%
Wastewater - San Diego Gas & Electric	53,388	53,388	-	0.0%
Recycled Water - Advanced Water Purification	148,153	148,154	1	0.0%
Recycled Water - SFID Pipeline Loan	44,500	46,980	2,480	5.6%
Recycled Water - Solana Beach Pipeline Loan	10,350	8,010	(2,340)	-22.6%
Recycled Water - 2023 Recycled Water Loan	778,982	778,497	(485)	100.0%
<b>Total</b>	<b>\$ 2,373,548</b>	<b>\$ 2,373,604</b>	<b>\$ 56</b>	<b>0.0%</b>

**Budget Allocation Basis and Revenues**

The cost for wastewater treatment and disposal services for the Member Agencies and other participating agencies is proportionally allocated based on use, indicated by measured flows or level of effort, as appropriate. Flows are averaged over a 3-year period to determine the cost sharing estimate for the subsequent fiscal year. Below is a table showing influent and effluent flow and capacity owned or leased by entity. Below are tables of the budget allocation basis and revenue by entity based on the allocation.

## BUDGET ALLOCATION BASIS

Millions of Gallons Per Day (MGD)

Entity	Influent		Effluent		Wastewater Treatment Capacity		Outfall Capacity	
City of Encinitas	1.223	45.9%	0.574	5.4%	2.200	41.9%	2.250	8.8%
City of Solana Beach	0.927	34.8%	0.422	4.0%	2.200	41.9%	2.250	8.8%
Rancho Santa Fe CSD	0.153	5.7%	0.072	0.7%	0.250	4.8%	0.250	1.0%
City of Del Mar	0.364	13.7%	0.161	1.5%	0.600	11.4%	0.600	2.4%
City of Escondido	-	0.0%	9.328	88.4%	-	0.0%	20.150	79.0%
<b>Total</b>	<b>2.667</b>	<b>100.0%</b>	<b>10.557</b>	<b>100.0%</b>	<b>5.250</b>	<b>100.0%</b>	<b>25.500</b>	<b>100.0%</b>

## REVENUE BY ENTITY BASED ON ALLOCATION

Revenue Source	Adopted Budget 2023-24	Recommended Budget 2024-25
City of Encinitas	\$ 4,691,390	\$ 4,624,919
City of Solana Beach	3,332,966	3,601,681
City of Del Mar	994,172	1,089,244
22nd District Agricultural Association	136,953	172,371
Rancho Santa Fe CSD	404,207	440,716
City of Escondido	996,841	1,061,075
Laboratory Services	100,600	112,400
Recycled Water	3,603,713	3,691,767
T-Mobile Cell Site Lease	32,736	33,718
Other Revenue	37,632	45,885
Interest on Wastewater Operations	30,000	63,100
Interest on Water Reclamation	12,000	425,750
<b>Total Revenue Sources</b>	<b>\$ 14,373,210</b>	<b>\$ 15,362,626</b>

### **Recycled Water Program**

SEJPA owns and operates a Recycled Water utility that sells water to San Dieguito Water District, Santa Fe Irrigation District, Olivenhain Municipal Water District, City of Del Mar, and Encinitas Ranch Golf Authority. For FY 2024-25, recycled water total revenues are forecast to be \$3,691,767, which will be an increase of \$88,054 year-over-year in anticipation of water sales performance. Recycled water total expenses are recommended at \$5,343,326 including \$2,633,685 operating cost, \$1,728,000 capital appropriation, and \$981,641 debt services costs.

The \$1,728,000 recycled water capital project appropriation is for the improvements to the recycled water treatment, storage, and conveyance systems. The funds will be utilized for projects related to treatment system enhancement, valve maintenance and replacements, refurbishment of existing storage tanks or the construction of new storage, replacing existing distribution system pumps and motors, stormwater recycling, and ongoing system asset management. The capital

funding strategy includes a private placement loan of \$10 million to smooth cashflows. The Wastewater Program will reimburse the Recycled Water Program for its share of the biological treatment improvements and stormwater capture and reuse across the Water Campus through annual payments (totaling \$3.5 million), starting in FY 2023-24 (see Capital Improvement Program section above). Below are two tables showing the Recycled Water Program revenue sources and expenses.

### RECYCLED WATER PROGRAM REVENUE SOURCES

Revenue Source	Adopted Budget 2023-24	Recommended Budget 2024-25	Budget Change	% Change
Santa Fe Irrigation District	\$ 1,096,044	\$ 1,108,380	\$ 12,336	1.1%
San Dieguito Water District	746,634	810,264	63,630	8.5%
City of Del Mar	165,510	162,435	(3,075)	-1.9%
Encinitas Ranch Golf Authority	327,503	412,938	85,435	26.1%
Olivenhain Municipal Water District	548,022	477,750	(70,272)	-12.8%
Total Customers	\$ 2,883,713	\$ 2,971,767	\$ 88,054	3.1%
MWD/CWA Incentives	720,000	720,000	-	0.0%
Total Revenue	\$ 3,603,713	\$ 3,691,767	\$ 88,054	2.4%

\*State and Federal Grant Revenue is shown in the Capital Program Section

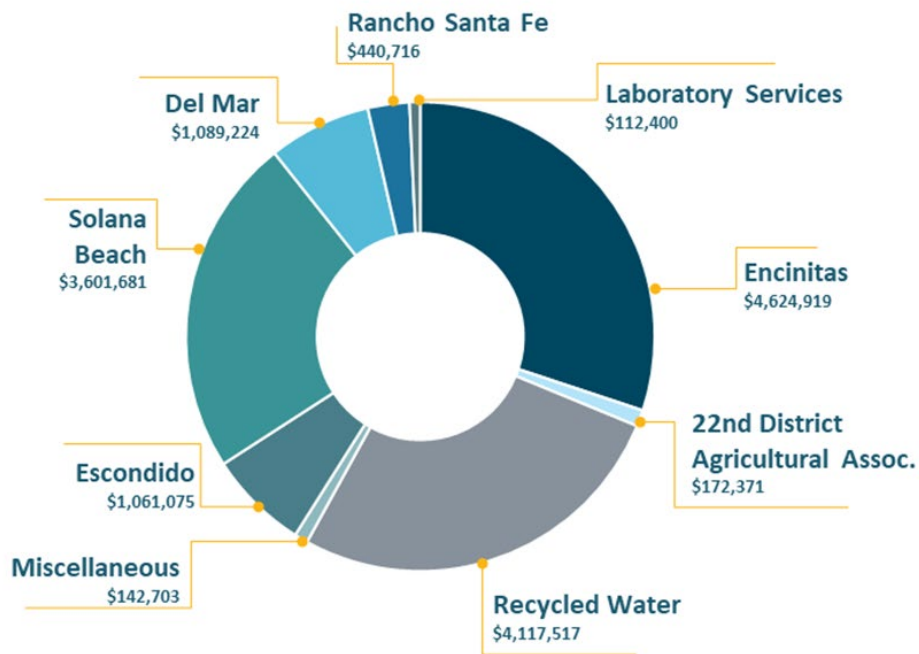
### RECYCLED WATER PROGRAM EXPENSES

Expense	Adopted Budget 2023-24	Recommended Budget 2024-25	Budget Change	% Change
Personnel	\$ 945,399	\$ 1,053,396	\$ 107,997	11.4%
Supplies and Services	1,684,733	1,490,289	(194,443)	-11.5%
Capital Outlay	40,000	40,000	-	0.0%
Contingency	50,000	50,000	-	0.0%
Total Operating Expense	\$ 2,720,132	\$ 2,633,685	\$ (86,447)	-3.2%
Capital Appropriations	4,450,000	1,728,000	(2,722,000)	-61.2%
Total Operating and Capital Appropriations	\$ 7,170,132	\$ 4,361,685	\$ (2,808,447)	-39.2%
Debt Service				
2023 Recycled Water Loan	\$ 778,982	\$ 778,497	\$ (485)	-0.1%
Advanced Water Purification	148,153	148,154	1	0.0%
SFID Pipeline Loan	44,500	46,980	2,480	5.6%
Solana Beach Pipeline Loan	10,350	8,010	(2,340)	-22.6%
Total Debt Service	\$ 981,985	\$ 981,641	\$ (344)	0.0%
Total Expenses	\$ 8,152,117	\$ 5,343,326	\$ (2,808,791)	-34.5%

## SUMMARY

The recommended FY 2024-25 Budget consists of \$10,521,442 operating expense, \$3,666,000 capital projects appropriation, and \$2,373,604 debt service payments for a total recommended budget of \$16,561,046.

SEJPA receives revenues from seven primary sources, with the three largest customers being the City of Encinitas, the City of Solana Beach, and the Recycled Water Utility, which are expected to provide \$4,624,919, \$3,601,681, and \$4,117,517, respectively. The graph below shows the revenue source allocations for FY 2024-25.



The recommended budget also includes adjustments to the labor Classification and Salary Schedule to align with changing workloads and duties expected in FY 2024-25. These changes include adding an Accounting Supervisor and Mechanical Systems Supervisor to existing position series, and adding a new position series for Human Resources (HR) Analyst. The HR Analyst series is anticipated to increase staffing by one full time equivalent (FTE), while the other series adjustments will not add to existing FTE staffing levels.

Further information about the FY 2024-25 Recommended Budget is discussed in detail in the budget document, along with information regarding the contribution requirements of the various agencies served by SEJPA. The May 21, 2024, Board Agenda will include a budget discussion item for the Board to publicly discuss any changes or comments on the recommended budget. The final recommended budget will be brought to the June 18, 2024, meeting for consideration of Board approval.

It is therefore recommended that the Board of Directors:

1. Review the Fiscal Year 2024-25 Recommended Budget; and
2. Discuss and take action as appropriate.

Respectfully submitted,



---

Michael T. Thornton, P.E.  
General Manager

# SAN ELIJO

JOINT POWERS AUTHORITY



RECOMMENDED ANNUAL BUDGET

2024 - 2025



SAN ELIJO | JOINT POWERS  
AUTHORITY

# SAN ELIJO JOINT POWERS AUTHORITY



Celebrating 59 years of service



Creating lasting water solutions for our communities & environment



Delivering responsible & reliable service



Promoting opportunities for our communities

## Mission

To serve our communities by providing safe and reliable recycled water and wastewater services in order to protect the environment and public health.

## Vision

We pursue innovative practices to produce clean water in an environmentally, socially, and fiscally responsible manner.

*As an organization, the San Elijo Joint Powers Authority values:*

HUMAN VALUE	PUBLIC TRUST	SAFETY	VALUE	LOYALTY
Provide equal opportunity for all employees to succeed and grow professionally and personally.	Honor and promote public confidence through transparency, personal character, and the highest level of professional behavior.	Ensure individual safety and the safety of co-workers and the public, without compromise.	Provide superior service to the community in a safe, reliable, and cost-effective manner.	Faithfully and reliably promote the best interests of the agency and fellow employees.
COURTESY	RESPONSIBILITY	HONESTY & INTEGRITY	COMMUNITY	
Be respectful, considerate, aware, and caring.	Be accountable for one's conduct and actions.	Be truthful and factual in upholding the values and ethics of the agency.	Demonstrate leadership and stewardship in serving the community and protecting the environment.	



# SAN ELIJO JOINT POWERS AUTHORITY

## RECOMMENDED ANNUAL BUDGET FISCAL YEAR 2024-25

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### BOARD OF DIRECTORS

KELLIE HINZE, ENCINITAS COUNCIL MEMBER, CHAIRPERSON  
KRISTI BECKER, SOLANA BEACH COUNCIL MEMBER, VICE CHAIR  
ALLISON BLACKWELL, ENCINITAS COUNCIL MEMBER, MEMBER  
DAVID ZITO, SOLANA BEACH COUNCIL MEMBER, MEMBER

### MANAGEMENT

MICHAEL T. THORNTON, P.E., GENERAL MANAGER  
CHRISTOPHER A. TREES, P.E., DIRECTOR OF OPERATIONS  
TOM FALK, P.E., P.M.P., DIRECTOR OF INFRASTRUCTURE & SUSTAINABILITY

### MEMBER AGENCIES

CITY OF ENCINITAS  
CITY OF SOLANA BEACH

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2695 Manchester Avenue  
Cardiff by the Sea, CA 92007

[www.sejpa.org](http://www.sejpa.org)

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# TRANSMITTAL LETTER

Honorable Chairperson and Members of the Board of Directors:

I am pleased to present SEJPA's FY 2024-25 Recommended Budget. Our focus remains on delivering high quality service and environmental protection through innovation, collaboration, and fiscal responsibility. With successful partnerships, teamwork, and staff development as our foundation, we are well positioned to continued building a sustainable future for our communities.



**Working Toward a Sustainable Future.** As we strive for a sustainable future, our capital program is focused on replacing aging assets, maintaining infrastructure reliability, and improving system performance. The San Elijo Water Campus creates approximately 25% of its electrical power via photovoltaic solar and produces more than 500 million gallons of recycled water annually for irrigation and industrial uses within north coastal San Diego County.



**Exceptional Water Treatment.** We are committed to delivering exceptional water quality and our average removal rate for both Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Suspended Solids (TSS) was impressive 98.5% in 2022 and 2023. Our performance track record is a testament to our unwavering dedication to protecting the environment and public health.



**Achieving Highest Levels of Safety.** We take pride in developing and leading a safe work environment. We utilize in-person and web-based training, low-frequency/high risk activity reviews, site safety inspections, and other learning formats to increase knowledge and improve safety behaviors. The results have been impressive as our staff has not missed a single work-day due to injury over the last 24 years. Our commitment to safety has kept our workforce safe and productive, helped us avoid injury and property damage claims, and has earned us formal recognition from the California Sanitation Risk Management Authority (CSRMA) and the California Water Environment Association (CWEA).



**Investing in Our Community and Workforce.** We are committed to preparing the next generation of water leaders through our internship program, which has fostered valuable partnerships with local universities and community colleges. We have hosted 31 interns over the last 4 years, and we are proud to have filled seven permanent positions through this program during this period.



**Building Valuable Partnerships.** SEJPA strives to be a model of inter-agency cooperation. Our culture of collaboration improves cost effectiveness, expands innovative practices, and increases the benefits we provide to the region. Currently, the North San Diego Water Reuse Coalition is spearheading a grant effort worth \$18.3 million to promote the expansion of recycled water use in North County. As part of this funding, SEJPA will receive approximately \$3.8 million, specifically aimed at expanding the use of stormwater and recycled water as local water supplies. We are excited to be part of this collaborative effort and look forward to contributing to the region's sustainable water management practices.

## OPERATING BUDGET OVERVIEW

The SEJPA recommended budget for FY 2024-25 comprises 12 operational programs that are managed and operated by SEJPA. We continually seek opportunities to improve our services and to apply science, technology, and engineering to maximize value to the communities we serve.

For FY 2024-25, the total increase in Operating Costs year-over-year is \$546,819 or 5.5%. This increase primarily stems from an overall higher-than-normal inflationary trend affecting most budget categories. Specifically, areas such as labor, insurance, and certain chemicals and service contracts have been notably impacted.

<b>Program</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>	<b>Budget Change</b>	<b>% Change</b>
Wastewater Treatment	\$ 3,963,797	\$ 4,306,992	\$ 343,195	8.7%
Laboratory Services	955,076	1,050,738	95,662	10.0%
Ocean Outfall	1,031,231	1,070,306	39,075	3.8%
Cardiff Sanitary Division Pump Stations	376,169	405,554	29,385	7.8%
Encinitas Sanitary Division Pump Station	167,777	185,448	17,671	10.5%
City of Encinitas Urban and Stormwater Services	55,514	61,804	6,290	11.3%
City of Solana Beach Pump Stations	463,275	512,798	49,524	10.7%
City of Solana Beach Generator Maintenance Services	15,507	17,556	2,050	13.2%
City of Del Mar Pump Station	66,392	75,981	9,589	14.4%
22nd District Agricultural Association (Del Mar Fairgrounds)	136,953	172,371	35,417	25.9%
Leucadia WD Technical Support Services	22,800	28,209	5,409	23.7%
	<u>\$ 7,254,492</u>	<u>\$ 7,887,757</u>	<u>\$ 633,265</u>	<u>8.7%</u>
Recycled Water	2,720,132	2,633,685	(86,447)	-3.2%
Total Operating Expenses	<u>\$ 9,974,623</u>	<u>\$ 10,521,442</u>	<u>\$ 546,819</u>	<u>5.5%</u>

## CAPITAL BUDGET OVERVIEW

The Capital Improvement Program (CIP) is prioritized to achieve environmental stewardship, permit compliance, investments in our local community, safe and reliable facilities, and sustainable resource management. Over the past 8 years, SEJPA’s Capital Program has averaged approximately \$5 million per year. Our capital infrastructure priorities for FY 2024-25 include implementation of six multi-year capital

PRIORITIZED CAPITAL PROJECTS, 3-YR PLAN	ESTIMATED COST
<b>Phase 3</b>	<b>\$ 12.1 Million</b>
Biosolids Dewatering Facility Improvements & MS-2 Replacement	
<b>Phase 4</b>	<b>\$ 18.1 Million</b>
Wanket Reservoir Refurbishment	
Wanket Connecting Pipeline	
Stormwater Capture, Reuse and Site WQ	
Biological Treatment Improvements	
Moonlight Beach Pump Station Modifications	
<b>Misc. Projects</b>	<b>\$ 2.4 Million</b>
<b>TOTAL</b>	<b>\$ 32.6 Million</b>

improvement projects and a backlog of smaller miscellaneous upgrades at the Water Campus and remote facilities with an estimated capital cost of \$32.6 million (see summary chart right).

Costs for capital projects are allocated to customer agencies based on infrastructure benefits and in accordance with capacity share owned/leased. Funding sources include annual budgeted capital program contributions for shared facilities and for special projects, recycled water revenues and incentives, financing through bonds and loans, and by state and federal grants. The FY 2024-25 budget includes \$1.9 million in capital program contributions. Notably, SEJPA has been awarded multiple grants totaling up to approximately \$6 million through the Integrated Regional Water Management (IRWM) program under Proposition 1 (California Water Bond) and from the US Bureau of Reclamation Title XVI Program to fund specific qualified projects.

SEJPA will commence an update to its Facility Plan in FY 2024-25 with an emphasis on asset management and resiliency to changing climate. SEJPA and its customer agencies have agreed to include the Water Campus and select remote facilities in this planning effort. The resulting plan will be the foundation for SEJPA’s capital program over the next 10 years.

## DEBT SERVICE

Debt service for FY 2024-25 is projected at \$2,373,604, which is similar to the prior year. This debt service is shared by the Wastewater Program at \$1,391,963 and Recycled Water Program at \$981,641. No new debt is anticipated to be initiated in FY 2024-25.

## A VISION FOR THE FUTURE

Our goal is to deliver excellent service, build trust with our customers and the community, and maximize opportunities to increase local sustainability, while developing and inspiring our employees. We are grateful for the support of our Board, staff, and community members, without whom none of our achievements would be possible. Looking ahead, we will continue to prioritize sustainability and explore new ways to advance environmental stewardship and social responsibility in our operations.

Your San Elijo Joint Powers Authority team is pleased to present the FY 2024-25 Recommended budget.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

**RESOLUTION NO. 2024-01**

**RESOLUTION APPROVING THE SAN ELIJO JOINT POWERS AUTHORITY  
OPERATING AND CAPITAL IMPROVEMENT BUDGETS  
FOR FISCAL YEAR 2024-25**

WHEREAS, the San Elijo Joint Powers Authority (SEJPA) General Manager has submitted for the consideration of the SEJPA Board of Directors proposed SEJPA Operating and Capital Projects Budgets for Fiscal Year 2024-25;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE SAN ELIJO JOINT POWERS AUTHORITY HEREBY RESOLVES AS FOLLOWS:

- The Board of Directors has reviewed the Recommended Operating Budgets and Capital Projects Budget, and the funds included herein for the period of July 1, 2024 through June 30, 2024 and hereby finds that such budgets, as reviewed, are sound plans for the financing of required SEJPA operations and capital improvements during Fiscal Year 2024-25. Such budgets are hereby adopted.

San Elijo JPA Operations and Maintenance Fund	\$ 9,436,377
San Elijo JPA Water Reclamation Operating Fund	3,615,326
San Elijo JPA Capital Projects Fund	1,938,000
Total	<u>\$ 14,989,703</u>

- The Board of Directors authorizes carrying forward unexpended capital project appropriations and encumbered operating funds for the Fiscal Year 2024-25.
- The Board of Directors authorizes the SEJPA Treasurer to deposit any surplus FY 2024-25 budgeted funds, meaning appropriated funds that are not expended or otherwise encumbered by June 30, 2024, into the SEJPA PARS Public Agencies Post-Employments Benefits Trust Program.

PASSED AND ADOPTED this 18<sup>th</sup> day of June 2024, by the following vote:

AYES: Board members:

NOES: Board members:

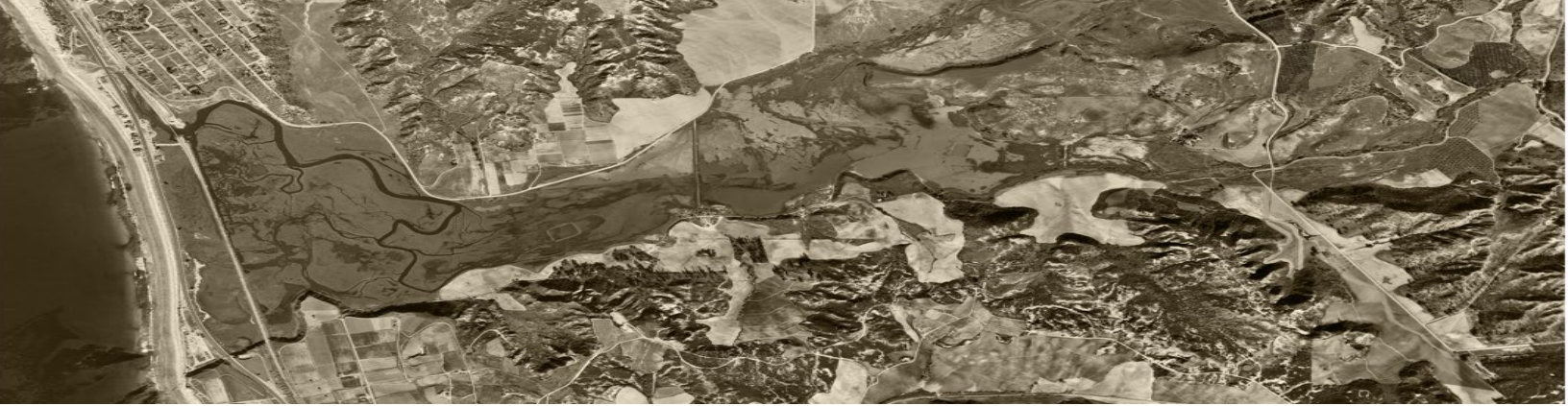
ABSENT: Board members:

ABSTAIN: Board members:

Attest:

Signature: \_\_\_\_\_  
Kellie Hinze, Chairperson

Signature: \_\_\_\_\_  
Michael T. Thornton, P.E.  
Secretary of the Board



## OUR HISTORY AT A GLANCE

Up to the early 1950s, Solana Beach and Cardiff-by-the-Sea relied on privately-owned septic systems for wastewater treatment and disposal. As the communities grew, the Cardiff Sanitation District and the Solana Beach Sanitation District formed to collect, treat, and dispose of wastewater. The districts built independent facilities in the San Elijo Lagoon to provide basic treatment before discharging the effluent directly into the lagoon. Within a decade, authorities determined that water quality in the lagoon was deteriorating, and that treatment needed to improve. In 1963, Cardiff Sanitation District and Solana Beach Sanitation District joined hands to form what is now the San Elijo Joint Powers Authority (SEJPA). Established under state law to protect public health and the environment, in 1965 the newly-formed entity built the San Elijo water pollution control facility and a 4,000-foot-long ocean outfall.

Since then, SEJPA has evolved, adding ocean disposal services to the City of Escondido (1974) and increasing the outfall length to 1.5 miles offshore, building new treatment (1991) to comply with the Clean Water Act, constructing water recycling infrastructure (2000), adding microfiltration and reverse osmosis treatment (2013) to enhance recycled water quality, providing wastewater treatment to the City of Del Mar (2017), adding clean water services for 22nd District Agricultural Association (2022), and providing operational support services to Leucadia Wastewater District (2022).

The San Elijo Joint Powers Authority has come a long way in its service to the local communities and its mission to protect the water environment through a host of clean water programs. Today, our focus is on high quality and reliable water treatment and recycling to produce a sustainable future for the communities we serve.

### SHARING OUR WATER STORY

We love to share our story. During Water Campus tours, students and teachers see the treatment process for wastewater and water recycling. In a typical year, we welcome more than 900 local students and teachers to the campus. To accommodate distance-learning, we produced a virtual tour to expand our water education outreach.





## INDUSTRY LEADERSHIP

In 2024, the San Elijo Joint Powers Authority was recognized by both the California Water Environment Association and the California Sanitation Risk Management Association for its leadership in promoting safe work practices within the industry. Building on our legacy of excellence, our agency has consistently received accolades for innovative treatment applications, efficient utility operations, and exceptional treatment performance in past years. We believe that fostering collaboration and knowledge sharing with our peers is integral to achieving sustained success.

## CELEBRATING ACCOMPLISHMENTS

We are proud to support the professional development of our employees. Recent accomplishments include:

### CERTIFICATIONS

**Devin McGinness**

Wastewater Treatment Plant Operator Grade 3  
Associate of Arts in Wastewater Technology

**Nina Holtz**

Wastewater Treatment Plant Operator Grade 3

**Ritwik Bandyopahdyay**

Wastewater Treatment Plant Operator Grade 1

**David Canady**

Operator In Training (OIT)

**Evan Fox**

Operator In Training (OIT)

**Jeffery Valdes**

Operator In Training (OIT)

**Brandon Moss**

CWEA Laboratory Analyst Grade 1





# FUND SUMMARY

The SEJPA includes five Fund categories: Wastewater Services, Wastewater Capital Projects, Recycled Water Services and Capital Projects, and PARS Trust which are presented below.

Wastewater Services Fund supports operating and debt services expenses in the Wastewater Treatment, Laboratory Services, Ocean Outfall, Pump Station Operations, and other services programs. Capital expenses for these programs are accounted for under the Wastewater Capital Projects Fund.

Wastewater Capital Projects Fund supports pay-as-you go projects for all projects under Wastewater Services programs. FY 2024-25 capital revenue budget of \$1,938,000 includes \$1,265,000 for Wastewater Treatment projects, \$146,000 for Ocean Outfall projects, \$147,000 for Laboratory projects, and \$380,000 for Pump Station Projects. Refer to the Capital Programs section for details.

Recycled Water Services & Capital Project Fund supports operating, capital, and debt services expenses in the Recycled Water program. FY 2024-25 capital appropriations budget includes \$1,728,000, which will be combined with previous appropriations to fund improvements to treatment system enhancements, valve maintenance and replacements, refurbishment of existing storage tanks or the construction of new storage, replacing existing distribution system pumps and motors, stormwater recycling, and ongoing system asset management. The \$10 million debt revenue is the private placement loan for the above-mentioned projects to smooth cashflow requirements.

The PARS Trust Fund accounts for an irrevocable Section 115 Trust established to serve as a pension rate stabilization program, facilitating the prefunding of employee benefit plan obligations. However, due to the notable escalation in the personnel budget, primarily attributed to the tightening labor market conditions, a contribution to the PARS Trust is not slated for allocation in the FY 2024-25 budget cycle.

	<b>Wastewater Services</b>	<b>Wastewater Capital Projects</b>	<b>Recycled Water Services</b>	<b>Recycled Water Capital Projects</b>	<b>PARS Trust</b>	<b>Total</b>
<b>Revenues</b>						
Operating	\$ 7,901,711	\$ -	\$ 3,691,767	\$ -	\$ -	\$ 11,593,478
Capital	-	1,938,000	-	-	-	1,938,000
Debt	1,391,963	-	-	-	-	1,391,963
Other	142,703	105,000	70,000	425,750	-	743,453
<b>Total Revenues</b>	<b>\$ 9,436,377</b>	<b>\$ 2,043,000</b>	<b>\$ 3,761,767</b>	<b>\$ 425,750</b>	<b>\$ -</b>	<b>\$ 15,666,894</b>
<b>Expenses</b>						
Operating	\$ 8,044,414	\$ -	\$ 2,633,685	\$ -	\$ -	\$ 10,678,099
Capital	-	5,675,000	-	1,728,000	-	7,403,000
Debt Service	1,391,963	-	981,641	-	-	2,373,604
Other	-	-	-	-	-	-
<b>Total Expenses</b>	<b>\$ 9,436,377</b>	<b>\$ 5,675,000</b>	<b>\$ 3,615,326</b>	<b>\$ 1,728,000</b>	<b>\$ -</b>	<b>\$ 20,454,703</b>
Increase/(Decrease)	\$ -	\$ (3,632,000)	\$ 146,441	\$ (1,302,250)	\$ -	\$ (4,787,810)
Funds Available Beginning of the Year	-	12,321,917	2,198,147	9,653,611	1,008,252	25,181,927
<b>Funds Available End of the Year</b>	<b>\$ -</b>	<b>\$ 8,689,917</b>	<b>\$ 2,344,588</b>	<b>\$ 8,351,361</b>	<b>\$ 1,008,252</b>	<b>\$ 20,394,117</b>

# REVENUE SUMMARY

## BASIS FOR REVENUE BY SOURCE

SEJPA’s revenue is based on cost of service and miscellaneous revenue sources. Influent and effluent flow percentages are used to estimate the operating and maintenance costs charged to each member and leasing agency. Capacity percentages are used to estimate capital costs charged to each member and leasing agency.

- Influent flow is the basis for Wastewater and Laboratory Services costs.
- Effluent flow is the basis for the Ocean Outfall costs.
- Capacity is the basis for capital appropriations and debt services.

Below is a table of the 3-year average daily influent, effluent, and owned/leased capacity data for each member and leasing agency:

Millions of Gallons Per Day (MGD)									
Entity	Influent		Effluent		Wastewater Treatment Capacity		Outfall Capacity		
City of Encinitas	1.223	45.9%	0.574	5.4%	2.200	41.9%	2.250	8.8%	
City of Solana Beach	0.927	34.8%	0.422	4.0%	2.200	41.9%	2.250	8.8%	
Rancho Santa Fe CSD	0.153	5.7%	0.072	0.7%	0.250	4.8%	0.250	1.0%	
City of Del Mar	0.364	13.7%	0.161	1.5%	0.600	11.4%	0.600	2.4%	
City of Escondido	-	0.0%	9.328	88.4%	-	0.0%	20.150	79.0%	
<b>Total</b>	<b>2.667</b>	<b>100.0%</b>	<b>10.557</b>	<b>100.0%</b>	<b>5.250</b>	<b>100.0%</b>	<b>25.500</b>	<b>100.0%</b>	

The Laboratory Services program provides analytical services to the following facilities:

- Fairbanks Ranch Community Service District (CSD)
- Rancho Santa Fe CSD
- Santa Fe Valley CSD
- Whispering Palms CSD
- San Ysidro Border Facility

The FY 2024-25 recommended budget is based on historic service levels. The analytical service revenues may vary based upon the actual number of samples analyzed for our customers.

The Recycled Water program receives revenue from different customers with varying levels of service. In May 2021, the Board accepted the 2021 Recycled Water Cost-of-Service Study and approved recycled water rates for five fiscal years from FY 2021-22 to FY 2025-26. The planned rate increase for FY 2024-25 is 3.9% that will go into effect on July 1, 2024. The Recycled Water program also receives incentives in the amount of \$250 per acre-foot (AF) from the Metropolitan Water District of Southern California (MWD) and \$200 per AF from the San Diego County Water Authority (SDCWA).

## *FY 2023-24 ESTIMATED ACTUAL REVENUE*

The estimated revenue for FY 2023-24 is projected to be \$14,459,494, which is \$86,284 or 0.6% more revenue than anticipated.

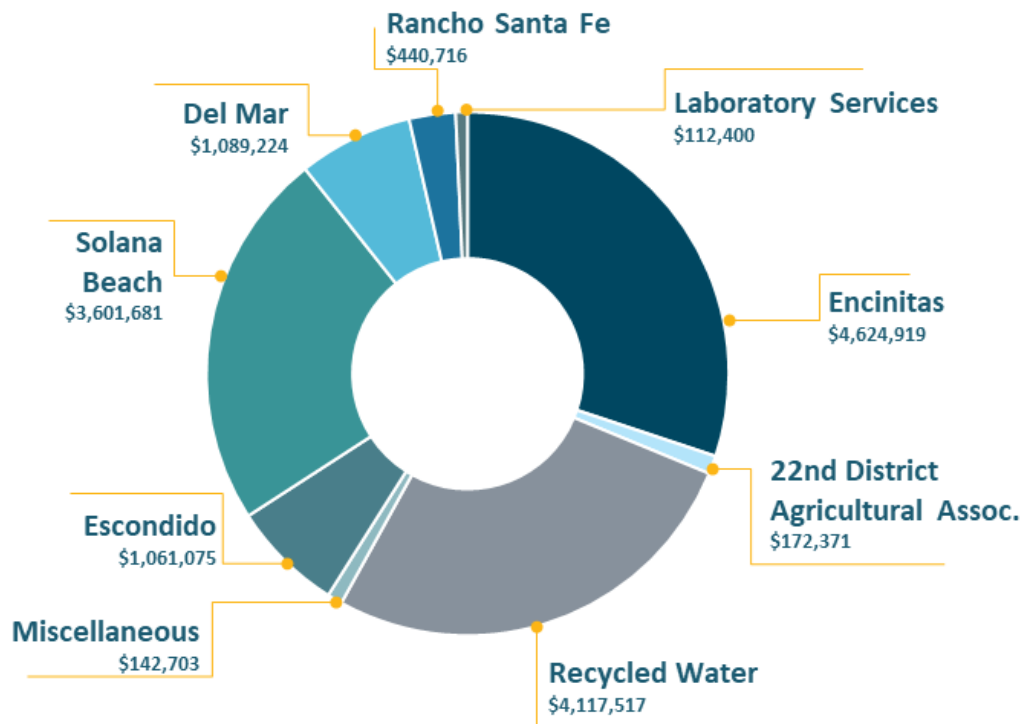
## *FY 2024-25 RECOMMENDED REVENUE BUDGET*

The FY 2024-25 recommended budget includes a total revenue forecast of \$15,362,626, which is \$989,416 or 6.9% increase from the prior fiscal year. Key contributors to year-over-year budget changes includes:

- Increased labor costs of approximately 13% across all programs, which is attributed to the tightening labor market conditions and staffing adjustments.
- The pattern of intense storm action associated with climate change has resulted in higher resource needs to respond.
- In the marketplace, insurance premiums have increased substantially, and as well as generally higher inflation for supplies and services.
- Increase to Solana Beach Pump Stations budget to reflect cost increase to odor control chemicals and SDG&E utility costs.
- Increase Laboratory Services budget to reflect increased costs associated with outside laboratory services.
- Increase to Cardiff Pump Stations budget to include capital project to replace the wet well inlet side gate at Olivenhain Pump Station.
- Increase in capital expenses across several programs to capture the expense of developing the 2025 Facility Plan update, which will outline capital needs for the next decade.
- Scheduled 3.9% recycled water rate increase effective July 1, 2024.
- Scheduled increase in recycled water purchase volume by the Encinitas Ranch Golf Authority.

Below is a summary of revenue sources shown in both table and chart format to illustrate the revenue diversity with the agencies we serve.

<b>Revenue Source</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
City of Encinitas	\$ 3,764,106	\$ 4,792,771	\$ 4,581,613	\$ 4,691,390	\$ 4,624,919
City of Solana Beach	2,873,053	3,085,413	3,250,973	3,332,966	3,601,681
City of Del Mar	830,683	928,891	963,554	994,172	1,089,244
22nd District Agricultural Association	-	139,564	161,505	136,953	172,371
Rancho Santa Fe CSD	338,568	370,513	393,998	404,207	440,716
City of Escondido	1,078,135	970,765	838,637	996,841	1,061,075
Laboratory Services	43,844	54,072	115,643	100,600	112,400
Recycled Water	3,318,361	3,100,369	3,374,267	3,603,713	3,691,767
T-Mobile Cell Site Lease	29,958	28,931	32,736	32,736	33,718
Other Revenue	337,569	65,840	47,832	37,632	45,885
Interest on Wastewater Operations	151	295,994	63,110	30,000	63,100
Interest on Water Reclamation	-	87,413	635,626	12,000	425,750
<b>Total Revenue Sources</b>	<b>\$ 12,615,736</b>	<b>\$ 13,920,539</b>	<b>\$ 14,459,494</b>	<b>\$ 14,373,210</b>	<b>\$ 15,362,626</b>



# REVENUE DETAIL

## CITY OF ENCINITAS – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Wastewater Treatment	\$ 1,378,372	\$ 1,507,468	\$ 1,790,005	\$ 1,825,408	\$ 1,975,788
RSF CSD Contribution for 2017 Revenue Bonds	(31,815)	(31,843)	(31,861)	(31,861)	(31,861)
Del Mar Contribution for 2017 Revenue Bonds	(76,356)	(76,424)	(76,467)	(76,467)	(76,467)
Del Mar Wastewater Treatment Credit	30,000	30,000	30,000	30,000	30,000
T-Mobile Cell Tower Income	(13,142)	(15,891)	(16,368)	(16,368)	(16,859)
Total Wastewater Revenue	<u>\$ 1,287,060</u>	<u>\$ 1,413,309</u>	<u>\$ 1,695,309</u>	<u>\$ 1,730,712</u>	<u>\$ 1,880,601</u>
Laboratory Services	351,089	411,742	352,642	391,994	430,453
Ocean Outfall	61,216	51,618	43,609	52,692	58,194
Cardiff Sanitary Division Pump Stations	300,545	339,056	342,464	376,169	405,554
Encinitas Sanitary Division Pump Station	142,988	148,206	177,439	167,777	185,448
Encinitas Urban and Stormwater Services	47,888	41,401	53,619	55,514	61,804
2017 Revenue Bonds	668,113	668,713	669,088	669,088	669,288
Capital Projects - Wastewater	905,208	1,718,726	572,444	572,444	604,578
Capital Projects - Cardiff Sanitary Division Pump Stations	-	-	75,000	75,000	125,000
Capital Projects - Encinitas Sanitary Division Pump Stations	-	-	600,000	600,000	204,000
Total Revenue	<u><u>\$ 3,764,106</u></u>	<u><u>\$ 4,792,771</u></u>	<u><u>\$ 4,581,613</u></u>	<u><u>\$ 4,691,390</u></u>	<u><u>\$ 4,624,919</u></u>

## CITY OF SOLANA BEACH – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Wastewater Treatment	\$ 1,085,118	\$ 1,131,886	\$ 1,344,303	\$ 1,371,135	\$ 1,497,592
RSF CSD Contribution for 2017 Revenue Bonds	(31,815)	(31,843)	(31,861)	(31,861)	(31,861)
Del Mar Contribution for 2017 Revenue Bonds	(76,356)	(76,424)	(76,467)	(76,467)	(76,467)
Del Mar Wastewater Treatment Credit	30,000	30,000	30,000	30,000	30,000
T-Mobile Cell Tower Income	(10,243)	(15,891)	(16,368)	(16,368)	(16,859)
Total Wastewater Revenue	<u>\$ 996,705</u>	<u>\$ 1,037,727</u>	<u>\$ 1,249,607</u>	<u>\$ 1,276,438</u>	<u>\$ 1,402,405</u>
Laboratory Services	256,191	309,158	267,260	297,084	326,271
Ocean Outfall	43,970	38,061	32,385	39,130	42,784
Solana Beach Pump Stations	362,511	416,900	439,753	451,388	500,243
Solana Beach Urban and Stormwater Services	6,870	7,399	5,794	11,887	12,555
Solana Beach Generator Maintenance Services	8,486	13,730	14,643	15,507	17,557
2017 Revenue Bonds	668,113	668,713	669,088	669,088	669,288
Capital Projects - Wastewater	530,208	593,726	572,444	572,444	604,578
Capital Projects - Pump Stations	-	-	-	-	26,000
Total Revenue	<u><u>\$ 2,873,053</u></u>	<u><u>\$ 3,085,413</u></u>	<u><u>\$ 3,250,973</u></u>	<u><u>\$ 3,332,966</u></u>	<u><u>\$ 3,601,681</u></u>

## CITY OF DEL MAR – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Wastewater Treatment	\$ 419,159	\$ 471,460	\$ 535,322	\$ 545,951	\$ 586,436
Laboratory Services	106,765	128,772	105,876	117,691	127,763
Ocean Outfall	17,946	15,566	12,528	15,138	16,323
Del Mar Wastewater Treatment Credit	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)
Del Mar Pump Station	49,564	58,410	60,828	66,392	75,982
2017 Revenue Bonds	152,711	152,849	152,934	152,934	152,934
Capital Projects - Wastewater	144,538	161,834	156,066	156,066	164,806
Capital Projects - Pump Stations	-	-	-	-	25,000
<b>Total Revenue</b>	<b>\$ 830,683</b>	<b>\$ 928,891</b>	<b>\$ 963,554</b>	<b>\$ 994,172</b>	<b>\$ 1,089,244</b>

## 22ND DISTRICT AGRICULTURAL ASSOCIATION (DEL MAR FAIRGROUNDS) – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Del Mar Fairgrounds	\$ -	\$ 139,564	\$ 161,505	\$ 136,953	\$ 172,371
<b>Total Revenue</b>	<b>\$ -</b>	<b>\$ 139,564</b>	<b>\$ 161,505</b>	<b>\$ 136,953</b>	<b>\$ 172,371</b>

## RANCHO SANTA FE COMMUNITY SERVICES DISTRICT – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Wastewater Treatment	\$ 165,287	\$ 183,077	\$ 216,994	\$ 221,302	\$ 247,175
Laboratory Services	42,101	50,005	42,917	47,706	53,851
Ocean Outfall	7,326	6,314	5,338	6,450	7,300
2017 Revenue Bonds	63,630	63,687	63,723	63,723	63,723
Capital Projects	60,224	67,430	65,026	65,026	68,668
<b>Total Revenue</b>	<b>\$ 338,568</b>	<b>\$ 370,513</b>	<b>\$ 393,998</b>	<b>\$ 404,207</b>	<b>\$ 440,716</b>



### PROMOTING SUSTAINABILITY

As California faces cyclical droughts, local supplies of recycled water are more important than ever. Ada Harris Elementary School saves money and conserves natural resources by using recycled water.

## CITY OF ESCONDIDO – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Ocean Outfall	\$ 1,078,135	\$ 832,481	\$ 759,617	\$ 917,822	\$ 945,706
Capital Projects	-	138,284	79,020	79,020	115,369
<b>Total Revenue</b>	<b>\$ 1,078,135</b>	<b>\$ 970,765</b>	<b>\$ 838,637</b>	<b>\$ 996,841</b>	<b>\$ 1,061,075</b>

## LABORATORY SERVICES – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Fairbanks Ranch	\$ 11,363	\$ 11,500	\$ 19,553	\$ 17,600	\$ 18,900
Rancho Santa Fe CSD 1	12,764	13,000	22,879	20,000	21,400
Santa Fe Valley	6,481	8,000	38,659	28,400	34,700
Whispering Palms	13,237	14,000	22,426	21,000	22,300
San Ysidro Boarder Patrol Facility	-	7,572	12,126	13,600	15,100
<b>Total Revenue</b>	<b>\$ 43,844</b>	<b>\$ 54,072</b>	<b>\$ 115,643</b>	<b>\$ 100,600</b>	<b>\$ 112,400</b>

## RECYCLED WATER – REVENUE DETAIL

Revenue Source	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Santa Fe Irrigation District	\$ 1,024,615	\$ 930,498	\$ 1,002,255	\$ 1,096,044	\$ 1,108,380
San Dieguito Water District	656,210	642,510	807,321	746,634	810,264
City of Del Mar	127,737	167,478	139,764	165,510	162,435
Encinitas Ranch Golf Authority	302,796	314,908	327,503	327,503	412,938
Olivenhain Municipal Water District	487,003	367,275	397,224	548,022	477,750
<b>Total Customers</b>	<b>\$ 2,598,361</b>	<b>\$ 2,422,669</b>	<b>\$ 2,674,067</b>	<b>\$ 2,883,713</b>	<b>\$ 2,971,767</b>
MWD/CWA Incentives	720,000	677,700	700,200	720,000	720,000
<b>Total Revenue</b>	<b>\$ 3,318,361</b>	<b>\$ 3,100,369</b>	<b>\$ 3,374,267</b>	<b>\$ 3,603,713</b>	<b>\$ 3,691,767</b>

\*State and Federal Grant Revenue is shown in the Capital Program Section

## RECYCLED WATER NET REVENUE

Net Revenue over (under) Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Operating Revenue	\$ 3,318,361	\$ 3,100,369	\$ 3,374,267	\$ 3,603,713	\$ 3,691,767
Operating Expense	(1,892,323)	(2,382,161)	(2,523,511)	(2,720,132)	(2,633,685)
Debt Service	(182,929)	(294,532)	(964,069)	(981,985)	(981,641)
<b>Net Recycled Water Revenue</b>	<b>\$ 1,243,109</b>	<b>\$ 423,676</b>	<b>\$ (113,313)</b>	<b>\$ (98,404)</b>	<b>\$ 76,441</b>

# OPERATING EXPENSE SUMMARY

SEJPA owns and operates the San Elijo Water Campus, San Elijo Recycled Water Utility, and is a co-owner of the San Elijo Ocean Outfall. SEJPA also manages several related service programs to support the cities of Encinitas, Solana Beach, and Del Mar, as well as other local government agencies. Operational programs include:

- Wastewater Treatment
- Laboratory Services
- Ocean Outfall
- Cardiff Sanitary Division Pump Stations
- Encinitas Sanitary Division Pump Station
- City of Encinitas Urban & Stormwater Services
- City of Solana Beach Pump Stations
- City of Solana Beach Generator Services
- City of Del Mar Pump Station
- 22nd District Agricultural Association (Del Mar Fairgrounds)
- Leucadia Wastewater District (LWD) Technical Support Services
- Recycled Water

In providing these services, SEJPA seeks to accomplish its mission in an environmentally, socially, and fiscally responsible manner. Except for the Recycled Water program, each of the above programs is funded by the customer base that is served and cost allocations are applied based on actual flows treated or level of effort provided. The Recycled Water Program is funded by water sales, grants, and incentive programs.

## STAFF ALLOCATION

Budgeting for staff time is based on estimates of actual time required by each program. Below is a table showing the anticipated percentages of direct labor for each program in FY 2024-25.

<b>Program</b>	<b>Recommended Staffing Allocation for FY 2024-25</b>
Wastewater Treatment	32.5%
Labooratory Services	16.6%
Ocean Outfall	11.2%
Cardiff Sanitary Division Pump Stations	3.6%
Encinitas Sanitary Division Pump Station	1.7%
City of Encinitas Urban & Stormwater Services	0.7%
City of Solana Beach Pump Stations	4.7%
Solana Beach Generator Services	0.3%
City of Del Mar Pump Station	0.9%
Del Mar Fairgrounds	2.5%
Leucadia WD Technical Support Services	0.4%
Recycled Water	17.9%
Capital Programs	7.1%
Total	100.0%



## FY 2023-24 ESTIMATED ACTUAL EXPENSE – ALL PROGRAMS

Total expenses including operating, capital, and debt service are estimated to end the fiscal year under budget by \$2,632,945 or 13.9%. By program, nine out of twelve programs are track under budget. Operating expenses are estimated to end the year under budget at \$540,029 or 5.4%. Capital expenses are estimated to be on budget. Debt services actual expenses are anticipated to end the year slightly below budget by \$17,916 or 0.75%.

## FY 2024-25 RECOMMENDED BUDGET – ALL PROGRAMS

Total FY 2024-25 recommended budget is \$16,561,046 including \$10,521,442 operating budget, \$3,666,000 capital appropriations, and \$2,373,604 debt service. The operating budget has increased by \$546,819 or 5.5% from the prior year. The capital appropriations are for projects listed in the Capital Program section of this budget book. The debt service budget will remain relatively similar to the prior year’s budget.

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 3,678,174	\$ 4,117,584	\$ 4,438,928	\$ 4,610,406	\$ 5,200,581
Supplies and Services	4,185,275	4,598,550	4,852,189	5,080,217	5,056,431
Capital Outlay	56,755	85,226	143,477	75,000	40,000
Contingency	-	-	-	209,000	224,430
Total Operating Expense	\$ 7,920,203	\$ 8,801,360	\$ 9,434,594	\$ 9,974,623	\$ 10,521,442
Capital Appropriations	2,235,000	3,180,000	4,495,000	6,570,000	3,666,000
Total Operating and Capital Appropriations	\$ 10,155,203	\$ 11,981,360	\$ 13,929,594	\$ 16,544,623	\$ 14,187,442
Debt Service					
2017 Revenue Bonds	\$ 1,336,225	\$ 1,337,425	\$ 1,338,175	\$ 1,338,175	\$ 1,338,575
SDG&E On-Bill Financing	53,388	53,388	53,388	53,388	53,388
2023 Recycled Water Loan	-	-	778,982	778,982	778,497
Advanced Water Purification	148,153	148,153	148,153	148,153	148,154
SFID Pipeline Loan	25,146	138,369	31,134	44,500	46,980
Solana Beach Pipeline Loan	9,630	8,010	5,800	10,350	8,010
Total Debt Service	\$ 1,572,542	\$ 1,685,345	\$ 2,355,632	\$ 2,373,548	\$ 2,373,604
Total Expenses	\$ 11,727,745	\$ 13,666,705	\$ 16,285,226	\$ 18,918,171	\$ 16,561,046



## BUILDING PARTNERSHIPS

Good neighbors make good partners. Across from the Water Campus, the Nature Collective and the County of San Diego manage the 800-acre San Elijo Lagoon Ecological Reserve. We share their commitment to protect the lagoon and ocean environments and are proud to be their partner in conservation and education.

### OPERATING EXPENSE DETAIL – ALL PROGRAMS

Operating Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
<b>Personnel</b>					
Direct Salaries and Wages	\$ 2,506,907	\$ 2,794,481	\$ 3,079,197	\$ 3,090,067	\$ 3,485,414
FICA Tax	307	-	-	-	-
Medicare Tax	40,685	37,722	40,397	47,241	55,095
State Unemployment Tax	3,474	4,430	3,891	12,775	4,046
Standby Pay	16,895	29,185	32,025	30,699	34,411
Overtime Pay	50,711	61,147	38,638	48,291	46,877
Dental/Vision	20,261	29,420	38,937	29,439	41,805
Employee Assistance Program	742	775	968	1,961	1,998
Life Insurance/Disability	24,644	14,802	27,209	26,802	31,627
Workers Comp. Insurance	50,767	41,209	49,726	56,133	57,197
Medical Insurance - Pers	248,678	299,409	430,286	421,028	535,078
Retirement Plan - CalPERS & PARS Trust	604,783	680,185	582,743	686,521	733,544
Deferred Comp-employer	94,134	103,048	101,300	136,928	149,936
Uniforms - Boots	1,994	4,342	2,502	6,624	6,656
Payroll Processing Fees	12,517	12,921	10,258	13,445	13,700
Other Personnel Costs	675	4,508	851	2,452	3,197
	<b>\$ 3,678,174</b>	<b>\$ 4,117,584</b>	<b>\$ 4,438,928</b>	<b>\$ 4,610,406</b>	<b>\$ 5,200,581</b>
<b>Supplies and Services</b>					
Advertising	\$ 3,072	\$ 6,283	\$ 6,316	\$ 4,305	\$ 4,520
Bank Service Charges	2,320	7,260	5,045	8,300	8,300
Board Expense	2,240	2,178	12,619	2,700	7,300
Dues & Memberships	34,562	26,122	21,823	29,760	31,200
Equipment Rental/Lease	17,065	8,617	5,699	12,000	12,000
Fees - Disposal	327	338	5	1,000	1,000
Fees - Permits	84,374	92,503	89,360	93,500	98,050
Fines	-	91	-	-	-
Fuel	23,361	22,874	24,573	25,000	26,005
Insurance - Liability	44,897	49,757	42,600	61,200	67,340
Insurance - Auto	2,739	2,765	2,751	3,400	3,770
Insurance - Property	60,115	85,389	123,620	102,500	130,000
Licenses	51,536	54,390	60,091	56,600	61,400
Minor Equip - Shop & Field	30,980	28,786	21,311	23,230	25,090
Miscellaneous	11	-	-	3,000	3,000
Postage/Shipping	2,522	2,316	3,028	2,500	3,100
Preemployment Screening	636	1,755	2,185	846	1,497
Printing	(710)	181	2,970	1,400	2,000
Rent	126,664	94,732	110,089	124,793	114,743
Repair Parts Expense	225,364	343,806	290,509	240,400	290,307
Retrofit Expenses	24,713	-	-	105,000	-
Seminars/Education	5,887	7,205	12,946	16,310	16,310
Services - Accounting	44,499	39,109	73,299	37,000	38,000
Services - Sediment Disposal	-	-	33,886	29,500	43,500
Services - Alarm	9,450	12,798	9,387	18,820	12,483
Services - Biosolids Hauling	221,713	182,840	219,011	225,055	307,500

Operating expense detail continued on next page.

Operating Expense Detail Continued

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Services - Engineering	\$ 618,686	\$ 275,470	\$ 301,385	\$ 405,000	\$ 240,000
Services - Fire Control	-	-	-	8,000	4,000
Services - Grease & Scum	13,414	7,751	21,453	20,000	22,000
Services - Grit & Screenings	36,615	62,216	15,138	29,900	29,900
Services - Janitorial	15,403	15,218	56,442	35,000	51,260
Services - Laboratory	42,396	40,629	61,673	51,500	64,000
Services - Landscape	68,168	79,573	61,786	65,424	68,695
Services - Legal	83,954	76,016	58,422	73,000	75,200
Services - Lobbying	21,088	14,625	19,500	20,000	24,000
Services - Maintenance	114,554	174,448	177,985	126,180	155,640
Services - Medical	6,249	4,372	4,939	8,000	8,000
Services - Other	584	292	1,574	1,600	1,600
Services - Professional	145,909	235,397	167,009	260,000	200,000
Services - Temp	109,718	178,607	225,184	170,909	150,351
Services - IT/GIS Support	98,536	116,695	93,976	164,658	87,860
Services - Contractors	54,233	104,883	96,434	111,870	111,870
Services - Testing	26	-	-	1,000	1,000
Services - Uniforms	8,842	9,288	7,999	11,002	11,002
Subscription	1,800	1,474	-	1,200	1,200
Subsistence - Meals	1,641	2,551	5,278	2,500	5,550
Subsistence - Travel/Rm & Bd	505	1,705	13,241	5,000	13,905
Supplies - Chem - Ferric Chloride	77,455	114,042	176,740	123,200	188,000
Supplies - Chem - Odor (Calcium Nitrate)	92,967	101,166	125,362	123,450	118,050
Supplies - Chem - Polymer	86,529	99,012	109,285	100,000	110,000
Supplies - Chem - Sodium Hypochlorite	75,369	129,330	182,092	229,500	222,000
Supplies - Chemicals	118,514	99,297	98,094	158,000	90,700
Supplies - IT Equipment	-	-	4,961	-	24,000
Supplies - Janitorial	2,152	6,267	3,331	5,000	5,000
Supplies - Lab	121,543	145,757	165,561	135,000	175,000
Supplies - Office	13,888	21,803	30,520	15,000	15,000
Supplies - Safety	8,680	14,698	15,825	11,200	16,000
Supplies - Shop & Field	43,126	38,595	50,622	28,975	46,729
Training	15,101	18,161	3,823	16,588	16,601
Training - Safety	1,778	3,460	4,321	10,605	10,622
Utilities - Gas & Electric	962,389	1,047,922	1,053,134	1,060,200	1,084,400
Utilities - Internet	2,593	173	10,501	5,400	25,255
Utilities - Telephone	37,175	43,122	37,573	38,311	39,490
Utilities - Trash	3,864	5,715	5,867	5,000	6,010
Utilities - Water	29,068	39,294	43,603	42,750	49,800
Utilities - Water (Suppl.)	26,755	49,140	21,561	16,500	21,500
Utilities - Solar Power	-	143,652	134,175	139,000	139,100
Vehicle Maintenance	5,674	4,639	12,698	16,675	17,725
	<u>\$ 4,185,275</u>	<u>\$ 4,598,550</u>	<u>\$ 4,852,189</u>	<u>\$ 5,080,217</u>	<u>\$ 5,056,431</u>
Capital Outlay	\$ 56,755	\$ 85,226	\$ 143,477	\$ 75,000	\$ 40,000
Contingency	-	-	-	209,000	224,430
Total Operating Expense	<u>\$ 7,920,203</u>	<u>\$ 8,801,360</u>	<u>\$ 9,434,594</u>	<u>\$ 9,974,623</u>	<u>\$ 10,521,442</u>

# OPERATING EXPENSE BY PROGRAM

## WASTEWATER TREATMENT

### PROGRAM DESCRIPTION

Wastewater Treatment is the primary cost center for operation and maintenance activities at the San Elijo Water Campus. Activities currently include full secondary wastewater treatment for the cities of Encinitas, Solana Beach, and Del Mar, as well as the Rancho Santa Fe Community Services District, with the effluent being recycled or disposed to the ocean. Wastewater biosolids are treated and dewatered, then hauled by contractor to a privately-operated land application site in Arizona for beneficial reuse.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

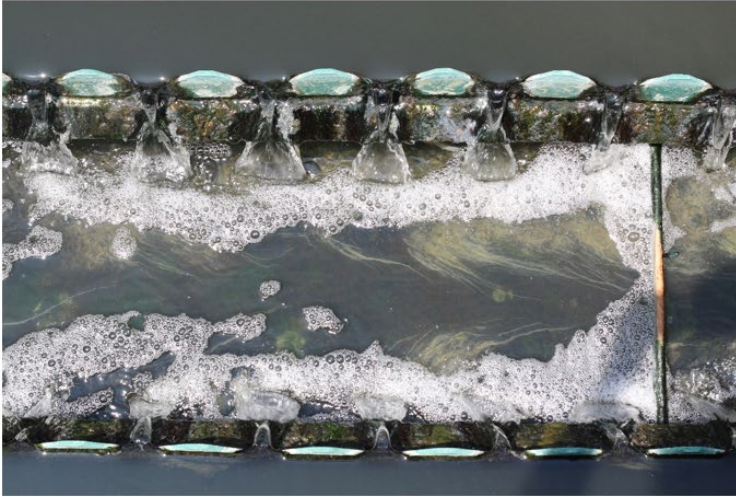
Actual operating expenses for the Wastewater Treatment program are expected to be under budget by \$77,174 or 1.9%. Personnel is over budget by \$9,571 or 0.6%. Supplies and Services is under budget by \$11,506 or 0.5%, due to higher than anticipated chemical costs. Capital Outlay is anticipated to be slightly over budget by the end of the fiscal year by \$762 or 2.2%.

### FY 2024-25 RECOMMENDED EXPENSE BUDGET

Total FY 2024-25 recommended budget is \$6,910,567 including \$4,306,992 operating budget, \$1,265,000 capital appropriations, and \$1,338,575 debt service. The operating budget is \$343,195 or 8.7% above the prior year’s budget. Personnel expenses are planned to increase by \$226,495 or 13.3% to reflect inflation to personnel and current work demands. Supplies and Services is to increase by \$151,700 or 7.0% to reflect general cost inflation and high percentage increases in certain chemicals, biosolids hauling and recycling, sediment disposal, and repair parts. Capital Outlay expenses have been moved to the capital program section this fiscal year. The Contingency budget is set at \$76,000 which is 3.3% of the budgeted Supplies and Services costs to provide funding for unplanned expenses.

### Wastewater Treatment Expense Summary

Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Personnel	\$ 1,434,521	\$ 1,439,739	\$ 1,708,606	\$ 1,699,035	\$ 1,925,530
Supplies and Services	1,604,585	1,797,979	2,142,256	2,153,762	2,305,462
Capital Outlay	28,793	13,530	35,762	35,000	-
Contingency	-	-	-	76,000	76,000
Total Operating Expense	<u>\$ 3,067,899</u>	<u>\$ 3,251,248</u>	<u>\$ 3,886,624</u>	<u>\$ 3,963,797</u>	<u>\$ 4,306,992</u>
Capital Appropriations	1,240,000	1,260,000	1,225,000	1,225,000	1,265,000
Total Operating and Capital Appropriations	<u>\$ 4,307,899</u>	<u>\$ 4,511,248</u>	<u>\$ 5,111,624</u>	<u>\$ 5,188,797</u>	<u>\$ 5,571,992</u>
Debt Service					
2017 Revenue Bonds	1,336,225	1,337,425	1,338,175	1,338,175	1,338,575
Total Debt Service	<u>\$ 1,336,225</u>	<u>\$ 1,337,425</u>	<u>\$ 1,338,175</u>	<u>\$ 1,338,175</u>	<u>\$ 1,338,575</u>
Total Expenses	<u>\$ 5,644,124</u>	<u>\$ 5,848,673</u>	<u>\$ 6,449,799</u>	<u>\$ 6,526,972</u>	<u>\$ 6,910,567</u>



## RECYCLING AND REUSING

At SEJPA we recycle and reuse majority of the wastewater we process. Our recycled water utility protects the environment and makes efficient use of natural resources.

### Wastewater Treatment Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 1,046,122	\$ 1,002,400	\$ 1,213,645	\$ 1,154,737	\$ 1,322,857
Medicare Tax	14,651	15,705	16,563	16,912	19,787
State Unemployment Tax	1,639	1,822	897	4,574	1,414
Standby Pay	11,596	14,262	13,501	13,907	15,458
Overtime Pay	16,102	14,578	13,471	14,382	15,781
Dental/Vision	7,859	11,112	14,034	10,540	14,605
Employee Assistance Program	289	302	393	703	699
Life Insurance/Disability	8,498	5,579	9,741	9,595	11,050
Workers Comp. Insurance	21,053	15,532	20,145	20,096	19,985
Medical Insurance - Pers	86,726	102,387	153,431	150,730	186,946
Retirement Plan - CalPERS & PARS Trust	175,749	207,010	207,516	245,777	256,287
Deferred Comp-employer	37,512	39,406	40,316	49,020	52,385
Uniforms - Boots	759	1,513	896	2,371	2,371
Payroll Processing Fees	4,976	4,887	3,673	4,813	4,787
Other Personnel Costs	675	3,244	385	878	1,118
	<b>\$ 1,434,521</b>	<b>\$ 1,439,739</b>	<b>\$ 1,708,606</b>	<b>\$ 1,699,035</b>	<b>\$ 1,925,530</b>
<b>Supplies and Services</b>					
Advertising	\$ 1,488	\$ 2,024	\$ 5,652	\$ 1,857	\$ 1,950
Bank Service Charges	2,320	6,260	5,045	8,300	8,300
Board Expense	2,240	2,129	12,609	1,350	3,650
Dues & Memberships	11,402	11,281	7,977	14,500	14,500
Equipment Rental/Lease	17,080	6,057	3,359	6,000	6,000
Fees - Disposal	327	338	5	1,000	1,000
Fees - Permits	46,601	40,538	40,508	40,000	42,000
Fuel	11,808	8,423	243	9,430	9,810
Insurance - Liability	19,112	24,291	17,296	24,850	27,330
Insurance - Auto	1,370	1,383	1,117	1,380	1,520
Insurance - Property	30,946	43,572	50,190	41,600	52,780
Licenses	13,035	20,342	34,967	18,350	20,100
Minor Equip - Shop & Field	9,008	25,182	18,758	10,890	12,000
Miscellaneous	11	-	-	3,000	3,000
Postage/Shipping	1,332	442	1,514	1,250	1,550
Preemployment Screening	291	779	786	302	535
Printing	(307)	119	1,347	750	810
Rent	547	556	526	518	518
Repair Parts Expense	114,866	164,818	155,235	139,150	176,677

Expense detail continued on next page.

Wastewater Treatment Operating Expense Detail Continued

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Seminars/Education	2,443	2,731	5,134	5,000	5,000
Services - Accounting	21,857	17,827	38,626	18,000	18,500
Services - Sediment Disposal	-	-	19,503	6,000	20,000
Services - Alarm	2,287	5,610	3,345	7,400	3,680
Services - Biosolids Hauling	221,713	170,785	219,011	225,055	307,500
Services - Engineering	54,965	14,667	142,940	193,750	132,500
Services - Fire Control	-	-	-	6,000	3,000
Services - Grease & Scum	13,414	7,751	21,453	20,000	22,000
Services - Grit & Screenings	9,734	23,004	11,280	23,000	23,000
Services - Janitorial	15,403	14,156	28,221	17,500	25,600
Services - Laboratory (Outsource)	475	-	4,309	4,000	4,300
Services - Landscape	68,168	64,721	41,858	32,712	34,348
Services - Legal	61,111	55,236	40,366	36,500	37,600
Services - Maintenance	50,923	46,922	104,177	57,000	59,000
Services - Medical	3,710	1,650	1,768	5,390	5,390
Services - Other	372	233	1,537	300	300
Services - Professional	88,211	55,172	54,040	112,500	82,500
Services - Temp	40,598	60,080	81,087	60,269	52,936
Services - IT/GIS Support	41,710	47,408	35,416	63,683	34,780
Services - Contractors	24,218	-	19,677	55,000	55,000
Services - Testing	-	-	-	1,000	1,000
Services - Uniforms	3,732	3,838	3,262	4,750	4,750
Subscriptions	760	653	-	600	600
Subsistence - Meals	698	1,767	3,084	1,000	2,220
Subsistence - Travel/Rm & Bd	213	509	4,893	2,000	5,560
Supplies - Chem - Ferrous Chlo	77,455	114,042	176,740	123,200	188,000
Supplies - Chem - Odor	3,349	4,520	15,383	23,000	16,000
Supplies - Chem - Polymer	83,620	90,804	99,285	90,000	99,000
Supplies - Chem - Sodium Hypo	-	5,802	-	48,195	39,000
Supplies - Chemicals	1,125	3,916	19,319	4,500	13,000
Supplies - Janitorial	1,902	4,018	1,666	2,500	2,500
Supplies - Lab	143	601	30,659	25,000	32,000
Supplies - IT Equipment	-	-	2,269	-	9,744
Supplies - Office	6,163	8,644	16,378	6,135	6,135
Supplies - Safety	5,560	10,912	9,960	4,550	6,500
Supplies - Shop & Field	34,047	27,068	39,690	19,896	35,000
Training	6,368	7,522	1,552	6,500	6,500
Training - Safety	750	1,976	1,886	4,300	4,300
Utilities - Gas & Electric	332,944	428,672	360,176	387,000	387,000
Utilities - Internet	1,215	173	4,263	2,200	10,250
Utilities - Telephone	14,299	18,730	19,819	15,400	15,900
Utilities - Trash	1,632	2,320	2,382	2,000	2,440
Utilities - Water	20,816	23,976	26,358	30,500	30,500
Utilities - Water (Suppl.)	-	8,168	-	-	-
Utilities - Solar Power	-	79,251	67,194	70,000	70,200
Vehicle Maintenance	3,006	3,612	5,155	6,000	6,400
	<u>\$ 1,604,585</u>	<u>\$ 1,797,979</u>	<u>\$ 2,142,256</u>	<u>\$ 2,153,762</u>	<u>\$ 2,305,462</u>
Capital Outlay	\$ 28,793	\$ 13,530	\$ 35,762	\$ 35,000	\$ -
Contingency	-	-	-	76,000	76,000
Total Operating Expense	<u>\$ 3,067,899</u>	<u>\$ 3,251,248</u>	<u>\$ 3,886,624</u>	<u>\$ 3,963,797</u>	<u>\$ 4,306,992</u>

# LABORATORY SERVICES

## PROGRAM DESCRIPTION

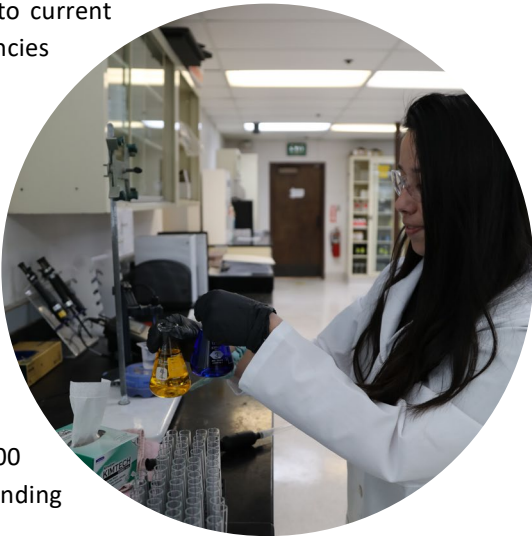
The laboratory located at the San Elijo Water Campus provides analytical services for SEJPA Wastewater and Recycled Water Programs as well as to other entities through contract agreements. The FY 2024-25 contract agreements include the Fairbanks Ranch Community Services District, the Rancho Santa Fe Community Services District, the Santa Fe Valley Community Services District, the Whispering Palms Community Services District, and the San Ysidro Border Patrol Facility, which is a new entity that San Elijo started to service in FY 2022-23.

## FY 2023-24 ESTIMATED ACTUAL EXPENSE

Overall, Laboratory Services actual operating expenses are expected to be under budget by \$62,637 or 9.3%. Personnel is under budget due to current vacancies and the use of temporary laboratory employees while vacancies are being filled.

## FY 2024-25 RECOMMENDED BUDGET

Total FY 2024-25 recommended budget is \$1,197,738 including \$1,050,738 operating budget and \$147,000 capital appropriations. The operating budget is \$95,662 or 10.0% higher than the prior year budgeted level. Personnel expenses will increase by \$67,419 or 10.0% to reflect inflation. Supplies and Services are planned to increase by \$24,243 or 8.9% due to increases in costs of laboratory supplies and subcontracted laboratory services for analyses requiring specialized equipment. Contingency funding has been set at \$9,000 which is 3.0% of the budgeted Supplies and Services cost to provide funding for unplanned expenses.



## Laboratory Services Expense Summary

Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Personnel	\$ 587,318	\$ 643,770	\$ 614,437	\$ 677,074	\$ 744,493
Supplies and Services	220,159	304,992	269,901	273,002	297,245
Capital Outlay	12,966	16,609	-	-	-
Contingency	-	-	-	5,000	9,000
Total Operating Expense	\$ 820,443	\$ 965,371	\$ 884,338	\$ 955,076	\$ 1,050,738
Capital Appropriations	-	120,000	120,000	120,000	147,000
Total Operating and Capital Appropriations	\$ 820,443	\$ 1,085,371	\$ 1,004,338	\$ 1,075,076	\$ 1,197,738

Laboratory Services Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 389,444	\$ 426,557	\$ 396,851	\$ 427,922	\$ 445,478
Medicare Tax	5,743	6,318	5,239	7,868	10,108
State Unemployment Tax	649	871	1,215	2,128	722
Standby	529	(414)	772	-	-
Overtime Pay	6,849	17,166	5,436	9,100	7,216
Dental/Vision	3,497	5,072	6,516	4,903	7,461
Employee Assistance Program	128	134	165	327	357
Life Insurance/Disability	4,571	2,552	4,533	4,464	5,645
Workers Comp. Insurance	8,265	7,104	8,435	9,349	10,209
Medical Insurance - Pers	46,652	55,883	72,117	70,120	95,498
Retirement Plan - CalPERS & PARS Trust	103,455	103,658	97,945	114,337	130,920
Deferred Comp-employer	14,982	15,166	12,950	22,805	26,760
Uniforms - Boots	438	1,116	417	1,103	1,103
Payroll Processing Fees	2,126	2,226	1,709	2,239	2,445
Other Personnel Costs	-	361	137	409	571
	<u>\$ 587,318</u>	<u>\$ 643,770</u>	<u>\$ 614,437</u>	<u>\$ 677,074</u>	<u>\$ 744,493</u>
<b>Supplies and Services</b>					
Advertising	\$ 423	\$ 3,574	\$ 106	\$ 730	\$ 767
Equipment Rental/Lease	61	734	-	-	-
Dues & Memberships	1,730	1,101	826	600	600
Fees - Permits	9,059	9,484	8,499	10,000	10,000
Fuel	410	1,221	130	1,750	1,820
Insurance - Liability	7,635	8,468	7,242	10,410	11,450
Insurance - Auto	-	-	468	580	640
Insurance - Property	5,202	5,612	21,015	17,500	22,100
Licenses	4,873	4,722	3,717	7,680	8,400
Minor Equip - Shop & Field	300	1,567	-	1,320	1,320
Postage/Shipping	736	1,302	-	-	-
Preemployment Screening	216	279	364	119	250
Printing	(120)	18	443	160	340
Rent	221	231	219	204	204
Repair Parts Expense	7,244	2,143	2,590	4,000	3,000
Seminars/Education	1,895	1,069	2,150	3,000	3,000
Services - Accounting	854	-	(2,261)	1,000	1,000
Services - Biosolids Hauling	-	12,055	-	-	-
Services - Engineering	-	-	-	12,500	-
Services - Janitorial	-	668	5,644	3,500	5,130
Services - Laboratory	34,166	36,959	52,224	40,000	48,000
Services - Legal	7,490	3,650	-	7,300	7,520
Services - Maintenance	1,397	3,684	2,053	5,000	7,200
Services - Alarm	-	-	-	335	335
Services - Medical	718	754	823	900	900
Services - Other	-	17	-	1,000	1,000
Services - Professional	1,788	3,543	-	5,000	5,000
Services - Temp	32,187	63,426	64,140	37,328	42,653
Services - Uniforms	1,507	1,578	1,360	1,867	1,867
Services - IT/GIS Support	16,788	19,839	14,641	27,339	14,930
Subscriptions	307	249	-	-	-
Subsistence - Meals	267	210	420	250	555
Subsistence - Travel/Rm & Bd	86	174	2,315	500	1,390
Supplies - Laboratory	69,028	95,326	61,319	50,000	65,000
Supplies - Chemicals	-	-	943	-	1,000
Supplies - IT Equipment	-	-	1,798	-	4,080
Supplies - Office	2,174	4,403	5,134	2,500	2,500
Supplies - Safety	2,347	2,416	1,082	1,900	2,720
Supplies - Shop & Field	1,604	4,305	86	660	660
Supplies - Janitorial	250	1,300	333	1,000	1,000
Training	2,575	3,045	650	2,750	2,750
Training - Safety	303	343	642	1,500	1,500
Utilities - Internet	303	-	1,785	920	4,290
Utilities - Telephone	2,796	4,419	3,844	6,450	6,655
Utilities - Trash	659	971	997	850	1,020
Vehicle Maintenance	682	133	2,159	2,600	2,700
	<u>\$ 220,159</u>	<u>\$ 304,992</u>	<u>\$ 269,901</u>	<u>\$ 273,002</u>	<u>\$ 297,245</u>
Capital Outlay	\$ 12,966	\$ 16,609	\$ -	\$ -	\$ -
Contingency	-	-	-	5,000	9,000
Total Operating Expense	<u>\$ 820,443</u>	<u>\$ 965,371</u>	<u>\$ 884,338</u>	<u>\$ 955,076</u>	<u>\$ 1,050,738</u>



# OCEAN OUTFALL

## PROGRAM DESCRIPTION

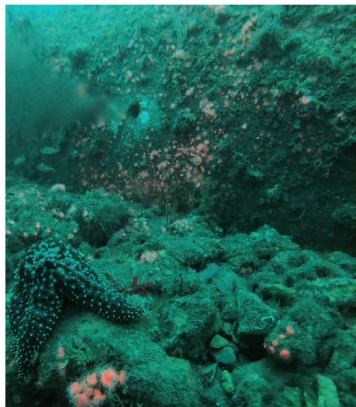
This program is the cost center for all operation and maintenance services related to the Ocean Outfall system. These activities include effluent pump station operations and maintenance; ocean monitoring; sampling and testing; and outfall inspection. Outfall capacity is shared through an agreement between SEJPA and the City of Escondido; all operation and maintenance costs are shared based on actual usage (measured by discharged flows). Capital improvement project costs are shared based on leased/owned capacity (79% City of Escondido and 21% SEJPA).

## FY 2023-24 ESTIMATED ACTUAL EXPENSE

Ocean Outfall's actual operating expenses are expected to be under budget by \$177,754 or 15.7% due to engineering services related to asset management of the Escondido regulator structure anticipated to be completed next fiscal year.

## FY 2024-25 RECOMMENDED BUDGET

Total FY 2024-25 recommended budget is \$1,216,306 including \$1,070,306 operating budget and \$146,000 capital appropriations. The recommended operating budget is \$39,075 or 3.8% more than the previous year. Personnel costs are expected to increase \$73,191 or 13.7% to reflect inflation to labor related costs. Supplies and Services are expected to decrease \$34,116 or 7.2%, due to a reduced need for engineering services. Contingency funding remains at \$25,000, which is approximately 5.7% of the budgeted Supplies and Services costs. This provides funding for unforeseen events or repairs for facilities within the Ocean Outfall Program.



### INSPECTING ASSETS

The San Elijo Ocean Outfall extends 8,000 feet from the shoreline at an end depth of 150 feet below sea level. In 2022, the Outfall Plume Tracking Study was completed. The resulting report confirmed historical findings that the aquatic life and environment are not being impacted by ocean discharge from San Elijo Ocean Outfall. Data showed the outfall was in excellent condition and marine life in the area was thriving.

### Ocean Outfall Expense Summary

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 442,860	\$ 558,515	\$ 491,311	\$ 534,110	\$ 607,301
Supplies and Services	769,417	388,972	362,166	472,121	438,005
Capital Outlay	61	2,881	-	-	-
Contingency	-	-	-	25,000	25,000
Total Operating Expense	\$ 1,212,337	\$ 950,368	\$ 853,477	\$ 1,031,231	\$ 1,070,306
Capital Appropriations	120,000	175,000	100,000	100,000	146,000
Total Operating and Capital Appropriations	\$ 1,332,337	\$ 1,125,368	\$ 953,477	\$ 1,131,231	\$ 1,216,306

### Ocean Outfall Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 304,215	\$ 347,607	\$ 333,161	\$ 354,787	\$ 401,350
Medicare Tax	7,338	2,319	4,497	5,612	6,840
State Unemployment Tax	287	442	501	1,518	489
Standby Pay	834	4,141	2,831	2,776	3,199
Overtime Pay	2,583	5,769	3,629	5,308	5,247
Dental/Vision	2,441	3,599	4,643	3,498	5,049
Employee Assistance Program	91	95	109	233	242
Life Insurance/Disability	3,226	1,810	3,232	3,184	3,820
Workers Comp. Insurance	5,351	5,040	5,607	6,669	6,908
Medical Insurance - Pers	32,781	38,992	51,211	50,020	64,625
Retirement Plan - CalPERS & PARS Trust	69,913	133,463	69,397	81,562	88,595
Deferred Comp-employer	12,094	12,961	10,894	16,268	18,109
Uniforms - Boots	243	459	297	787	787
Payroll Processing Fees	1,470	1,577	1,219	1,597	1,655
Other Personnel Costs	-	241	84	291	386
	\$ 442,860	\$ 558,515	\$ 491,311	\$ 534,110	\$ 607,301

Expense detail continued on next page.

Ocean Outfall Operating Expense Detail Continued

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Supplies and Services</b>					
Advertising	\$ 269	\$ 183	\$ 71	\$ 429	\$ 450
Board Expense	-	20	4	550	1,450
Dues & Memberships	11,751	3,351	1,987	5,100	5,100
Equipment Rental/Lease	39	486	936	2,400	2,400
Fees - Permits	22	23	33	2,500	2,500
Fuel	1,507	2,103	1,386	325	340
Insurance - Liability	4,695	5,647	4,814	6,920	7,600
Insurance - Auto	548	553	311	380	425
Insurance - Property	5,993	9,649	13,969	11,600	14,690
Licenses	4,016	8,046	2,464	5,100	5,600
Postage/Shipping	113	157	606	500	620
Preemployment Screening	34	186	259	125	180
Printing	(71)	12	305	110	225
Rent	139	151	144	150	150
Repair Parts Expense	4,894	4,993	9,867	2,420	10,000
Seminars/Education	445	780	1,429	1,300	1,300
Minor Equip - Shop & Field	15,049	76	-	4,840	4,840
Services - Accounting	8,440	7,131	15,777	7,200	7,400
Services - Engineering	507,270	45,610	-	75,000	7,500
Services - Janitorial	-	-	5,644	3,500	5,130
Services - Landscape	-	5,662	-	13,085	13,739
Services - Laboratory	1,037	153	298	-	-
Services - Legal	604	367	1,607	7,300	7,520
Services - Maintenance	657	8,525	4,161	2,000	10,460
Services - Medical	509	535	587	200	200
Services - Other	74	11	15	-	-
Services - Professional	28,635	74,300	67,015	74,000	62,000
Services - IT/GIS Support	10,535	13,178	9,732	18,172	9,930
Services - Contractors	14,340	9,560	4,780	32,670	32,670
Services - Temp	15,146	21,721	31,253	32,158	25,267
Services - Uniforms	955	1,015	897	1,096	1,096
Services - Alarm	-	-	-	300	300
Subscriptions	195	152	-	240	240
Subsistence - Meals	185	141	1,006	500	1,110
Subsistence - Travel/Rm & Bd	55	115	2,175	1,000	2,780
Supplies - IT Equipment	-	-	247	-	2,712
Supplies - Janitorial	-	287	333	500	500
Supplies - Lab	44,080	39,768	61,319	50,000	65,000
Supplies - Office	1,753	2,496	2,395	1,700	1,700
Supplies - Safety	226	495	1,150	1,270	1,800
Supplies - Shop & Field	1,009	329	800	440	800
Training	1,635	2,024	432	1,750	1,750
Training - Safety	193	359	507	1,100	1,100
Utilities - Gas & Electric	79,525	87,660	83,254	76,000	85,000
Utilities - Internet	189	-	1,187	620	2,850
Utilities - Telephone	1,776	2,929	2,799	4,300	4,420
Utilities - Trash	416	646	663	570	680
Utilities - Water	-	1,363	1,741	-	1,800
Utilities - Solar Power	-	25,984	20,379	19,000	20,900
Vehicle Maintenance	535	40	1,435	1,700	1,780
	<u>\$ 769,417</u>	<u>\$ 388,972</u>	<u>\$ 362,166</u>	<u>\$ 472,120</u>	<u>\$ 438,005</u>
Capital Outlay	\$ 61	\$ 2,881	\$ -	\$ -	\$ -
Contingency	-	-	-	25,000	25,000
Total Operating Expense	<u>\$ 1,212,337</u>	<u>\$ 950,368</u>	<u>\$ 853,477</u>	<u>\$ 1,031,231</u>	<u>\$ 1,070,306</u>



## CARDIFF SANITARY DIVISION PUMP STATIONS

### PROGRAM DESCRIPTION

Under this program, SEJPA provides pump station operation and maintenance services to the City of Encinitas' Cardiff Sanitary Division (CSD). These facilities include the Cardiff, Coast Highway, and Olivenhain Pump Stations. The actual costs incurred are borne solely by the CSD.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

The CSD Pump Stations actual operating expenses are expected to be \$33,705 under budget, or 9.0%. Personnel and Supplies and Services expenses are both estimated to be slightly under budget.

### FY 2024-25 RECOMMENDED BUDGET

Total FY 2024-25 recommended budget is \$530,554 including \$405,554 operating budget and \$125,000 capital appropriations. The operating budget is to increase by \$29,385 or 7.8%, which is primarily attributable to Personnel expenses increasing as a result of labor-related cost inflation and current work demands. Contingency funding has been set at \$17,500, which is approximately 10% of budgeted Supplies and Services costs. This provides funding for unforeseen events and repairs at any of the CSD Pump Stations. This year funding for a new Facility Plan Update is being added to this budget.

### Cardiff Sanitary Division Pump Stations Expense Summary

Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Personnel	\$ 157,151	\$ 199,346	\$ 177,885	\$ 185,221	\$ 214,223
Supplies and Services	143,392	146,197	164,578	171,448	173,831
Contingency	-	-	-	19,500	17,500
Total Operating Expense	\$ 300,543	\$ 345,543	\$ 342,464	\$ 376,169	\$ 405,554
Capital Appropriations	-	-	75,000	75,000	125,000
Total Operating and Capital Appropriations	\$ 300,543	\$ 345,543	\$ 417,464	\$ 451,169	\$ 530,554
Cardiff Pump Station	\$ 100,375	\$ 123,193	\$ 116,930	\$ 134,082	\$ 151,131
Coast Blvd Pump Station	50,472	61,182	59,363	63,439	66,190
Olivenhain Pump Station	149,697	161,168	166,171	178,648	188,233
Total Operating Expense	\$ 300,543	\$ 345,543	\$ 342,464	\$ 376,169	\$ 405,554

Cardiff Sanitary Division Pump Stations Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 92,502	\$ 108,791	\$ 123,675	\$ 124,836	\$ 146,810
Medicare Tax	2,637	1,602	1,681	1,889	2,223
State Unemployment Tax	110	193	113	510	158
Standby Pay	335	1,380	1,351	1,325	1,527
Overtime Pay	1,642	3,096	1,360	1,439	1,715
Dental/Vision	875	1,195	1,557	1,177	1,640
Employee Assistance Program	32	33	38	78	78
Life Insurance/Disability	1,126	599	1,086	1,071	1,241
Workers Comp. Insurance	2,213	1,669	1,935	2,244	2,244
Medical Insurance - Pers	11,637	13,524	17,205	16,832	20,995
Retirement Plan - CalPERS & PARS Trust	39,940	62,376	23,306	27,446	28,782
Deferred Comp-employer	3,511	4,123	4,043	5,474	5,883
Uniforms - Boots	59	155	100	265	265
Payroll Processing Fees	535	525	409	537	537
Other Personnel Costs	-	83	28	98	125
	<b>\$ 157,151</b>	<b>\$ 199,346</b>	<b>\$ 177,885</b>	<b>\$ 185,221</b>	<b>\$ 214,223</b>
<b>Supplies and Services</b>					
Advertising	\$ 101	\$ 63	\$ 24	\$ 185	\$ 194
Dues & Memberships	173	133	77	30	-
Equipment Rental/Lease	15	169	-	-	-
Fees - Disposal	-	-	-	-	-
Fees - Permits	1,004	3,719	1,183	3,200	2,800
Fine	-	91	-	-	-
Fuel	991	1,067	4,571	975	1,015
Insurance - Liability	1,859	1,945	1,661	2,380	2,620
Insurance - Auto	-	-	107	130	150
Insurance - Property	2,567	3,330	4,821	4,000	5,070
Licenses	1,181	3,035	851	1,760	2,000
Minor Equip - Shop & Field	3	187	-	1,364	1,364
Postage/Shipping	43	15	-	-	-
Preemployment Screening	13	64	87	30	50
Printing	(30)	4	104	60	80
Rent	53	54	50	51	51
Repair Parts Expense	27,178	21,850	11,235	16,830	16,830
Seminars/Education	129	199	493	700	700
Services - Alarm	1,628	2,220	1,776	2,409	1,954
Services - Accounting	203	-	(564)	-	-
Services - Maintenance	15,605	4,397	9,288	7,050	7,050
Services - Medical	177	177	197	165	165
Services - Other	-	4	-	-	-
Services - Professional	162	409	-	-	-
Services - IT/GIS Support	4,026	4,554	3,359	6,272	3,430
Services - Temp	15	220	503	-	-
Services - Uniforms	359	372	314	472	472
Subscriptions	73	53	-	-	-
Subsistence - Meals	63	37	32	-	-
Subsistence - Travel/Rm & Bd	20	40	302	-	-
Supplies - Chemicals	917	-	943	2,300	1,000
Supplies - Chem - Odor	27,323	27,626	52,130	56,450	53,000
Supplies - IT Equipment	-	-	86	-	936
Supplies - Office	457	612	796	585	585
Supplies - Safety	72	73	248	430	625
Supplies - Shop & Field	924	1,734	1,832	800	1,780
Training	612	699	149	810	810
Training - Safety	72	67	145	530	530
Utilities - Gas & Electric	50,914	61,854	62,131	55,700	61,900
Utilities - Internet	73	-	410	205	985
Utilities - Telephone	2,012	2,194	1,749	1,480	1,530
Utilities - Trash	157	223	229	220	235
Utilities - Water	2,054	2,440	2,764	3,300	3,300
Vehicle Maintenance	196	233	495	575	620
	<b>\$ 143,392</b>	<b>\$ 146,197</b>	<b>\$ 164,578</b>	<b>\$ 171,448</b>	<b>\$ 173,831</b>
Contingency	\$ -	\$ -	\$ -	\$ 19,500	\$ 17,500
<b>Total Operating Expense</b>	<b>\$ 300,543</b>	<b>\$ 345,543</b>	<b>\$ 342,464</b>	<b>\$ 376,169</b>	<b>\$ 405,554</b>



# ENCINITAS SANITARY DIVISION PUMP STATION

## PROGRAM DESCRIPTION

Under this program, SEJPA provides pump station operation and maintenance services to the Encinitas Sanitary Division (ESD), for the Moonlight Beach Pump Station, located in the City of Encinitas. The actual costs incurred are borne solely by the ESD.

## FY 2023-24 ESTIMATED ACTUAL EXPENSE

It is anticipated that the ESD Pump Station actual operating expenses will be \$9,663 or 5.8% above budget for FY 2023-24. Supplies and Services are expected to be \$22,886 or 32.9% over budget due to unanticipated repair of the overhead crane and replacement of a variable frequency drive for one of the large motors. Contingency funding was used to cover part of the Supplies and Services overage.

## FY 2024-25 RECOMMENDED BUDGET

For FY 2024-25, the recommended budget is \$389,448 including \$185,448 operating budget and \$204,000 capital appropriations. The ESD Pump Station operating budget is recommended to be \$17,670 or 10.5% over FY 2023-24 budget. Personnel expenses will increase by \$14,099 or 16.0% due to labor-related cost inflation and current work demands. Supplies and Services will increase by \$3,571 or 5.1% as a result of high utility costs. Contingency funding has been set at \$10,000, which is 13.7% of budgeted Supplies and Services costs. This provides funding for unforeseen events and repairs at the pump station.

### Encinitas Sanitary Division Pump Station Expense Summary

	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
<b>Operating Expense</b>					
Personnel	\$ 79,792	\$ 80,357	\$ 84,965	\$ 88,188	\$ 102,287
Supplies and Services	63,197	104,598	92,475	69,589	73,160
Contingency	-	-	-	10,000	10,000
Total Operating Expense	\$ 142,988	\$ 184,955	\$ 177,440	\$ 167,777	\$ 185,448
Capital Appropriations	375,000	1,125,000	600,000	600,000	204,000
Total Operating and Capital Appropriations	\$ 517,988	\$ 1,309,955	\$ 777,440	\$ 767,777	\$ 389,448

Encinitas Sanitary Division Pump Station Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 44,242	\$ 54,799	\$ 58,508	\$ 59,548	\$ 70,239
Medicare Tax	679	805	804	899	1,060
State Unemployment Tax	47	89	54	243	76
Standby Pay	141	648	592	580	669
Overtime Pay	842	1,865	1,373	641	773
Dental/Vision	402	560	740	560	782
Employee Assistance Program	15	15	17	37	37
Life Insurance/Disability	519	281	517	510	592
Workers Comp. Insurance	1,010	783	893	1,068	1,070
Medical Insurance - Pers	5,358	6,301	8,195	8,009	10,014
Retirement Plan - CalPERS & PARS Trust	24,573	11,751	11,096	13,060	13,728
Deferred Comp-employer	1,691	2,101	1,920	2,605	2,806
Uniforms - Boots	27	72	48	126	126
Payroll Processing Fees	246	246	195	256	256
Other Personnel Costs	-	38	13	47	60
	<b>\$ 79,792</b>	<b>\$ 80,357</b>	<b>\$ 84,965</b>	<b>\$ 88,188</b>	<b>\$ 102,287</b>
<b>Supplies and Services</b>					
Advertising	\$ 46	\$ 29	\$ 11	\$ 81	\$ 85
Dues & Memberships	80	61	36	-	-
Equipment Rental/Lease	(216)	78	-	-	-
Fees - Permits	785	1,246	475	1,200	1,400
Fuel	629	1,963	1,822	450	470
Insurance - Liability	841	898	767	1,100	1,200
Insurance - Auto	-	-	50	60	70
Insurance - Property	1,130	1,537	2,225	1,900	2,340
Licenses	536	1,162	393	820	900
Postage/Shipping	44	164	-	-	-
Preemployment Screening	6	30	41	13	30
Printing	(13)	2	49	25	35
Rent	24	25	21	23	23
Repair Parts Expense	4,196	34,755	28,289	4,000	4,000
Seminars/Education	60	92	228	300	300
Training	282	322	69	340	340
Training - Safety	33	31	66	220	220
Minor Equip - Shop & Field	1,481	-	176	-	200
Services - Accounting	94	-	(269)	-	-
Services - Grit & Screenings	1,028	-	-	-	-
Services - Maintenance	1,769	5,923	514	4,200	4,200
Services - Uniforms	165	169	144	207	207
Services - Alarm	1,320	600	480	720	528
Services - Medical	82	83	94	100	100
Services - Professional	75	192	-	-	-
Services - Temp	7	102	232	-	-
Services - Other	-	2	-	-	-
Services - IT/GIS Support	1,844	2,102	1,550	2,895	1,580
Subscriptions	34	24	-	-	-
Subsistence - Meals	29	17	15	-	-
Subsistence - Travel/Rm & Bd	9	18	139	-	-
Supplies - Chem	-	-	136	-	-
Supplies - Chem - Odor	-	-	44	-	50
Supplies - IT Equipment	-	-	40	-	432
Supplies - Office	211	282	367	270	270
Supplies - Shop & Field	941	216	167	330	330
Supplies - Safety	33	34	602	200	290
Utilities - Gas & Electric	44,433	51,153	52,192	49,000	52,000
Utilities - Internet	33	-	189	95	460
Utilities - Telephone	981	1,058	787	680	700
Utilities - Trash	72	103	106	90	110
Vehicle Maintenance	90	109	229	270	290
	<b>\$ 63,197</b>	<b>\$ 104,598</b>	<b>\$ 92,475</b>	<b>\$ 69,589</b>	<b>\$ 73,160</b>
Contingency	\$ -	\$ -	\$ -	\$ 10,000	\$ 10,000
<b>Total Operating Expense</b>	<b>\$ 142,988</b>	<b>\$ 184,955</b>	<b>\$ 177,440</b>	<b>\$ 167,777</b>	<b>\$ 185,448</b>



## CITY OF ENCINITAS URBAN AND STORMWATER SERVICES

### PROGRAM DESCRIPTION

Under this program, SEJPA provides stormwater operation and maintenance services to the City of Encinitas. These services include operating the Urban Runoff Treatment Facility, the Phoebe Stormwater Pump Station, and the Storm Drain Sediment Drying and Disposal Program. The Phoebe Stormwater Pump Station and Urban Runoff Treatment Facility provide services to the City of Encinitas Clean Water Program for the protection of local creek, beach, and lagoon water quality. Under the Storm Drain Sediment Drying and Disposal Program, Member Agencies deliver sediment to the San Elijo Water Campus, where the sediment is dewatered, dried, tested, and disposed at a local landfill. This program is designed to comply with current stormwater best management practices and is intended to reduce the overall disposal cost associated with wet sediment. The actual costs incurred are borne solely by the City of Encinitas.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

The City of Encinitas facilities, which includes the Phoebe Stormwater Pump Station, the Urban Runoff Treatment Facility, and the Storm Drain Sediment Drying and Disposal program, are anticipated to end the year \$1,893 or 3.4% below budget, due to Contingency funds not expected to be used.

### FY 2024-25 RECOMMENDED BUDGET

The operating budget for these programs is recommended to be \$61,804, which is \$6,290 or 11.3% above the prior fiscal year budget with \$2,010 Contingency funding designated for these programs.

### *City of Encinitas Urban and Stormwater Services Expense Summary*

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 22,025	\$ 22,853	\$ 34,423	\$ 34,423	\$ 39,617
Supplies and Services	25,862	36,211	19,198	19,592	20,177
Contingency	-	-	-	1,500	2,010
Total Operating Expense	<u>\$ 47,887</u>	<u>\$ 59,064</u>	<u>\$ 53,621</u>	<u>\$ 55,514</u>	<u>\$ 61,804</u>
Storm Drain Pump Stations	\$ 3,502	\$ 5,517	\$ 10,848	\$ 11,471	\$ 13,266
Urban Runoff Station	21,916	15,969	24,841	22,276	25,584
Storm Drain Sediment Drying	22,469	37,578	17,931	21,768	22,955
Total Operating Expense	<u>\$ 47,887</u>	<u>\$ 59,064</u>	<u>\$ 53,621</u>	<u>\$ 55,514</u>	<u>\$ 61,804</u>



City of Encinitas Urban and Stormwater Services Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 14,886	\$ 14,989	\$ 23,383	\$ 23,383	\$ 27,323
Medicare Tax	219	222	347	347	408
State Unemployment Tax	19	25	72	94	29
Standby Pay	46	214	206	202	233
Overtime Pay	105	185	184	250	287
Dental/Vision	133	186	279	216	301
Employee Assistance Program	5	5	7	14	14
Life Insurance/Disability	174	93	199	197	227
Workers Comp. Insurance	315	260	456	412	412
Medical Insurance - Pers	1,784	2,066	3,141	3,093	3,852
Retirement Plan - CalPERS & PARS Trust	3,680	3,909	5,045	5,044	5,281
Deferred Comp-employer	569	577	1,006	1,006	1,079
Uniforms - Boots	9	26	18	49	49
Payroll Processing Fees	81	81	75	99	99
Other Personnel Costs	-	15	5	17	23
	<u>\$ 22,025</u>	<u>\$ 22,853</u>	<u>\$ 34,423</u>	<u>\$ 34,423</u>	<u>\$ 39,617</u>
<b>Supplies and Services</b>					
Advertising	\$ 15	\$ 11	\$ 4	\$ 29	\$ 30
Dues & Memberships	26	24	14	-	-
Equipment Rental/Lease	2	30	-	-	-
Fuel	86	87	707	175	175
Insurance - Liability	285	347	298	430	480
Insurance - Auto	-	-	19	23	30
Insurance - Property	403	598	865	700	910
Licenses	180	803	148	315	400
Minor Equip - Shop & Field	-	-	498	-	500
Postage/Shipping	6	3	-	-	-
Preemployment Screening	2	11	16	5	12
Printing	(5)	1	19	5	15
Rent	8	9	6	8	8
Repair Parts Expense	800	1,412	2,624	550	550
Seminars/Education	19	36	88	140	140
Services - Accounting	31	-	(103)	-	-
Services - Grit & Screenings	17,862	30,566	-	-	-
Services - Engineering	4,380	-	-	-	-
Services - Maintenance	-	95	12	-	-
Services - Medical	27	27	36	5	5
Services - Temp	2	39	90	-	-
Services - Professional	24	66	-	-	-
Services - Uniforms	54	64	56	74	74
Services - Sediment Disposal	-	-	12,278	15,000	15,000
Subscriptions	11	9	-	-	-
Subsistence - Meals	9	6	6	-	-
Subsistence - Travel/Rm & Bd	3	7	54	-	-
Supplies - IT Equipment	-	-	-	-	168
Supplies - Office	68	109	158	105	105
Supplies - Safety	11	13	44	80	110
Supplies - Shop & Field	0	68	-	158	-
Training	92	125	27	140	140
Training - Safety	11	12	24	90	90
Services - IT/GIS Support	611	815	603	1,126	620
Utilities - Internet	11	-	74	35	175
Utilities - Telephone	774	769	402	260	280
Utilities - Trash	24	40	41	35	45
Vehicle Maintenance	30	1	89	105	115
	<u>\$ 25,863</u>	<u>\$ 36,211</u>	<u>\$ 19,198</u>	<u>\$ 19,593</u>	<u>\$ 20,177</u>
Contingency	\$ -	\$ -	\$ -	\$ 1,500	\$ 2,010
Total Operating Expense	<u>\$ 47,887</u>	<u>\$ 59,064</u>	<u>\$ 53,621</u>	<u>\$ 55,514</u>	<u>\$ 61,804</u>



## *CITY OF SOLANA BEACH PUMP STATIONS*

### PROGRAM DESCRIPTION

Under this program, SEJPA provides pump station operation and maintenance services to the City of Solana Beach. These facilities include the Eden Gardens, Solana Beach, San Elijo Hills, and Fletcher Cove Pump Stations, Low Flow Diverters located at Fletcher Cove and Seascape Sur, as well as the Storm Drain Sediment Drying and Disposal Program. Under the Storm Drain Sediment Drying and Disposal program, Member Agencies deliver sediment to the San Elijo Water Campus, where the sediment is dewatered, dried, tested, and disposed at a local landfill. This program is designed to comply with current stormwater best management practices and is intended to reduce the overall disposal cost associated with wet sediment. The actual costs incurred are paid for by the City of Solana Beach.

### FY 2023-24 ESTIMATED ACTUAL EXPENDITURES

The Solana Beach Pump Stations are expected to be below budget this year by \$17,728 or 3.8%. Personnel expenses are anticipated to be slightly under budget. Supplies and Services will be over budget due to rising fuel costs, property insurance, and permit fees, which will be offset by the Contingency funds.

### FY 2024-25 RECOMMENDED BUDGET

Overall, the Solana Beach Pump Stations operating budget is \$538,798 with the expected increase of \$75,524 or 16.3% above the prior year budget. This increase is primarily due to anticipated inflation across labor, utilities, supplies, and services. Personnel budget is projected to increase by \$37,149 or 15.2%. The Supplies and Services category is expected to increase by \$12,375 or 6.2%, as a result of general inflation, increased use of odor control chemicals, and miscellaneous repair parts. Contingency funding is increasing to \$20,000, which is approximately 9.5% of budgeted Supplies and Services costs for the pump stations. This provides funding for unforeseen events and repairs.

### City of Solana Beach Pump Stations Expense Summary

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 208,951	\$ 234,784	\$ 235,466	\$ 244,573	\$ 281,721
Supplies and Services	160,431	191,942	210,081	198,702	211,077
Contingency	-	-	-	20,000	20,000
Total Operating Expense	<u>\$ 369,382</u>	<u>\$ 426,726</u>	<u>\$ 445,546</u>	<u>\$ 463,275</u>	<u>\$ 512,798</u>
Capital Appropriations	-	-	-	-	26,000
Total Operating and Capital Appropriations	<u>\$ 369,382</u>	<u>\$ 426,726</u>	<u>\$ 445,546</u>	<u>\$ 463,275</u>	<u>\$ 538,798</u>
Eden Gardens Pump Station	\$ 124,207	\$ 141,860	\$ 142,428	\$ 150,440	\$ 166,529
Solana Beach Pump Station	156,373	182,523	192,954	193,281	212,329
San Elijo Hills Pump Station	61,720	69,025	75,667	77,632	87,124
Fletcher Cove Pump Station	13,240	20,332	19,908	22,258	25,320
Storm Drain Sediment Drying	6,895	5,939	5,794	11,887	12,555
Seascape Sur Low Flow Diverter	4,453	3,996	3,686	3,934	4,495
Fletcher Cove Low Flow Diverter	2,493	3,051	5,109	3,843	4,447
Total Operating Expense	<u>\$ 369,382</u>	<u>\$ 426,726</u>	<u>\$ 445,547</u>	<u>\$ 463,275</u>	<u>\$ 512,798</u>

### City of Solana Beach Pump Stations Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 115,533	\$ 128,232	\$ 164,185	\$ 165,087	\$ 193,227
Medicare Tax	1,712	1,868	2,228	2,484	2,916
State Unemployment Tax	140	187	145	671	208
Standby Pay	417	1,886	1,773	1,739	2,004
Overtime Pay	1,991	2,208	1,493	1,948	2,275
Dental/Vision	1,181	1,627	2,061	1,547	2,154
Employee Assistance Program	42	44	51	102	102
Life Insurance/Disability	1,511	817	1,431	1,409	1,628
Workers Comp. Insurance	3,066	2,275	2,630	2,952	2,944
Medical Insurance - Pers	15,686	18,476	22,660	22,142	27,554
Retirement Plan - CalPERS & PARS Trust	62,513	71,317	30,722	36,104	37,772
Deferred Comp-employer	4,332	4,808	5,378	7,202	7,720
Uniforms - Boots	80	211	131	349	349
Payroll Processing Fees	725	716	539	708	705
Other Personnel Costs	-	113	38	129	164
	<u>\$ 208,951</u>	<u>\$ 234,784</u>	<u>\$ 235,466</u>	<u>\$ 244,573</u>	<u>\$ 281,721</u>

Expense detail continued on next page.

City of Solana Beach Pump Stations Operating Expense

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Supplies and Services</b>					
Advertising	\$ 135	\$ 86	\$ 33	\$ 256	\$ 269
Dues & Memberships	233	181	105	30	-
Equipment Rental/Lease	20	229	-	-	-
Fees - Permits	586	4,102	5,249	3,600	4,200
Fuel	1,685	1,862	6,101	1,325	1,380
Insurance - Liability	2,537	2,643	2,258	3,240	3,570
Insurance - Auto	-	-	146	190	205
Insurance - Property	3,565	4,526	6,552	5,500	6,890
Licenses	1,607	3,441	1,143	2,405	2,900
Minor Equip - Shop & Field	4	-	-	200	200
Preemployment Screening	17	87	115	41	83
Printing	(42)	5	139	75	106
Rent	71	73	61	71	71
Repair Parts Expense	1,558	21,071	17,378	15,510	16,310
Seminars/Education	174	271	670	1,140	1,140
Services - Accounting	273	-	(744)	-	-
Services - Sediment Disposal	-	-	2,106	8,000	8,000
Services - Alarm	1,496	2,040	1,632	2,190	1,925
Services - Grit & Screenings	7,603	7,719	2,478	3,000	3,000
Services - Maintenance	7,206	6,440	6,625	6,650	6,650
Services - Medical	237	242	260	180	180
Services - Professional	1,818	559	-	-	-
Services - Uniforms	483	508	427	650	650
Services - IT/GIS Support	5,447	6,188	4,564	8,523	4,665
Services - Temp	19	299	683	-	-
Subscriptions	97	72	-	-	-
Subsistence - Meals	85	50	43	-	-
Subsistence - Travel/Rm & Bd	28	54	410	-	-
Supplies - Chem - Odor (bioxide)	44,091	43,147	57,805	44,000	49,000
Supplies - IT Equipment	-	-	101	-	1,272
Supplies - Janitorial	-	49	-	-	-
Supplies - Office	238	832	1,097	795	795
Supplies - Safety	97	211	337	600	850
Supplies - Shop & Field	1,508	884	3,157	941	1,966
Training	823	949	203	910	910
Training - Safety	97	91	198	605	605
Utilities - Gas & Electric	72,053	78,517	83,321	82,500	86,500
Utilities - Internet	99	-	557	280	1,345
Utilities - Telephone	2,916	3,106	2,349	2,020	2,075
Utilities - Trash	212	303	311	265	315
Utilities - Water	1,007	737	1,578	2,200	2,200
Vehicle Maintenance	263	304	673	810	850
	<b>\$ 160,431</b>	<b>\$ 191,942</b>	<b>\$ 210,081</b>	<b>\$ 198,702</b>	<b>\$ 211,077</b>
Contingency	\$ -	\$ -	\$ -	\$ 20,000	\$ 20,000
<b>Total Operating Expense</b>	<b>\$ 369,382</b>	<b>\$ 426,726</b>	<b>\$ 445,547</b>	<b>\$ 463,275</b>	<b>\$ 512,798</b>



## CITY OF SOLANA BEACH GENERATOR MAINTENANCE SERVICES

### PROGRAM DESCRIPTION

Under this program, SEJPA provides generator maintenance services to the City of Solana Beach. The generators are located at the Solana Beach City Hall and the Lomas Santa Fe Fire Station. The actual costs incurred are borne solely by the City of Solana Beach.

### FY 2023-24 ESTIMATED ACTUAL EXPENDITURES

The Solana Beach Generator Maintenance Services are expected to be \$865 or 5.6% under budget. Both Personnel and Supplies and Services are anticipated to be under budget.

### FY 2024-25 RECOMMENDED BUDGET

The recommended budget is \$17,556, which is \$2,050 or 13.2% higher than the prior year. This amount reflects the anticipated inflation in maintenance and other services costs. Contingency was added to this program to cover minor unanticipated repairs as these generators age.

### *City of Solana Beach Generator Maintenance Services Expense Summary*

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 5,068	\$ 5,681	\$ 7,051	\$ 7,383	\$ 8,472
Supplies and Services	3,418	2,995	7,591	8,124	8,264
Contingency	-	-	-	-	820
Total Operating Expense	<u>\$ 8,486</u>	<u>\$ 8,676</u>	<u>\$ 14,641</u>	<u>\$ 15,507</u>	<u>\$ 17,556</u>
SB City Hall Generator	\$ 4,130	\$ 4,650	\$ 6,853	\$ 7,308	\$ 8,296
SB Lomas SF Fire Generator	4,356	4,026	7,788	8,199	9,260
Total Operating Expense	<u>\$ 8,486</u>	<u>\$ 8,676</u>	<u>\$ 14,641</u>	<u>\$ 15,507</u>	<u>\$ 17,556</u>

City of Solana Beach Generator Maintenance Services Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 3,063	\$ 3,568	\$ 4,885	\$ 5,012	\$ 5,839
Medicare Tax	47	52	66	75	87
State Unemployment Tax	3	6	4	20	6
Standby Pay	14	56	46	45	52
Overtime Pay	20	22	41	56	64
Dental/Vision	40	48	62	46	65
Employee Assistance Program	1	2	2	4	4
Life Insurance/Disability	53	24	43	42	49
Workers Comp. Insurance	91	66	99	89	88
Medical Insurance - Pers	537	547	688	663	823
Retirement Plan - CalPERS & PARS Trust	1,052	1,122	931	1,081	1,129
Deferred Comp-employer	120	137	161	215	231
Uniforms - Boots	3	7	4	10	10
Payroll Processing Fees	24	21	16	21	21
Other Personnel Costs	-	4	1	4	4
	<u>\$ 5,070</u>	<u>\$ 5,681</u>	<u>\$ 7,051</u>	<u>\$ 7,383</u>	<u>\$ 8,472</u>
<b>Supplies and Services</b>					
Advertising	\$ 4	\$ 3	\$ 1	\$ 8	\$ 8
Dues & Memberships	8	7	4	-	-
Fuel	222	104	201	50	50
Insurance - Liability	81	99	85	120	140
Insurance - Auto	-	-	6	7	10
Insurance - Property	108	171	247	200	260
Licenses	52	52	35	90	200
Preemployment Screening	1	3	4	2	2
Printing	(1)	0	5	-	4
Rent	2	3	1	2	2
Repair Parts Expense	136	221	-	440	440
Seminars/Education	6	10	25	30	30
Training	27	36	8	30	30
Training - Safety	3	3	7	20	20
Services - Maintenance	2,469	1,877	6,584	6,580	6,580
Services - Uniforms	16	18	16	20	20
Services - Medical	8	7	8	-	-
Services - Professional	7	18	-	-	-
Services - Professional IT Support	177	233	172	322	180
Services - Temp	1	11	26	-	-
Subscriptions	3	3	-	-	-
Subsistence - Meals	3	2	2	-	-
Subsistence - Travel/Rm & Bd	1	2	15	-	-
Supplies - IT Equipment	-	-	-	-	48
Supplies - Office	20	31	45	30	30
Supplies - Shop & Field	0	1	-	22	-
Supplies - Safety	3	4	13	20	30
Utilities - Internet	3	-	21	10	50
Utilities - Telephone	30	47	50	80	80
Utilities - Trash	7	11	12	10	10
Vehicle Maintenance	9	0	25	30	40
	<u>\$ 3,416</u>	<u>\$ 2,995</u>	<u>\$ 7,590</u>	<u>\$ 8,124</u>	<u>\$ 8,264</u>
Contingency	\$ -	\$ -	\$ -	\$ -	\$ 820
<b>Total Operating Expense</b>	<u><u>\$ 8,486</u></u>	<u><u>\$ 8,676</u></u>	<u><u>\$ 14,641</u></u>	<u><u>\$ 15,507</u></u>	<u><u>\$ 17,556</u></u>



## CITY OF DEL MAR PUMP STATION

### PROGRAM DESCRIPTION

Under this program, SEJPA provides pump station operation and maintenance services that include daily pump station review, after-hours alarm monitoring and emergency response, equipment preventative maintenance, quarterly generator service, PLC programming, instrumentation calibration, wet well cleaning, and disposal of wastewater collection sediment for the City of Del Mar. Any additional pump station services requested by the City of Del Mar are captured in this program. Costs incurred through this program are borne solely by the City of Del Mar.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

The program is forecast to be under budget by \$5,565 or 8.4% mainly due to unspent Contingency funding of \$2,000. Both Personnel and Supplies and Services are anticipated to be slightly under budget.

### FY 2024-25 RECOMMENDED BUDGET

The budget for FY 2024-25 is increasing by \$34,589 or 52.1% to \$100,981. This increase is primarily a result of the additional capital appropriations for the Facility Plan Update. The Supplies and Services category is increasing \$3,467, which is predominately due to increasing maintenance needs.

### City of Del Mar Pump Station Expense Summary

Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Personnel	\$ 43,354	\$ 49,876	\$ 44,421	\$ 46,519	\$ 52,541
Supplies and Services	6,210	15,825	16,406	17,872	21,340
Contingency	-	-	-	2,000	2,100
Total Operating Expense	<u>\$ 49,565</u>	<u>\$ 65,701</u>	<u>\$ 60,827</u>	<u>\$ 66,392</u>	<u>\$ 75,981</u>
Capital Appropriations	-	-	-	-	25,000
Total Operating and Capital Appropriations	<u>\$ 49,565</u>	<u>\$ 65,701</u>	<u>\$ 60,827</u>	<u>\$ 66,392</u>	<u>\$ 100,981</u>

City of Del Mar Pump Station Operating Cost Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 30,091	\$ 35,039	\$ 30,441	\$ 31,061	\$ 36,107
Medicare Tax	542	525	420	463	542
State Unemployment Tax	33	53	26	125	39
Standby Pay	79	358	322	315	364
Overtime Pay	451	1,371	789	1,014	423
Dental/Vision	228	310	385	289	400
Employee Assistance Program	8	9	14	19	19
Life Insurance/Disability	297	155	267	263	303
Workers Comp. Insurance	558	433	695	550	547
Medical Insurance - Pers	3,023	3,488	4,216	4,127	5,119
Retirement Plan - CalPERS & PARS Trust	6,744	6,590	5,716	6,730	7,017
Deferred Comp-employer	1,144	1,332	997	1,342	1,434
Uniforms - Boots	16	47	25	65	65
Payroll Processing Fees	140	136	101	132	131
Other Personnel Costs	-	29	8	24	31
	<u>\$ 43,356</u>	<u>\$ 49,876</u>	<u>\$ 44,421</u>	<u>\$ 46,519</u>	<u>\$ 52,541</u>
<b>Supplies and Services</b>					
Advertising	\$ 31	\$ 23	\$ 9	\$ 58	\$ 61
Equipment Rental/Lease	4	60	-	-	-
Dues & Memberships	53	48	28	-	-
Fees - Permits	3	3	4	-	-
Fuel	475	1,045	2,510	350	365
Insurance - Liability	576	688	596	850	950
Insurance - Auto	-	-	39	50	50
Insurance - Property	806	1,195	1,731	1,500	1,820
Licenses	365	984	306	630	700
Preemployment Screening	4	23	22	9	15
Printing	(10)	1	32	15	30
Rent	16	19	20	16	16
Repair Parts Expense	317	792	366	2,500	2,500
Seminars/Education	40	72	177	200	200
Services - Sediment Disposal	-	-	-	500	500
Services - Alarm	-	-	-	750	750
Services - Grit & Screenings	387	927	1,380	3,900	3,900
Services - Maintenance	869	6,778	4,320	1,700	4,500
Services - IT/GIS Support	1,238	1,631	2,206	2,251	1,230
Services - Medical	46	46	48	60	60
Services - Professional	50	118	-	-	-
Services - Temp	4	79	181	-	-
Services - Uniforms	110	128	112	147	147
Subscriptions	22	19	-	-	-
Subsistence - Meals	19	13	11	-	-
Subsistence - Travel/Rm & Bd	6	14	108	-	-
Supplies - IT Equipment	-	-	31	-	336
Supplies - Office	140	219	286	210	210
Supplies - Safety	22	26	89	150	225
Supplies - Shop & Field	1	77	863	440	865
Training	187	251	54	300	300
Training - Safety	22	24	52	200	200
Minor Equip - Shop & Field	1	-	-	200	200
Utilities - Internet	22	-	147	75	355
Utilities - Telephone	203	330	591	530	550
Utilities - Trash	48	80	82	70	85
Vehicle Maintenance	58	61	178	210	220
	<u>\$ 6,210</u>	<u>\$ 15,825</u>	<u>\$ 16,406</u>	<u>\$ 17,871</u>	<u>\$ 21,340</u>
Contingency	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,100
Total Operating Cost	<u>\$ 49,565</u>	<u>\$ 65,701</u>	<u>\$ 60,827</u>	<u>\$ 66,392</u>	<u>\$ 75,981</u>





## *22ND DISTRICT AGRICULTURAL ASSOCIATION (DEL MAR FAIRGROUNDS)*

### PROGRAM DESCRIPTION

This program was developed in FY 2022-23 to support the Del Mar Fairgrounds with their infield stormwater and urban runoff treatment system. SEJPA staff will conduct weekly treatment system and pump station review, after-hours alarm monitoring and emergency response, equipment preventative maintenance, PLC programming, instrumentation calibration, and rotating drum filter maintenance. Any additional services requested by the Fairgrounds Staff are captured in this program. Costs incurred through this program are borne solely by the Del Mar Fairgrounds.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

This program is expected to end the year over budget by \$24,552 or 17.9%, due to additional services that were requested by Del Mar Fairgrounds after the FY 2023-24 budget was developed. Del Mar Fairgrounds has provided funding for these additional expenses.

### FY 2024-25 RECOMMENDED BUDGET

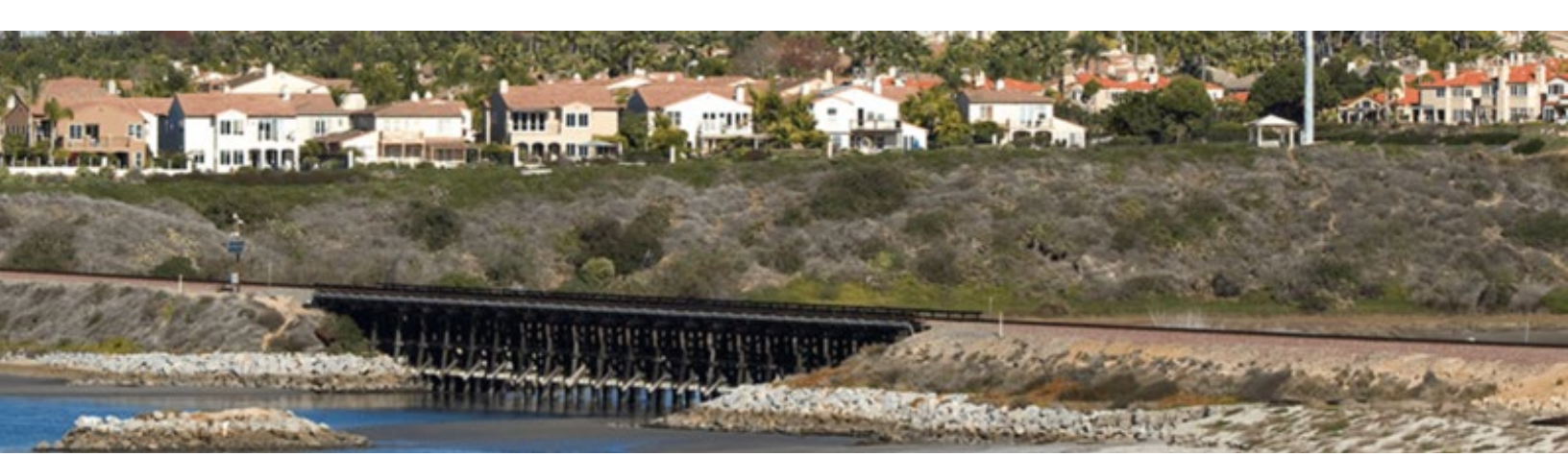
The budget for FY 2024-25 is \$172,371 which is \$35,417 or 25.9% higher than last year due to general inflation and the request for additional maintenance services.

### *Del Mar Fairgrounds Expense Summary*

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ 6,559	\$ 138,480	\$ 134,047	\$ 125,681	\$ 143,291
Supplies and Services	1,787	16,834	27,458	11,273	17,080
Contingency	-	-	-	-	12,000
Total Operating Expense	<u>\$ 8,345</u>	<u>\$ 155,314</u>	<u>\$ 161,505</u>	<u>\$ 136,953</u>	<u>\$ 172,371</u>

Del Mar Fairgrounds Operating Expense Detail

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 6,298	\$ 135,077	\$ 100,651	\$ 85,376	\$ 98,106
Medicare Tax	-	629	75	1,258	-
State Unemployment Tax	-	40	331	340	110
Standby Pay	-	23	926	909	979
Overtime Pay	-	164	781	1,024	1,261
Dental/Vision	-	-	902	784	1,137
Employee Assistance Program	-	-	-	52	54
Life Insurance/Disability	-	-	724	714	860
Workers Comp. Insurance	-	-	-	1,494	1,556
Medical Insurance - Pers	-	-	11,453	11,209	14,557
Retirement Plan - CalPERS & PARS Trust	-	-	14,908	18,276	19,956
Deferred Comp-employer	261	2,541	2,944	3,645	4,079
Uniforms - Boots	-	5	67	176	176
Payroll Processing Fees	-	-	273	358	373
Other Personnel Costs	-	-	13	65	87
	<u>\$ 6,559</u>	<u>\$ 138,480</u>	<u>\$ 134,047</u>	<u>\$ 125,680</u>	<u>\$ 143,291</u>
<b>Supplies and Services</b>					
Fuel	\$ -	\$ -	\$ 2,895	\$ 720	\$ 750
Postage/Shipping	-	17	-	-	-
Printing	-	-	33	-	-
Services - Alarm	-	-	5	617	648
Services - Maintenance	-	6,595	-	-	-
Services - Laboratory	-	-	1,225	-	4,200
Services - Medical	-	-	131	-	-
Services - IT/GIS Support	-	-	6,404	5,451	880
Services - Medical	-	-	131	-	-
Services - Professional	-	6,066	-	-	-
Supplies - Shop & Field	-	571	-	789	828
Preemployment Screening	-	-	56	-	40
Printing	-	-	33	-	-
Repair Parts Expense	1,787	3,585	15,264	-	5,000
Training	-	-	-	258	271
Training - Safety	-	-	-	340	357
Minor Equip - Shop & Field	-	-	1,092	1,110	1,166
Supplies - Chemicals	-	-	733	-	700
Utilities - Telephone	-	-	-	313	330
Vehicle Maintenance	-	-	-	1,675	1,910
	<u>\$ 1,787</u>	<u>\$ 16,834</u>	<u>\$ 27,458</u>	<u>\$ 11,273</u>	<u>\$ 17,080</u>
Contingency	\$ -	\$ -	\$ -	\$ -	\$ 12,000
Total Operating Expense	<u>\$ 8,345</u>	<u>\$ 155,314</u>	<u>\$ 161,505</u>	<u>\$ 136,953</u>	<u>\$ 172,371</u>



*LEUCADIA WASTEWATER DISTRICT (LWD) TECHNICAL SUPPORT SERVICES*

PROGRAM DESCRIPTION

This program supports the Leucadia Wastewater District (LWD) with technical support and operation services for the Forest R. Gafner Water Reclamation Facility (Gafner Facility). Costs incurred through this program are borne solely by LWD.

FY 2023-24 ESTIMATED ACTUAL EXPENSE

This program is expected to be \$7,800 or 34.2% over budget, due to additional Cross Connection Testing Services at Omni Golf Course requested by LWD after the FY 2023-24 budget was developed. Leucadia Wastewater District has provided funding for these additional services.

FY 2024-25 RECOMMENDED BUDGET

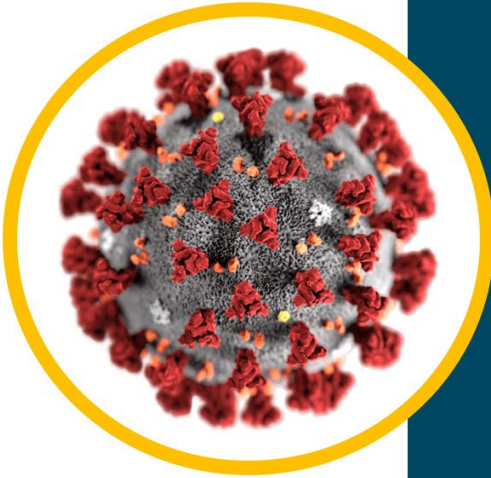
The budget for FY 2024-25 is \$28,209, where 98.2% of the operating expenses come from personnel and the remaining 1.8% is allocated for permit expenses.

*Leucadia WD Technical Support Services Expense Summary*

<b>Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
Personnel	\$ -	\$ 5,577	\$ 30,600	\$ 22,800	\$ 27,709
Supplies and Services	-	500	-	-	500
Total Operating Expense	\$ -	\$ 6,077	\$ 30,600	\$ 22,800	\$ 28,209

*Leucadia WD Technical Support Services Operating Expense Detail*

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ -	\$ 5,278	\$ 28,188	\$ 22,800	\$ 20,011
Medicare Tax	-	76	239	-	237
State Unemployment Tax	-	4	8	-	17
Standby Pay	-	4	154	-	486
Overtime Pay	-	6	1,458	-	365
Dental/Vision	-	-	-	-	175
Employee Assistance Program	-	-	-	-	8
Life Insurance/Disability	-	-	-	-	132
Workers Comp. Insurance	-	-	-	-	239
Medical Insurance - Pers	-	-	-	-	2,239
Retirement Plan - CalPERS & PARS Trust	-	-	-	-	3,070
Deferred Comp-employer	-	211	551	-	628
Uniforms - Boots	-	-	-	-	32
Payroll Processing Fees	-	-	-	-	57
Other Personnel Costs	-	-	-	-	13
	<u>\$ -</u>	<u>\$ 5,577</u>	<u>\$ 30,600</u>	<u>\$ 22,800</u>	<u>\$ 27,709</u>
<b>Supplies and Services</b>					
Fees - Permits	\$ -	\$ 500	\$ -	\$ -	\$ 500
Total Operating Expense	<u>\$ -</u>	<u>\$ 6,077</u>	<u>\$ 30,600</u>	<u>\$ 22,800</u>	<u>\$ 28,209</u>



**TRACKING COVID-19**

SEJPA participates in tracking of COVID-19 by analyzing wastewater. Known as “sewer surveillance” or “wastewater epidemiology,” technicians testing for coronavirus RNA can predict whether infections will rise or fall. Unlike other types of tracking, wastewater surveillance does not depend on data patients provide to the healthcare system or the availability of COVID-19 testing.

<https://biobot.io/data/>



## RECYCLED WATER

### PROGRAM DESCRIPTION

SEJPA owns and operates a recycled water utility which wholesales recycled water to Santa Fe Irrigation District (SFID), San Dieguito Water District (SDWD), City of Del Mar, and Olivenhain Municipal Water District (OMWD), and includes a direct sales agreement with Encinitas Ranch Golf Authority (ERGA). SEJPA financed, permitted, and constructed the recycled water utility, which became operational in September 2000. Since the addition of the Advanced Water Purification (AWP) system in 2013, SEJPA's Recycled Water program delivers up to 3 million gallons per day or nearly 2,000 acre-feet per year (AFY) of recycled water. Local customers that use the recycled water for landscape irrigation include the Encinitas Ranch Golf Course, Lomas Santa Fe Executive and Country Club Golf Courses, Magdalena Ecke Family YMCA, Del Mar Fairgrounds, Village Park greenbelt, local schools, parks, businesses, and street/freeway landscape. Industrial use customers include Scripps Hospital, the Del Mar Fairgrounds, and the San Elijo Water Campus. FY 2024-25 begins the 24th year of operation for the Recycled Water program.

### FY 2023-24 ESTIMATED ACTUAL EXPENSE

Recycled Water program's estimated operating expenditures are projected to be under budget by \$196,621 or 7.2%. Supplies and Services are under budget primarily due to reduced chemical use and unspent retrofit expenses. Capital Outlay is over budget by \$67,714, which is predominantly due to the purchase of surge control valves used to dampen transient pressure waves that were identified in certain sections of the distribution system. Savings from other categories will be used to offset the Capital Outlay overage.

### FY 2024-25 RECOMMENDED BUDGET

For FY 2024-25, the recommended budget is \$5,343,326 including \$2,633,685 operating budget, \$1,728,000 capital appropriations, and \$981,641 debt services budget. The Recycled Water operating budget decreased by \$86,447 or 3.2%. Personnel costs have increased by \$107,997 or 11.4% to reflect inflation to personnel and current work demands. Supplies and Services are estimated to decrease by \$194,443 or 11.9% primarily due to the reduction of the retrofit expenses and certain chemical costs. Capital Outlay is set at \$40,000 for planned equipment replacement. Contingency funding has been set at \$50,000 or 3.4% of Supplies and Services costs to provide funding for unanticipated expenses.

## Recycled Water Expense Summary

Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Personnel	\$ 690,573	\$ 738,450	\$ 875,717	\$ 945,399	\$ 1,053,396
Supplies and Services	1,186,814	1,591,505	1,540,079	1,684,733	1,490,289
Capital Outlay	14,936	52,206	107,714	40,000	40,000
Contingency	-	-	-	50,000	50,000
Total Operating Expense	\$ 1,892,323	\$ 2,382,161	\$ 2,523,511	\$ 2,720,132	\$ 2,633,685
Capital Appropriations	500,000	500,000	2,375,000	4,450,000	1,728,000
Total Operating and Capital Appropriations	\$ 2,392,323	\$ 2,882,161	\$ 4,898,511	\$ 7,170,132	\$ 4,361,685
Debt Service					
2023 Recycled Water Loan	\$ -	\$ -	\$ 778,982	\$ 778,982	\$ 778,497
Advanced Water Purification	148,153	148,153	148,153	148,153	148,154
SFID Pipeline Loan	25,146	138,369	31,134	44,500	46,980
Solana Beach Pipeline Loan	9,630	8,010	5,800	10,350	8,010
Total Debt Service	\$ 182,929	\$ 294,532	\$ 964,069	\$ 981,985	\$ 981,641
Total Expenses	\$ 2,575,252	\$ 3,176,693	\$ 5,862,580	\$ 8,152,117	\$ 5,343,326



### EVERY DROP COUNTS

To help keep our communities green, SEJPA provides recycled water to schools, parks, businesses, homeowners associations, and golf courses for irrigation. This conserves local water supplies and limits our dependencies on imported water.

## Recycled Water Net Revenue

Net Revenue over (under) Expense	Actual 2021-22	Actual 2022-23	Estimated Actual 2023-24	Adopted Budget 2023-24	Recommended Budget 2024-25
Operating Revenue	\$ 3,318,361	\$ 3,100,369	\$ 3,374,267	\$ 3,603,713	\$ 3,691,767
Operating Expense	(1,892,323)	(2,382,161)	(2,523,511)	(2,720,132)	(2,633,685)
Debt Service	(182,929)	(294,532)	(964,069)	(981,985)	(981,641)
Net Recycled Water Revenue	\$ 1,243,109	\$ 423,676	\$ (113,313)	\$ (98,404)	\$ 76,441

*Recycled Water Operating Expense Detail*

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Personnel</b>					
Direct Salaries and Wages	\$ 460,512	\$ 532,002	\$ 601,624	\$ 635,518	\$ 718,067
Medicare Tax	7,116	7,589	8,238	9,434	10,887
State Unemployment Tax	544	698	525	2,552	778
Standby Pay	2,904	6,627	9,551	8,900	9,441
Overtime Pay	20,127	14,716	8,624	13,130	11,471
Dental/Vision	3,605	5,711	7,757	5,879	8,036
Employee Assistance Program	131	137	172	392	384
Life Insurance/Disability	4,670	2,891	5,436	5,353	6,080
Workers Comp. Insurance	8,844	8,048	8,832	11,210	10,995
Medical Insurance - Pers	44,495	57,745	85,968	84,083	102,856
Retirement Plan - CalPERS & PARS Trust	117,165	78,988	116,163	137,104	141,007
Deferred Comp-employer	17,916	19,680	20,140	27,346	28,822
Uniforms - Boots	360	731	500	1,323	1,323
Payroll Processing Fees	2,193	2,506	2,050	2,685	2,634
Other Personnel Costs	-	380	138	490	615
	<b>\$ 690,574</b>	<b>\$ 738,450</b>	<b>\$ 875,717</b>	<b>\$ 945,399</b>	<b>\$ 1,053,396</b>



**BEAUTIFYING COMMUNITIES**

SEJPA’s recycled water brings landscapes to life throughout Encinitas, Solana Beach, and Del Mar. The Coastal Rail Trail, irrigated with recycled water, wanders through colorful displays of drought-tolerant plants.

*Expense detail continued on next page.*

Recycled Water Operating Expense Detail Continued

<b>Operating Expense</b>	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Supplies and Services</b>					
Board Expense	\$ -	\$ 29	\$ 6	\$ 800	\$ 2,200
Advertising	558	288	404	672	706
Bank Charges	-	1,000	-	-	-
Dues & Memberships	9,106	9,935	10,770	9,500	11,000
Equipment Rental/Lease	60	764	1,404	3,600	3,600
Fees - Permits	26,313	32,888	33,407	33,000	34,650
Fuel	5,548	4,999	4,008	9,450	9,830
Insurance - Liability	7,276	4,731	7,583	10,900	12,000
Insurance - Auto	822	830	490	600	670
Insurance - Property	9,396	15,199	22,004	18,000	23,140
Licenses	25,691	11,804	16,071	19,450	20,200
Minor Equip - Shop & Field	5,134	1,773	787	3,300	3,300
Postage/Shipping	174	191	908	750	930
Preemployment Screening	52	292	435	200	300
Printing	(111)	18	495	200	355
Rent	125,583	93,613	109,039	123,750	113,700
Repair Parts Expense	62,387	88,166	47,661	55,000	55,000
Retrofit Expenses	24,713	-	-	105,000	-
Seminars/Education	677	1,947	2,551	4,500	4,500
Services - Accounting	12,676	14,152	23,375	10,800	11,100
Services - Landscape	-	9,190	19,928	19,627	20,609
Services - Alarm	2,719	2,328	2,149	4,100	2,364
Services - Engineering	52,072	215,193	158,446	123,750	100,000
Services - Janitorial	-	393	16,933	10,500	15,400
Services - Fire Control	-	-	-	2,000	1,000
Services - Laboratory	6,718	3,517	3,618	7,500	7,500
Services - Legal	14,749	16,763	16,450	21,900	22,560
Services - Lobbying	21,088	14,625	19,500	20,000	24,000
Services - Maintenance	33,658	83,212	40,251	36,000	50,000
Services - Medical	734	851	987	1,000	1,000
Services - Other	138	18	23	300	300
Services - Professional	25,139	94,954	45,954	68,500	50,500
Services - IT/GIS Support	16,161	20,749	15,330	28,625	15,635
Services - Contractors	15,675	95,323	71,977	24,200	24,200
Services - Temp	21,740	32,630	46,989	41,154	29,495
Services - Uniforms	1,461	1,597	1,412	1,719	1,719
Subscriptions	298	240	-	360	360
Subsistence - Meals	282	308	660	750	1,665
Subsistence - Travel/Rm & Bd	84	771	2,828	1,500	4,175
Supplies - Chem - Odor	18,204	25,873	-	-	-
Supplies - Chem - Polymer	2,909	8,208	10,000	10,000	11,000
Supplies - Chem - Sodium Hypo	75,369	123,527	182,092	181,305	183,000
Supplies - Chemicals	116,471	95,382	76,021	151,200	75,000
Supplies - IT Equipment	-	-	389	-	4,272
Supplies - Janitorial	-	539	999	1,000	1,000
Supplies - Lab	8,292	10,062	12,264	10,000	13,000
Supplies - Office	2,663	4,174	3,865	2,670	2,670
Supplies - Safety	308	513	2,300	2,000	2,850
Supplies - Shop & Field	3,093	3,342	4,027	4,500	4,500
Training	2,499	3,188	681	2,800	2,800
Training - Safety	294	553	793	1,700	1,700
Utilities - Gas & Electric	382,520	340,067	412,060	410,000	412,000
Utilities - Internet	646	-	1,869	960	4,495
Utilities - Telephone	11,388	9,541	5,185	6,800	6,970
Utilities - Water	5,191	10,778	11,162	6,750	12,000
Utilities - Water (Suppl.)	26,755	40,973	21,561	16,500	21,500
Utilities - Trash	637	1,017	1,044	890	1,070
Utilities - Solar Power	-	38,342	46,678	50,000	48,000
Vehicle Maintenance	804	144	2,260	2,700	2,800
	<b>\$ 1,186,814</b>	<b>\$ 1,591,505</b>	<b>\$ 1,540,079</b>	<b>\$ 1,684,733</b>	<b>\$ 1,490,289</b>
Capital Outlay	\$ 14,936	\$ 52,206	\$ 107,714	\$ 40,000	\$ 40,000
Contingency	-	-	-	50,000	50,000
Total Operating Expense	<b>\$ 1,892,323</b>	<b>\$ 2,382,161</b>	<b>\$ 2,523,511</b>	<b>\$ 2,720,132</b>	<b>\$ 2,633,685</b>



Environmental  
Stewardship

Strong Permit  
Compliance

Community  
Investments

Safety and  
Reliability

Sustainable  
Resource  
Management

## CAPITAL PROGRAMS

### *CAPITAL IMPROVEMENT PROGRAM OVERVIEW*

SEJPA's Capital Improvement Program (CIP) prioritizes environmental protection, fiscal responsibility, and community benefits including the safety of our staff and the public when developing and ranking agency infrastructure needs. We strive to replace aging assets prior to failure or significant decline in service performance and invest in energy efficiency and sustainable practices. Over the last five years, significant capital projects included:

- Upgrading pretreatment systems to improve performance during intense storms, increase operational efficiency, and allow the capture and reuse of stormwater;
- Expanding our recycled water system to decrease reliance on imported water and improve local sustainability;
- Replacing the land portion of the ocean outfall system to ensure treated flows safely reach the ocean;
- Modernizing the Water Campus to meet the needs of our agency, improve public access, and provide beneficial amenities to the communities we serve;
- Upgrades to SEJPA's Supervisory, Control, and Data Acquisition (SCADA) system and operator control space; and
- Building 600 kW photovoltaic solar energy system to meet up to 25% of the water campus power needs with renewable energy.

SEJPA is responsible for maintaining permit compliance with regulatory agencies and legal agreements with customers to provide wastewater, recycled water, and clean water services. Proactive asset management and capital improvement planning are critical components in keeping these commitments. SEJPA employs a "triple-bottom line" approach to prioritize and weight projects to compare each project against the other and confirm SEJPA achieves balanced, value-added results for environmental, financial, and social goals.



**ENVIRONMENTAL**  
35%

Meet permit requirements and minimize risk of violations. Seek sustainable and efficient operational practices, maximize resource recovery, and minimize impacts to the environment.



**FINANCIAL**  
30%

Implement economically-feasible projects and solutions. Maximize economic benefits for customers through cost-effective operations.



**SOCIAL**  
35%

Maintain a high standard of worker safety and maximize community benefits through improved aesthetics and recreational uses.

In 2017, SEJPA secured \$23.9 million in a bond offering. Staff bundled the projects into four phases to prioritize capital spending, streamline project delivery, minimize community impacts, and reduce cost through economies of scale. The highest priority projects went into construction in 2017. The first two phases of the capital plan have been completed and the third phase (Biosolids Dewatering Facilities Improvement and MS-2 Replacement) is entering construction. Completed Phases 1 and 2, and ongoing Phase 3 are estimated to cost \$49.7 million. The figure below presents the first three phases of the Capital Program.



SEJPA is executing the 3-Year Capital Plan, consisting of the carryover Phase 3 Project (Biosolids Dewatering Facility and MS-2 Replacement), five new capital improvement projects and a backlog of miscellaneous projects. The current Capital Plan has an estimated cost of \$32.6 million. Project descriptions and funding appropriations are further discussed below. In FY 2024-25, SEJPA will also be updating its Facility Plan to identify, prioritize, and plan for the next generation of investments in the San Elijo Water Campus and remote facilities operated and maintained by SEJPA. Future projects will maintain and improve infrastructure related to wastewater treatment, laboratory services, ocean outfall, wastewater pump stations, and recycled water including expanded non-potable service and foundational improvements to support Potable Reuse in the future.

## CAPITAL PROGRAM FUNDING SUMMARY

The Capital Program is funded through a combination of sources with costs allocated to programs based on infrastructure benefits and in accordance with the capacity share owned/leased by contributing agencies. Funding sources include:

- Annual capital contributions from customer agencies for shared facilities (i.e., Wastewater Program, Ocean Outfall Program, Laboratory Program);
- Annual capital contributions by specific customer agencies for special projects undertaken by SEJPA (i.e., Pump Station upgrades);
- Recycled Water Revenues (recycled water sales and incentive programs) that fund the recycled water reserve, a portion of which is designated for recycled water capital improvements;
- Financing including bond measures and private loans; and
- Grants from State of California and the United States Federal Government.

SEJPA has been awarded multiple grants totaling up to \$6 million through the Integrated Regional Water Management (IRWM) program under Proposition 1 (California Water Bond) and from the US Bureau of Reclamation Title XVI Program to fund the following qualified projects. This grant funding offsets approximately 1/3 of the total estimated project costs for these qualified projects.

**Projects Approved for Funding Under State and Federal Grant Programs**

Capital Project	Summary	Benefiting Program(s)
Wanket Tank and Pipeline (two separate construction contracts)	Refurbishment and retrofit of pre-existing 3 million gallon tank; pipeline connecting tank to SEJPA's north distribution system.	Recycled Water
Biological Treatment Improvements	Converts existing conventional activated sludge biological process to Nitrification/Denitrification and upgrades and retrofit of recycled water disinfection (Chlorine Contact Tank). Improves reliability and resiliency of secondary process that produces source water to recycled water system; mitigates risk of future nutrient limits for ocean discharge; positions SEJPA for potable reuse in the future.	Recycled Water, Wastewater, Ocean Outfall
Stormwater Capture and Reuse	Rehabilitation and upgrades to headworks; accomodates stormwater diversion; Construction Completed 2019. Diverts stormwater from regional storm channel and within the San Elijo Water Campus to the headworks to reduce pollutant loading to San Elijo Lagoon, manage runoff and erosion at SEWC, and augment recycled water supply.	Recycled Water, Wastewater

## *CAPITAL PROGRAM PROJECT APPROPRIATION SUMMARY*

The Capital Program is organized by SEJPA service programs, as expenses are incurred through those programs and the respective member and customer agencies fund the capital projects. Details of the capital projects are presented in the following subsections. Where projects benefit multiple programs, costs are shared proportionally. Below is a table listing the appropriations for FY 2024-25.

<b>Program</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Wastewater Treatment	\$ 1,240,000	\$ 1,260,000	\$ 1,225,000	\$ 1,265,000
Laboratory Services	-	120,000	120,000	147,000
Ocean Outfall	120,000	175,000	100,000	146,000
Cardiff Sanitary Division Pump Stations	-	-	75,000	125,000
Encinitas Sanitary Division Pump Station	375,000	1,125,000	600,000	204,000
City of Solana Beach Pump Stations	-	-	-	26,000
City of Del Mar Pump Station	-	-	-	25,000
Recycled Water	500,000	500,000	4,450,000	1,728,000
Total Capital Appropriations	<u>\$ 2,235,000</u>	<u>\$ 3,180,000</u>	<u>\$ 6,570,000</u>	<u>\$ 3,666,000</u>

## *WASTEWATER TREATMENT PROJECT APPROPRIATION DETAIL*

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Biosolids Dewatering (Phase 3)	\$ 1,040,000	\$ 1,060,000	\$ -	\$ -
Miscellaneous Projects	200,000	200,000	350,000	313,000
Stormwater Capture and Reuse	-	-	350,000	-
Biological Treatment Improvements (NDN & CCT)	-	-	525,000	725,000
Facility Plan Update	-	-	-	227,000
Total Capital Appropriations	<u>\$ 1,240,000</u>	<u>\$ 1,260,000</u>	<u>\$ 1,225,000</u>	<u>\$ 1,265,000</u>

### PHASE 3 – BIOSOLIDS DEWATERING FACILITIES IMPROVEMENT (AND MS-2 REPLACEMENT) PROJECT

The Biosolids Dewatering Facilities Improvements and MS-2 Replacement Project was bid and awarded in January 2023. Construction completion is extending due to persistent supply constraints in the construction industry, in particular manufacturing of electrical equipment. Construction is now expected to be complete in mid- to late-2025. The estimated value of the Biosolids Dewatering and MS-2 Replacement Project is \$12.1 million, including capitalized soft costs (i.e., engineering, design, bidding services, legal, and SEJPA staff). The project will replace the dewatering belt-presses with new centrifuges, rehabilitate and replace corroded steel and sludge handling equipment, replace chemical storage and pumping equipment, and other related improvements. During final design, Main Switchboard No. 2 (MS-2) was determined to be at the end of its service life and reaching obsolescence – it will also be replaced and upsized with this Project. The entire \$12.1 million estimated project cost is funded from wastewater capital contributions received in prior years.

## PHASE 4 – BIOLOGICAL TREATMENT IMPROVEMENTS

The Biological Treatment Improvements Project consists of two main components: (1) converting the secondary treatment system to a more robust nitrification/denitrification (NDN) process to remove nutrients, and (2) retrofit and rerating of the chlorine contact tank (CCT). The Wastewater Program will share the cost of the NDN upgrades with the Recycled Water Program, as this improvement will produce more reliable and higher quality effluent that benefits both wastewater treatment/disposal and recycled water production. The second component, retrofitting and rerating the CCT will be borne solely by the Recycled Water Program. The improved biological treatment preemptively prepares for anticipated nutrient limits on ocean outfall flows and will provide more robust treatment to allow the secondary process to better handle the increasingly variable wastewater strength and hydraulic loading experienced in recent years at the SEWC. The project is estimated to cost \$10 million, and SEJPA anticipates this project being eligible for a federal grant on the order of \$2.5 million under a federal program for expanding recycled water production. The Project will be financed with a private placement loan of approximately \$10 million through the Recycled Water Program to smooth cash flow, as the grant funding will likely be received after the project is completed and to reduce the burden on wastewater funds. The Wastewater Program’s share of the overall project is budgeted at \$3 million plus project delivery support costs (estimated at \$0.15 million) and will be collected over a five-year period in accordance with the following schedule:

Fiscal Year	Capital Contribution from Wastewater Program	Status
2023-24	\$ 525,000	Collected
2024-25	725,000	Budgeted
2025-26	725,000	Projected
2026-27	725,000	Projected
2027-28	450,000	Projected
<b>Total Contributions</b>	<b>\$ 3,150,000</b>	<b>Estimated</b>

## PHASE 4 – STORMWATER CAPTURE AND REUSE

The SEJPA Stormwater Capture and Reuse Project will reduce pollution to the San Elijo Lagoon and Pacific Ocean and capture stormwater to augment water supply to the recycled water system. The project will also improve site drainage to manage runoff and align with industrial stormwater permit requirements. The project, scheduled to start construction in FY 2024-25, will include stormwater interceptors, desilting basins, up to two pump stations and other ancillary equipment to capture and treat approximately 7 million gallons per year. The project budget is \$2,000,000, plus project delivery support costs (estimated at \$0.1 million) and is expected to be funded primarily by grant funding, estimated at up to \$1.4 million. .

The cost of this Project which benefits the entire Water Campus will be shared between the Recycled Water Program and Wastewater Program. The Wastewater Program’s portion is budgeted at \$0.35 million (net of grant funding) and was collected in FY 2023-24.

## MISCELLANEOUS PROJECTS

SEJPA continuously assesses its assets and implements capital projects to maximize equipment useful service life, enhance process automation, address safety issues, and improve treatment quality. Small projects are prioritized and implemented on an as-needed basis, based on capital cash availability and in-house project oversight capacity. Historically, SEJPA has also budgeted for Capital Outlays within the Operating Budget; however, starting with the FY 2024-25 Budget, capital expenses will be budgeted entirely within the Capital Program. Miscellaneous Projects including asset renewal and replacement is estimated to total over \$2 million over the next five years.

Capital contributions on the order of \$0.3 to \$0.4 million will be budgeted annually to fund the capital reserve for these projects under a pay-go capital project implementation strategy.

Examples of miscellaneous and asset management projects at the San Elijo Water Campus include rehabilitating Dissolved Air Flootation Thickener (DAFT) #1 (note, DAFT#2 was rehabilitated in FY 2022-23), modifications to headworks channel cover plate system to address identified safety concerns, large pump replacements and rebuilds, and implementing biogas treatment to protect low-emission boilers and flares. SEJPA is budgeting \$0.313 million in FY 2024-25 for miscellaneous capital projects.

## FACILITY PLAN UPDATE

SEJPA will be updating the Facility Plan which is the foundational document for SEJPA's capital program. The planning effort will commence in Summer 2024 and continue into the Fall 2025. The facility planning effort will include a review of pertinent regulations and condition assessment of existing assets both at the San Elijo Water Campus and at 13 remote facilities. The updated planning document will provide recommendations for prioritized capital projects over the next decade. Each of SEJPA operating "program(s)" will be responsible for contributing its share of the facility plan update effort. The Wastewater Program's share is estimated at \$227,000 and is budgeted in the FY 2024-25 capital budget.

*LABORATORY SERVICES PROJECT APPROPRIATION DETAIL*

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Laboratory Remodel	\$ -	\$ 120,000	\$ 120,000	\$ 125,000
Facility Plan Update	-	-	-	22,000
<b>Total Capital Appropriations</b>	<b>\$ -</b>	<b>\$ 120,000</b>	<b>\$ 120,000</b>	<b>\$ 147,000</b>

The current laboratory casework has been in use for more than 30 years and has significant signs of corrosion and deterioration. Although the building code has no significant requirements on corroding surfaces, the laboratory casework, counters, furniture, and ventilation equipment has been recommended for replacement due to age and increased maintenance requirements. In preparation for a laboratory remodeling project, in FY 2022-23 SEJPA began collecting cash contributions for a forthcoming laboratory refurbishment project. In FY 2022-23 and FY 2023-24, SEJPA collected installments of \$120,000 for a total of \$240,000 to date. For FY 2024-25, SEJPA is budgeting a third installment of \$125,000. SEJPA has retained an architect to conduct a condition assessment, needs analysis, and to develop a scope and budget for the Project; recommendations will be incorporated into the Facility Plan Update. The Laboratory Program will also contribute \$22,000 to the Facility Plan Update.

*OCEAN OUTFALL PROJECT APPROPRIATION DETAIL*

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Outfall Reserve	\$ 120,000	\$ 25,000	\$ 50,000	\$ 50,000
Escondido Vault Rehabilitation	-	150,000	50,000	50,000
Facility Plan Update	-	-	-	46,000
<b>Total Capital Appropriations</b>	<b>\$ 120,000</b>	<b>\$ 175,000</b>	<b>\$ 100,000</b>	<b>\$ 146,000</b>

**OUTFALL RESERVE**

The San Elijo Ocean Outfall system is critical regional infrastructure that serves SEJPA and the City of Escondido. This infrastructure includes pressure regulating and isolation valves, ocean discharge pumps, flow measuring meters, 2,600 feet of land outfall pipeline, 8,000 feet of ocean outfall pipe, system automation and monitoring components, and support structures and rock ballast that hold the outfall stationary on the ocean floor. The outfall conveys an average of approximately 10 million gallons per day (MGD) with peak flows during storm events of up to 25.5 MGD. The Outfall Reserve is a capital reserve account dedicated for repair and replacement activities associated with the San Elijo Ocean Outfall system. Due to ocean currents and sand movement on the ocean floor, the rock ballast that protects the outfall generally requires to be replenished every 15-20 years. Re-ballasting and diffuser maintenance was completed most recently in 2006 – a comparable scope is anticipated to cost over \$4 million today (in 2024 dollars). SEJPA completed an inspection of the outfall in 2021 that found the ballast rock was adequately supporting the outfall; however, ballast rock can be affected by a single significant ocean swell. The Outfall Reserve balance totals approximately \$1.61 million. Collecting reserve funding over time helps smooth the rates while building up funds required to complete the work when it becomes necessary.

### ESCONDIDO VAULT REHABILITATION PROJECT

As part of the Ocean Outfall system, SEJPA operates and maintains flow metering and water quality monitoring equipment inside a below-ground, concrete structure on Manchester Avenue near the Water Campus driveway. The vault was initially installed in 1974 and modified in 1999 to include a second flow meter. The original 1974 flow meter and valves have reached the end of useful life, and this project will replace old and outdated equipment in the vault. SEJPA will evaluate the condition of the vault and equipment through the Facility Plan update. SEJPA received \$150,000 in capital contributions for this project in FY 2022-23 and a second installment of \$50,000 in FY 2024-25 for a total of \$200,000 in reserve to implement the project.

### EFFLUENT PUMP STATION

As part of the Ocean Outfall system, SEJPA operates and maintains the Effluent Pump Station at the San Elijo Water Campus. The pump station was initially installed in 1974 with the extension of the Ocean Outfall. The original 1974 equipment is nearing the end of its useful life, and a project is anticipated to replace old and outdated equipment, upgrade electrical and control components and rehabilitate the structure. SEJPA will evaluate the condition of the Effluent Pump Station through the Facility Plan update.

The Ocean Outfall Program will contribute \$46,000 to the Facility Plan Update to assess and define projects to rehabilitate and upgrade the Escondido Vault and the Effluent Pump Station. Recommendations for rehab and upgrades will be the basis for future capital improvement projects.

### CARDIFF SANITARY DIVISION PUMP STATIONS APPROPRIATION DETAIL

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Olivenhain Inlet Gate Replacement	\$ -	\$ -	\$ 75,000	\$ 100,000
Facility Plan Update	-	-	-	25,000
Total Capital Appropriations	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 75,000</u>	<u>\$ 125,000</u>

### OLIVENHAIN PUMP STATION INLET GATE REPLACEMENT

The wet well inlet gate to the Olivenhain Pump Station is inoperable and needs to be replaced. This gate is critical for isolating flow to allow SEJPA and City of Encinitas staff to safely maintain and clean the wet well structure. In particular, high sediment and rock loads carried from the tributary collection systems to this pump station requires regular cleaning. The gate replacement will require temporary upstream diversion and special construction methods to safely access and work within the confined space. SEJPA will prepare a small project bid solicitation to retain a contractor to support the installation of the inlet gate. SEJPA collected \$75,000 for this gate replacement project in FY 2023-24 and is budgeting a second installment of \$100,000 for FY 2024-25.

Cardiff Sanitary Division will contribute \$25,000 to the Facility Plan Update, for assessment of its three sewer pump stations. Recommendations for rehab and upgrades will be the basis for future capital improvement projects.



*ENCINITAS SANITARY DIVISION PUMP STATION APPROPRIATION  
DETAIL*

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Moonlight Beach Pump Station Rehabilitation	\$ 375,000	\$ 1,125,000	\$ 600,000	\$ 200,000
Facility Plan Update	-	-	-	4,000
<b>Total Capital Appropriations</b>	<b>\$ 375,000</b>	<b>\$ 1,125,000</b>	<b>\$ 600,000</b>	<b>\$ 204,000</b>

**MOONLIGHT BEACH PUMP STATION REHABILITATION**

**PHASE 4 - MOONLIGHT BEACH PUMP STATION REHABILITATION**

The Moonlight Beach Pump Station was originally constructed in 1974 and underwent significant renovation in 2006. It is located on the southeast corner of the intersection of 3rd Street and B Street in the City of Encinitas. A pump/grinder replacement evaluation for this pump station was conducted and the findings are detailed in the September 2019 Moonlight Beach Pump Station, Pump Replacement Evaluation. Design of this project began in FY 2021-22 with the initial \$375,000 payment from the City of Encinitas. As the design progressed, additional issues not anticipated in the initial 2019 report were identified and incorporated into the project including wet well access safety issues, replacement of inoperable valves, and replacement of flow meter that has reached the end of its service life. SEJPA is carefully monitoring the impact of inflation on construction cost trends and conferring with engineers and contractors. The cost for this Project is now estimated at \$2.3 million, including project delivery costs (estimated at \$0.1 million), of which the City of Encinitas has funded \$2.1 million over the past four years. The unfunded amount of \$0.2 million is budgeted for FY 2024-25. The project is funded solely by the City of Encinitas and is included in the revenues collected from the City.

The Encinitas Sanitary Division will also contribute \$4,000 to the Facility Plan Update for the assessment of the Moonlight Beach Pump Station, with emphasis on facility assets that are not part of the ongoing rehabilitation project, for example the electrical system and SCADA communications. Recommendations for rehab and upgrades will be the basis for future capital improvement projects.

*CITY OF SOLANA BEACH PUMP STATIONS PROJECT APPROPRIATION  
DETAIL*

<b>Capital Project</b>	<b>Fiscal Year 2021-22</b>	<b>Fiscal Year 2022-23</b>	<b>Fiscal Year 2023-24</b>	<b>Recommended Budget 2024-25</b>
Facility Plan Update	\$ -	\$ -	\$ -	\$ 26,000
<b>Total Capital Appropriations</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 26,000</b>

SEJPA is not anticipating any capital improvements in the Solana Beach Sanitation Division, Pump Station Program for FY 2024-25. However, the City of Solana Beach will contribute \$26,000 to the Facility Plan Update for the assessment of its four wastewater pump stations. Recommendations for rehab and upgrades will be the basis for future capital improvement projects.

## *RECYCLED WATER PROJECT APPROPRIATION DETAIL*

Working collaboratively with its water district partners, SEJPA plans and constructs improvements to the recycled water infrastructure to maintain service reliability, improve operational efficiency, and enhance service capabilities.

SEJPA's 3-Year Capital Plan, consisting of six large capital improvement projects and a backlog of miscellaneous projects has an estimated capital cost of \$32.6 million, of which \$13.5 million is attributed to the Recycled Water Program. Significant grant funding, in the order of \$6 million, will reduce the burden on the Recycled Water Program. SEJPA's funding strategy includes a private placement loan of approximately \$10 million to smooth cashflow requirements. The Wastewater Program will reimburse the Recycled Water Program for its share of the NDN conversion and stormwater site improvements across the Water Campus through annual contributions totaling \$3.85 million, starting in FY 2023-24. Project descriptions and funding appropriations are further discussed below. In FY 2024-25, SEJPA will also be updating its Facility Plan to identify, prioritize, and plan for the next generation of investments in the San Elijo Water Campus and remote facilities operated and maintained by SEJPA. Future projects will maintain and improve infrastructure related to wastewater treatment, laboratory services, ocean outfall, wastewater pump stations, and recycled water including expanded non-potable service and foundational improvements to support Potable Reuse in the future.

The following Treatment, Conveyance, and Storage projects have been identified as Phase 4 projects:

### WANKET TANK REFURBISHMENT AND PIPELINE

This project will convert the Wanket Tank, an existing 3-million-gallon pre-stressed concrete potable water tank that has been out of service for about a decade, into a recycled water storage tank. The Wanket Tank, constructed in 1975, is jointly owned by Olivenhain Municipal Water District (OMWD) and San Dieguito Water District (SDWD) and is no longer used for potable water service. Wanket Tank is located on a 1.67-acre site approximately 1,000 ft east of the nearest existing SEJPA recycled water line in Quail Gardens Drive. The project will include rehabilitating the concrete reservoir, disconnecting the tank from potable water pipelines, constructing a new recycled water pipeline to connect the tank to the existing recycled water system in Quail Gardens Drive, and ancillary improvements. This project will substantially increase recycled water storage, improving service reliability, operational efficiency, and water pressure for customers. SEJPA is carefully monitoring impacts of inflation on construction cost trends and conferring with engineers and contractors; project scope was refined in 2023 to align project goals with available funding. The cost for this project is now budgeted at \$3.1 million, plus project delivery costs (estimated at \$0.11 million), and has qualified for approximately \$1.6 million in state and federal grant funding. The remaining project cost of approximately \$1.6 million is proposed to be funded by the Recycled Water Fund.

### STORMWATER CAPTURE AND REUSE

The SEJPA Stormwater Capture and Reuse project is intended to reduce pollution to the San Elijo Lagoon and Pacific Ocean and capture stormwater to augment water supply to the recycled water system. The project will also improve site drainage to manage runoff and align with industrial stormwater permit requirements. The project is envisioned to include stormwater interceptor, desilting basins, up to two pump stations and other ancillary equipment to capture and recycle approximately 7 million gallons per year. The project budget is \$2.0 million, plus project delivery support costs and is expected to be funded primarily by grant funding, estimated

at up to \$1.4 million. This project includes elements not completed with the Water Campus Improvement project and will be designed and constructed over the next two years.

The cost of this Project, which benefits the entire Water Campus, will be shared between the Recycled Water Program and Wastewater Program. The Recycled Water Program portion is \$0.35 million (net of grant funding). The Wastewater Program's portion, budgeted at \$0.35 million (net of grant funding) was collected in FY 2023-24.

### BIOLOGICAL TREATMENT IMPROVEMENTS (NDN & CCT)

The Biological Treatment Improvements Project consists of two main components: (1) converting the secondary treatment system to a more robust nitrification/denitrification (NDN) process to remove nutrients, and (2) retrofit and rerating of the chlorine contact tank (CCT). The Recycled Water Program will share the cost of the NDN upgrades with the Wastewater Program, as this improvement will produce more reliable and higher quality effluent that benefits both wastewater treatment/disposal and recycled water production. The second component, retrofitting and rerating the CCT, will be borne solely by the Recycled Water Program. The improved biological treatment will allow the secondary process to better handle variable wastewater strength and hydraulic loading, providing more consistent water quality to the tertiary process which will allow the sand and membrane filters to operate more efficiently, and utilize less chemicals. The longer solids retention time utilized in the NDN process will be less susceptible to process upsets and will yield fewer colloidal particles that are believed to be contributing to occasional coliform breakthrough in the sand filters. Furthermore, with a fully nitrified effluent (no residual ammonia), the CCT can be rerated using free chlorine which will allow the tank to be rerated from 3 mgd to 4 mgd and it will also allow a portion of the existing structure volume to be repurposed for onsite storage, which will alleviate operational challenges on the recycled water pump station. The total project is estimated to cost \$10 million, plus project delivery support services (estimated at \$0.5 million), and SEJPA anticipates this project being eligible for a federal grant on the order of \$2.5 million. The Recycled Water Program's share of the overall project is budgeted at \$7.4 million. The Wastewater Program will reimburse the Recycled Water Program for its share of the NDN improvements through annual capital contributions starting in FY 2023-24 (See Wastewater Treatment Project Appropriation Detail Section, above, for projected capital contribution schedule).

# DEBT SERVICE

## WASTEWATER TREATMENT DEBT SERVICE

### 2017 CLEAN WATER REVENUE BONDS

SEJPA issued revenue bonds in July 2017 to fund a series of wastewater, ocean outfall, and recycled water projects. The bond included a face value of \$22.115 million, plus a premium less expense of \$1.797 million netting \$23.912 million received with a true interest cost of 3.39% over 30 years. The FY 2024-25 payments will include both interest and principal: \$414,288 interest and \$255,000 principal for each Member Agency. The estimated balance as of June 30, 2024, will be \$18,956,425. The scheduled payoff date is March 2047.

### SAN DIEGO GAS & ELECTRIC ON BILL FINANCING

In July 2017, SEJPA and San Diego Gas & Electric (SDG&E) entered into an On-Bill Financing Loan Agreement to fund the Blower Replacement Project. This project replaced three 125-hp multi-stage centrifugal blowers that were installed in 1991 with substantially more efficient turbo blowers. This replacement project resulted in a \$533,883 loan from SDG&E with 120 monthly payments of \$4,449 with no interest. The resulting annual cost savings from the installation of more energy-efficient equipment roughly equals the annual finance expense. The estimated balance as of June 30, 2024, will be \$160,164. The scheduled payoff date is July 2027.



### ENCOURAGING INNOVATION

SEJPA supports efficiency and innovation. Solar power provides electricity at the Water Campus. Visitors can charge electric vehicles at public charging stations. Our policies protect the environment and advance the goals of climate action plans.

## *RECYCLED WATER DEBT SERVICE*

### 2023 RECYCLED WATER LOAN

SEJPA has secured a private placement loan in the amount of \$10,120,000 to fund Recycled Water Capital Improvements. The loan has a 4.58% fixed interest rate for a term of 20 years with annual payments ranging from \$778,028 to \$779,039. Debt service on the loan will be paid through recycled water rates.

### ADVANCED WATER PURIFICATION LOAN

In November 2011, SEJPA received a private placement loan for the construction of the Advanced Water Purification Facility in the amount of \$2 million at a fixed interest rate of 4.15%. Annual payments of \$148,154 began in 2011 and will continue for 20 years until 2031. The outstanding principal balance on June 30, 2024, is estimated to be \$942,083.

### SFID PIPELINE LOAN

In 2013, SEJPA entered into an agreement with the Santa Fe Irrigation District to purchase a recycled water distribution pipeline for \$526,149 with an initial down payment of \$50,000 and annual interest between 1.0% and 2.5% based on the Local Agency Investment Fund (LAIF) rate. The repayment schedule is \$450 per acre foot of water delivered through the pipeline. The outstanding principal balance as of June 30, 2024, is estimated to be \$322,822. Payment amount is based on 90 acre-feet delivered through the pipeline in FY 2023-24.

### SOLANA BEACH PIPELINE LOAN

In 2020, SEJPA entered into an agreement with the City of Solana Beach to purchase a recycled water distribution pipeline for \$1,191,652 with no annual interest and \$478,319 of the reimbursement through water sales. Other sources of funds for reimbursement will be a combination of the cash value of services to be provided by SEJPA and actual grants received. In FY 2022-23, \$600,000 of grant funding was reimbursed to Solana Beach. The repayment schedule is \$450 per acre foot of water delivered through the pipeline. The outstanding principal balance as of June 30, 2024, is estimated to be \$425,834. The payment amount is based on 13 acre-feet delivered through the pipeline in FY 2023-24.

## DEBT SERVICE SUMMARY

	<b>Actual 2021-22</b>	<b>Actual 2022-23</b>	<b>Estimated Actual 2023-24</b>	<b>Adopted Budget 2023-24</b>	<b>Recommended Budget 2024-25</b>
<b>Wastewater Debt Service</b>					
2017 Clean Water Revenue Bonds					
Principal	\$ 460,000	\$ 475,000	\$ 490,000	\$ 490,000	\$ 510,000
Interest	876,225	862,425	848,175	848,175	828,575
Total Debt Service	<u>\$ 1,336,225</u>	<u>\$ 1,337,425</u>	<u>\$ 1,338,175</u>	<u>\$ 1,338,175</u>	<u>\$ 1,338,575</u>
San Diego Gas & Electric					
Principal	\$ 53,388	\$ 53,388	\$ 53,388	\$ 53,388	\$ 53,388
Interest	-	-	\$ -	-	-
Total On Bill Financing	<u>\$ 53,388</u>	<u>\$ 53,388</u>	<u>\$ 53,388</u>	<u>\$ 53,388</u>	<u>\$ 53,388</u>
Total Wastewater Debt Service					
Principal	\$ 513,388	\$ 528,388	\$ 543,388	\$ 543,388	\$ 563,388
Interest	876,225	862,425	848,175	848,175	828,575
Total Debt Service	<u>\$ 1,389,613</u>	<u>\$ 1,390,813</u>	<u>\$ 1,391,563</u>	<u>\$ 1,391,563</u>	<u>\$ 1,391,963</u>
<b>Recycled Water Debt Service</b>					
2023 Recycled Water Loan					
Principal	\$ -	\$ -	\$ 310,000	\$ 310,000	\$ 333,000
Interest	-	-	468,982	468,982	445,497
Total Debt Service	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 778,982</u>	<u>\$ 778,982</u>	<u>\$ 778,497</u>
Advanced Water Purification Loan					
Principal	\$ 97,249	\$ 101,327	\$ 105,576	\$ 105,576	\$ 110,003
Interest	50,904	46,826	42,577	42,577	38,151
Total Debt Service	<u>\$ 148,153</u>	<u>\$ 148,153</u>	<u>\$ 148,153</u>	<u>\$ 148,153</u>	<u>\$ 148,154</u>
SFID Pipeline Loan					
Principal	\$ 21,053	\$ 131,775	\$ 24,790	\$ 40,500	\$ 40,500
Interest	4,093	6,593	6,344	4,000	6,480
Total Debt Service	<u>\$ 25,146</u>	<u>\$ 138,369</u>	<u>\$ 31,134</u>	<u>\$ 44,500</u>	<u>\$ 46,980</u>
Solana Beach Pipeline Loan					
Principal	\$ 9,630	\$ 8,010	\$ 5,800	\$ 10,350	\$ 8,010
Interest	-	-	-	-	-
Total Debt Service	<u>\$ 9,630</u>	<u>\$ 8,010</u>	<u>\$ 5,800</u>	<u>\$ 10,350</u>	<u>\$ 8,010</u>
Total Water Reclamation Debt Service					
Principal	\$ 127,932	\$ 241,112	\$ 446,166	\$ 466,426	\$ 491,513
Interest	54,997	53,420	\$ 517,904	515,559	490,128
Total Debt Service	<u>\$ 182,929</u>	<u>\$ 294,532</u>	<u>\$ 964,069</u>	<u>\$ 981,985</u>	<u>\$ 981,641</u>
<b>Total Debt Service</b>					
Total All Debt Service					
Principal	\$ 641,320	\$ 769,500	\$ 989,554	\$ 1,009,814	\$ 1,054,901
Interest	931,222	915,845	1,366,079	1,363,734	1,318,703
Total Debt Service	<u>\$ 1,572,542</u>	<u>\$ 1,685,345</u>	<u>\$ 2,355,632</u>	<u>\$ 2,373,548</u>	<u>\$ 2,373,604</u>

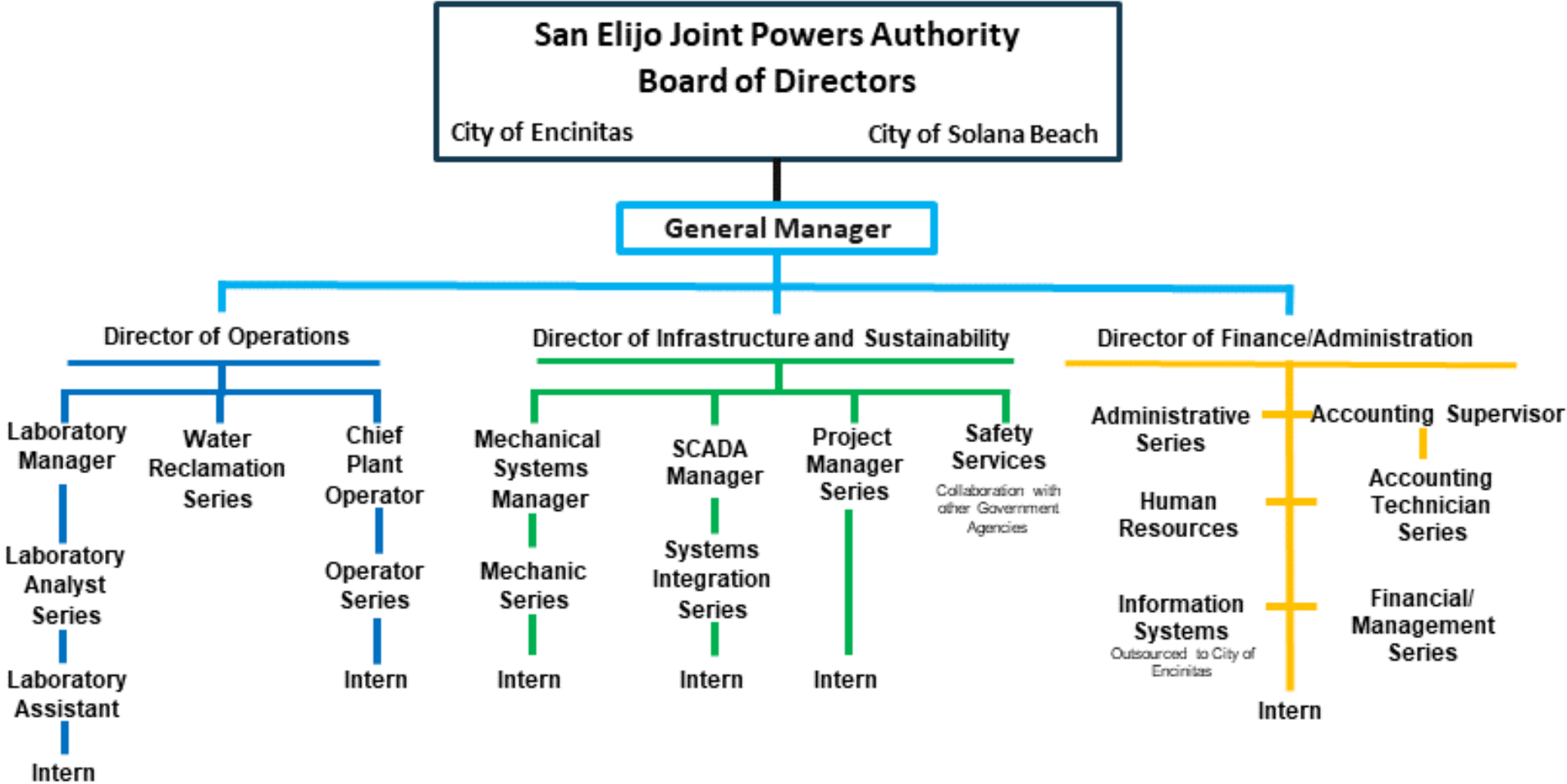
# CLASSIFICATION AND SALARY SCHEDULE

**SAN ELIJO JOINT POWERS AUTHORITY**  
**FY 2024-25 CLASSIFICATION AND SALARY SCHEDULE**  
 As of July 1, 2024

Position	Base Salary*			
	Monthly		Annual	
	Minimum	Maximum	Minimum	Maximum
<b>Accounting Series</b>				
<i>Accounting Technician I</i>	\$4,035	\$5,764	\$48,417	\$69,168
<i>Accounting Technician II</i>	4,670	6,671	56,039	80,056
<i>Accounting Technician III</i>	5,675	8,107	68,103	97,290
<i>Accounting Supervisor</i>	7,642	10,917	91,700	131,000
<b>Administrative Series</b>				
<i>Administrative Assistant I</i>	3,033	4,333	36,396	51,994
<i>Administrative Assistant II</i>	4,127	5,895	49,520	70,742
<i>Administrative Assistant III</i>	4,694	6,705	56,324	80,463
<i>Administrative Coordinator</i>	6,429	9,184	77,148	110,212
<b>Director of Operations</b>	12,773	18,247	153,272	218,960
<b>Director of Finance/Administration</b>	12,773	18,247	153,272	218,960
<b>Director of Infrastructure and Sustainability</b>	12,773	18,247	153,272	218,960
<b>Financial / Management / HR Analyst Series</b>				
<i>Analyst-In-Training</i>	3,781	6,410	45,370	76,914
<i>Analyst I</i>	5,338	7,625	64,053	91,504
<i>Analyst II</i>	5,867	8,382	70,407	100,582
<i>Analyst III</i>	6,661	9,516	79,938	114,197
<b>General Manager (Board Approved Contract)</b>	21,130	21,130	253,560	253,560
<b>Laboratory Series</b>				
<i>Laboratory Assistant</i>	2,990	4,303	35,880	51,632
<i>Laboratory Analyst I</i>	4,932	7,046	59,183	84,548
<i>Laboratory Analyst II</i>	5,901	8,431	70,817	101,167
<i>Senior Laboratory Analyst</i>	7,023	10,032	84,273	120,389
<i>Laboratory Manager</i>	9,310	13,299	111,715	159,593
<b>Mechanic Series</b>				
<i>Mechanic-In-Training</i>	3,781	6,410	45,370	76,914
<i>Mechanic I</i>	5,091	7,273	61,097	87,281
<i>Mechanic II</i>	5,887	8,409	70,639	100,912
<i>Lead Mechanic</i>	6,845	9,779	82,144	117,349
<i>Mechanical Systems Supervisor</i>	7,992	11,417	95,900	137,000
<i>Mechanical Systems Manager</i>	9,310	13,299	111,715	159,593
<b>Project Management Series</b>				
<i>Project Manager</i>	8,567	12,239	102,809	146,870
<i>Senior Project Manager</i>	10,523	15,033	126,280	180,400
<b>Recycled Water Distribution Series</b>				
<i>Recycled Water Specialist</i>	6,429	9,184	77,148	110,212
<i>Recycled Water Supervisor</i>	7,023	10,032	84,273	120,389
<b>Systems Integration Series</b>				
<i>Systems Integration Technician-In-Training</i>	3,781	6,410	45,370	76,914
<i>Systems Integration Technician I</i>	5,180	7,400	62,162	88,802
<i>Systems Integration Technician II</i>	6,240	8,915	74,885	106,978
<i>SCADA Manager</i>	10,523	15,033	126,280	180,400
<b>Wastewater Treatment Operator Series</b>				
<i>Operator-In-Training</i>	3,781	6,410	45,370	76,914
<i>Operator I</i>	5,086	7,266	61,037	87,196
<i>Operator II</i>	6,121	8,744	73,452	104,931
<i>Lead Operator</i>	7,023	10,032	84,273	120,389
<i>Chief Plant Operator</i>	9,310	13,299	111,715	159,593
<b>Intern (All Departments)</b>	3,010	4,300	36,119	51,599

\* Base salary minimum and maximum are based on full-time employment. Intern positions are generally part-time.

# ORGANIZATIONAL CHART





SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

April 16, 2024

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO OCEAN OUTFALL 2023 INSPECTION REPORT

RECOMMENDATION

It is recommended that the Board of Directors:

1. Accept and file the San Elijo Ocean Outfall Year 2023 Inspection and Structural Integrity Assessment Report prepared by Marine Taxonomic Services, Inc and Carollo Engineers; and
2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Ocean Outfall was commissioned in 1965 to discharge treated effluent from the San Elijo Water Campus. The outfall was upgraded and expanded in 1974 to include discharge capacity for the City of Escondido's Hale Avenue Resource Recovery Facility. The length of the outfall from the shoreline into the ocean is 8,000 feet, with an end depth of approximately 150 feet below mean sea level. The diffuser section of pipe is composed of 1,176 feet of 48-inch pipe with 200 individual 2-inch diameter diffuser ports. The discharge of treated wastewater to the ocean is subject to strict environmental regulations that stipulate dilution requirements, distance from shore, and depth of water for which the effluent is discharged. To ensure that the ocean outfall is in sound operating condition and that environmental regulations are being met, the San Elijo Joint Powers Authority (SEJPA) inspects the outfall bi-annually. In addition, the outfall is allowed in the ocean under a lease agreement with the State Lands Commission which requires a structural integrity assessment of the outfall pipeline by a California registered Civil/Structural Engineer at least once every five years.

DISCUSSION

The SEJPA contracted with Marine Taxonomic Services, Inc. (MTS) to complete the 2023 outfall inspection and Structural Integrity Assessment. Previous inspection reports had recommended a wintertime inspection to inspect the pile supports assuming that winter storms would move the sand and expose more pile supports. The dive operations for this

inspection were completed on November 30, 2023 and December 7, 2023. Inspection activity was attentive to the following:

- Evidence of surface failure of exposed concrete;
- Cracks or other deficiencies in the outfall;
- Joint integrity;
- Leaks or evidence of degradation;
- Potential hazards;
- Attrition or the loss of the ballast materials as a result of physical, biological, or geologic processes;
- Grading of ballast according to size as a result of oceanographic forces;
- Scour of the nearby marine sediments;
- Man-made debris;
- Inspection of exposed portholes and pile supports;
- Inspection of diffuser flow;
- Evaluation of cathodic protection at exposed anodes; and
- Clearing kelp that hindered inspection activities or threatened ballast material.

MTS reports that the San Elijo Ocean Outfall was found to be in excellent overall condition. Offshore areas of the outfall were stable and showed no signs of ballast movement; inshore ballast rock showed no significant signs of movement since the last re-ballasting project completed in 2005. The outfall showed no signs of spalling, rust staining, cracking, or other deficiencies in the concrete pipe. All observed joints were in alignment with no evidence of leaks. The near shore inspection revealed no kelp growth on the pipeline and the surrounding ballast. Because kelp has considerable buoyancy, it is important to keep kelp cleared to minimize the threat of ballast movement.

The outfall was constructed with five access portholes that have metal covers. These covers use sacrificial zinc anodes for corrosion protection. Two of these portholes (4 and 5) were buried in sand and shell hash so they could not be inspected. The anodes on all visible Portholes appear to have greater than 60% mass remaining.

During inspections, efforts are made to inspect the 35 pile supports that secure the inshore section of the ocean outfall. Typically, these pile supports are covered by sand and cannot be inspected during summertime inspections. This year, the inspection was scheduled in the wintertime and a majority of the pile supports were exposed during the inspection. Each of the pile supports has two sacrificial anodes attached and 17 exposed anodes were replaced this year during the inspection and an additional 18 were ordered and will be installed when they are received.

The number and size of spiny lobster under the outfall has increased again. The Swami's State Marine Conservation area was established in December 2010 (including the land over the San Elijo Ocean Outfall) to protect marine life by limiting the removal of wildlife from within its borders. During the current survey, numerous lobsters were observed in burrows under the outfall in the deep section that is not ballasted. While the amount of material excavated for these burrows is minimal compared to the total area of seafloor the pipeline rests upon, the slow movement of material by lobsters over time could reduce the contact area with the seafloor and increase stress on the pipeline in the future.

## SUMMARY AND RECOMMENDATIONS

MTS reports the following points to summarize the major findings of this outfall inspection:

- In general, the San Elijo Ocean Outfall was found to be in excellent overall condition.
- Ballast rock shows no significant sign of movement since the last re-ballasting project.
- The outfall showed no signs of spalling, rust staining, or cracking and there was no leakage observed from pipe joints or any other location on the outfall.
- A majority (28 of 35) of the pile supports were visible during this inspection and 17 anodes were installed.
- No giant kelp was growing on the pipeline or ballast.
- The pile supports surveyed during this inspection were found to be in good condition.
- Marine growth that was observed around the diffuser ports was removed to prevent blockage.
- All diffusers were flowing well.
- Numerous large California spiny lobsters were found along the base of the pipe where it appeared they have cleared out substrate to create burrows for protection.

The following items are recommendations for continued integrity and environmentally safe operation of the San Elijo Ocean Outfall:

- Excavation of portholes 4 and 5 should be conducted during a separate effort in order to inspect the covers and collect cathodic protection readings.
- Complete a Remote Operated Vehicle (ROV) or rebreather dive survey of the diffuser section of the outfall pipe as needed to clear any blocked ports.
- Continue to remove kelp from pipeline and ballast pile to minimize movement.
- Monitor for re-emergence of pile supports and inspect all visible pile support structures. Pile supports seem to be most exposed during winter months.
- During future inspections, anodes should be replaced when they become ineffective against preventing corrosion to pipe and pile structures.
- Continue to monitor biological growth around diffuser ports. Growth is not currently obstructing flow.
- Continue monitoring the presence of lobster burrows and associated loss of pipe bedding material.

The full report is available for review at the SEJPA office, 2695 Manchester Ave. Cardiff by the Sea, CA 92007 or at <https://www.sejpa.org/news/studies-reports>

## FINANCIAL IMPACT

None.

It is therefore recommended that the Board of Directors:

1. Accept and file the San Elijo Ocean Outfall Year 2023 Inspection and Structural Integrity Assessment Report prepared by Marine Taxonomic Services, Inc and Carollo Engineers; and
2. Discuss and take action as appropriate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. Thornton', written over a horizontal line.

Michael T. Thornton, P.E.  
General Manager

Attachment: Ocean Outfall Integrity Report, March 2024

## Ocean Outfall Assessment



# Outfall Integrity Report

FINAL / April 2024



Ocean Outfall Assessment

# Outfall Integrity Report

FINAL / April 2024



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## Abbreviations

AC	asbestos cement
Facility	San Elijo Water Reclamation Facility
HDPE	high-density polyethylene
MTS	Marine Taxonomical Services
PVC	polyvinyl chloride
RCP	reinforced concrete pipe
ROV	remote-operated vehicle
SCUBA	self-contained underwater breathing apparatus
SEJPA	San Elijo Joint Powers Authority



## SECTION 1 PROJECT BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns and operates the San Elijo Water Reclamation Facility (Facility), located in Cardiff-by-the-Sea, California. The Facility provides wastewater treatment and recycled water treatment and distribution to their member agencies of Solana Beach and Encinitas. The Facility also holds leases from the City of Del Mar and Rancho Santa Fe Community Services District.

At the Facility, secondary effluent not sent to tertiary treatment is discharged to the ocean through an outfall, which has both a land portion (land outfall) and an ocean portion (ocean outfall). The Hale Avenue Resource Recovery Facility is owned by the City of Escondido and also discharges secondary effluent through the land outfall. The outfall is located on lands owned by the State of California.

The SEJPA maintains the outfall through lease No. PRC 3228.9 issued by the State Lands Commission. As part of the special provisions of the lease, the outfall must have periodic structural integrity evaluations. In response, Carollo Engineers, Inc. partnered with Marine Taxonomical Services (MTS) to inspect the SEJPA's ocean outfall system and prepare an integrity report. This report describes the procedures, findings, and recommendations for the structural evaluation of both the land and ocean outfall.

## SECTION 2 OUTFALL DESCRIPTION

The Facility's outfall consists of two sections—a land outfall portion that extends from the Facility to the shore of the Pacific Ocean and an ocean outfall portion that extends from the shore approximately 8,000 feet into the Pacific Ocean. The location and routing of the outfall can be found on Figure 1. This section will review both the land and ocean portions of the outfall and their components.

### 2.1 Land Outfall

The land outfall, originally constructed in 1965 as asbestos cement (AC) pipe, begins at the Facility's effluent pump station, running below grade of the Facility's driveway entrance. All AC pipe has been replaced with either polyvinyl chloride (PVC) or high-density polyethylene (HDPE) pipe. In 1974 the City of Escondido built a 14-mile land outfall and the Escondido Regulator Structure, located on the west side of Manchester Avenue, to receive effluent from Escondido before combining with the SEJPA land outfall. The pipe then runs beneath the San Elijo Lagoon before connecting to the ocean outfall below grade at Cardiff State Beach.

In 2018, SEJPA constructed a new land outfall with 30-inch HDPE pipe that connected to the existing 30-inch PVC pipe at the edge of the Facility, and abandoned the existing 30-inch AC pipe. The project also replaced the piping that connects the Escondido Regulator Structure to the outfall. The new land outfall was constructed utilizing horizontal directional drilling, which used remote microtunneling to drill and install the new HDPE piping beneath the San Elijo Lagoon, the North County Transit District railroad, and Pacific Coast Highway. The drilling began at a launching site at San Elijo State Beach, shown on Figure 2, near the existing ocean outfall. The pipe descends to a depth of 70 feet below grade before ascending to a receiving site at the Facility for final connectivity.

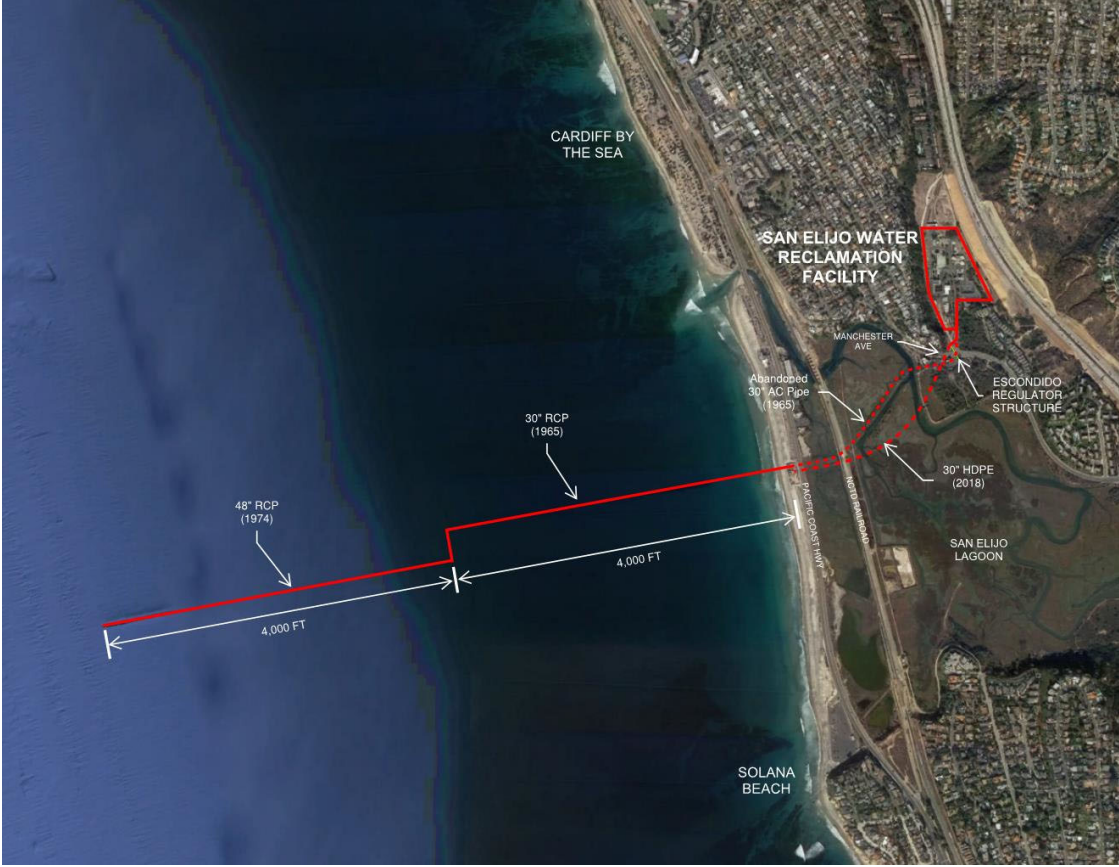


Figure 1 San Elijo Outfall Map



Figure 2 Land Outfall Launch Site

## 2.2 Ocean Outfall

First constructed in 1965, the ocean outfall consisted of 30-inch diameter reinforced concrete pipe (RCP) and extended approximately 4,000 feet into the ocean before discharging. Along the original 30-inch section are five portholes equipped with cathodic protection.

In 1974, the outfall was extended to a water depth of 150 feet below the mean lower low water, approximately 8,000 feet offshore using 48-inch diameter RCP. The diffuser ports in the original 30-inch diameter line were blocked with fiberglass covers at the completion of the extension. Effluent is presently discharged through a single 1,176-foot-long diffuser section that is composed of two hundred 2-inch nominal diameter diffuser ports at the end of the 48-inch extension.

Throughout the life of the ocean outfall, several projects were implemented to keep the outfall in stable, clean, and efficient operating condition. The projects included several ballasting and reballasting projects, pile supports for the inshore portion of the outfall, and cathodic protection.

For the numerous ballasting projects, 4-inch quarry rock, pile support assemblies, and rip-rap were installed to stabilize the pipe. Because beach sediment erosion has occurred all along the southern California coast, pile support assemblies were installed in 1993 on the inshore portion of the outfall for increased stabilization.

In 1993, 35 pile support assemblies were installed on the inshore portion of the original 30-inch outfall for further support and to prevent movement and cracks or defects. The supports were driven through the sand and into the underlying bedrock on both sides of the pipe and were secured around the pipe with bolted clamps.

To protect the piles from corrosion, anodes were clamped to the pile boxes to provide cathodic protection. The pile supports are surveyed approximately every year, and the amount of remaining life for each anode is recorded.

In 1996, a reballasting project stabilized the inshore zone of the ballast pipe where a significant drop in the sand level had caused the ballast to move away from a protective position around the pipe.

In 2005, another reballasting project included the replacement of zinc anodes used to protect metal supports and access ports, replacement of ballast rock that had shifted away from the structure due to ocean currents and wave energy, and the cleaning of the diffuser ports at the end of the structure.

## SECTION 3 EVALUATION PROCEDURE AND SUMMARY

### 3.1 Land Outfall

As mentioned in Section 2, the HDPE land outfall was constructed beneath the San Elijo Lagoon, so no visual inspection was performed prior to pullback. During installation, the pipe was fused by welding the ends of the pipe together as it was pulled into the drilled tunnel. Each weld was inspected prior to insertion, with no defective welds identified. Before being put into service, the new land outfall had to pass pressure testing, per the design engineer's requirements. As a result, the land outfall was pressure tested with air for 4 hours, at a pressure of 80 pounds per square inch. To identify leaks, joints were covered with soapy water. None were found, meaning the new land outfall passed the initial pressure test.

Pressure test data of the land outfall can be found in Appendix A. Due to the recent construction, inspection, and successful pressure tests of the land outfall, the pipe is in good operating condition and at the beginning of its useful life.

## 3.2 Ocean Outfall

In late November and early December of 2023, MTS completed several dives to inspect the ocean outfall from the end cap to where burial begins close to shore. The divers used video recording equipment to record both the northern and southern sides of the ocean outfall.

This section summarizes the divers' findings and the condition of the ocean outfall. MTS' full report can be found in Appendix B.

### 3.2.1 Evaluation Equipment

MTS used a 22-foot aluminum survey vessel, shown on Figure 3, to perform their dives and inspect the ocean outfall. For each dive, the vessel launched from the Oceanside Harbor and transported the dive equipment to the dive site. The dive equipment included rebreathers for the two-person dive team and handheld video cameras for each side of the pipeline. Shallow water sections of the diver survey were completed by self-contained underwater breathing apparatus (SCUBA). The divers used a GoPro Hero 8 and a GoPro Hero 9 digital video camera. After each dive, the dive equipment was inspected to ensure it was working properly.



Figure 3 MTS Dive Vessel

## 3.2.2 Areas of Inspection

The dives focused on the overall condition of the ocean outfall and on surveying signs of exposed concrete spalling, cracks or other deficiencies, leaks, joint integrity, and other potential hazards. The inspection included a pile support survey, cathodic protection evaluation, porthole inspections, pipe joint inspection, and diffuser port inspection.

### 3.2.2.1 General Inspection

Growth of marine plants and animals on artificial surfaces is a common occurrence when they are submerged for an extended period of time. Although some evidence of marine growth was found, it was minimal and not believed to affect the outfall piping. During MTS' inspection, numerous Spiny Lobsters, shown in Figure 4, were observed in holes beneath the outfall in the deep section that is not ballasted. The amount of material excavated by the lobsters is minimal compared to the total area of seafloor the pipeline rests on, however the slow movement of material over time could reduce the contact area with the seafloor and increase the stress on the pipeline.



Figure 4 Local Spiny Lobsters

### 3.2.2.2 Porthole Inspection

The original 30-inch section of the ocean outfall has five portholes that consist of a circular Ni-Resist plate bolted to a flanged riser. Ni-Resist is a type of cast iron alloy specified for handling salt solutions and is corrosion resistant. For this type of alloy, a neoprene gasket creates a seal between the cover and the flange, and the portholes have anodes to protect exposed metal surfaces from corrosion.

Portholes 1 through 3 were visually inspected, while Portholes 4 and 5 could not be excavated from the overlying shell hash and could not be inspected. The portholes and anodes that were inspected were

found to be in fair to good condition. Cathodic protection readings were taken, all having an estimated remaining anode mass of 60 percent. The portholes showed no signs of spalling, leaks, or fractures. Figure 5 shows Porthole 3 and surrounding rock ballast with marine growth.



Figure 5 [Manhole No. 3](#)

### 3.2.2.3 Pile Supports

There are several pile-support assemblies that have been driven through the sand to the underlying rock on both sides of the pipe. Metallic clamps between each pair of pile supports are bolted securely around the pipe and are equipped with anodes to provide cathodic protection. Approximately every year anodes that have broken loose are replaced by the dive team.

In previous surveys, many of the pile supports have been buried, making it difficult to inspect and record anode life. However, during this survey, many of the pile supports were exposed and inspected. There were several pile supports where anodes had broken off but were replaced during the survey. A complete summary of replaced anodes and anode life readings can be found in the MTS report in Appendix B.

### 3.2.2.4 Diffusers

The final diffuser section is composed of two hundred 2-inch nominal diameter diffuser ports for effluent discharge. Diffuser holes will often become partially clogged due to growth of marine life, also known as biofouling. Figure 6 shows an open and clear diffuser port. All diffusers were observed to be free of biofouling and properly flowing.



Figure 6 Clear Diffuser Port

## SECTION 4 RECOMMENDATIONS

In general, the ocean outfall was in excellent overall condition, with no signs of corrosion, deteriorating conditions, or concerns of the pipe's integrity. The land outfall portion is new and only recently installed. As a result, it maintains a high integrity.

MTS' report mentioned the following general and specific recommendations for continued structural integrity and environmentally safe operation of the ocean outfall.

### 4.1 General Recommendations

- Continue performing "rapid-response" overview inspections after periods of extremely high surf or earthquakes to identify damage and the potential for failure due to scour, high-velocity currents, or major seafloor movements.
- During future inspections, replace anodes when they can no longer protect corrosion to pipe and pile structures.
- Continue preventative maintenance and detailed biannual inspections of the entire pipeline using SCUBA, rebreather, and/or remote-operated vehicle (ROV) surveys.

### 4.2 Specific Recommendations

- Excavation of Portholes 4 and 5 to remove shell hash on top of the portholes that prevented observation and collection of cathodic protection readings.

- Complete a ROV or rebreather-based dive survey of the diffuser section of the outfall pipe as needed to clear any blocked ports.
- Continue to survey for and cut kelp on the pipeline and ballast pile to keep additional ballast from moving away from the pipeline.
- Monitor for re-emergence of all inshore pile support structures and complete structural inspection and addition of anodes once these re-emerge from the littoral sands. The anodes seem to be exposed the most in the winter months.
- Continue to monitor the presence of “lobster burrows” and possible loss of pipeline bedding material during future surveys.
- Perform replacements of additional anodes noted in report.



APPENDIX A

# PIPE PRESSURE TEST REPORT

PIPE PRESSURE TEST

Line Service Description: 10" Dual Force Mains		Pressure Test Date: 01/19/18
		<input checked="" type="checkbox"/> Initial Test <input type="checkbox"/> Retest
Pipe Size & Material: 10" PVC/IPVC	Reference Dwgs:	
Test Duration: <input checked="" type="checkbox"/> 4 hrs. <input type="checkbox"/> 2 hrs. <input type="checkbox"/> 15 min.	Test Medium: Water	
Max System Operating Pressure:	Test Pressure: 60psi	

Test Start Time: <i>7:15</i>	Test End Time: <i>11:15</i>	Test Start Pressure: <i>62 psi</i>	Test End Pressure: <i>62 psi</i>
Comments & Notes: <i>Line was pressurized at 1430 pm on 1-18-2018. Pressure was maintained over night with no decrease.</i>			

		Name (Print)	Signature
Test Performed By:	J.R. Filanc	<i>Luis Rubio</i>	<i>[Signature]</i>
Witnessed & Accepted by:	B&V	<i>Late Shu</i>	<i>[Signature]</i>

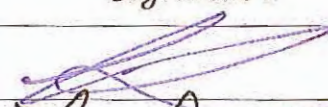
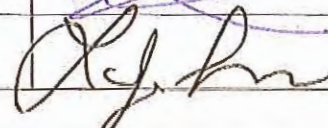
TEST MEDIUM	Pipe Material /Service	TEST PRESS (psi)	TIME (hr)
Water	DIPB	150	4 hr
	DIPF	150	4 hr
	PVC-1	200	4 hr
	PVC-4	100	4 hr
	Force Mains (Based of Pump Curve per RFI 019)	<u>60</u>	<u>4 hr</u>
	HDPE	80	4 hr
Air	HDPE	80	4 hr

PIPE PRESSURE TEST

Line Service Description <b>OUTFALL</b>		Pressure Test Date: <input checked="" type="checkbox"/> Initial Test <input type="checkbox"/> Retest
Pipe Size & Material: <b>30" HDPE</b>	Reference Dwgs:	
Test Duration: <input checked="" type="checkbox"/> 4 hrs. <input type="checkbox"/> 2 hrs. <input type="checkbox"/> 15 min.	Test Medium:	
Max System Operating Pressure:	Test Pressure: <b>80 PSI</b>	

Test Start Time: <b>10:17 A.M.</b>	Test End Time: <b>02:17 P.M.</b>	Test Start Pressure: <b>80 PSI</b>	Test End Pressure: <b>81 PSI</b>
---------------------------------------	-------------------------------------	---------------------------------------	-------------------------------------

Comments & Notes:  
*Clear and sunny for duration of test. No visible leakage of air during "soaping" of joints. Pressure increases slightly during test.*

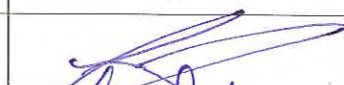
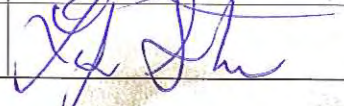
		Name (Print)	Signature
Test Performed By:	J.R. Filanc	<b>ARROW RAMIREZ</b>	
Witnessed & Accepted by:	B&V	<b>Late Shan</b>	

TEST MEDIUM	Pipe Material	TEST PRESS (psi)	TIME (hr)
Water	DIPB	150	4 hr
	DIPF	150	4 hr
	PVC-1	200	4 hr
	PVC-4	100	4 hr
	IPVC		4 hr
	HDPE		80
<u>Air</u>	<u>HDPE</u> <i>L.S. A.P.</i>	<u>80</u>	<u>4 hr</u>

PIPE PRESSURE TEST

Line Service Description <b>30" OUTFALL (HDD Portion)</b>		Pressure Test Date: <b>02-02-18</b>
Pipe Size & Material: <b>36" HDPE</b>		Reference Dwgs:
Test Duration: <input checked="" type="checkbox"/> 4 hrs. <input type="checkbox"/> 2 hrs. <input type="checkbox"/> 15 min.	Test Medium: <b>HYDROSTATIC</b>	
Max System Operating Pressure:	Test Pressure: <b>80 psi (84 psi L.S.)</b>	

Test Start Time: <b>11:00 am</b>	Test End Time: <b>03:00 pm</b>	Test Start Pressure: <b>84 PSI</b>	Test End Pressure: <b>84 PSI</b>
Comments & Notes:			

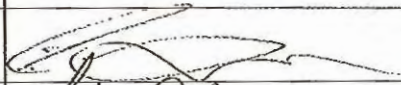
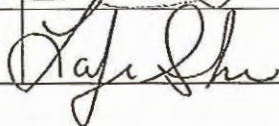
		Name (Print)	Signature
Test Performed By:	J.R. Filanc	<b>Arnon Ramirez</b>	
Witnessed & Accepted by:	B&V	<b>Lafe Shaw</b>	

TEST MEDIUM	Pipe Material	TEST PRESS (psi)	TIME (hr)
Water	DIPB	150	4 hr
	DIPF	150	4 hr
	PVC-1	200	4 hr
	PVC-4	100	4 hr
	fPVC		4 hr
	HDPE	<b>80</b>	4 hr
Air	HDPE	80	4 hr

PIPE PRESSURE TEST

Line Service Description <i>10" Pressure relief line Escondido</i>		Pressure Test Date: <i>3-15-2018</i>
Pipe Size & Material: <i>10" PVC c-900</i>		<input checked="" type="checkbox"/> Initial Test <input type="checkbox"/> Retest
Reference Dwgs: <i>C-5</i>	Test Duration: <input checked="" type="checkbox"/> 4 hrs. <input type="checkbox"/> 2 hrs. <input type="checkbox"/> 15 min.	Test Medium: <i>Water</i>
Max System Operating Pressure:	Test Pressure: <i>110 psi</i>	

Test Start Time: <i>10:00am</i>	Test End Time: <i>1410</i>	Test Start Pressure: <i>110 psi</i>	Test End Pressure: <i>110 psi</i>
Comments & Notes:			

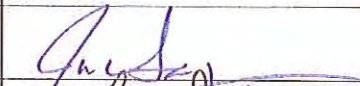
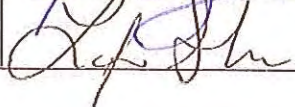
		Name (Print)	Signature
Test Performed By:	J.R. Filanc	<i>Aaron Ramirez</i>	
Witnessed & Accepted by:	B&V	<i>Late Shaw</i>	

TEST MEDIUM	Pipe Material	TEST PRESS (psi)	TIME (hr)
Water	DIPB	150	4 hr
	DIPF	150	4 hr
	PVC-1	200	4 hr
	PVC-4	100	4 hr
	fPVC		4 hr
	HDPE	80	4 hr
Air	HDPE	80	4 hr

PIPE PRESSURE TEST

Line Service Description: 30" HDPE from 20" reducer at St-5+64 to 30" Butterfly Valve at St ~ 4+10.5		Pressure Test Date: 4-19-2018
Pipe Size & Material: 30" HDPE DR11		Reference Dwgs:
Test Duration: <input checked="" type="checkbox"/> 4 hrs. + <input type="checkbox"/> 2 hrs. <input type="checkbox"/> 15 min.	Test Medium: Hydro test (water)	
Max System Operating Pressure:	Test Pressure: 92 psi	
		<input checked="" type="checkbox"/> Initial Test <input type="checkbox"/> Retest

Test Start Time: 7:45am	Test End Time: 12:20pm	Test Start Pressure: 92 psi	Test End Pressure: 92 psi
Comments & Notes: 4" stainless steel saddle spool was not tested			

		Name (Print)	Signature
Test Performed By:	J.R. Filanc	Jaime Sanchez	
Witnessed & Accepted by:	B&V	Lafe Shaw	

TEST MEDIUM	Pipe Material	TEST PRESS (psi)	TIME (hr)
Water	DIPB	150	4 hr
	DIPF	150	4 hr
	PVC-1	200	4 hr
	PVC-4	100	4 hr
	IPVC		4 hr
	HDPE - 30"	-80-92	4 hr
Air	HDPE	80	4 hr

APPENDIX B

# SAN ELIJO OCEAN OUTFALL 2023 INSPECTION REPORT

MARINE TAXONOMIC SERVICES, LTD.

# San Elijo Ocean Outfall 2023 Inspection Report

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February 2, 2024

**Prepared for:**

San Elijo Joint Powers Authority  
2695 Manchester Ave.  
Cardiff, CA 92007



**Prepared By:**

Marine Taxonomic Services, Ltd.

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**Marine Taxonomic Services Ltd. 2024. San Elijo Ocean Outfall 2023 Inspection Report. Prepared for San Elijo Joint Powers Authority. February 2, 2024.**



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**Robert Mooney, PhD**  
**Principal Scientist**

**Participating Marine Taxonomic Services Ltd. Team Members;**

Project Lead – Robert Mooney, Ph.D.  
Lead Technical Survey Diver – Seth Jones  
Technical Survey Diver – Monique Rydel-Fortner, BA  
Report Draft and Survey Diver – Eila Miller, BA  
Marine Technician and Survey Diver – Erik Mahan, MAS

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# San Elijo Ocean Outfall 2023 Inspection Report

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February 2, 2024

## 1 Introduction

The San Elijo Joint Powers Authority (SEJPA) contracted MTS to complete the Year 2023 San Elijo Ocean Outfall (SEOO) inspection. Diving operations were conducted on November 30, 2023, and December 7, 2023. Data analyses immediately followed the field effort. The inspection effort included the following elements:

- General diver overview inspection of the outfall corridor from the end cap to burial inshore attentive to the following criteria: Evidence of spalling of the exposed concrete surfaces, cracks or other deficiencies in the outfall, joint integrity, leaks or evidence of degradation, potential hazards, attrition or the loss of efficacy of the ballast material as a result of physical, biological, or geological processes, scouring of the nearby marine sediments, and manmade debris;
- Evaluation of cathodic protection at exposed anodes;
- Replacement of expired anodes
- Clearing kelp that hindered inspection activities or threatened the ballast material;
- Photographic and video documentation;
- Pile support survey;
- Zinc anode replacement;

Procedures, results, analyses, and implications are reviewed here for all elements comprising this project. This report also contains background information regarding the SEOO and a discussion of oceanographic processes (Appendix A) that could affect its structural integrity. Digital video and still images support written descriptions. Full copies of the video records are included on a USB with this report. The video log details and notes are included in Appendix B. Photos of all diffuser ports are included in Appendix C. Photos of marine organisms observed along the SEOO are provided in Appendix D.

### 1-1 Project Background

The SEOO was commissioned in 1965 to discharge treated effluent from the San Elijo Water Reclamation Facility (formally known as the San Elijo Water Pollution Control Facility). In 1974, the Hale Avenue Resource Recovery Facility was connected to the original outfall structure, and the outfall was extended to its current length of 8,000 feet. Given environmental regulations regarding discharges into marine waters and increasing demands on the infrastructure over the past 4 decades, it has been imperative that the pipeline be maintained and monitored for potential damage. To this end, the SEJPA has contracted numerous surveys of the outfall pipeline. This report presents the results of the 2023 survey performed by MTS. Given the large volume of information collected during previous monitoring events, it would be inappropriate to compile this report without including data and information presented in previous reports. For this reason, some of the language, figures, and data presented in this report originated from previous monitoring reports prepared for the SEJPA. The contribution of numerous individual Thales

Geosolutions, Inc. reports are acknowledged here but are not cited in this document. The reports and their contents are the property of the SEJPA.

## 1-2 Outfall Configuration

The SEOO carries treated effluent from the San Elijo Water Reclamation Facility and the Hale Avenue Resource Recovery Facility. It is then transported through the outfall and discharged into the ocean; the discharge is approximately one-and one-half miles from shore at an approximate water depth of 150 feet. The general location of the outfall is shown in Figure 1.

Construction of the original SEOO was completed in 1965. It consisted of a 30-inch diameter reinforced concrete pipeline terminating approximately 4,000 feet offshore. Effluent was discharged at a water depth of 60 feet below the Mean Lower Low Water (MLLW) datum. In 1974, the outfall was extended to a water depth of 150-foot MLLW, approximately 8,000 feet offshore using 48-inch diameter reinforced concrete pipe. The diffuser ports in the original 30-inch diameter line were blocked with fiberglass covers at the completion of the extension. Effluent is presently discharged through a single 1,176-foot-long diffuser section that is composed of two hundred individual two-inch nominal diameter diffuser ports at the end of the 48-inch extension.

Several projects have been executed to keep the outfall in a stable, clean, and efficient operating condition. Reballasting projects were conducted inshore of the 55-foot isobath in 1982, 1987, 1993, 1996 and 2005 to replace ballast that had been moved away from the outfall by ocean processes. The erosion of beach sediments from the shoreline, which is occurring all along the southern California coast, has caused exposure and undermining of the most inshore portion of the outfall that was previously buried well beneath the beach sand. To secure this vulnerable stretch of pipe, the pipe was clamped to piles driven into the surrounding sediments in the summer of 1992. In late 1993, additional ballast was placed around the pipe between the water depths of 55 and 85 feet. This 1993 reballasting spans the deepest portion of the 30-inch pipe, including the old diffuser section, and the shallow portion of the 48-inch pipe. The new large ballast replenished and augmented the original four-inch quarry rock that was placed around the outfall at the installation of the pipeline. Prior to placing the ballast in 1993, the fiberglass covers that had previously sealed the diffuser ports in the 30-inch leg of the outfall were all replaced by titanium expansion plugs.

The 1996 reballasting project stabilized the inshore zone of the ballast pile where a significant drop in the sand level had caused the ballast to move away from a protective position around the pipe. The zone where the pipeline support transitions from pile/clamp assemblies to rip-rap ballast was significantly enhanced, creating an overlap between the two support systems. In addition, several areas within two hundred feet of this transition that had exhibited low ballast coverage were augmented.

The 2005 reballasting project included the replacement of zinc anodes used to protect metal supports and access ports, replacement of ballast rock that had shifted away from the structure due to ocean currents and wave energy and the cleaning of the diffuser ports at the end of the structure. Construction commenced in September 2005 and was completed by mid-October 2005. More than 7,365 tons of ballast rock was placed along the length of the outfall and the outfall's 200 diffuser ports were cleaned.

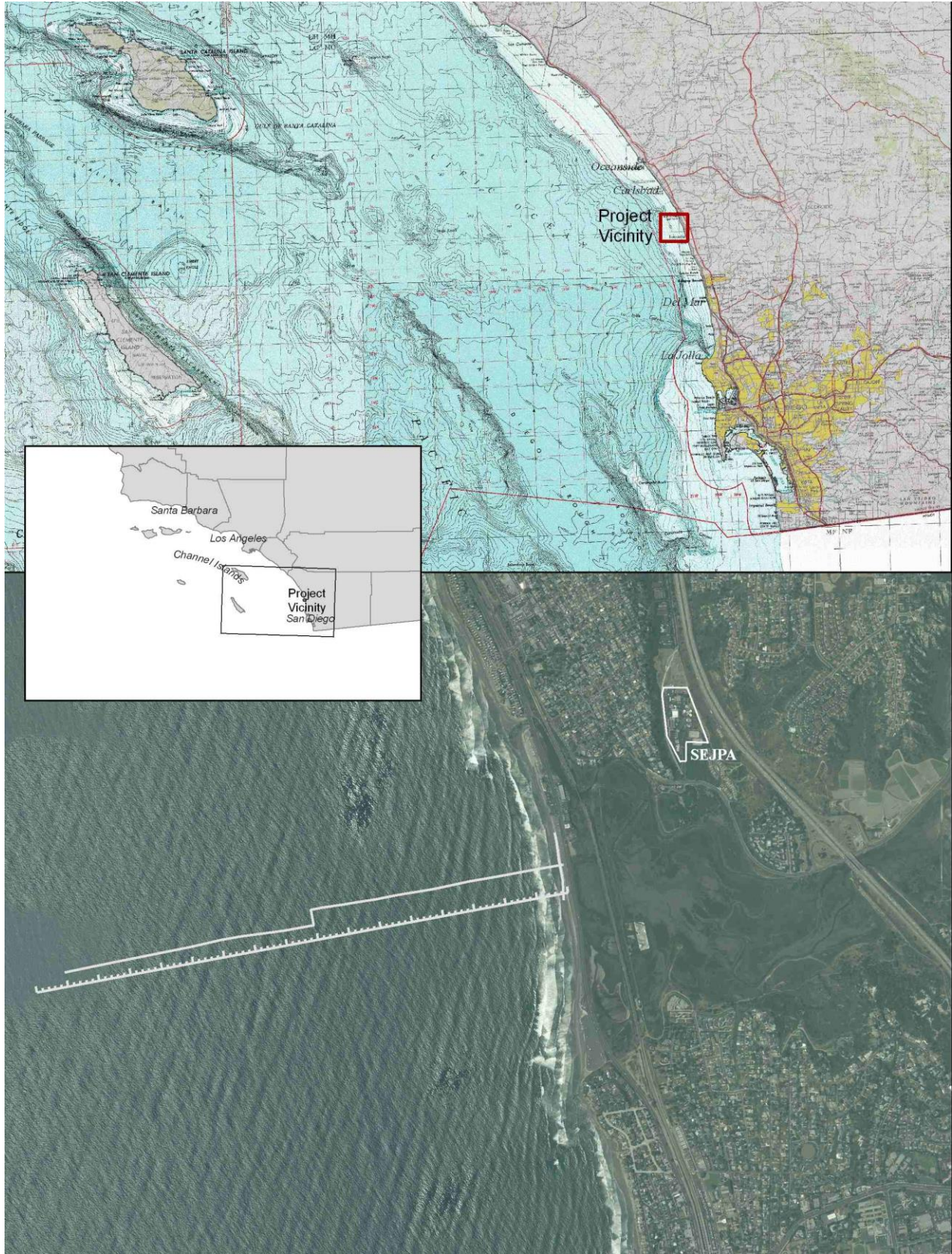


Figure 1. Map displaying San Elijo Joint Powers Authority (SEJPA) location relative to project vicinity.

### 1-3 Project Summary

Marine Taxonomic Services, Ltd. (MTS) performed the Year 2023 SEOO inspection and anode maintenance at the request of the SEJPA. MTS provided SEJPA with the range of services noted in the Request for Proposals (RFP). The inspection involved diver examination of the outfall from the end cap to burial at shore, evaluation of exposed portholes, evaluation of cathodic protection at exposed anodes, kelp clearing, a pile support survey, and diffuser section survey. The anode maintenance involved replacing any anodes that were no longer providing cathodic protection to the SEOO.

Photo and video documentation were collected along the entire outfall. The purpose of the inspection was to look for evidence of spalling of the exposed concrete surfaces, cracks or other signs of wear or degradation of the outfall structure. This includes inspecting joint integrity for leaks or evidence of degradation, inspecting diffuser flow, evaluating for other potential hazards and checking attrition or the loss of efficacy of the pipe ballast material. The video and photographic data collected during the survey is additionally being shared with Carollo Engineers (Carollo). Carollo will be providing a separate report where they review the data and this report to provide their professional opinion on the condition of the SEOO.

In general, the SEOO was found to be in excellent overall condition. All areas of the pipeline were stable, and the ballast showed minimal signs of movement based on the diver survey. The outfall showed no signs of spalling, rust staining, or cracking. No leaks were detected. Anodes on the exposed portholes were in good condition and have greater than 50% remaining life expectancy after. There were 28 pile supports exposed during this survey, a significantly higher number than that of previous survey years. However, of the 28 exposed pile supports, 8 of them are not cathodically protected at this time. An additional maintenance effort will be needed to add new anodes to the unprotected pile supports. Porthole 4 and 5 were not able to be inspected as they were buried in shell hash and could not be excavated for inspection. The inspection team tried to excavate the porthole covers but could not do so and will require a separate effort to complete excavation. Additionally, numerous large California spiny lobsters (*Panulirus interruptus*) were found along the base of the pipe, most predominantly in the diffuser portion of the pipe, where it appeared they had cleared out substrate to create burrows for hiding.



## 2 Methods and Materials

Numerous techniques were incorporated in executing the current inspection tasks, which were tactically arranged to maximize diver efficiency. Dive staff worked from deep water to shallow in the interest of maximizing bottom time and minimizing decompression time at the end of the dive.

### 2-1 Vessel

The MTS marine research vessel, The Koffler (Figure 2), was mobilized for the outfall inspection. The Koffler, a 22-ft aluminum survey vessel, was selected as the diving platform. The vessel was equipped with all essential diving, safety, navigation, and inspection equipment.



Figure 2. MTS marine research vessel, The Koffler.

The vessel was transported to and launched at Oceanside Harbor. After every launching of the survey vessel, all equipment was inspected to ensure that it was in working order.

## 2-2 General Diver Inspection

MTS conducted a general overview inspection of the entire exposed portion of the outfall from the end cap toward shore. During operations, diving staff was attentive to the following criteria:

- Evidence of spalling of the exposed concrete surfaces;
- Cracks or other deficiencies in the outfall;
- Joint integrity;
- Leaks or evidence of degradation;
- Potential hazards;
- Attrition or the loss of efficacy of the ballast materials as a result of physical, biological, or geologic processes;
- Grading of ballast according to size as a result of oceanographic forces;
- Scour of the nearby marine sediments; and
- Man-made debris;

General pipeline inspection was achieved by divers with the use of rebreathers. Shallow water portions of the diver survey were completed by SCUBA. A two-person dive team swam with a hand-held video camera on each side of the pipeline. The divers operated a Go-Pro Hero 8 and Go-Pro Hero 9 digital video camera.

## 2-3 Porthole Inspection

A visual evaluation was conducted of the exposed surfaces for mechanical/structural integrity including examination for leaks, fractures, gasket seal integrity, concrete spalling, etc. The sacrificial anodes were inspected for expected remaining lifespan. There are five portholes along the original 30-inch diameter portion of SEOO. These portholes consist of a circular, Ni-Resist cast iron plate bolted to a flanged riser. A 5/16-inch-thick gasket, composed of neoprene, creates a seal between the cover and the flange. Sacrificial zinc anodes provide cathodic protection to the exposed metallic surfaces of the porthole covers and risers. All exposed portholes were inspected and are in good condition.

## 2-4 Pile Support Survey

In 1993, thirty-five pile-support assemblies were installed around the pipe between stations 4+41 and 9+69. Piles were driven through the sand to underlying bedrock on both sides of the pipe. Clamps between each pair of pile supports were bolted securely around the pipe and grouted to the piles in pile boxes. Anodes were welded to the pile boxes to provide cathodic protection to the metallic clamps and the piles. In 2005, additional anodes were clamped onto exposed pile supports but broke loose because of poor construction. Roughly each year, broken or exhausted anodes are replaced if the anodes are exposed. A complete visual inspection of the metal pipe shield and the pile supports exposed at the time of the survey was performed.

## 2-5 Diffuser Port Inspection

The diffuser port inspection was completed by visually observing each port while diving on rebreather. The divers start at diffuser port #1 located at the terminal end of the endcap structure where there is a single port on the northern and southern side of the end cap structure and swim inshore visually inspecting each sequential port on the northern and southern side of the diffuser pipe segment. The divers visually observed a total of 200 diffuser ports, 100 on the northern side and 100 on the southern side of the diffuser port segment of the pipe. Each diffuser port was inspected for the presence of biofouling and any other obstructions that may interfere with the proper function of the diffuser port.

## 3 Results

### 3-1 General Diver and Deep Inspection

During this present inspection, a visual examination of SEOO's reinforced concrete pipeline was completed on all exposed portions. The condition of the visible portions of the pipeline was generally found to be good. There was no evidence of spalling, cracking or other deficiencies in the concrete pipe. All observed joints were in alignment with no evidence of leaks. There were minimal debris items that could potentially affect the pipeline. Biofouling, or the undesirable accumulation of microorganisms, plants and animals on artificial surfaces, of the deeper pipeline sections was minimal and not expected to have an impact on the pipeline. No giant kelp was found growing on the pipeline or ballast. Finally, there was no evidence of oceanographic impacts to marine sediments or ballast along the pipeline.

There was one notable observation with regards to spiny lobster. Spiny lobster abundance has increased with greater numbers of lobster and larger individuals observed since the SEOO has been included in the Swamis State Marine Conservation Area. During the current survey, numerous lobsters were observed in holes beneath the outfall in the deep section that is not ballasted. While the amount of material excavated is minimal compared to the total area of seafloor the pipeline rests on, the slow movement of material by lobster over time could reduce the contact area with the seafloor and increase the stress on the pipeline.

### 3-2 Porthole Inspection

All portholes that could be observed were inspected. Portholes 4 and 5 could not be excavated from the overlying shell hash and could not be inspected. Portholes 4 and 5 were covered by greater than a one-foot thick layer of shell hash that has sluffed down from the adjacent ballast rock placed in 1993. The dive team could not remove enough of the shell hash to inspect the cover or the anode. Portholes 4 and 5 require excavation and will require a separate dive effort to inspect and check the cathodic protection.

Visual inspection of the portholes 1-3 revealed the portholes and associated zinc anodes to be in fair to good condition (Figure 3). There were no signs of concrete spalling, leaks, or fractures. Cathodic protection (CP) readings on zinc anodes were also conducted and the anodes were cleaned of oxidized material and fouling organisms. Data from the 2023 survey, as well as for CP readings from the previous three years of surveys, are presented in Table 1. All readings indicate that porthole covers are currently being protected by the anodes.

All of the exposed portholes were estimated to have a 0.1-inch-thick corrosion layer. Porthole 1 had a 2-inch-thick biofouling layer. Porthole 2 and porthole 3 had a 1-inch and 0.5-inch-thick biofouling layer, respectively. All exposed portholes are shown in the video data provided with this report. Locations where shell hash obscures portholes 4 and 5 can also be seen in the video.



**Figure 3. Porthole 3 cover with zinc anode with approximately 50% remaining life expectancy.**

**Table 1. Cathodic protection (CP) readings and associated % estimated remaining anode mass results from the 2016-2023 porthole surveys. Readings were not taken in 2018 or 2020. "N/A" indicated portholes that could not be observed. Estimated anode remaining increased from 2017 to 2019, however anodes were not replaced between surveys.**

Porthole #	2016		2017		2019		2021		2023	
	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass
1	-1.130	>60%	-1.035	>50%	-0.957	>60%	-0.994	>60%	-0.950	>60%
2	-0.980	>60%	-1.025	>50%	-0.941	>60%	-1.010	>60%	-0.990	>60%
3	-1.040	>60%	-0.993	>50%	-1.011	>60%	-1.032	>60%	-0.970	>60%
4	-0.970	>60%	-	-	-0.975	>60%	N/A	N/A	N/A	N/A
5	-0.950	>60%	-	-	-0.970	>60%	N/A	N/A	N/A	N/A

### 3-3 Pile Support Survey

In previous surveys, much of the pile supports were buried and not able to be inspected. However, a majority of the pile supports were exposed during this survey effort. A total of 28 offshore pile supports, (supports 35-15, 13, 11, 9, 7, 5, 3, and 1) were exposed and inspected. Note that even numbered pile supports are smaller than odd numbered pile supports; for this reason, even numbered supports should have one anode each and odd numbered supports should have 2 anodes each. One anode was replaced each on pile supports 9, 13, 18, 20, and 22 through 28. Two anodes were replaced each on pile supports 5, 7, and 11. On pile supports 5, 7, and 11 there were no anodes on the structures and therefore the “replaced” anodes are actually newly installed. Pile supports 9 and 13 had only one anode at 50% remaining life expectancy, a second new anode was added so that the pile supports now have two anodes at 50% and 100% remaining life expectancy. The two anodes on pile supports 15 and 17 both had 50% life remaining. One anode on pile support 18 had 20% life remaining, a second new pile support anode was added so that the pile support now has two anodes at 20% and 100% life remaining. Pile support 13 had two anodes, both at 30% life remaining. One anode was added to pile supports 20 and 26. Pile support 21 had two anodes with 20% and 30% life expectancy remaining. Pile supports 22, 24 and 28 both had one anode that was buried and unable to be inspected and one anode that was replaced. Pile supports 23, 25, and 27 all had one anode replaced and the other anode had 30% life expectancy remaining. The anodes on pile support 33 had 20% and 70% life remaining. Pile support 35 had two anodes at 60% and 70% life expectancy remaining.

MTS utilized all anodes available to perform the above actions. There are additional actions necessary. There are a total of 12 anodes that need to be added to pile supports along the pipeline. Pile supports 1, 3, and 29 require two new anodes to replace missing anodes. Pile supports 16, 30, 32, and 34 require one new anode to replace missing anodes. The anodes on pile support 31 have 50% and 10% life remaining and so require one new anode. The metal plate is currently missing an anode and requires a new anode for cathodic protection. These additional anodes are being fabricated and will be installed at a later date. The efforts to add these anodes will be documented in a memorandum when the work is complete.

CP reading data from the 2023 survey, as well as CP readings from the previous four years of surveys, are presented in Table 2. Readings are after any performed cleaning and replacements.

**Table 2. Cathodic Protection (CP) readings and associated % estimated remaining anode mass results from the 2016-2023 pile support surveys. Readings were not taken in 2018 or 2020.**

Pile Support #	2016		2017		2019		2021		2023	
	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP VDC	% Estimated Remaining Anode Mass	CP-VDC	% Estimated Remaining Anode Mass
1	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.798	0/0
2	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
3	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.781	0/0
4	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
5	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.003	100/100%
6	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
7	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.008	100/100%
8	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
9	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.989	50/100%
10	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
11	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.011	100/100%
12	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
13	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.003	100/50%
14	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried
15	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.010	50/50%
16	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.805	0
17	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.999	50/50%
18	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.991	20/100%
19	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.990	30/30%
20	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.998	100%
21	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.007	20/30%
22	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.008	100%/Buried
23	-1.010	>70/70%	Buried	Buried	Buried	Buried	Buried	Buried	-1.003	30/100%
24	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.008	100%/Buried
25	-0.980	>80/80%	Buried	Buried	Buried	Buried	Buried	Buried	-0.999	30/100%
26	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.997	100%
27	-0.940	>90/30%	Buried	Buried	Buried	Buried	Buried	Buried	-0.991	100/30%
28	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-1.017	100%
29	-0.910	>70/70% And >20/20%	Buried	Buried	-1.005	100%	Buried	Buried	-0.799	0/0
30	Buried	Buried	Buried	Buried	Buried	Buried	Buried	Buried	-0.813	None
31	-0.950	>50/50%	-0.950	>40/50%	-0.991	100%	Buried	Buried	-1.003	50/10%
32	-0.930	>50/50%	-0.939	>50/50%	Buried	Buried	-0.942	100/100%	-0.802	None
33	-0.950	>40/40%	-0.950	>40/40%	-1.007	100%	-1.011	>50/100%	-0.993	20/70%
34	Buried	Buried	-1.005	>50/50%	-0.979	100%	-1.001	100/100%	-0.810	None
35	-1.000	>50/50%	-0.950	>40/40%	-1.004	100%	-1.008	>70/100%	-1.010	60/70%
Pipe Protection Cowling	-0.890	>40%	-0.872	>30%	-0.960	100%	-0.982	100%	-0.798	None



### 3-4 Diffuser Port Inspection

Divers visually observed all 200 diffuser ports along the diffuser section of the outfall pipe. The presence of biofouling or any kind of notable obstruction was not observed. Diffuser ports 1 on the northern and southern side of the end cap structure were not flowing, however this is the typical condition for these diffuser ports and was not considered to be blocked by any form of obstruction. These “ports” are in the end structure and are not drilled all the way through to the pipeline. All other diffuser ports appeared to be in proper working function with observable flow coming out of the diffuser ports. Each of the diffuser ports in shown in the video survey results included with the submission of this report.

## 4 Summary and Recommendations

The following points summarize the major findings of this inspection:

- In general, the San Elijo Ocean Outfall was found to be in excellent overall condition.
- Ballast rock on the pipeline showed no significant signs of movement since the last reballasting project.
- The outfall showed no signs of spalling, rust staining, or cracking.
- One anode is needed on the pipe protection cawling, there is currently no protection
- One anode is needed on pile support 34, there is currently no protection.
- One anode is needed on pile support 32, there is no protection.
- One anode is needed on pile support 31, one anode had 50% remaining life expectancy, the other anode had 10% remaining life expectancy.
- One anode is needed on pile support 30, there is currently no protection.
- Two anodes are needed on pile support 29, there is currently no protection.
- One anode was added to pile support 28.
- One anode was replaced on pile support 27, the second anode on pile support 27 had 30% remaining life expectancy.
- One anode was added to pile support 26.
- One anode was replaced on pile support 25, the second anode on pile 25 had 30% remaining life expectancy.
- One anode was added to pile support 24, the second anode was buried.
- One anode was replaced on pile support 23, the second anode on pile support 23 had 30% remaining life expectancy.
- One anode was added to pile support 22, the second anode was buried.
- One anode was added to pile support 20, there was no other anode on the pile.
- One anode was replaced on pile support 18, the second anode on pile support 18 had 20% remaining life expectancy and was left in place.
- One anode is needed on pile support 16, there is currently no protection.
- One anode was added on pile support 13, the original anode on pile 13 had 50% remaining life expectancy. There are now two anodes on pile support 13.
- Two anodes were added to pile support 11, there were no anodes before inspection.
- One anode was added to pile support 9, the original anode on pile support 9 had 50% remaining life expectancy. There are now two anodes on pile support 9.
- Two anodes were added to pile support 7, there were no anodes before inspection.



- Two anodes were added to pile support 5, there were no anodes before inspection.
- Two anodes are needed on pile support 3, there is currently no protection.
- Two anodes are needed on pile support 1, there is currently no protection.
- Anodes that were observed at portholes were in good condition and have greater than 50% remaining life expectancy where these were visible and could be inspected.
- No anode is present at the metal plate located just offshore of the pile support section, this structure should have an anode installed to prevent corrosion.
- No giant kelp was found growing on the pipeline or ballast.
- 20 of the 28 exposed pile supports surveyed during this inspection were found to be cathodically protected but in need of service as noted above. There are eight exposed pile supports that currently have no cathodic protection.
- All diffusers were flowing well.
- Numerous large California spiny lobsters were found along the base of the pipe where it appeared they had cleared out substrate to create burrows for hiding in.

The following items are recommendations for continued structural integrity and environmentally safe operation of the San Elijo Ocean Outfall. Some of the comments made below were mentioned in previous reports, but are included again because they are still valid points.

#### **4-1 Specific Recommendations**

- Excavation of porthole 4 and 5 are proposed to remove shell hash on top of the portholes that prevented observation and collection of CP readings.
- Continue to perform routine ROV or rebreather-based dive survey of the diffuser section of the outfall pipe as needed to clear any blocked ports.
- Continue to survey for and cut kelp on the pipeline and ballast pile as warranted so further ballast is not moved away from the pipeline.
- Monitor for re-emergence of all inshore pile support structures and complete structural inspection and addition of anodes once these re-emerge from the littoral sands. They seem to be the most exposed in the winter months such that a survey following a winter storm might allow for additional inspection and service.
- Continue to monitor the presence of “lobster burrows” and possible loss of pipeline bedding material during future surveys.
- Perform replacements of anodes as noted above.

#### **4-2 General Recommendations**

- Continue to perform “rapid-response” overview inspections after periods of extremely high surf or earthquakes in order to identify damage and potential for failure due to scour, high-velocity currents, or major seafloor movements.
- During future inspections, anodes should be replaced when they become ineffective against preventing corrosion to pipe and pile structures.
- Continue preventative maintenance and detailed inspections of the entire pipeline using SCUBA, rebreather, and/or ROV surveys.

## **Appendix A: Important Oceanographic Processes**

## General Oceanographic Forces and Processes

*(Adapted from prior Thales GeoSolutions Pacific, Inc. reports)*

Several phenomena within the ocean environment exert a significant influence on the San Elijo outfall and ballast material. These processes include the hydrodynamic forces due to waves, longshore currents, and sediment transport. The arrival of large waves from local or distant storms increases localized water particle velocities, amplifies the effects of these processes and are capable of damaging the outfall. Each of these phenomena will be discussed in general terms and as they might apply to the San Elijo Ocean Outfall.

### Waves and Currents

Beneath deep-water waves, water particles move in a circular orbit. The water particle velocity decreases with depth; the maximum depth of wave-induced particle motion is a function of wave height and period. The larger the wave and longer the period, the deeper the effects of the wave are felt in the water column. As a wave advances toward shore and enters shallow water, it begins to experience the effects of friction with seafloor. The frictional interaction of waves with the seafloor modifies the waveform, causing the wave height to increase, the wavelength to decrease, and the circular orbit of the particles to become increasingly elliptical. As each wave progresses into shallower water, it eventually reaches a height where the wave will break, which typically occurs in a depth of water that is nearly 1.3 times the height of the wave. The highest energy release occurs where waves are breaking. It is in this high-energy area that a pipeline is most likely to be damaged during a storm.

In addition to the wave-induced oscillatory particle motion, waves approaching a straight coastline at an angle can generate a steady longshore current. This longshore current is largely responsible for the erosion and longshore transport of sediment. The impact of this current and sediment load directly affects any structure, which could interrupt the current flow. At San Elijo, current is generally southward from November through April due to the arrival of waves generated by persistent north and northwest winds from large North Pacific storm systems. The longshore current direction occasionally reverses itself during the remaining months due to exposure to Southern Hemisphere swell or infrequent tropical storms. Other components of the nearshore current include tidal currents with semi-diurnal reversing of the onshore/offshore and upcoast/downcoast flow, regional oceanic circulation patterns, and currents produced by local winds such as sea breeze or thunderstorms and squalls. The combination of these wave- and current-related forces make the nearshore a very dynamic environment in terms of sediment transport and generating forces with act on costal structures.

### Hydrodynamic Forces

Dynamic forces acting on a submerged object are comprised of the direct impact of the water particles against the object, varying hydrostatic pressure as a wave passes, and the lift/drag forces caused by increased fluid velocities over and around the object. Currents generated by waves can cause movement of the entire water mass, which can cause forces similar to a flowing river. The flow over the top of the San Elijo outfall can cause lift forces due to pressure gradients and drag on the pipe in the direction of the current flow. The lift caused by currents, coupled with the increased oscillation lift associated with localized water particle velocities and drag forces, can cause large objects such as ballast rock to move as a wave passes.

### **Liquefaction**

Shock from breaking ocean waves or earthquake surface waves can cause unconsolidated, water-saturated sediments to go into suspension. This process, called liquefaction, results in the sediment losing its shear strength and therefore its ability to support higher density objects. This process causes objects such as ballast rock resting on the liquefied area to settle.

### **Sediment Scour and Transport**

The forces discussed in previous sections apply to sediments as well as to an ocean outfall pipe. Longshore sediment transport and seasonal beach migration (inshore/offshore) occur when the water particle velocity is great enough to suspend sediment particles and transport them in agitated water as suspended-load and bed-load. The suspension and movement of unconsolidated sediments in the water column may result in lower bottom elevation. Eroded sand may or may not be re-deposited at the same level, depending on the resultant mean current and the up-current sediment supply.

### **Coastal Sediment Transport and Erosion**

The transport of sediment parallel to the shore along Southern California beaches is due primarily to the longshore current generated by waves breaking at an angle to the coastline. The majority of the transport occurs within the littoral zone, extending from shore to just beyond the seaward limits of the breaker zone. The Southern California coast can be divided into a series of cells between the natural features of headlands and submarine canyons (Figure 5-1). At a headland or promontory, the upcoast supply of sand is effectively blocked or deflected offshore into deeper water and lost to the system. Similarly, submarine canyons capture the beach sand and channel it offshore into deeper water where it is also permanently lost to beach replenishment.

The local littoral sediment budget determines whether the coast is likely to experience net erosion or deposition. A beach may be considered to be in a state of equilibrium if the longshore transport into a cell or coastal segment equals the transport out of the cell. However, the coast is a dynamic environment with naturally occurring periods of erosion and deposition. Thus, an imbalance in the budget is difficult to predict due to uncertainty in estimating the magnitude of the various sediment sources and losses. The primary sources of beach material are longshore transport from upcoast segments, river transport, sea cliff erosion, onshore transport, dredging, and sand bypass at harbor entrances. The primary losses of beach material are longshore transport out of area, offshore transport, deposition within submarine canyons, accumulations at harbor entrances, and mining. In general, the contribution of sediment from river transport and runoff has been significantly reduced by the construction of dams and reservoirs. Lagoons normally contribute little to the coastal sediment budget and many actually constitute a net sediment loss. River-transported sediments deposited in shallow coastal lagoons are not normally available to nearby beaches unless there is sufficient tidal exchange to suspend and transport sand-size particles. In some instances, tidal currents may carry sediment into a lagoon where it is deposited due to lower velocity. The exception to this may occur after periods of heavy rainfall when the increased flow due to excessive runoff and coastal flooding may flush deposited sediments onto adjacent beaches.

The Oceanside Littoral Cell extends from Dana Point to the Scripps-La Jolla Submarine Canyon, a distance of approximately 50 miles. Within this cell, the net annual transport is toward the south due to the prevailing wind and wave direction from the northwest during October/November through April/May. During the summer months, the arrival of swell from Southern Hemisphere or tropical storms can reverse the longshore current, producing periods of northward longshore transport. The estimated annual transport offshore through Scripps-La Jolla Submarine Canyon of 260,000 cubic yards is roughly equivalent to the total littoral transport reaching the adjacent upcoast beach (Chamberlain, 1964). Surveys within

the Carlsbad Submarine Canyon concluded that it was not currently an active site of beach material loss. No other canyons affect the Oceanside Littoral Cell.

U.S. Army Corps of Engineers studies have suggested the division of littoral cells into segments or subcells based on the following criteria:

Distinctive sediment characteristics due to natural or man-influenced processes such as beach nourishment programs;  
Known natural (lagoons and submarine canyons) or man-made (jetties and breakwaters) barriers to littoral sand transport.

The eight-mile-long costal segment between San Marcos Creek at Batiquitos Lagoon and the San Dieguito River includes the communities of Leucadia, Encinitas, Cardiff and Solana Beach. Based on data from 1954 through 1988, the sea cliffs in this area have retreated an average of approximately 0.1 to 0.2 feet per year. This sediment source contributes relatively small amounts of sand, gravel and cobble to the coastal sediment budget. Analysis of aerial photographs and beach profiles for the 50-year interval from 1938 through 1988 showed a nearly stable shoreline position, indicating a close balance in the sediment budget. The normal seasonal onshore/offshore sediment transport and localized changes near the outfall due to the effects of severe storm events or scour are not reflected in the long-term average.

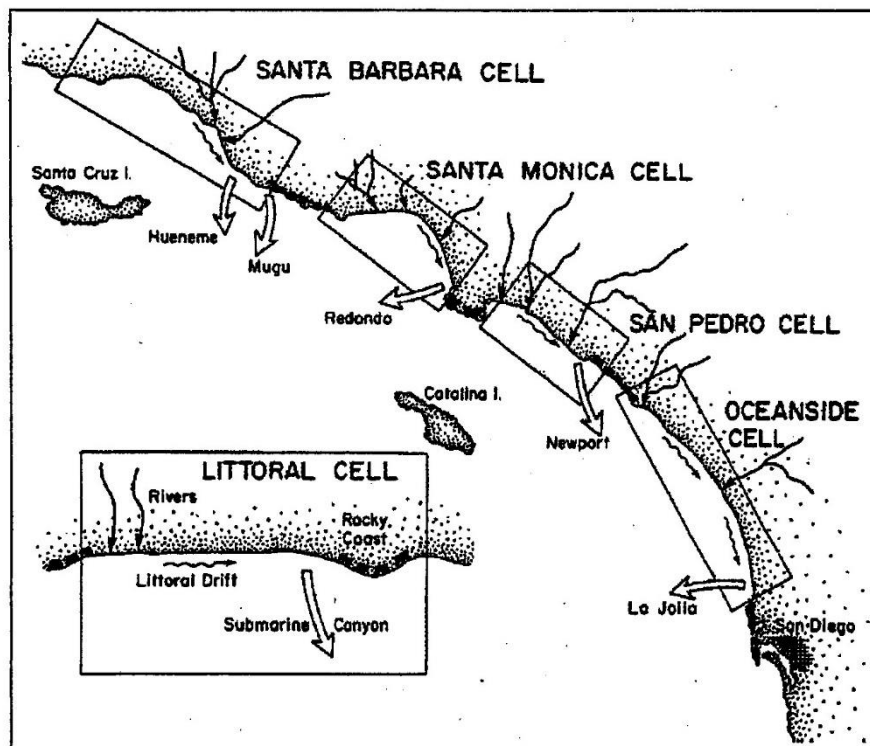


Figure 5-1 Southern California Coast Littoral Transportation Cells

## Scour

Depletion of sediment occurs adjacent to offshore structures that have readily transportable sediment near their perimeters. This localized depletion of sediment around an object is called scour. Flow velocity increases as it passes around the edge of a structure, causing a localized increase in the energy proportional to the square of the velocity. This increased energy allows water to transport more sediment and larger size particles. In the case of the San Elijo Ocean Outfall, the sediment typically available for transport is sand. Therefore, at the toe end of a ballast pile, or the outfall terminus, flow passes around stationary or non-transportable material, the area will be more susceptible to scour.

Scour around an outfall can also be noted on a larger scale as differences in bottom elevation of the nearfield sediment distribution around a pipe and ballast pile. On the up-current side of the pipe, the seawater slows down as it approaches the ballast pile and loses some of its energy. As a result, its ability to transport sediment is reduced, thus causing deposition on the up-current side of the pipe. As fluid passes over the pipe and ballast pile it gains energy but not enough to displace correctly designed ballast. As the seawater leaves the down-current edge of the ballast pile, its energy is increased because of the turbulence around the ballast pile and a return to non-deflected flow. This increased energy level enhances the ability to transport sediment. Thus, sediment deposited at the ballast pile is re-suspended and transported away, which results in a lower level of sand on the down-current side. This same phenomenon is typically visible around a jetty where the up-current side experiences buildup of material and the down-current side shows a loss of material.

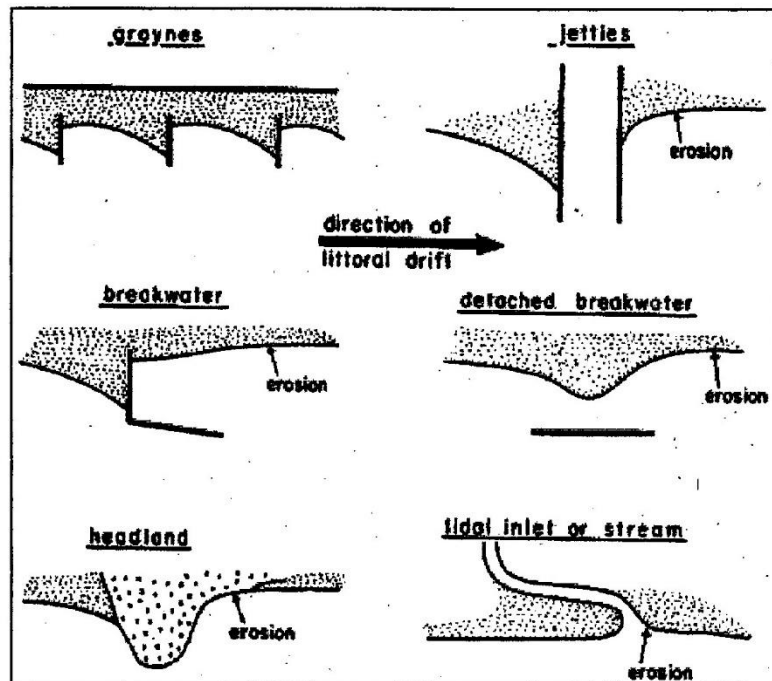


Figure 5-2 Deposition and erosion due to interruption of longshore transport

Scour results in the loss of sand around the toe of the ballast pile, around the pipe, and supporting structures where no ballast exists. Excessive scour can lead to ballast pile setting or collapse and weakened support foundation, which eventually may result in unsupported spans of pipe.

## **Metallic Corrosion**

The galvanic process commonly referred to as corrosion arises when two dissimilar metallic alloys or different areas of the same metal are immersed in an electrolyte (e.g., generally a liquid capable of conducting electricity such as seawater). The connection created between the two metals that has a sufficient voltage potential different to initiate an oxidation reaction. The location of this reaction is known as the anode and is characterized by a negative charge. Once liberated, electrons flow as current through the metallic pathway to a more positively charged region within the cell and begin to generate a reductive reaction at an area known as the cathode.

The circuit is completed by the migration of hydroxide ions from the cathodic region to the anode. The major point of interest is that the rate at which these reactions occur is governed in large part by the rate at which oxygen can be reduced at the cathode. In basic terms, this means that the reduction rate and thus the rate of corrosion are controlled by the amount of dissolved oxygen available in the water column.

Metals immersed in seawater are susceptible to corrosion due to galvanic action, which produces an electrical current in an electrolyte (conducting) solution. Seawater is an electrolyte since it contains a significant percentage of chlorine ions found in solution. More specifically, there are approximately 35 grams of dissolved salt per kilogram of seawater. Sites on the surface of the metal where corrosion or oxidation (electron loss) is occurring are referred to as anodes. The chemical reaction at an anode results in the production of metal ions and free electrons. These electrons pass through the seawater to other sites (referred to as cathodes) where a reaction (electron gain) is occurring. Metal ions can go into solution or react to form corrosion products such as oxides on the surface of the metal, forming the classic reddish-brown rust commonly observed.

All exposed metallic fixtures on the outfall, including the steel pipeline, are susceptible to corrosion. The rate of corrosion can be significantly reduced by attachment of sacrificial zinc alloy anodes. Zinc has a higher corrosion potential than most metals and therefore the resulting loss of material is from the zinc anode and protected parts remain relatively inert.

## **Kelp Settlement and Growth**

Kelp (*Macrocystis sp.*) is a marine alga, which grows in the Shallow Littoral Zone. It grows on hard substrate such as rocks, boulders, outcrops, concrete, and pipeline ballast rock. Substrate attachment is by means of a rhizome-like base called a holdfast. Under suitable nutrient, light, and thermal conditions, kelp plants grow to lengths in excess of 200 feet, with daily growth rates in excess of one percent of plant size. The major parts of a kelp plant are:

*Holdfast* – Base that anchors the kelp to the ocean floor;

*Stipe* – A stem-like section that connects the pneumatocysts and blades to the holdfast;

*Pneumatocyst* – A small, ball-like, gas-filled float between the stipe and the blades, which provides buoyancy;

*Blades* – Leaflike sections, 0.8 feet to 1.3 feet long and approximately 0.2 feet wide.

Multiple stipes can grow from a single holdfast clump. Kelp has considerable buoyancy and drag potential in the water column.

The entire kelp plant is quite elastic, allowing it to survive high-energy sea conditions. However, under extreme wave and current conditions, a stipe may break and the plant will float away if the stipe elasticity and strength are exceeded by drag forces. Under certain conditions at very low ocean-energy levels, the

entire kelp plant, including the holdfast, can be transported away. This occurs when the substrate to which the kelp has attached has insufficient mass to anchor the kelp. Obviously, the smaller the ballast rock, the easier it is for individual kelp plants to carry it away from an outfall. While inspecting San Elijo outfall prior to the most recent reballasting, previous inspectors witnessed kelp growing on small units of ballast in the sand field away from the pipeline. Following reversal of tidal current direction, those same plants were found alongside the pipeline. By this process, a ballast pile can be significantly depleted even during moderate wave conditions if the ballast is not of a suitable size to prevent its removal by kelp drag.



## **Appendix B: Video Log and Notes**

## Video Notes

### South Flange

Flange #	Notes	Lobsters Present	Flange #	Notes	Lobsters Present
SF1	Unremarkable.	N	SF53	Evidence of clearing and excavation from Lobsters.	Y
SF2	Unremarkable.	N	SF54	Evidence of clearing and excavation from Lobsters.	Y
SF3	Unremarkable.	N	SF55	Evidence of clearing and excavation from Lobsters.	Y
SF4	Unremarkable.	N	SF56	Evidence of clearing and excavation from Lobsters.	N
SF5	Unremarkable.	N	SF57	Unremarkable.	N
SF6	Unremarkable.	N	SF58	Evidence of clearing and excavation from Lobsters.	Y
SF7	Unremarkable.	N	SF59	Unremarkable.	N
SF8	Unremarkable.	N	SF60	Unremarkable.	N
SF9	Unremarkable.	N	SF61	Evidence of clearing and excavation from Lobsters.	N
SF10	Unremarkable.	N	SF62	Evidence of clearing and excavation from Lobsters.	Y
SF11	Unremarkable.	N	SF63	Unremarkable.	N
SF12	Unremarkable.	N	SF64	Evidence of clearing and excavation from Lobsters.	N
SF13	Unremarkable.	N	SF65	Evidence of clearing and excavation from Lobsters.	Y
SF14	Unremarkable.	N	SF66	Evidence of clearing and excavation from Lobsters.	N
SF15	Unremarkable.	N	SF67	Unremarkable.	N
SF16	Unremarkable.	Y	SF68	Evidence of clearing and excavation from Lobsters.	Y
SF17	Unremarkable.	N	SF69	Unremarkable.	N
SF18	Evidence of excavation from Lobsters.	Y	SF70	Unremarkable.	N
SF19	Evidence of excavation from Lobsters.	Y	SF71	Unremarkable.	N
SF20	Unremarkable.	N	SF72	Unremarkable.	N
SF21	Unremarkable.	N	SF73	Unremarkable.	N
SF22	Evidence of excavation from Lobsters.	Y	SF74	Unremarkable.	N
SF23	Evidence of excavation from Lobsters.	Y	SF75	Unremarkable.	N
SF24	Unremarkable.	Y	SF76	Unremarkable.	N
SF25	Unremarkable.	Y	SF77	Unremarkable.	N
SF26	Unremarkable.	N	SF78	Unremarkable.	N
SF27	Unremarkable.	N	SF79	Unremarkable.	N

<b>SF28</b>	Unremarkable.	N	<b>SF80</b>	Unremarkable.	N
<b>SF29</b>	Unremarkable.	N	<b>SF81</b>	Unremarkable.	N
<b>SF30</b>	Unremarkable.	N	<b>SF82</b>	Unremarkable.	N
<b>SF31</b>	Evidence of excavation from Lobsters.	Y	<b>SF83</b>	Unremarkable.	N
<b>SF32</b>	Unremarkable.	N	<b>SF84</b>	Unremarkable.	N
<b>SF33</b>	Unremarkable.	N	<b>SF85</b>	Unremarkable.	N
<b>SF34</b>	Unremarkable.	N	<b>SF86</b>	Unremarkable.	N
<b>SF35</b>	Unremarkable.	N	<b>SF87</b>	Unremarkable.	N
<b>SF36</b>	Unremarkable.	N	<b>SF88</b>	Unremarkable.	N
<b>SF37</b>	Unremarkable.	Y	<b>SF89</b>	Unremarkable.	N
<b>SF38</b>	Evidence of excavation from Lobsters.	Y	<b>SF90</b>	Unremarkable.	N
<b>SF39</b>	Unremarkable.	Y	<b>SF91</b>	Unremarkable.	N
<b>SF40</b>	Evidence of excavation from Lobsters.	Y	<b>SF92</b>	Unremarkable.	N
<b>SF41</b>	Evidence of excavation from Lobsters.	Y	<b>SF93</b>	Unremarkable.	N
<b>SF42</b>	Evidence of clearing and excavation from Lobsters.	Y	<b>SF94</b>	Unremarkable.	N
<b>SF43</b>	Evidence of clearing and excavation from Lobsters.	Y	<b>SF95</b>	Unremarkable.	N
<b>SF44</b>	Unremarkable.	Y	<b>SF96</b>	Unremarkable.	N
<b>SF45</b>	Evidence of excavation from Lobsters.	Y	<b>SF97</b>	Unremarkable.	N
<b>SF46</b>	Evidence of excavation from Lobsters.	Y	<b>SF98</b>	Unremarkable.	N
<b>SF47</b>	Unremarkable.	Y	<b>SF99</b>	Unremarkable.	N
<b>SF48</b>	Unremarkable.	Y	<b>SF100</b>	Unremarkable.	N
<b>SF49</b>	Unremarkable.	N	<b>SF101</b>	Unremarkable.	N
<b>SF50</b>	Unremarkable.	N	<b>SF102</b>	Unremarkable.	N
<b>SF51</b>	Unremarkable.	N	<b>SF103</b>	Unremarkable.	N
<b>SF52</b>	Unremarkable.	N			

## North Flange

Flange #	Notes	Lobsters Present	Flange #	Notes	Lobsters Present
NF1	Unremarkable.	Y	NF53	Unremarkable.	N
NF2	Unremarkable.	N	NF54	Unremarkable.	N
NF3	Unremarkable.	Y	NF55	Evidence of excavation from Lobsters.	N
NF4	Evidence of excavation from Lobsters.	Y	NF56	Evidence of excavation from Lobsters.	Y
NF5	Evidence of clearing and excavation from Lobsters.	Y	NF57	Evidence of excavation from Lobsters.	Y
NF6	Evidence of excavation from Lobsters.	Y	NF58	Evidence of excavation from Lobsters.	Y
NF7	Unremarkable.	Y	NF59	Evidence of excavation from Lobsters.	Y
NF8	Unremarkable.	N	NF60	Evidence of excavation from Lobsters.	Y
NF9	Evidence of excavation from Lobsters.	Y	NF61	Evidence of excavation from Lobsters.	Y
NF10	Unremarkable.	N	NF62	Evidence of excavation from Lobsters.	Y
NF11	Unremarkable.	N	NF63	Unremarkable.	N
NF12	Unremarkable.	N	NF64	Unremarkable.	N
NF13	Unremarkable.	Y	NF65	Unremarkable.	N
NF14	Evidence of excavation from Lobsters.	Y	NF66	Unremarkable.	N
NF15	Unremarkable.	N	NF67	Unremarkable.	N
NF16	Unremarkable.	Y	NF68	Evidence of excavation from Lobsters.	Y
NF17	Evidence of excavation from Lobsters.	N	NF69	Unremarkable.	N
NF18	Unremarkable.	N	NF70	Evidence of excavation from Lobsters.	Y
NF19	Unremarkable.	N	NF71	Evidence of excavation from Lobsters.	Y
NF20	Unremarkable.	Y	NF72	Unremarkable.	N
NF21	Evidence of excavation from Lobsters.	Y	NF73	Evidence of excavation from Lobsters.	N
NF22	Unremarkable.	Y	NF74	Unremarkable.	N
NF23	Unremarkable.	Y	NF75	Unremarkable.	N
NF24	Unremarkable.	N	NF76	Evidence of excavation from Lobsters.	Y
NF25	Evidence of excavation from Lobsters.	Y	NF77	Unremarkable.	N
NF26	Unremarkable.	N	NF78	Unremarkable.	N
NF27	Evidence of excavation from Lobsters.	Y	NF79	Unremarkable.	N
NF28	Unremarkable.	N	NF80	Unremarkable.	N
NF29	Evidence of clearing and excavation from Lobsters.	Y	NF81	Unremarkable.	N

<b>NF30</b>	Evidence of excavation from Lobsters.	Y	<b>NF82</b>	Unremarkable.	N
<b>NF31</b>	Unremarkable.	N	<b>NF83</b>	Unremarkable.	N
<b>NF32</b>	Evidence of excavation from Lobsters.	Y	<b>NF84</b>	Unremarkable.	N
<b>NF33</b>	Evidence of excavation from Lobsters.	Y	<b>NF85</b>	Unremarkable.	N
<b>NF34</b>	Evidence of excavation from Lobsters.	Y	<b>NF86</b>	Unremarkable.	N
<b>NF35</b>	Evidence of excavation from Lobsters.	Y	<b>NF87</b>	Unremarkable.	N
<b>NF36</b>	Evidence of excavation from Lobsters.	Y	<b>NF88</b>	Unremarkable.	N
<b>NF37</b>	Evidence of excavation from Lobsters.	Y	<b>NF89</b>	Unremarkable.	N
<b>NF38</b>	Unremarkable.	N	<b>NF90</b>	Unremarkable.	N
<b>NF39</b>	Evidence of excavation from Lobsters. Growth.	Y	<b>NF91</b>	Unremarkable.	N
<b>NF40</b>	Evidence of excavation from Lobsters.	Y	<b>NF92</b>	Unremarkable.	N
<b>NF41</b>	Evidence of excavation from Lobsters.	Y	<b>NF93</b>	Unremarkable.	N
<b>NF42</b>	Unremarkable.	Y	<b>NF94</b>	Unremarkable.	N
<b>NF43</b>	Evidence of excavation from Lobsters.	Y	<b>NF95</b>	Unremarkable.	N
<b>NF44</b>	Evidence of excavation from Lobsters.	Y	<b>NF96</b>	Unremarkable.	N
<b>NF45</b>	Evidence of excavation from Lobsters.	Y	<b>NF97</b>	Unremarkable.	N
<b>NF46</b>	Unremarkable.	N	<b>NF98</b>	Unremarkable.	N
<b>NF47</b>	Unremarkable.	N	<b>NF99</b>	Unremarkable.	N
<b>NF48</b>	Unremarkable.	N	<b>NF100</b>	Unremarkable.	N
<b>NF49</b>	Unremarkable.	N	<b>NF101</b>	Unremarkable.	N
<b>NF50</b>	Evidence of excavation from Lobsters.	Y	<b>NF102</b>	Unremarkable.	N
<b>NF51</b>	Evidence of excavation from Lobsters.	N	<b>NF103</b>	Unremarkable.	N
<b>NF52</b>	Evidence of excavation from Lobsters.	N			

### South Diffusors

Diffusor #	Notes	Diffusor #	Notes	Diffusor #	Notes	Diffusor #	Notes
SD1	Unremarkable.	SD26	Unremarkable.	SD51	Unremarkable.	SD76	Unremarkable.
SD2	Unremarkable.	SD27	Unremarkable.	SD52	Unremarkable.	SD77	Cleared.
SD3	Unremarkable.	SD28	Unremarkable.	SD53	Unremarkable.	SD78	Unremarkable.
SD4	Unremarkable.	SD29	Unremarkable.	SD54	Unremarkable.	SD79	Unremarkable.
SD5	Unremarkable.	SD30	Unremarkable.	SD55	Unremarkable.	SD80	Unremarkable.
SD6	Unremarkable.	SD31	Unremarkable.	SD56	Unremarkable.	SD81	Unremarkable.
SD7	Unremarkable.	SD32	Unremarkable.	SD57	Unremarkable.	SD82	Unremarkable.
SD8	Unremarkable.	SD33	Unremarkable.	SD58	Unremarkable.	SD83	Unremarkable.
SD9	Unremarkable.	SD34	Unremarkable.	SD59	Unremarkable.	SD84	Unremarkable.
SD10	Unremarkable.	SD35	Unremarkable.	SD60	Unremarkable.	SD85	Unremarkable.
SD11	Unremarkable.	SD36	Unremarkable.	SD61	Unremarkable.	SD86	Unremarkable.
SD12	Unremarkable.	SD37	Unremarkable.	SD62	Unremarkable.	SD87	Unremarkable.
SD13	Unremarkable.	SD38	Unremarkable.	SD63	Unremarkable.	SD88	Unremarkable.
SD14	Unremarkable.	SD39	Unremarkable.	SD64	Unremarkable.	SD89	Unremarkable.
SD15	Unremarkable.	SD40	Unremarkable.	SD65	Unremarkable.	SD90	Unremarkable.
SD16	Unremarkable.	SD41	Unremarkable.	SD66	Unremarkable.	SD91	Unremarkable.
SD17	Unremarkable.	SD42	Unremarkable.	SD67	Unremarkable.	SD92	Unremarkable.
SD18	Unremarkable.	SD43	Unremarkable.	SD68	Unremarkable.	SD93	Unremarkable.
SD19	Unremarkable.	SD44	Unremarkable.	SD69	Unremarkable.	SD94	Unremarkable.
SD20	Unremarkable.	SD45	Unremarkable.	SD70	Unremarkable.	SD95	Unremarkable.
SD21	Unremarkable.	SD46	Unremarkable.	SD71	Unremarkable.	SD96	Unremarkable.
SD22	Unremarkable.	SD47	Unremarkable.	SD72	Unremarkable.	SD97	Unremarkable.
SD23	Unremarkable.	SD48	Unremarkable.	SD73	Unremarkable.	SD98	Cleared.
SD24	Unremarkable.	SD49	Unremarkable.	SD74	Unremarkable.	SD99	Unremarkable.
SD25	Unremarkable.	SD50	Unremarkable.	SD75	Unremarkable.	SD100	Unremarkable.

**Other Notes** Higher Ballast built up along pipe between SD18 and SD19.

## North Diffusors

Diffusor #	Notes	Diffusor #	Notes	Diffusor #	Notes	Diffusor #	Notes
ND1	Unremarkable.	ND26	Cleared.	ND51	Unremarkable.	ND76	Unremarkable.
ND2	Cleared.	ND27	Unremarkable.	ND52	Unremarkable.	ND77	Unremarkable.
ND3	Unremarkable.	ND28	Unremarkable.	ND53	Unremarkable.	ND78	Unremarkable.
ND4	Unremarkable.	ND29	Unremarkable.	ND54	Unremarkable.	ND79	Unremarkable.
ND5	Unremarkable.	ND30	Unremarkable.	ND55	Unremarkable.	ND80	Unremarkable.
ND6	Unremarkable.	ND31	Unremarkable.	ND56	Unremarkable.	ND81	Unremarkable.
ND7	Unremarkable.	ND32	Unremarkable.	ND57	Unremarkable.	ND82	Unremarkable.
ND8	Unremarkable.	ND33	Unremarkable.	ND58	Unremarkable.	ND83	Unremarkable.
ND9	Unremarkable.	ND34	Unremarkable.	ND59	Unremarkable.	ND84	Unremarkable.
ND10	Cleared.	ND35	Unremarkable.	ND60	Unremarkable.	ND85	Unremarkable.
ND11	Unremarkable.	ND36	Unremarkable.	ND61	Unremarkable.	ND86	Unremarkable.
ND12	Cleared.	ND37	Unremarkable.	ND62	Unremarkable.	ND87	Unremarkable.
ND13	Unremarkable.	ND38	Unremarkable.	ND63	Unremarkable.	ND88	Unremarkable.
ND14	Unremarkable.	ND39	Unremarkable.	ND64	Unremarkable.	ND89	Unremarkable.
ND15	Unremarkable.	ND40	Unremarkable.	ND65	Unremarkable.	ND90	Unremarkable.
ND16	Unremarkable.	ND41	Unremarkable.	ND66	Unremarkable.	ND91	Unremarkable.
ND17	Unremarkable.	ND42	Unremarkable.	ND67	Unremarkable.	ND92	Unremarkable.
ND18	Cleared.	ND43	Unremarkable.	ND68	Unremarkable.	ND93	Unremarkable.
ND19	Unremarkable.	ND44	Unremarkable.	ND69	Unremarkable.	ND94	Unremarkable.
ND20	Unremarkable.	ND45	Unremarkable.	ND70	Unremarkable.	ND95	Unremarkable.
ND21	Unremarkable.	ND46	Unremarkable.	ND71	Unremarkable.	ND96	Unremarkable.
ND22	Unremarkable.	ND47	Unremarkable.	ND72	Unremarkable.	ND97	Unremarkable.
ND23	Unremarkable.	ND48	Unremarkable.	ND73	Unremarkable.	ND98	Unremarkable.
ND24	Unremarkable.	ND49	Unremarkable.	ND74	Unremarkable.	ND99	Unremarkable.
ND25	Unremarkable.	ND50	Unremarkable.	ND75	Unremarkable.	ND100	Cleared.

### Other Notes

Excavation along pipe between NF35 and NF36.

Excavation along pipe between NF37 and NF38.

**Video File – Provided as a USB Drive**

**Photo File- “North Flanges\_Sized for Report”**

Photos of all flanges on the north end of the structure. North Flange 1 is the first flange. Photos are labeled in ascending order until the last flange on the north side, North Flange 103.

**Photo File- “South Flanges\_Sized for Report”**

Photos of all flanges on the south end of the structure. South Flange 1 is the first flange. Photos are labeled in ascending order until the last flange on the south side, South Flange 103.

**Photo File- “North Diffuser Ports\_Sized for Report”**

Photos of all diffuser ports on the north end of the structure. North Diffuser 1 is the first diffuser port. Photos are labeled in ascending order until the last diffuser port on the north side, North Diffuser 100.

**Photo File- “South Diffuser Ports\_Sized for Report”**




































Photos of all diffuser ports on the south end of the structure. South Diffuser 1 is the first diffuser port. Photos are labeled in ascending order until the last diffuser on the south side, South Diffuser 100.




































All photos are provided as a digital copy.






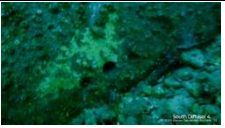

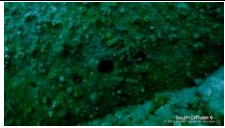
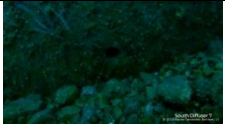

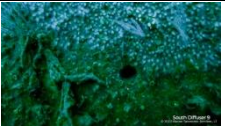
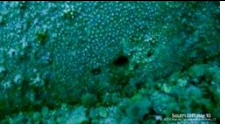

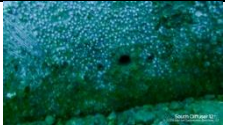
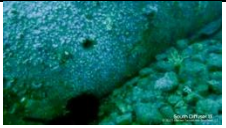



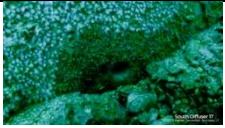

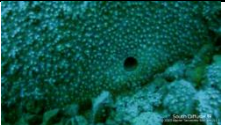





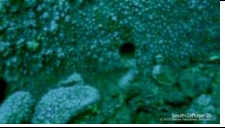
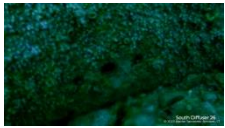
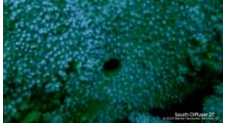

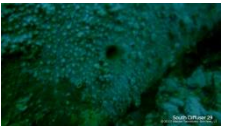

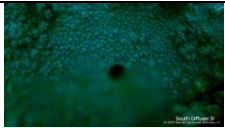

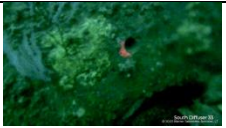
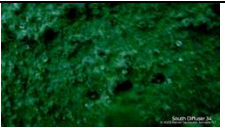
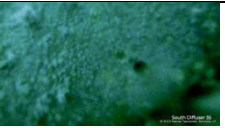
## **Appendix C: Photos of all Diffuser Ports**

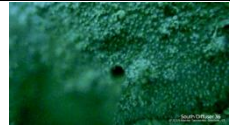


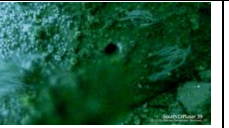

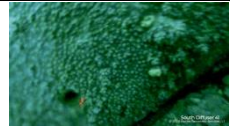
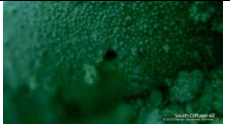

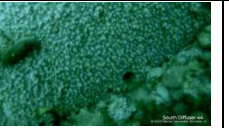
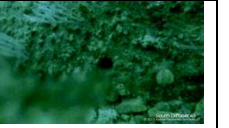
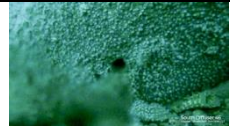
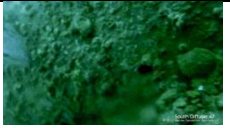

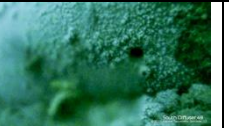
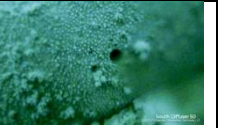
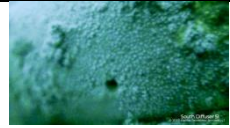


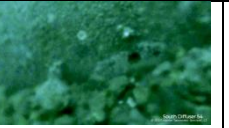
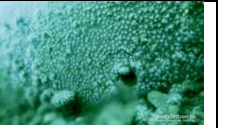
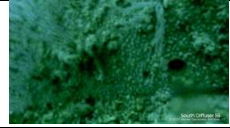







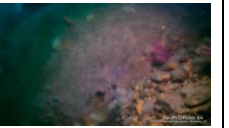


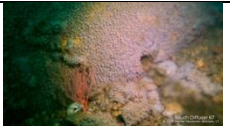
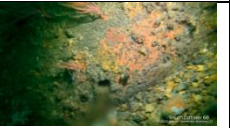


## North Diffuser Ports








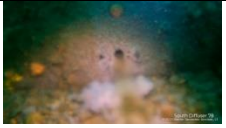
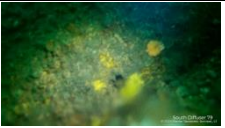

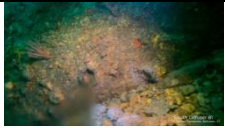


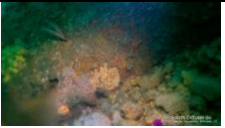

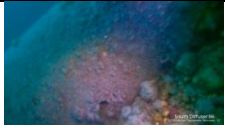




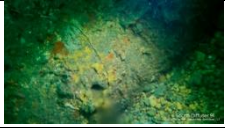









				
<b>Port 1</b>	<b>Port 2</b>	<b>Port 3</b>	<b>Port 4</b>	<b>Port 5</b>
				
<b>Port 6</b>	<b>Port 7</b>	<b>Port 8</b>	<b>Port 9</b>	<b>Port 10</b>
				
<b>Port 11</b>	<b>Port 12</b>	<b>Port 13</b>	<b>Port 14</b>	<b>Port 15</b>
				
<b>Port 16</b>	<b>Port 17</b>	<b>Port 18</b>	<b>Port 19</b>	<b>Port 20</b>
				
<b>Port 21</b>	<b>Port 22</b>	<b>Port 23</b>	<b>Port 24</b>	<b>Port 25</b>
				
<b>Port 26</b>	<b>Port 27</b>	<b>Port 28</b>	<b>Port 29</b>	<b>Port 30</b>
				
<b>Port 31</b>	<b>Port 32</b>	<b>Port 33</b>	<b>Port 34</b>	<b>Port 35</b>

				
<b>Port 36</b>	<b>Port 37</b>	<b>Port 38</b>	<b>Port 39</b>	<b>Port 40</b>
				
<b>Port 41</b>	<b>Port 42</b>	<b>Port 43</b>	<b>Port 44</b>	<b>Port 45</b>
				
<b>Port 46</b>	<b>Port 47</b>	<b>Port 48</b>	<b>Port 49</b>	<b>Port 50</b>
				
<b>Port 51</b>	<b>Port 52</b>	<b>Port 53</b>	<b>Port 54</b>	<b>Port 55</b>
				
<b>Port 56</b>	<b>Port 57</b>	<b>Port 58</b>	<b>Port 59</b>	<b>Port 60</b>
				
<b>Port 61</b>	<b>Port 62</b>	<b>Port 63</b>	<b>Port 64</b>	<b>Port 65</b>
				
<b>Port 66</b>	<b>Port 67</b>	<b>Port 68</b>	<b>Port 69</b>	<b>Port 70</b>

## South Diffuser Ports

				
<b>Port 1</b>	<b>Port 2</b>	<b>Port 3</b>	<b>Port 4</b>	<b>Port 5</b>
				
<b>Port 6</b>	<b>Port 7</b>	<b>Port 8</b>	<b>Port 9</b>	<b>Port 10</b>
				
<b>Port 11</b>	<b>Port 12</b>	<b>Port 13</b>	<b>Port 14</b>	<b>Port 15</b>
				
<b>Port 16</b>	<b>Port 17</b>	<b>Port 18</b>	<b>Port 19</b>	<b>Port 20</b>
				
<b>Port 21</b>	<b>Port 22</b>	<b>Port 23</b>	<b>Port 24</b>	<b>Port 25</b>
				
<b>Port 26</b>	<b>Port 27</b>	<b>Port 28</b>	<b>Port 29</b>	<b>Port 30</b>
				
<b>Port 31</b>	<b>Port 32</b>	<b>Port 33</b>	<b>Port 34</b>	<b>Port 35</b>

				
<b>Port 36</b>	<b>Port 37</b>	<b>Port 38</b>	<b>Port 39</b>	<b>Port 40</b>
				
<b>Port 41</b>	<b>Port 42</b>	<b>Port 43</b>	<b>Port 44</b>	<b>Port 45</b>
				
<b>Port 46</b>	<b>Port 47</b>	<b>Port 48</b>	<b>Port 49</b>	<b>Port 50</b>
				
<b>Port 51</b>	<b>Port 52</b>	<b>Port 53</b>	<b>Port 54</b>	<b>Port 55</b>
				
<b>Port 56</b>	<b>Port 57</b>	<b>Port 58</b>	<b>Port 59</b>	<b>Port 60</b>
				
<b>Port 61</b>	<b>Port 62</b>	<b>Port 63</b>	<b>Port 64</b>	<b>Port 65</b>
				
<b>Port 66</b>	<b>Port 67</b>	<b>Port 68</b>	<b>Port 69</b>	<b>Port 70</b>

				
<b>Port 71</b>	<b>Port 72</b>	<b>Port 73</b>	<b>Port 74</b>	<b>Port 75</b>
				
<b>Port 76</b>	<b>Port 77</b>	<b>Port 78</b>	<b>Port 79</b>	<b>Port 80</b>
				
<b>Port 81</b>	<b>Port 82</b>	<b>Port 83</b>	<b>Port 84</b>	<b>Port 85</b>
				
<b>Port 86</b>	<b>Port 87</b>	<b>Port 88</b>	<b>Port 89</b>	<b>Port 90</b>
				
<b>Port 91</b>	<b>Port 92</b>	<b>Port 93</b>	<b>Port 94</b>	<b>Port 95</b>
				
<b>Port 96</b>	<b>Port 97</b>	<b>Port 98</b>	<b>Port 99</b>	<b>Port 100</b>

## **Appendix D: Photos of Marine life present during inspection**



Cabezon



Spanish Dancer



Horn Shark



Gorgonian



Garibaldi



Spiny Lobster