

**AGENDA**  
**SPECIAL MEETING OF THE**  
**SAN ELIJO JOINT POWERS AUTHORITY**  
**TUESDAY, FEBRUARY 25, 2020 AT 8:30 AM**  
**SAN ELIJO WATER CAMPUS – CONFERENCE 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 (NON-ACTION ITEM)
5. AWARDS AND RECOGNITION
6. \* **CONSENT CALENDAR**
7. \* APPROVAL OF MINUTES FOR JANUARY 27, 2020 MEETING
8. \* APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS
9. \* SAN ELIJO WATER CAMPUS TREATED EFFLUENT FLOWS – MONTHLY REPORT
10. \* SAN ELIJO JOINT POWERS AUTHORITY RECYCLED WATER PROGRAM – MONTHLY REPORT
11. \* 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 the Consent Calendar. Items removed by a "Request to Speak" form from the public will be handled immediately following adoption of the Consent Calendar. Items removed by a Board Member will be handled as directed by the Board.*

## **REGULAR AGENDA**

### 12. **OCEAN OUTFALL 2019 INSPECTION**

1. Accept and file;
2. Discuss and take action as appropriate.

Staff Reference: Director of Operations

### 13. **MID-YEAR REVIEW OF OPERATING BUDGET**

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

Staff Reference: General Manager

### 14. **WATER CAMPUS IMPROVEMENT PROJECT UPDATE**

1. Discuss and take action as appropriate.

Staff Reference: General Manager

### 15. **GENERAL MANAGER'S REPORT**

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

### 16. **GENERAL COUNSEL'S REPORT**

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

### 17. **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.

### 18. **ADJOURNMENT**

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Monday, March 9, 2020 at 8:30 a.m.

### **NOTICE:**

The San Elijo Joint Powers Authority's open and public meetings meet 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 is 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 SEJPA Board meetings are held on the second Monday of the month, except August.

**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 in the following locations:

San Elijo Water Campus, 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: February 20, 2020

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

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

SAN ELIJO JOINT POWERS AUTHORITY  
MINUTES OF THE SPECIAL BOARD MEETING  
HELD ON JANUARY 27, 2020  
AT THE  
SAN ELIJO WATER CAMPUS

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Jody Hubbard, 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 Monday, January 27, 2020, at 8:30 a.m., at the San Elijo Water Campus at 2695 Manchester Avenue, Cardiff by the Sea, California.

1. CALL TO ORDER

Chair Hubbard called the meeting to order at 8:30 a.m.

2. ROLL CALL

*Directors Present:*

Jody Hubbard  
Kristi Becker  
Catherine Blakespear  
David Zito

*Directors Absent:*

None

*Others Present:*

General Manager	Michael Thornton
Director of Operations	Chris Trees
Director of Finance and Administration	Amy Chang
Administrative Coordinator	Vanessa Hackney

*SEJPA Counsel:*

Procopio, Cory, Hargreaves & Savitch	Adriana Ochoa
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*City of Encinitas:*

Assistant City Manager	Mark Delin
Director of Public Works	Carl Quiram

*City of Solana Beach:*

City Manager	Greg Wade
Director of Engineering/Public Works	Mohammad "Mo" Sammak

3. PLEDGE OF ALLEGIANCE

Chair Hubbard led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

None

5. AWARDS AND RECOGNITION

None

6. CONSENT CALENDAR

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

Agenda Item No. 7 Approval of Minutes for the December 9, 2019 Meeting

Agenda Item No. 8 Approval for Payment of Warrants and Monthly Investment Report

Agenda Item No. 9 San Elijo Water Reclamation Facility Treated Effluent Flows – Monthly Report

Agenda Item No. 10 San Elijo Joint Powers Authority Recycled Water Program – Monthly Report

Motion carried with the following vote of approval:

AYES: Hubbard, Becker, Blakespear, Zito  
NOES: None  
ABSENT: None  
ABSTAIN: None

11. ITEMS REMOVED FROM CONSENT CALENDAR

None

12. RESOLUTION APPROVAL OF SEJPA INVESTMENT POLICY AND GUIDELINES, AND APPOINTMENT OF SEJPA TREASURER

General Manager Thornton recommended that Amy Chang, the new Director of Finance/Administration, be appointed as the SEJPA Treasurer for the remainder of FY2019-2020.

The proposed Investment Policy and Guidelines in Resolution No. 2020-04 is unchanged from 2019-20.

Moved by Board Member Zito and seconded by Chair Hubbard to:

1. Adopt Resolution No. 2020-04, Resolution Approving the San Elijo Joint Powers Authority Investment Policy and Guidelines and Appointment of Amy Chang as SEJPA Treasurer.

Motion carried with the following vote of approval:

AYES: Hubbard, Becker, Blakespear, Zito  
NOES: None  
ABSENT: None  
ABSTAIN: None

13. AGREEMENT AMENDMENT FOR ENGINEERING SERVICES

General Manager Thornton advised that staff is seeking additional engineering support from Carollo Engineers to utilize the electrical model that they developed for the arc flash study to quantify existing loads and to provide recommendations to meet anticipated new power demands. In addition, Carollo will evaluate the existing emergency generator to determine if the generator has capacity available to serve the Water Campus Improvement project.

Moved by Board Member Blakespear and seconded by Board Member Zito to:

1. Authorize the General Manager to amend the professional services agreement with Carollo Engineers for an additional \$34,582.

Motion carried with the following vote of approval:

AYES: Hubbard, Becker, Blakespear, Zito  
NOES: None  
ABSENT: None  
ABSTAIN: None

14. WATER CAMPUS IMPROVEMENT PROJECT UPDATE

The General Manager updated the Board of Directors on the Water Campus improvements project. Mr. Thornton stated that during the design process, PCL Construction provided feedback that the original trail concept that utilized a concrete box culvert for the storm channel relocation would exceed the project budget. To help reduce these anticipated construction costs, Kimley-Horn and Associated (KHA) evaluated the design to identify options to reduce costs. This effort required additional design hours to complete but provided valuable cost control for the project. Mr. Thornton also stated that in preparation for construction, the project team conducted site investigations to locate existing below ground utilities within the project footprint. Review of the data indicates that the multiple wells will likely be required to remove excess water from the site soil prior to construction activities. Additional design effort is required for the well design from Roesling, Nakamura, and Terada Architects (RNT). The architect will provide geotechnical, mechanical, and electrical support in design of the well system utilizing their current sub-consultants. In addition, RNT will also provide a coordinated trenching plan in order to develop a cost-effective plan for routing new utilities within the project site.

Moved by Board Member Zito and seconded by Chair Hubbard to:

1. Authorize the General Manager to amend the professional services agreement with Kimley-Horn and Associates for an additional \$97,600; and
2. Authorize the General Manager to amend the professional services agreement with Roesling, Nakamura, and Terada Architects for an additional \$56,425.

Motion carried with the following vote of approval:

AYES: Hubbard, Becker, Blakespear, Zito  
NOES: None  
ABSENT: None  
ABSTAIN: None

15. GENERAL MANAGER'S REPORT

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

The General Manager stated that on January 6, 2020, Air Scrubber No. 2 encountered mechanical difficulties with its air blower. Staff responded promptly and appropriately. Equipment was repaired and returned to service in 10 Calendar Days. No odor complaints were received during the outage and all air quality samples indicated safe air quality.

16. GENERAL COUNSEL'S REPORT

None

17. BOARD MEMBER COMMENTS

Chair Hubbard commented that the group was looking to move the February Board Meeting to February 24, 2020. All Board Members concurred that the new date would work for them.

18. CLOSED SESSION

None

19. ADJOURNMENT

The meeting adjourned at 10:05 a.m. The next Board of Directors meeting will be held on Monday, February 24, 2020 at 8:30 a.m.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

**SAN ELIJO JOINT POWERS AUTHORITY  
PAYMENT OF WARRANTS  
20-2  
For the Month of January 2020**

<b>Warrant #</b>	<b>Vendor Name</b>	<b>G/L Account</b>	<b>Warrant Description</b>	<b>Amount</b>
38060	A-Check Global	Preemployment Screening	New employee verification	\$ 328.45
38061	Abila	Licenses	Accounting software	\$ 1,123.00
38062	Adler Tank Rentals	Equipment Rental/Lease	Open top tank - 12/02/19 - 12/19/19 and demobilization	\$ 1,070.64
38063	Advanced Air & Vacuum	Services - Maintenance	GA11FF compressors	\$ 1,464.43
38064	Affordable Pipeline Services	Services - Maintenance	Grit from container tank	\$ 770.00
38065	Ametek Brookfield	Services - Maintenance	Loaner - H2S analyzer	\$ 216.77
38066	Atlas Pumping Service Inc.	Services - Grit & Screenings	Grease and scum pumping and Digester clean-out	\$ 4,464.88
38067	Brady Worldwide, Inc.	Supplies - Office	Labels	\$ 1,355.78
38068	Brax Process and Pump Equip.	Repair Parts Expense	Metering pump	\$ 4,358.34
38069	Complete Office	Supplies - Office	Office supplies	\$ 126.03
38070	Void			\$ -
38071	Dell Marketing L.P.	Capital Outlay	Computer	\$ 1,645.65
38072	E & M Electric & Machinery, In	Licenses	Software support and annual licensing fee	\$ 28,815.00
38073	EDCO Waste & Recycling Service	Utilities - Trash	December	\$ 257.48
38074	Forte of San Diego	Services - Janitorial	Janitorial cleaning services and supplies	\$ 1,286.05
38075	GLS US	Postage/Shipping	Lab samples	\$ 20.18
38076	GC Pivotal LLC	Utilities - Internet	T-1 service - February	\$ 323.09
38077	Hardy Diagnostics	Supplies - Lab	Lab supplies	\$ 1,274.15
38078	Home Depot Credit Services	Supplies - Safety	Supplies and tools	\$ 826.90
38079	Idexx Distribution, Inc.	Supplies - Lab	Lab supplies	\$ 2,775.51
38080	Larry Walker Associates	Services - Professional	Training, review, and recommendations	\$ 1,160.00
38081	McMaster-Carr Supply Co.	Supplies - Shop & Field	Hardware supplies	\$ 487.01
38082	MetLife - Group Benefits	Dental/Vision	Dental - January	\$ 1,641.35
38083	Occupational Health Centers	Services - Medical	New employee	\$ 244.00
38084	Robert Half Technology	Service - IT Support	Week end - 10/04/19 and 10/25/19	\$ 4,000.00
38085	Rockwell Solutions	Repair Parts Expense	Impeller and cutters	\$ 3,325.51
38086	Rohan & Sons, Inc	Services - Maintenance	Honeywell thermostat	\$ 238.87
38087	San Dieguito Trophy	Supplies - Office	Update plaque	\$ 32.33
38088	San Dieguito Water District	Utilities - Water (Suppl.)	1190 Oakcrest Park - #080338	\$ 609.73
38089	Test America	Services - Laboratory	Testing water samples	\$ 179.00
38090	Michael Thornton	Supplies - Safety	Eye protection and office supplies reimbursement	\$ 264.99
38091	Unifirst Corporation	Services - Uniforms	Uniform service	\$ 334.62
38092	MUFG Union Bank, NA	Bank Service Charges	Annual account management fee - JPA - 2011 Refunding	\$ 2,013.00
38093	Underground Service Alert/SC	Services - Alarm	Dig alert - December and safe excavation board	\$ 202.91
38094	USA Bluebook	Supplies - Lab	Ammonia reagent, detergent, and standard solution	\$ 541.76
38095	USP Technologies	Supplies - Chem - Odor	Calcium nitrate	\$ 11,764.14
38096	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	\$ 6,040.84
38097	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	\$ 3,230.52
38098	Volt Management Corp	Services - Temp	Period end - 12/13/19 and 12/20/19	\$ 1,738.80
38099	VWR International, Inc.	Supplies - Lab	Lab supplies	\$ 826.79
38100	County of San Diego	Fees - Permits	Emergency - Odor control scrubber	\$ 977.00
38101 - 38153	Void			\$ -
38154	Aflac	EE Deduction Benefits	Aflac - January	\$ 626.76
38155	Allied Storage Containers	Equipment Rental/Lease	20' and 40' storage containers	\$ 172.40
38156	American Compressor Company	Repair Parts Expense	URAI repair kit, drive end impeller and shaft	\$ 853.39
38157	Aquatic Bioassay	Services - Laboratory	Toxicity testing	\$ 1,050.00
38158	AT&T	Utilities - Telephone	Phone service - 12/13/19 - 01/12/20	\$ 414.40
38159	AT&T	Utilities - Telephone	Alarm service - January	\$ 399.60
38160	Atlas Pumping Service Inc.	Services - Grit & Screenings	Roll-off behind building and grease/scum pumping	\$ 1,594.88
38161	Brenntag Pacific, Inc	Supplies - Chem - Odor	Sodium hydroxide	\$ 1,688.27
38162	CA-NV Section AWWA	Dues & Memberships	Certificate - M. Piper	\$ 100.00
38163	California Water Technologies	Supplies - Chem - Ferric Chlo	Ferric chloride	\$ 5,391.76
38164	Carollo Engineers	Services - Professional	Ocean outfall integrity report	\$ 2,314.75
38165	Complete Office	Supplies - Office	Office supplies	\$ 177.26
38166	Corodata	Rent	Record storage - December	\$ 99.68
38167	CS-Amsco	Repair Parts Expense	Repair parts	\$ 2,324.90
38168	David Martinez	Dues & Memberships	Certification exam	\$ 120.00
38169	Encina Wastewater Authority	Service - EWA Support	Resource sharing - HR	\$ 1,457.98
38170	City of Encinitas	Service - IT Support	Admin network - January	\$ 2,703.75
38171	Eurofins Calscience, Inc.	Services - Laboratory	Testing water samples	\$ 1,623.00
38172	Evantec Scientific	Supplies - Lab	Filters	\$ 499.49
38173	Forte of San Diego	Services - Janitorial	February	\$ 1,000.00
38174	Global Power Group Inc.	Services - Maintenance	PM service	\$ 661.68



**SAN ELIJO JOINT POWERS AUTHORITY  
PAYMENT OF WARRANTS  
20-2  
For the Month of January 2020**

<b>Warrant #</b>	<b>Vendor Name</b>	<b>G/L Account</b>	<b>Warrant Description</b>	<b>Amount</b>
38175	Industrial Metal Supply	Repair Parts Expense	Steel angle	\$ 386.12
38176	Larry Walker Associates	Services - Professional	Lab operations manual and training	\$ 2,030.00
38177	McMaster-Carr Supply Co.	Supplies - Shop & Field	Hardware supplies	\$ 479.09
38178	Midas Shop	Vehicle Maintenance	Crew truck - PR1	\$ 233.46
38179	Nobel Systems	Prepaid - Other	GIS annual subscription and GeoViewer	\$ 11,400.00
38180	Eric ORiley	Seminars/Education	Tuition, fees, and textbook	\$ 499.00
38181	Pacific Green Landscape	Services - Landscape	November and January	\$ 5,250.00
38182	Michael Piper	Subsistence - Travel/Rm & Bd	ABPA 23rd annual conference and exam	\$ 203.29
38183	Polydyne Inc.	Supplies - Chem - Polymer	Clarifloc WE-007	\$ 11,799.44
38184	Preferred Benefit Insurance	Dental/Vision	January	\$ 291.90
38185	ProBuild Company, LLC	Supplies - Shop & Field	Shop and field supplies	\$ 302.15
38186	Procopio Cory Hargreaves	Services - Legal	General - December	\$ 1,993.98
38187	RSF Security Systems	Services - Alarm	Cellular central station	\$ 24.67
38188	Rusty Wallis, Inc.	Services - Maintenance	Maintenance supplies	\$ 565.92
38189	Santa Fe Irrigation District	Utilities - Water	11/02/19 - 01/02/20 and 12/03/19 - 01/02/20	\$ 421.70
38190	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - December	\$ 101.24
38191	San Dieguito Water District	Utilities - Water	Recycled water	\$ 759.79
38192	State Water Resources Control	Fees - Permits	Annual permit	\$ 1,400.00
38193	State Water Resources Control	Fees - Permits	Annual permit	\$ 1,638.00
38194	State Water Resources Control	Fees - Permits	Annual permit	\$ 1,638.00
38195	Terminix Processing Center	Services - Maintenance	December	\$ 391.00
38196	Trussell Technologies, Inc	Services - Engineering	Operations plan updates and training	\$ 8,680.50
38197	Unifirst Corporation	Services - Uniforms	Uniform service	\$ 254.38
38198	UPS	Postage/Shipping	Parts	\$ 119.87
38199	USA Bluebook	Supplies - Lab	Buffer 4L	\$ 76.71
38200	Vanessa Hackney	Subsistence - Travel/Rm & Bd	Mileage and office supplies reimbursement	\$ 60.89
38201	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	\$ 6,033.04
38202	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	\$ 41,765.42
38203	Verizon Wireless	Utilities - Telephone	Cell phone service	\$ 1,016.52
38204	WageWorks	Payroll Processing Fees	Admin and compliance fee	\$ 128.75
38205	The Water Research Foundation	Dues & Memberships	WRFMBR - Utility Membership - 01/01/20 - 12/31/20	\$ 2,014.00
38206	WM Corporate Services, Inc.	Services - Grit & Screenings	10 yd roll-off	\$ 1,523.58
38207	WorkPartners Occupational	Services - Medical	New employee	\$ 285.00
On-line 368	BankCard Center	Vehicle Maintenance	Security, permits, supplies, and repairs	\$ 3,462.23
On-line 369	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 12/14/19 -12/27/19	\$ 14,123.41
On-line 370	ReadyRefresh	Supplies - Lab	Kitchen and lab supplies	\$ 478.50
On-line 371	BankCard Center	Vehicle Maintenance	Parts, offices supplies, and security	\$ 3,377.76
On-line 372	Fuelman	Fuel	December	\$ 694.19
On-line 373	P.E.R.S.	Medical Insurance - Pers	Health - February	\$ 18,128.64
On-line 374	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 12/28/19 - 01/10/20	\$ 13,284.29
On-line 375	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 12/04/19 - 01/06/20	\$ 50,383.75
On-line 376	Board of Equalization	Accrued Sales Tax Payable	Sales tax - 10/01/19 - 12/31/19	\$ 125.00
On-line 377	Sun Life Financial	Life Insurance/Disability	Life and disability insurance - February	\$ 1,550.34
				<b>\$ 327,004.97</b>

SAN ELIJO JOINT POWERS AUTHORITY

PAYMENT OF WARRANTS SUMMARY

**For the Month of January 2020  
As of January 31, 2020**

PAYMENT OF WARRANTS		\$ 327,004.97
Reference Number	20-2	

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 the SEJPA, including the Member Agency commitment in their operating budgets to support the operations of the SEJPA, are expected to be adequate to meet the SEJPA's obligations over the next six months. I also certify that the SEJPA's investment portfolio complies with the SEJPA's investment policy.



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Amy Chang  
Director of Finance & Administration

STATEMENT OF FUNDS AVAILABLE FOR PAYMENT OF WARRANTS  
AND INVESTMENT INFORMATION  
As of January 31, 2020

FUNDS ON DEPOSIT WITH	AMOUNT
<b>LOCAL AGENCY INVESTMENT FUND</b>	
<i>(DECEMBER 2019 YIELD 2.043%)</i>	
RESTRICTED SRF RESERVE	\$ 630,000.00
UNRESTRICTED DEPOSITS	\$ 8,205,610.59
<b>CALIFORNIA BANK AND TRUST</b>	
<i>(DECEMBER 2019 YIELD 0.01%)</i>	
REGULAR CHECKING	\$ 1,285,995.58
PAYROLL CHECKING	\$ 5,000.00
<b>UNION BANK - TRUSTEE (BOND FUNDS)</b>	
BLACKROCK	\$ 327,388.42
<i>(DECEMBER 2019 YIELD 1.60%)</i>	
LAIF	\$ 14,892,644.98
<i>(DECEMBER 2019 YIELD 2.043%)</i>	
<b>PARS - TRUSTEE (POST-EMPLOYMENT BENEFITS TRUST)</b>	
<i>(DECEMBER 2019 YIELD 1.67%)</i>	\$ 53,633.09
<b>TOTAL RESOURCES</b>	<b>\$ 25,400,272.66</b>

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

February 25, 2020

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO WATER CAMPUS TREATED EFFLUENT FLOWS – MONTHLY REPORT

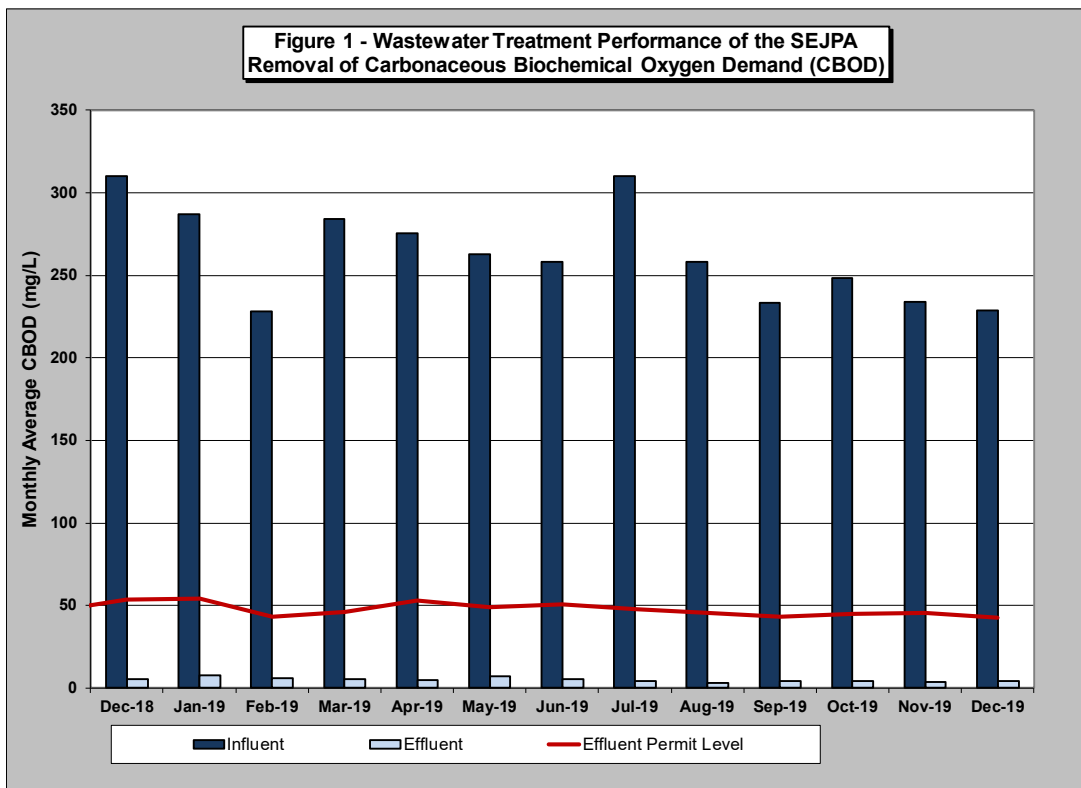
RECOMMENDATION

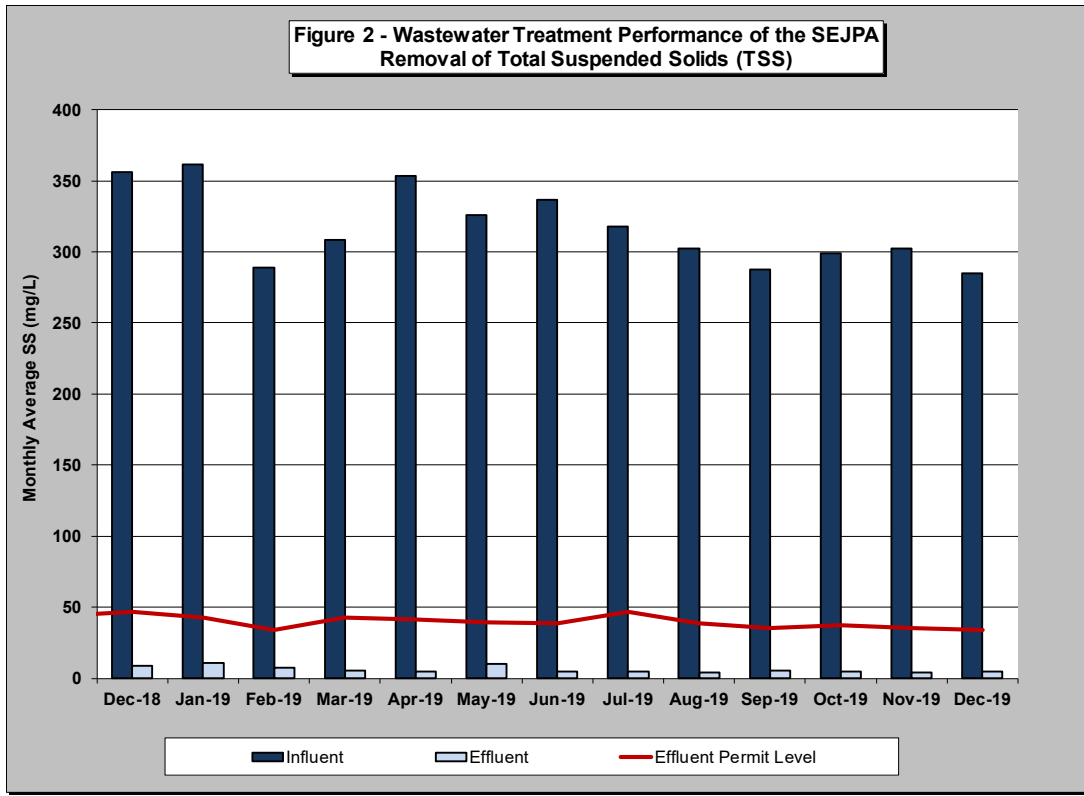
No action required. This memorandum is submitted for information only.

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 December 2019. The primary indicators of treatment performance include the removal of Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Suspended Solids (TSS). The SEJPA is required to remove a minimum of 85 percent of the CBOD and TSS from the wastewater. Treatment levels for CBOD and TSS were 98.1 and 98.4 percent removal, respectively (as shown in Figure 1 and Figure 2).





Member Agency Flows

Presented below are the influent and effluent flows for the month of December. Average daily influent flows were recorded for each Member Agency. Total effluent flow was calculated for the San Elijo Water Campus.

	December	
	<u>Influent (mgd)</u>	<u>Effluent (mgd)*</u>
Cardiff Sanitary Division	1.347	1.178
City of Solana Beach	0.946	0.827
Rancho Santa Fe SID	0.173	0.152
City of Del Mar	0.483	0.422
<b>Total San Elijo WRF Flow</b>	<b>2.949</b>	<b>2.579</b>

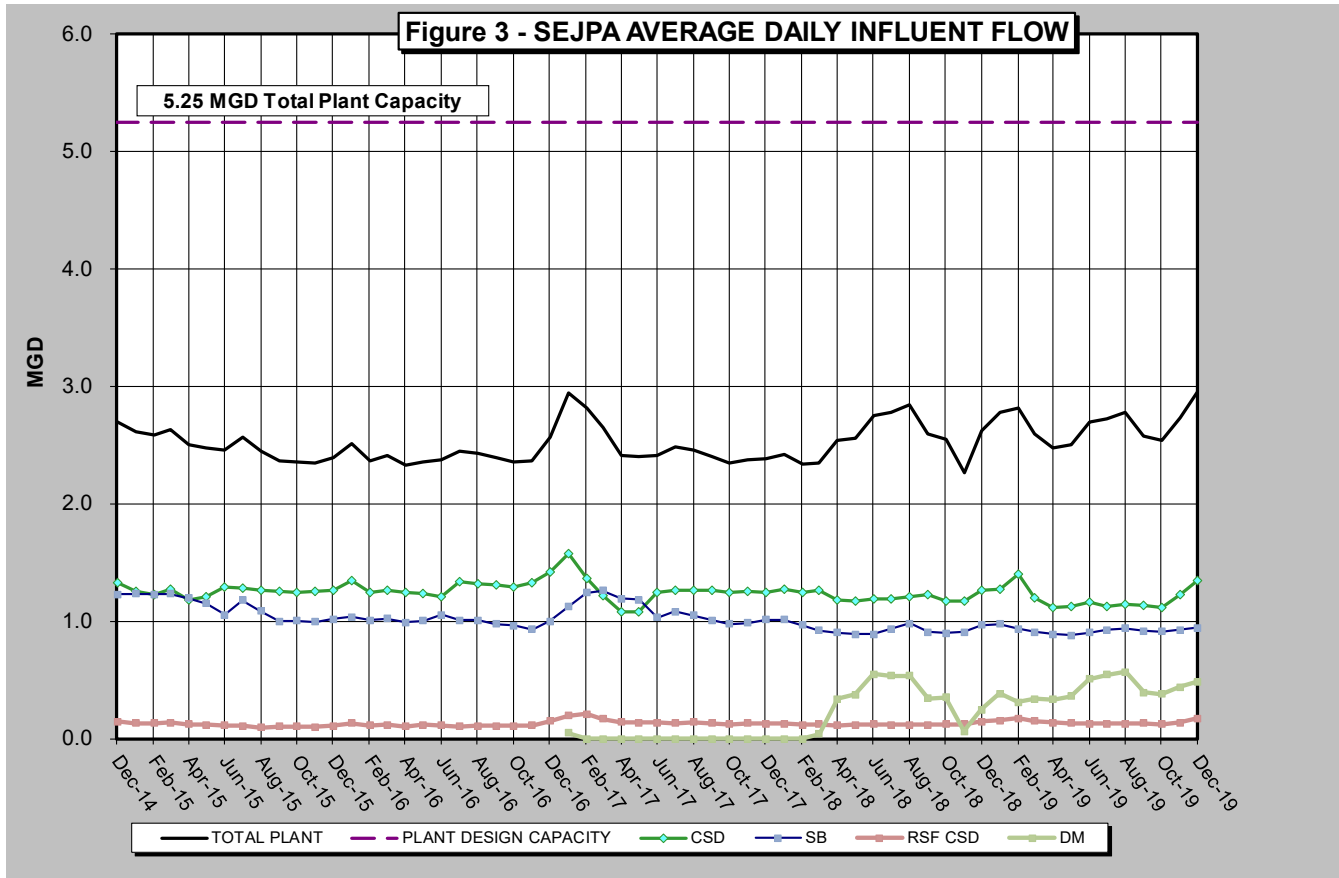
\* Effluent is calculated by subtracting the recycled water production from the influent wastewater.

Table 1 (below) presents the historical average, maximum, and unit influent and effluent flow rates per month for each of the Member Agencies during the past 5 years. It also presents the number of connected Equivalent Dwelling Units (EDUs) for each of the Member Agencies during this same time period.

**TABLE 1 - SAN ELJO WATER RECLAMATION FACILITY MONTHLY REPORT - FLOWS AND EDUS**

MONTH	AVERAGE DAILY INFLUENT FLOW RATE (MGD)					AVERAGE DAILY EFFLUENT FLOW RATE (MGD)					CONNECTED EDUS					AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDU/DAY)							
	CSD	RSF	CSD	SB	DM	TOTAL PLANT	CSD	RSF	CSD	SB	DM	TOTAL PLANT	EDUS	RSF	CSD	SB	DM	TOTAL EDUS	CSD	RSF	SB	DM	TOTAL PLANT
Jun-14	1.341	0.126	1.188			2.655	0.207	0.020	0.183			0.410	8,333	498	7,728			16,559	161	253	154		160
Jul-14	1.271	0.130	1.307			2.708	0.232	0.024	0.239			0.495	8,338	499	7,728			16,565	152	261	169		163
Aug-14	1.228	0.130	1.298			2.656	0.227	0.024	0.239			0.490	8,345	500	7,728			16,573	147	260	168		160
Sep-14	1.215	0.113	1.232			2.560	0.211	0.019	0.214			0.444	8,351	500	7,728			16,579	145	226	159		154
Oct-14	1.204	0.114	1.198			2.516	0.394	0.038	0.392			0.824	8,353	500	7,728			16,581	144	228	155		152
Nov-14	1.237	0.118	1.198			2.553	0.667	0.063	0.646			1.376	8,354	502	7,728			16,584	148	235	155		154
Dec-14	1.323	0.147	1.229			2.699	1.163	0.129	1.081			2.373	8,355	502	7,728			16,585	158	293	159		163
Jan-15	1.253	0.130	1.232			2.615	0.984	0.102	0.967			2.053	8,359	503	7,977			16,838	150	259	154		155
Feb-15	1.229	0.132	1.228			2.589	0.757	0.081	0.757			1.595	8,361	504	7,977			16,841	147	262	154		154
Mar-15	1.269	0.135	1.231			2.635	0.583	0.062	0.566			1.211	8,365	504	7,977			16,846	152	268	154		156
Apr-15	1.183	0.124	1.196			2.503	0.350	0.036	0.354			0.740	8,366	504	7,977			16,847	141	246	150		149
May-15	1.209	0.117	1.149			2.475	0.545	0.053	0.518			1.116	8,367	505	7,977			16,848	144	232	144		147
Jun-15	1.287	0.113	1.052			2.452	0.362	0.032	0.296			0.690	8,369	506	7,977			16,852	154	224	132		146
Jul-15	1.282	0.110	1.176			2.568	0.392	0.034	0.359			0.785	8,370	510	8,003			16,883	153	216	147		152
Aug-15	1.264	0.095	1.087			2.446	0.315	0.023	0.271			0.609	8,371	510	8,003			16,884	151	186	136		145
Sep-15	1.256	0.105	1.001			2.362	0.457	0.038	0.364			0.859	8,372	511	8,003			16,885	150	206	125		140
Oct-15	1.243	0.106	1.002			2.351	0.681	0.058	0.549			1.288	8,373	511	8,003			16,886	148	208	125		139
Nov-15	1.250	0.100	0.994			2.344	0.792	0.063	0.630			1.485	8,376	511	8,003			16,889	149	196	124		139
Dec-15	1.266	0.107	1.016			2.389	0.971	0.082	0.780			1.833	8,377	511	8,003			16,891	151	210	127		141
Jan-16	1.342	0.131	1.037			2.510	1.189	0.116	0.918			2.223	8,380	511	8,003			16,894	160	257	130		149
Feb-16	1.245	0.112	1.008			2.365	0.780	0.070	0.631			1.481	8,383	512	8,003			16,897	149	219	126		140
Mar-16	1.267	0.116	1.023			2.406	0.763	0.070	0.616			1.449	8,388	512	8,003			16,903	151	227	128		142
Apr-16	1.240	0.102	0.990			2.332	0.675	0.055	0.539			1.269	8,389	512	8,003			16,904	148	199	124		138
May-16	1.238	0.117	1.002			2.357	0.505	0.048	0.409			0.962	8,389	512	8,003			16,904	148	229	125		139
Jun-16	1.205	0.111	1.055			2.371	0.362	0.033	0.317			0.712	8,390	514	8,003			16,907	144	216	132		140
Jul-16	1.336	0.105	1.008			2.449	0.586	0.046	0.442			1.074	8,392	514	8,020			16,926	159	204	126		145
Aug-16	1.317	0.107	1.007			2.431	0.647	0.053	0.495			1.195	8,393	516	8,020			16,929	157	207	126		144
Sep-16	1.311	0.110	0.975			2.396	0.601	0.050	0.447			1.098	8,394	516	8,020			16,930	156	213	122		142
Oct-16	1.289	0.108	0.962			2.359	0.521	0.043	0.389			0.953	8,397	517	8,020			16,933	154	209	120		139
Nov-16	1.323	0.113	0.932			2.368	0.730	0.062	0.514			1.306	8,403	517	8,020			16,940	157	219	116		140
Dec-16	1.419	0.150	0.998			2.567	1.179	0.125	0.829			2.133	8,406	549	8,020			16,975	169	273	124		151
Jan-17	1.572	0.197	1.125	0.047		2.941	1.489	0.186	1.066	0.045		2.786	8,409	549	8,020	1,716		18,694	187	359	140	142	157
Feb-17	1.361	0.211	1.240	0.000		2.812	1.236	0.192	1.126	0.000		2.554	8,409	549	8,020	1,716		18,694	162	384	155	0	166
Mar-17	1.215	0.170	1.261	0.000		2.646	0.856	0.120	0.889	0.000		1.865	8,413	550	8,020	1,716		18,698	144	309	157	0	156
Apr-17	1.077	0.139	1.190	0.000		2.406	0.841	0.108	0.929	0.000		1.878	8,414	551	8,020	1,716		18,700	128	252	148	0	142
May-17	1.082	0.136	1.184	0.000		2.402	0.842	0.106	0.922	0.000		1.870	8,416	551	8,049	1,716		18,732	129	247	147	0	141
Jun-17	1.241	0.134	1.032	0.000		2.407	0.980	0.106	0.815	0.000		1.901	8,420	551	8,049	1,716		18,737	147	243	128	0	141
Jul-17	1.267	0.130	1.083	0.000		2.480	0.802	0.082	0.685	0.000		1.569	8,421	551	8,061	1,716		18,749	150	236	134	0	146
Aug-17	1.262	0.139	1.051	0.000		2.452	0.852	0.094	0.709	0.000		1.655	8,423	553	8,061	1,716		18,753	150	251	130	0	144
Sep-17	1.264	0.130	1.006	0.000		2.400	0.866	0.089	0.689	0.000		1.644	8,427	555	8,061	1,716		18,759	150	234	125	0	141
Oct-17	1.242	0.123	0.977	0.000		2.342	0.543	0.053	0.427	0.000		1.023	8,431	555	8,061	1,716		18,763	147	222	121	0	137
Nov-17	1.257	0.131	0.983	0.000		2.371	0.661	0.069	0.517	0.000		1.247	8,431	554	8,061	1,716		18,762	149	237	122	0	139
Dec-17	1.248	0.125	1.014	0.000		2.387	0.693	0.070	0.563	0.000		1.326	8,431	554	8,061	1,716		18,762	148	226	126	0	140
Jan-18	1.276	0.125	1.015	0.000		2.416	0.886	0.087	0.705	0.000		1.678	8,435	555	8,061	1,716		18,767	151	225	126	0	142
Feb-18	1.249	0.118	0.968	0.000		2.335	0.601	0.056	0.466	0.000		1.123	8,441	555	8,061	1,716		18,773	148	213	120	0	137
Mar-18	1.265	0.122	0.922	0.039		2.348	0.857	0.083	0.625	0.026		1.591	8,451	555	8,061	1,716		18,782	150	220	114	149	125
Apr-18	1.184	0.115	0.901	0.337		2.537	0.627	0.061	0.477	0.179		1.344	8,451	559	8,061	1,716		18,786	140	206	112	129	135
May-18	1.173	0.119	0.890	0.376		2.558	0.566	0.057	0.430	0.182		1.235	8,461	562	8,061	1,716		18,799	139	212	110	144	136
Jun-18	1.188	0.124	0.888	0.549		2.749	0.557	0.058	0.417	0.258		1.290	8,466	562	8,061	1,716		18,804	140	221	110	210	146
Jul-18	1.193	0.118	0.933	0.537		2.781	0.619	0.061	0.484	0.278		1.442	8,478	562	8,083	2,611		19,733	141	210	115	206	141
Aug-18	1.210	0.119	0.980	0.534		2.843	0.686	0.067	0.555	0.303		1.611	8,481	563	8,083	2,611		19,737	143	212	121	205	144
Sep-18	1.230	0.117	0.905	0.341		2.593	0.677	0.064	0.498	0.188		1.427	8,481	563	8,083	2,611		19,737	145	208	112	131	131
Oct-18	1.172	0.121	0.897	0.354		2.544	0.529	0.054	0.405	0.160		1.148	8,481	564	8,083	2,611		19,738	138	215	111	136	129
Nov-18	1.173	0.121	0.906	0.064		2.264	0.495	0.051	0.383	0.027		0.956	8,488	565	8,083	2,611		19,746	138	214	112	136	129
Dec-18	1.264	0.144	0.967	0.244		2.619	1.017	0.116	0.778	0.196		2.107	8,491	566	8,083	2,611		19,751	149	255	120	136	138
Jan-19	1.269	0.153	0.975	0.384		2.781	1.221	0.147	0.938	0.369		2.675	8,491	566	8,083	2,611		19,751	149	271	121	147	141
Feb-19	1.400	0.173	0.935	0.309		2.817	1.256	0.156	0.839	0.277		2.528	8,492	566	8,083	2,611		19,752	165	306	116	137	145
Mar-19	1.200	0.149	0.908	0.340		2.597	0.956	0.119	0.724	0.271		2.070	8,493	568	8,083	2,611		19,755	141	263	112	132	132
Apr-19	1.119	0.138	0.887	0.334		2.478	0.330	0.040	0.262	0.099		0.731	8,494	568	8,083	2,611		19,756	132	243	110	128	125
May-19	1.1																						

Figure 3 (below) presents the 5-year historical average daily flows per month for each Member Agency. This is to provide a historical overview of the average treated flow by each agency. Also shown in Figure 3 is the total wastewater treatment capacity of the plant, 5.25 mgd, of which each Member Agency has 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.



City of Escondido Flows

The average and peak flow rate for the month of December 2019 from the City of Escondido's Hale Avenue Resource Recovery Facility, which discharges through the San Elijo Ocean Outfall, is reported below.

	<b>Flow (mgd)</b>
Escondido (Average flow rate)	11.71
Escondido (Peak flow rate)	19.6

Connected Equivalent Dwelling Units

The City of Solana Beach and the City of Del Mar updated the connected EDUs number that is reported to the SEJPA in September 2019. The City of Encinitas and Rancho Santa Fe CSD report their connected EDUs every month. The number of EDUs connected for each of the Member Agencies and lease agencies is as follows:

	<b>Connected (EDU)</b>
Cardiff Sanitary Division	8,516
Rancho Santa Fe SID	571
City of Solana Beach	7,768
San Diego (to Solana Beach)	337
City of Del Mar	2,612
<b>Total EDUs to System</b>	<b>19,804</b>

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager



SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

February 25, 2020

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO RECYCLED WATER PROGRAM – MONTHLY REPORT

RECOMMENDATION

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

DISCUSSION

*Recycled Water Production*

For the month of December 2019, recycled water demand was 19.15 acre-feet (AF), which was met using 19.15 AF of recycled water and 0.0 AF supplementation with potable water.

December demand was 60% below budget expectations of 48 AF. The total water production for FY 2019-20 is slightly below budget (3.7%) for the first 6 months.

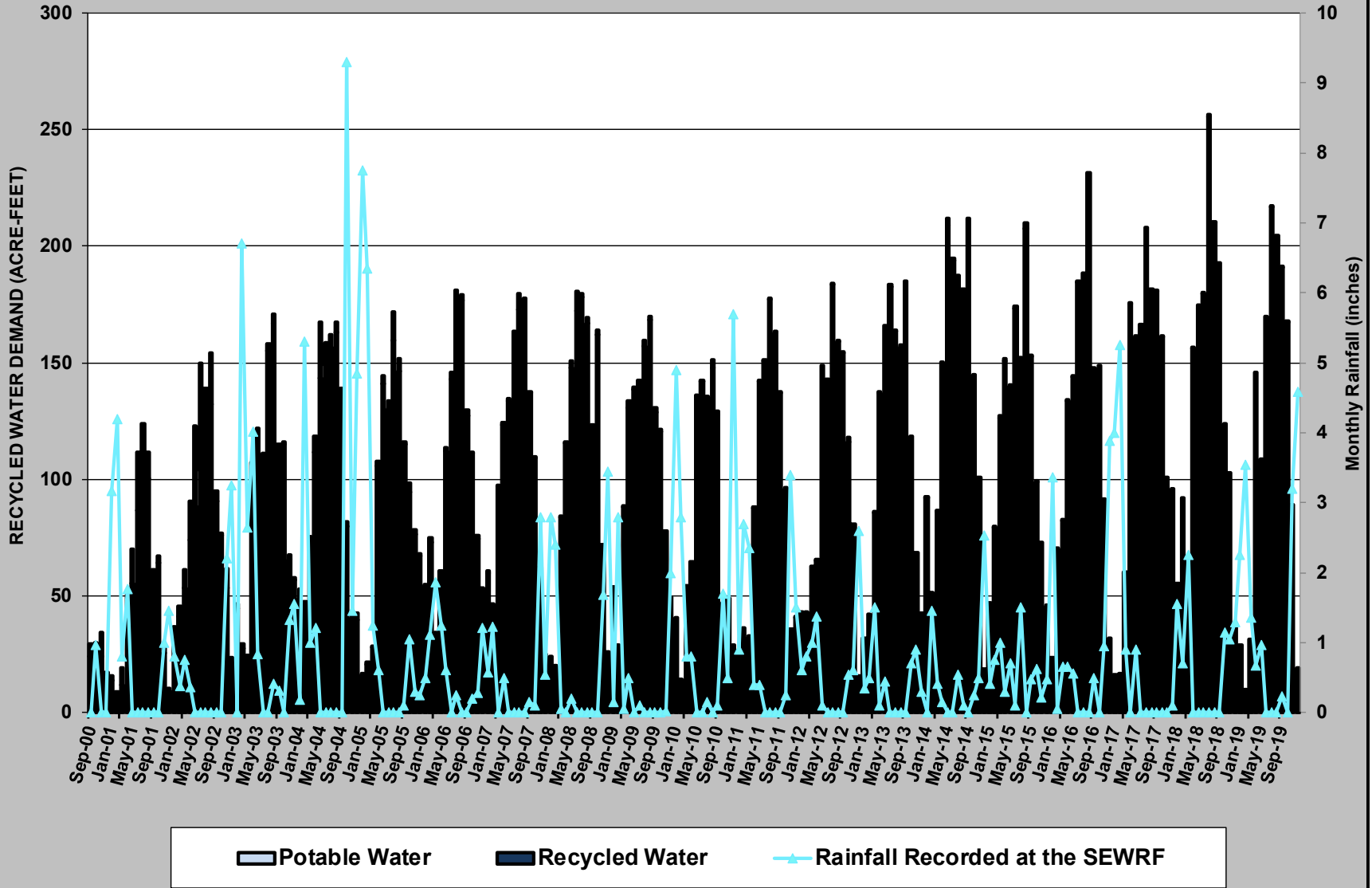
Figure 1 (attached) provides monthly demands for recycled water since deliveries began in September 2000. Figure 2 (attached) provides a graphical view of annual recycled water demand spanning the last 19 fiscal years. Figure 3 (attached) shows the monthly recycled water demand for each December since the program began. Figure 4 (attached) compares budget versus actual recycled water sales for FY 2019-20.

Respectfully submitted,

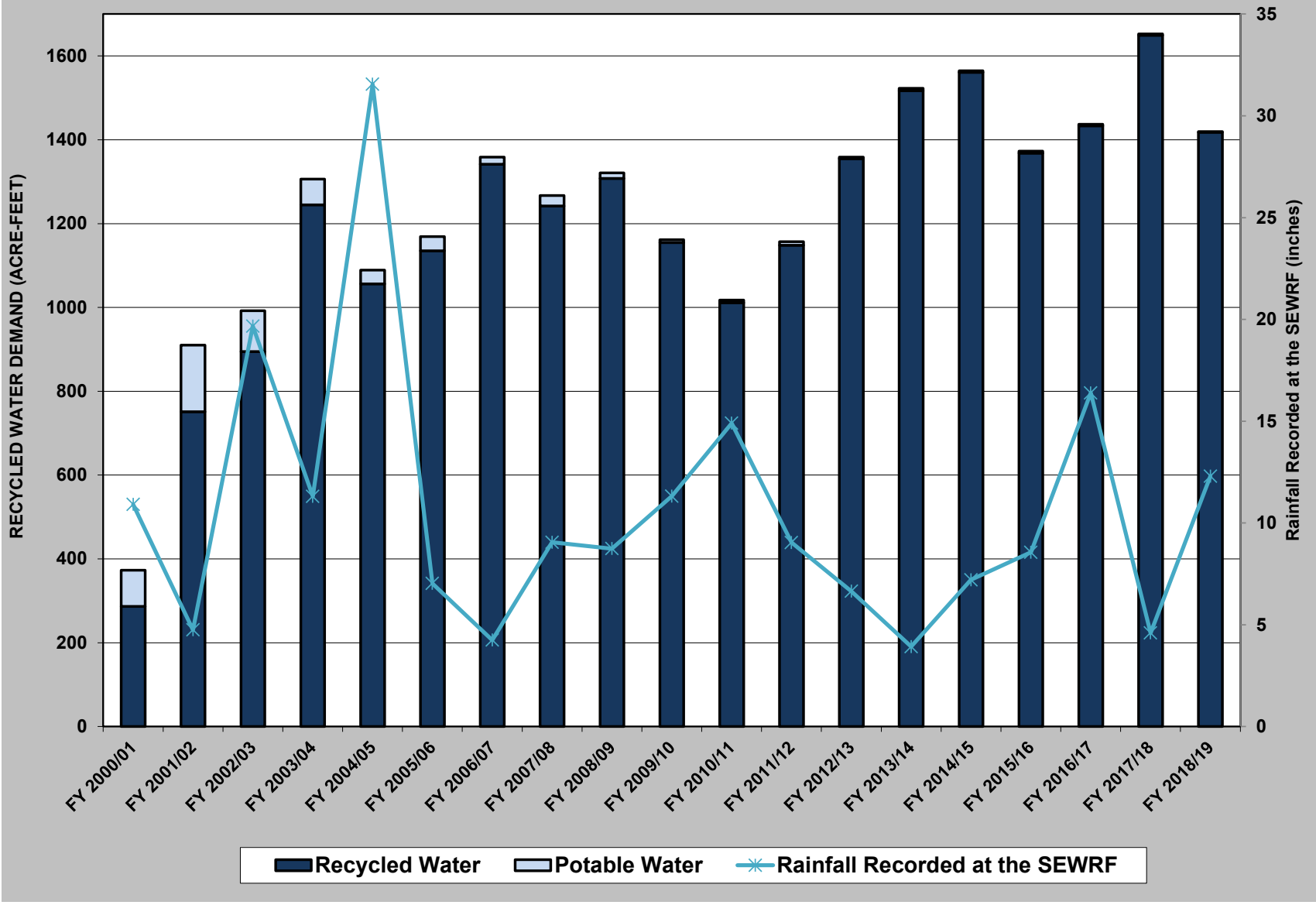


Michael T. Thornton, P.E.  
General Manager

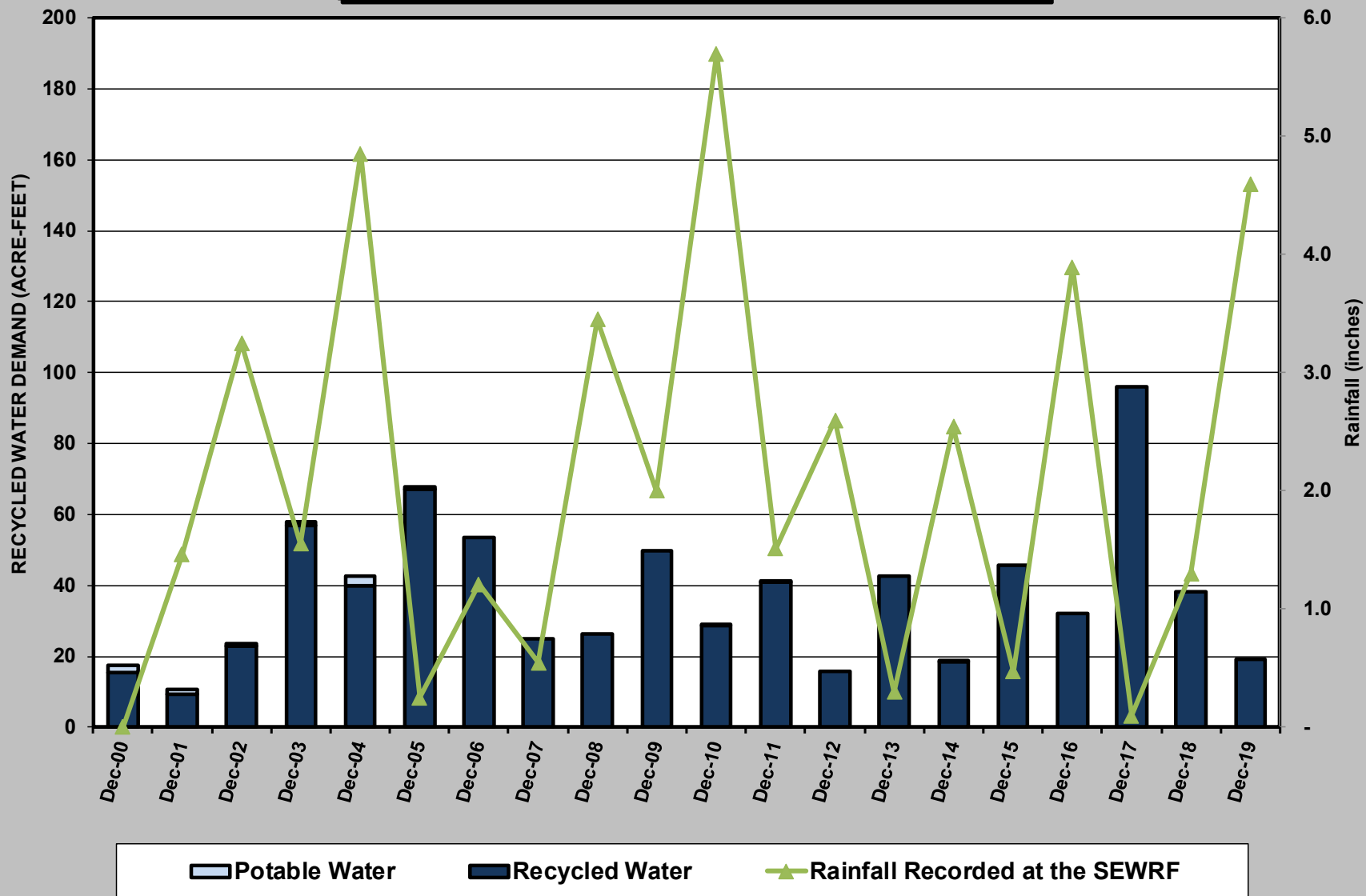
**Figure 1 - MONTHLY RECYCLED WATER DEMAND**



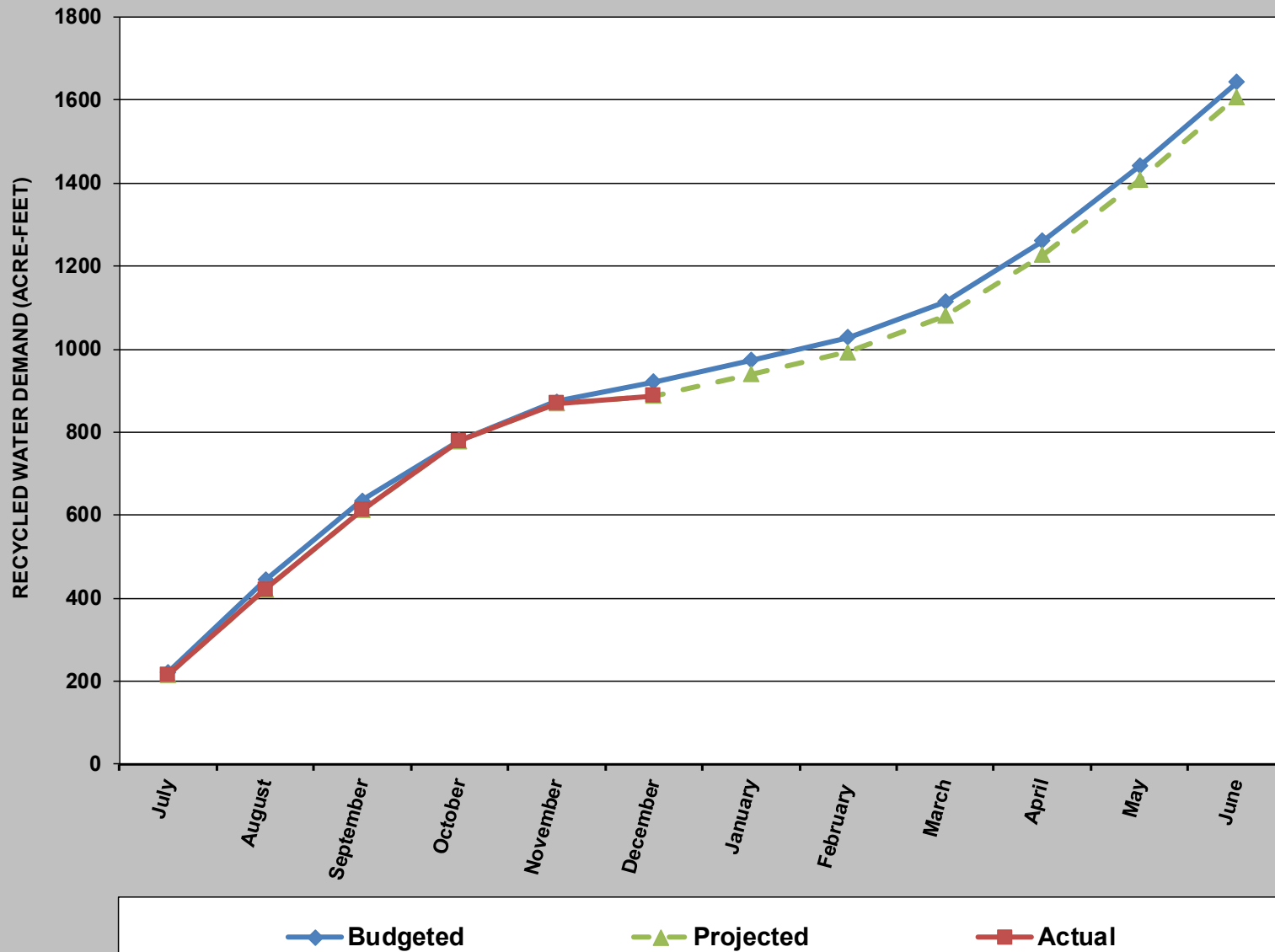
**Figure 2 - RECYCLED WATER DEMAND by FISCAL YEAR**



**Figure 3 - DECEMBER RECYCLED WATER DEMAND**



**Figure 4 - RECYCLED WATER DEMAND BUDGET vs ACTUAL**





San Elijo Joint Powers Authority  
San Elijo Water Reclamation Facility

## OUTFALL INTEGRITY REPORT

FINAL | January 2020





San Elijo Joint Powers Authority  
San Elijo Water Reclamation Facility  
**OUTFALL INTEGRITY REPORT**

FINAL | January 2020

Digitally signed by Jeffrey A. Weishaar  
Contact Info: Carollo Engineers, Inc.  
Date: 2020.01.06 10:45:48-08'00'



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## 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 (RSFCSD).

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 (HARRF) 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., (Carollo) 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 (HDD), which used remote micro tunneling to drill and install the new HDPE piping beneath the San Elijo Lagoon, the North County Transit District (NCTD) 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 (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 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.

## 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 (psi). 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 August and early September of 2019, 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. The divers used a Nikon COOLPIX AW130 camera and a GoPro digital 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 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

General inspection of the ocean outfall consisted of visual examination of the exposed sections of the RCP. The visible portions were in good condition and showed no signs of spalling or other deficiencies. All observed joints were in alignment and showed no signs of leaking.

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. Figure 4 shows a portion of the outfall pipe showing signs of marine growth.



Figure 4 Marine Growth on Joint and Piping

#### 3.2.2.2 Ballasts

The ocean outfall has undergone several reballasting projects with the most recent reballasting project occurring in 2005. The 2005 project replaced ballast rock that had shifted away from the structure due to ocean currents and wave energy. Upon MTS' 2019 inspection, the ballast rock on the pipeline showed no significant signs of movement since the last reballasting project.

#### 3.2.2.3 Pile Supports

The anodes were recently replaced as part of a preventative maintenance project. Efforts were made to uncover buried pile supports and record anode life. However, only 5 of 35 were able to be recorded. The anodes recorded had an estimated 100 percent anode mass remaining. Readings from this survey and previous surveys can be found in the MTS Report in Appendix B.

#### 3.2.2.4 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.

All portholes and anodes were visually inspected and were found to be in 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 No. 3 and surrounding rock ballast with marine growth.

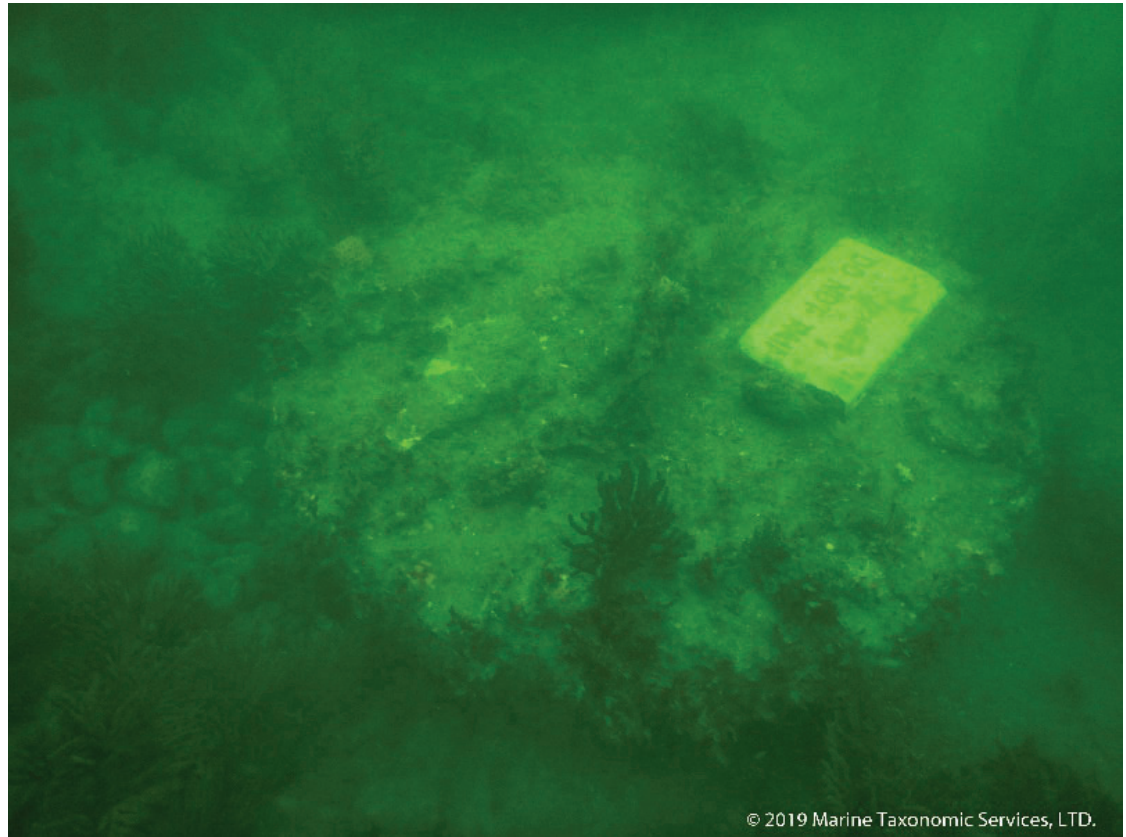


Figure 5 Porthole No. 3

#### 3.2.2.5 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. Figure 6 shows an open and clear diffuser port. All diffusers were flowing well, and any marine growth that was found immediately around the diffuser ports was removed.

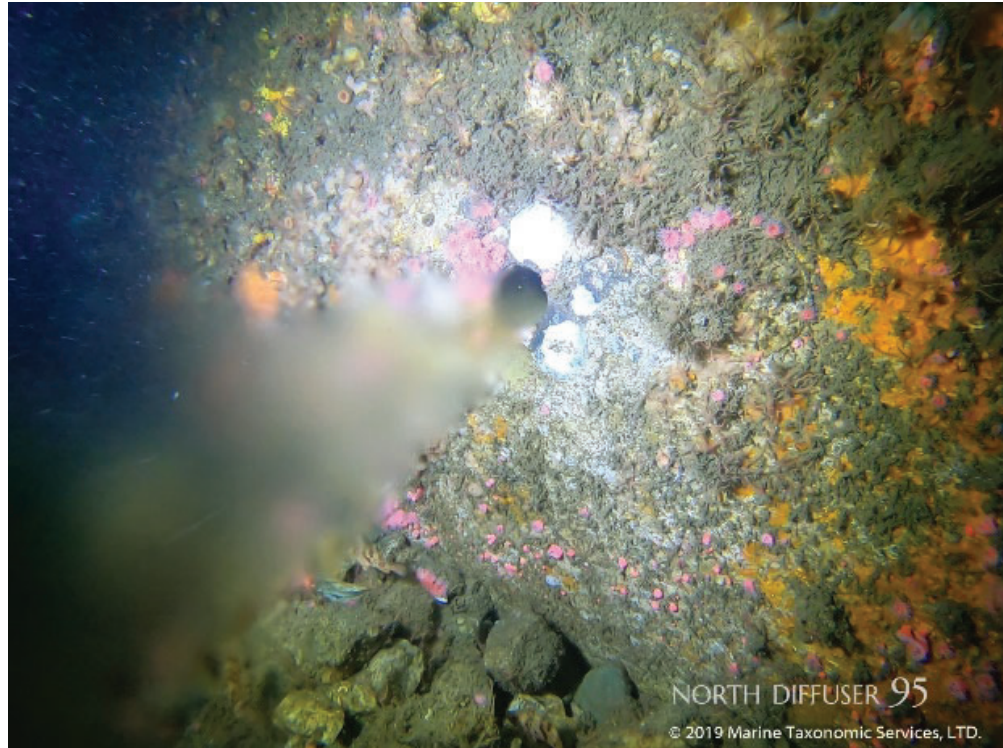


Figure 6 Clear Diffuser Port

## 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

- 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 35 pile support structures, complete structural inspection of anodes, and add them once they re-emerge from the littoral sands. The anodes seem to be exposed the most in the winter months.

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

February 25, 2020

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: Director of Operations

SUBJECT: SAN ELIJO OCEAN OUTFALL 2019 INTEGRITY REPORT

RECOMMENDATION

It is recommended that the Board of Directors:

1. Accept and file the San Elijo Ocean Outfall Year 2019 Integrity Report prepared by 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 Carollo Engineers to complete the 2019 outfall inspection and integrity report as the responsible Engineer of Record. Marine Taxonomic Services, Inc. (MTS) partnered with Carollo to perform dive operations that were conducted in late August through early September 2019. 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;
- Attrition or the loss of the ballast materials as a result of physical, biological, or geologic processes;
- Scour of the nearby marine sediments;
- 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. The anodes on all Portholes appear to have considerable 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. This year, five of the pile supports were exposed during the inspection. All of the exposed pile supports have good, working anodes attached.

## SUMMARY AND RECOMMENDATIONS

Carollo Engineers, as the responsible Engineer of Record, 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.
- Anodes were in good condition and have considerable mass remaining where these were visible and could be inspected.
- No kelp was growing on the pipeline or ballast.
- The pile supports surveyed during this inspection were found to be completely protected.
- Marine growth that was observed around the diffuser ports was removed to prevent blockage.
- All diffusers were flowing well.

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

- Complete a Submersible, 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.

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>

It is therefore recommended that the Board of Directors:

1. Accept and file the San Elijo Ocean Outfall Year 2019 Integrity Report prepared by Carollo Engineers; and
2. Discuss and take action as appropriate.

Respectfully submitted,



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Christopher A. Trees, P.E.  
Director of Operations

Attachment: Summary report without appendices

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

February 25, 2020

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: Director of Finance and Administration

SUBJECT: SAN ELIJO JOINT POWERS AUTHORITY MID-YEAR REVIEW OF THE  
FISCAL YEAR 2019-20 OPERATING BUDGET

RECOMMENDATION

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

BACKGROUND

San Elijo Joint Powers Authority (SEJPA) provides wastewater treatment and disposal, water recycling, and technical support to local clean-water programs. In providing these services, SEJPA seeks to accomplish its mission in an environmentally, socially, and fiscally responsible manner. Each of the programs below is funded by the customer base that is served, and cost allocations are generally applied based on actual flows treated or level of effort provided. The total budget for this Fiscal Year (FY 2019-20) is \$11,070,853 which includes debt service (\$2,457,071), capital (\$1,672,427), and operating expense (\$6,941,355). This staff report is a mid-year review of the operating expenses for the programs managed and operated by SEJPA that includes:

- Wastewater Treatment
- Laboratory Services
- Ocean Outfall
- Cardiff Pump Stations
- Solana Beach Pump Stations
- City of Solana Beach Services
- Encinitas Pump Stations
- Encinitas Storm Water
- Del Mar Pump Station
- Recycled Water

DISCUSSION

The following information is an estimate of expenses for FY 2019-20, which ends June 30, 2020. SEJPA's management developed the mid-year fiscal review based on actual costs incurred through the first 6 months of the fiscal year, cost trends, and anticipated future costs. Estimates provided in this report are based on current information. Final results may differ due to emergencies, unplanned repairs, or unforeseen events.

Below are tables by program and expense category showing the forecast, budget, variance to budget, and percentage of budget spent.

### **Expense by Program**

<b>Program</b>	<b>Estimate</b>	<b>Budget</b>	<b>Over/(Under)</b>	<b>% Budget</b>
	<b>FY 2019-20</b>	<b>FY 2019-20</b>	<b>Budget</b>	<b>Spent</b>
Wastewater Treatment	2,971,386	3,012,864	(41,478)	98.6%
Laboratory	606,831	565,365	41,466	107.3%
Ocean Outfall	803,603	835,925	(32,322)	96.1%
Cardiff Sanitary Division	259,375	283,454	(24,079)	91.5%
Encinitas Sanitary Division	132,525	141,940	(9,415)	93.4%
City of Encinitas	31,092	31,179	(87)	99.7%
City of Solana Beach	434,120	471,634	(37,514)	92.0%
City of Solana Beach Services	13,117	13,151	(34)	99.7%
City of Del Mar	47,748	50,834	(3,086)	93.9%
<b>Programs before Recycled Water</b>	<b>5,299,797</b>	<b>5,406,346</b>	<b>(106,549)</b>	<b>98.0%</b>
<b>Recycled Water</b>	<b>1,598,866</b>	<b>1,535,009</b>	<b>63,857</b>	<b>104.2%</b>
<b>Total All SEJPA Programs</b>	<b>6,898,663</b>	<b>6,941,355</b>	<b>(42,692)</b>	<b>99.4%</b>

### **Expense by Category**

<b>Expense Category</b>	<b>Estimate</b>	<b>Budget</b>	<b>Over/(Under)</b>	<b>% Budget</b>
	<b>FY 2019-20</b>	<b>FY 2019-20</b>	<b>Budget</b>	<b>Spent</b>
Personnel	3,224,800	3,242,275	(17,475)	99.5%
Supplies & Services	3,499,489	3,414,880	84,609	102.5%
Capital Outlay	174,374	95,800	78,574	182.0%
Contingency	-	188,400	(188,400)	0.0%
<b>Total All SEJPA Programs</b>	<b>6,898,663</b>	<b>6,941,355</b>	<b>(42,692)</b>	<b>99.4%</b>

Personnel costs are tracking about at budget. Supplies and Services are tracking slightly above budget due to Environmental Laboratory Accreditation Program (ELAP) compliance related expenses. Capital Outlay is higher than expected due to the replacement of aging pumps and motors that were scheduled to be replaced next year (FY 2020-21). The replaced equipment had been in operations for 20 years, and operational reliability concerns prompted the replacement in this fiscal year.



The table below is a summary of expenses for Supplies and Services.

### **Supplies and Services Expense**

	<b>Estimate</b>	<b>Budget</b>	<b>Over/(Under)</b>	<b>% Budget</b>
<b><i>Supplies and Services</i></b>	<b>FY 2019-20</b>	<b>FY 2019-20</b>	<b>Budget</b>	<b>Over/(Under)</b>
Utilities	942,406	978,230	(35,824)	96.3%
Contracted services	1,093,514	1,100,590	(7,076)	99.4%
Supplies	487,142	491,858	(4,716)	99.0%
Miscellaneous	339,624	259,506	80,118	130.9%
Disposal services	257,027	220,450	36,577	116.6%
Repair parts expense	197,487	198,349	(862)	99.6%
Permit/purveyor fees	115,667	97,179	18,488	119.0%
Insurance	66,622	68,719	(2,097)	96.9%
<b>Total All SEJPA Programs</b>	<b>3,499,489</b>	<b>3,414,881</b>	<b>84,608</b>	<b>102.5%</b>

Overall for Supplies and Services, SEJPA programs are anticipated to be slightly over budget by \$84,608 or 2.5%. Miscellaneous is higher than budget due to the procurement of new equipment and supplies to comply with ELAP regulatory changes and equipment rental for digester cleaning. Disposal services is over budget as a result of actual bid amount exceeding estimated amount. Permit/purveyor fees are trending higher than our anticipated budget amount. Utilities, which includes electricity, water, gas, is tracking below budget. Contingency funding of approximately \$145,700 is anticipated to be used to offset additional expenses.

### **Expenses by Program**

#### **Wastewater Treatment**

	<b>Estimate</b>	<b>Budget</b>	<b>Over/(Under)</b>	<b>% Budget</b>
<b><i>Expense Category</i></b>	<b>FY 2019-20</b>	<b>FY 2019-20</b>	<b>Budget</b>	<b>Spent</b>
Personnel	1,387,033	1,387,439	(406)	100.0%
Supplies & Services	1,543,219	1,506,085	37,134	102.5%
Capital Outlay	41,133	44,040	(2,907)	93.4%
Contingency	-	75,300	(75,300)	0.0%
<b>Total Wastewater Treatment</b>	<b>2,971,385</b>	<b>3,012,864</b>	<b>(41,479)</b>	<b>98.6%</b>

This program is the cost center for operations and maintenance activities for wastewater treatment at the San Elijo Water Campus. Activities include primary and secondary wastewater treatment for the cities of Encinitas, Solana Beach, and Del Mar as well as the Rancho Santa Fe Community Services Districts, with the effluent being recycled or disposed to the ocean. Wastewater biosolids are treated and dewatered, then hauled by contractor to Arizona for beneficial reuse through land application.

Wastewater Treatment is expected to be under budget by \$41,479 or 1.4% with Personnel at budget. Supplies and Services are projected to be slightly over budget by \$37,134 primarily due to the additional engineering contract services and lower utilities for electricity cost than

anticipated. Overall, the costs before Contingency are over budget by \$33,821. Contingency funding of \$75,300 will be used to offset additional expenses.

### **Laboratory Services**

<b><i>Expense Category</i></b>	<b>Estimate FY 2019-20</b>	<b>Budget FY 2019-20</b>	<b>Over/(Under) Budget</b>	<b>% Budget Spent</b>
Personnel	443,081	447,462	(4,381)	99.0%
Supplies & Services	163,751	110,203	53,548	148.6%
Capital Outlay	-	-	-	
Contingency	-	7,700	(7,700)	0.0%
<b>Total JPA Laboratory</b>	<b>606,832</b>	<b>565,365</b>	<b>41,467</b>	<b>107.3%</b>

The laboratory located at the San Elijo Water Campus provides analytical laboratory services for the SEJPA's wastewater and recycled water programs, as well as to other entities through contract agreements. For the Fiscal Year 2019-20, 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 Elijo Lagoon Conservancy.

Overall, Laboratory Services are expected to be over budget by \$41,467 or 7.3%. The primary cause for the additional expense is the result of the procurement of new equipment and supplies to comply with ELAP regulatory changes.

### **Ocean Outfall**

<b><i>Expense Category</i></b>	<b>Estimate FY 2019-20</b>	<b>Budget FY 2019-20</b>	<b>Over/(Under) Budget</b>	<b>% Budget Spent</b>
Personnel	341,456	345,855	(4,399)	98.7%
Supplies & Services	446,552	446,350	202	100.0%
Capital Outlay	15,594	12,520	3,074	124.6%
Contingency	-	31,200	(31,200)	0.0%
<b>Total JPA Ocean Outfall</b>	<b>803,602</b>	<b>835,925</b>	<b>(32,323)</b>	<b>96.1%</b>

This program provides a cost center for all operation and maintenance services related to the Ocean Outfall system. These activities include effluent pump station operation and maintenance, ocean monitoring, sampling and testing, outfall inspection, maintenance, and repairs. As the outfall capacity is shared through an agreement with the City of Escondido, all operations and maintenance costs are shared on the basis of actual usage (measured by discharged flows).

Ocean Outfall is expected to be under budget by \$32,323 or 3.9%. All expense categories are tracking at or below budget with the exception of Capital Outlay which is over by \$3,074. Contingency funding is not expected to be used at this time.

## Cardiff Sanitary Division

<i>Expense Category</i>	Estimate	Budget	Over/(Under)	% Budget
	FY 2019-20	FY 2019-20	Budget	Spent
Personnel	149,137	150,192	(1,055)	99.3%
Supplies & Services	110,238	111,062	(824)	99.3%
Capital Outlay	-	-	-	
Contingency	-	22,200	(22,200)	0.0%
<b>Total Cardiff Sanitary Division</b>	<b>259,375</b>	<b>283,454</b>	<b>(24,079)</b>	<b>91.5%</b>

Pump station maintenance and operation services are provided 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.

Expenses are projected to be under budget by \$24,079. Contingency funding is not expected to be used at this time.

## Encinitas Sanitary Division

<i>Expense Category</i>	Estimate	Budget	Over/(Under)	% Budget
	FY 2019-20	FY 2019-20	Budget	Spent
Personnel	69,487	69,967	(480)	99.3%
Supplies & Services	59,256	59,973	(717)	98.8%
Capital Outlay	3,782	-	3,782	
Contingency	-	12,000	(12,000)	0.0%
<b>Total Encinitas Sanitary Division</b>	<b>132,525</b>	<b>141,940</b>	<b>(9,415)</b>	<b>93.4%</b>

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

Capital Outlay funding was used to replace ventilation equipment. The estimated replacement cost will be offset by Contingency. Overall, the program is forecast to be under budget by \$9,415 or 6.6%.

**City of Encinitas**

<i>Expense Category</i>	<b>Estimate FY 2019-20</b>	<b>Budget FY 2019-20</b>	<b>Over/(Under) Budget</b>	<b>% Budget Spent</b>
Personnel	23,596	23,676	(80)	99.7%
Supplies & Services	7,496	7,503	(7)	99.9%
Capital Outlay	-	-	-	
Contingency	-	-	-	
<b>Total City of Encinitas</b>	<b>31,092</b>	<b>31,179</b>	<b>(87)</b>	<b>99.7%</b>

Under this program, the SEJPA provides stormwater related maintenance and operation services to the City of Encinitas. These services include the Urban Runoff Treatment Facility, the Phoebe Stormwater Pump Station, and the Storm Drain Sediment Drying and Disposal program. The actual costs incurred are borne solely by the City of Encinitas. This program is expected to end the year on track with budget.

**City of Solana Beach**

<i>Expense Category</i>	<b>Estimate FY 2019-20</b>	<b>Budget FY 2019-20</b>	<b>Over/(Under) Budget</b>	<b>% Budget Spent</b>
Personnel	206,063	206,306	(243)	99.9%
Supplies & Services	228,057	228,128	(71)	100.0%
Capital Outlay	-	-	-	
Contingency	-	37,200	(37,200)	0.0%
<b>Total City of Solana Beach</b>	<b>434,120</b>	<b>471,634</b>	<b>(37,514)</b>	<b>92.0%</b>

This program provides pump station maintenance and operation services to the City of Solana Beach. These facilities include the Eden Gardens, Solana Beach, San Elijo Hills, and Fletcher Cove pump stations, as well as the Storm Drain Sediment Drying and Disposal Program.

The program is forecast to complete the year under budget by \$37,514 or 8.0%. Personnel and Supplies and Services expenses are expected to be approximately at budget. Contingency funding is not expected to be used at this time.

### City of Solana Beach Services

This program provides for emergency power generator maintenance services located at the City of Solana Beach City Hall and the Lomas Santa Fe Fire Station. Costs incurred are reimbursed solely by the City of Solana Beach.

<i>Expense Category</i>	<b>Estimate</b> FY 2019-20	<b>Budget</b> FY 2019-20	<b>Over/(Under)</b> Budget	<b>% Budget</b> Spent
Personnel	6,546	6,570	(24)	99.6%
Supplies & Services	6,571	6,581	(10)	99.8%
Capital Outlay	-	-	-	
Contingency	-	-	-	
<b>Total City of Solana Beach Services</b>	<b>13,117</b>	<b>13,151</b>	<b>(34)</b>	<b>99.7%</b>

The current outlook is that this program will be at budget.

### City of Del Mar

The City of Del Mar (Del Mar) has contracted with the SEJPA to provide pump station operation and maintenance, and other sanitary sewer services. This program began as additional maintenance support, PLC programming, instrumentation installation, and wet well cleaning and disposal services. The level of service that SEJPA will be providing to Del Mar's pump station program is being evaluated this year to determine a long-term strategy.

<i>Expense Category</i>	<b>Estimate</b> FY 2019-20	<b>Budget</b> FY 2019-20	<b>Over/(Under)</b> Budget	<b>% Budget</b> Spent
Personnel	38,604	38,867	(263)	99.3%
Supplies & Services	9,144	9,167	(23)	99.8%
Contingency	-	2,800	(2,800)	0.0%
<b>Total City of Del Mar</b>	<b>47,748</b>	<b>50,834</b>	<b>(3,086)</b>	<b>93.9%</b>

Overall, this program is expected to be under budget by \$3,086 or 6.1%.

## Total Expenses by Category before Recycled Water

<i>Expense Category</i>	Estimate	Budget	Over/(Under)	% Budget
	FY 2019-20	FY 2019-20	Budget	Spent
Personnel	2,665,004	2,676,334	(11,330)	99.6%
Supplies & Services	2,574,284	2,485,052	89,232	103.6%
Capital Outlay	60,510	56,560	3,950	107.0%
Contingency	-	188,400	(188,400)	0.0%
<b>Total Expense Excluding Recycled</b>	<b>5,299,798</b>	<b>5,406,346</b>	<b>(106,548)</b>	<b>98.0%</b>

Operational expenses funded by the member agencies and other government organizations are expected to be under budget by \$106,548 or 2.0%.

## Recycled Water Program

The SEJPA recycled water program produces high quality water for irrigation and industrial uses. It is a locally produced, drought resistant water supply, that helps support a diversified regional water portfolio.

The SEJPA wholesales recycled water to San Dieguito Water District, Santa Fe Irrigation District, Olivenhain Municipal Water District, and the City of Del Mar, as well as direct sales to the Encinitas Ranch Golf Authority. End customers that use the recycled water include the Encinitas Ranch Golf Course, Lomas Santa Fe Executive and Country Club Golf Courses, Encinitas Community Park, Ecker YMCA, Del Mar Fairgrounds, various Home Owners Associations landscaping, local schools, parks, businesses, and street/freeway landscape.

## Recycled Water Program Revenues

<i>Recycled Water Customer</i>	Estimate	Budget	Over/(Under)	% Budget
	FY 2019-20	FY 2019-20	Budget	Over/(Under)
Sante Fe Irrigation District	881,972	861,100	20,872	102.4%
San Dieguito Water District	663,600	726,800	(63,200)	91.3%
City of Del Mar	189,600	202,240	(12,640)	93.8%
Encinitas Ranch Golf Authority	279,951	279,951	-	100.0%
Olivenhain Municipal Water District	356,211	331,800	24,411	107.4%
<b>Total Customer Revenue</b>	<b>2,371,334</b>	<b>2,401,891</b>	<b>(30,557)</b>	<b>98.7%</b>
MWD and CWA Incentives	715,581	720,000	(4,419)	99.4%
IRWM Grant	40,000	40,000	-	100.0%
<b>Total Recycled Water Revenue</b>	<b>3,126,915</b>	<b>3,161,891</b>	<b>(34,976)</b>	<b>98.9%</b>

The MWD and CWA (Metropolitan Water District and San Diego County Water Authority respectively) revenues are incentive funding for recycled water. The Integrated Regional Water Management (IRWM) revenue is grant funding for recycle water projects through Proposition 84.

Recycled Water revenues are expected to be 1.1% less than budget as a result of decreased water purchases from customers within San Dieguito Water District and the City of Del Mar, which

was partially offset by increased recycled water usage by Santa Fe Irrigation District and Olivenhain Municipal Water District. Reduced usage was related to Caltrans' North Coastal Corridor Project that substantially reduced landscape irrigation during construction, construction at the Del Mar Fairgrounds that reduced both industrial and irrigation water use, and construction at the San Elijo Water Campus. New customers within Encinitas Ranch and Village Park are helping to increase use. Caltrans is also beginning to plant new landscaping, which will initiate new usage. The current outlook for the Recycled Water program revenue is approximately \$34,976 less than budget.

### **Recycled Water Program Expenses**

<i>Expense Category</i>	<b>Estimate FY 2019-20</b>	<b>Budget FY 2019-20</b>	<b>Over/(Under) Budget</b>	<b>% Budget Spent</b>
Personnel	559,797	565,939	(6,142)	98.9%
Supplies & Services	925,205	929,830	(4,625)	99.5%
Capital Outlay	113,864	39,240	74,624	290.2%
Contingency	-	-	-	
<b>Total Operating &amp; Maintenance Exp</b>	<b>1,598,866</b>	<b>1,535,009</b>	<b>63,857</b>	<b>104.2%</b>
Debt Service	997,828	997,828	-	100.0%
<b>Total Expense</b>	<b>2,596,694</b>	<b>2,532,837</b>	<b>63,857</b>	<b>102.5%</b>

Recycled Water operating expenses are expected to be over budget by \$63,857. The driver for this exceedance is Capital Outlay expenditure. During this year, staff replaced aging pumps and motors that were scheduled to be replaced next year (FY 2020-21). The replaced equipment had been in operation for 20 years, and operational reliability concerns prompted the replacement in this fiscal year. Overall, including debt service, this program is expected to be about 2.5% over budget.

The anticipated net revenue of \$3,126,915, less the estimated expense of \$2,596,694 will result in \$530,221 revenue over expense, which will increase the Recycled Water Fund Reserves to fund capital, future repair, and replacement needs.

### **Summary**

Total operating expenses for the agency are expected to be under budget by \$42,692 or 0.6%. Eight programs are tracking to finish the fiscal year at or below budget, while two programs (Laboratory and Recycled Water) are tracking slightly above budget. Regulatory compliance changes have resulted in higher than anticipated expenses for the Laboratory and Capital equipment replacement added costs to the Recycled Water program. Overall, the Recycled Water program projects to deliver \$530,221 revenue over expense, which is roughly in line with expectations when subtracting the capital replacement expense that was planned for FY 2020-21.

Respectfully submitted,

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Michael T. Thornton, P.E.  
General Manager

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

February 25, 2020

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: WATER CAMPUS IMPROVEMENT PROJECT UPDATE

RECOMMENDATION

It is recommended that the Board of Directors:

1. Discuss and take action as appropriate.

BACKGROUND

San Elijo Joint Powers Authority (SEJPA) is developing the Water Campus Improvement Project to modernize and improve the San Elijo Water Campus, which was built in multiple phases over the last 55 years. The project consists of multiple components including construction of a new administration and operations building, public parking, upgraded security measures, and improved potable water and fire-fighting systems. In addition, solar power, energy efficiency, EV charging stations, and other Climate Action Plan measures have been incorporated into the project design.

Transportation improvements include a regional multi-use (bicycle/pedestrian) path connecting Birmingham Drive to Manchester Avenue through SEJPA property, a trailhead rest area, and road enhancements on Manchester Avenue including a four-way traffic signal. These improvements will receive funding from Caltrans as community enhancements in the City of Encinitas as part of the North Coast Corridor project.

Key project drivers include the need to comply with current building standards and ADA requirements, expand and modernize workspaces, improve public access and site security, upgrade the campus fire-fighting system; and improve onsite stormwater capture and reuse.

DISCUSSION

In June 2018, the SEJPA Board authorized staff to pursue the development of the Water Campus Improvement Project using the Construction Manager at Risk (CMAR) delivery method coupled with the financial structure of a lease-purchase agreement. The agency utilized a Request for Qualifications/Proposals process and multiple team interviews to select the CMAR. PCL Construction, Inc. was selected to construct the project based on their proposed approach, project team, and overall value (including staffing costs, profit, and overhead markup).



The lease-purchase agreement between PCL Construction and SEJPA was executed in March 2019 and provides the base terms and conditions and important contractual requirements. The agreement is structured in a two-stage format, with Stage 1 focused on CMAR constructability and value engineering review, including development of pricing and schedule information in preparation of a Guaranteed Maximum Price (GMP). Once the GMP is negotiated, Stage 2 “Construction Services” will be added to the lease-purchase agreement, then presented for Board approval consideration. Stage 2 also includes collaboration and problem-solving during construction, start-up, and commissioning.

SEJPA completed the project design in December 2019 and submitted permit applications to the City of Encinitas for grading and building permits. In February 2020, SEJPA received permitting comments from the City to allow the project design and GMP to be finalized. Currently staff is in discussions with PCL Construction to finalize the GMP, project schedule, and construction documents. It is anticipated that the lease-purchase agreement amendment for Stage 2 will be presented to the SEJPA Board at the March 2020 Board meeting.

The project budget has been revised to reflect the current construction market and project scope, including increases due to additional engineering, permitting comments and fees, unanticipated site constraints, and regulatory and environmental compliance requirements. The project budget is shown in Figure 1, with a comparison to the 2019 budget.

<b>FIGURE 1 - PROJECT BUDGET</b>			
<b>WATER CAMPUS IMPROVEMENT PROJECT</b>			
<b>Item</b>	<b>2019 Estimate</b>	<b>2020 Estimate</b>	<b>Increase</b>
<b>PROJECT DEVELOPMENT</b>			
Design/Permitting/Environmental	\$ 1,130,000	\$ 1,490,000	
PCL Stage 1 Pre-construction agreement	\$ 140,000	\$ 140,000	
<b>Total</b>	<b>\$ 1,270,000</b>	<b>\$ 1,630,000</b>	<b>28%</b>
<b>CONSTRUCTION</b>			
Building	\$ 7,604,000	\$ 8,460,000	
Multi-use Path	\$ 4,000,000	\$ 5,270,000	
Site Improvements	\$ 4,040,000	\$ 4,220,000	
Site dewatering		\$ 170,000	
<b>Sub Total</b>	<b>\$ 15,644,000</b>	<b>\$ 18,120,000</b>	
Construction Contingency (scope gap)	\$ -	\$ 310,000	
<b>Sub Total</b>	<b>\$ 15,644,000</b>	<b>\$ 18,430,000</b>	
Owner Contingency	\$ 880,000	\$ 910,000	
<b>Total</b>	<b>\$ 16,524,000</b>	<b>\$ 19,340,000</b>	<b>17%</b>
<b>CONSTRUCTION FEES &amp; SUPPORT SERVICES</b>			
CM/Engineering/Environmental Compliance	\$ 720,000	\$ 700,000	
City of Encinitas Permits/Inspection Fees	\$ 86,000	\$ 525,000	
San Diego Regional Water Quality Control Board		\$ 150,000	
<b>Grand Total</b>	<b>\$ 18,600,000</b>	<b>\$ 22,345,000</b>	<b>20%</b>

## FINANCIAL IMPACT

The current budget for the Water Campus Improvement Project is approximately \$3.75 million or approximately 20% over the anticipated budget. To fund this gap, staff will seek additional cost support from Caltrans, as well as seek credit from the City of Encinitas for the land contributed to the proposed multi-use trail to offset City fees. The remaining shortfall will be funded from existing and future capital program funds from the wastewater and recycled water programs.

It is therefore, recommended that the Board of Directors:

1. Discuss and take action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager