

**AGENDA**  
**SAN ELIJO JOINT POWERS AUTHORITY**  
**MONDAY JULY 13, 2015 AT 9:00 AM**  
**SAN ELIJO WATER RECLAMATION FACILITY – 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. PRESENTATION OF AWARDS  
None
6. \* **CONSENT CALENDAR**
7. \* APPROVAL OF MINUTES FOR THE JUNE 8, 2015 MEETING
8. \* APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS
9. \* SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS – MONTHLY REPORT
10. \* SAN ELIJO JOINT POWERS AUTHORITY RECYCLED WATER PROGRAM – MONTHLY REPORT
11. \* VILLAGE PARK RECYCLED WATER PROJECT UPDATE
12. \* 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

### 13. WASTEWATER TREATMENT AND OCEAN OUTFALL CAPITAL BOND FINANCING

1. Authorize the General Manager to request proposals from underwriters to pursue municipal bond financing of approximately \$22.4 million; and
2. Discuss and take action as appropriate.

Staff Reference: Director of Finance/Administration

### 14. RECYCLED WATER CAPITAL PROJECT BOND FINANCING

1. Authorize the General Manager to request proposals from underwriters to pursue bond financing of approximately \$4.8 million; and
2. Discuss and take action as appropriate.

Staff Reference: Director of Finance/Administration

### 15. AWARD OF CONTRACT FOR SAN ELIJO LAND OUTFALL FINAL DESIGN AND PERMITTING

1. Accept and file the San Elijo Joint Powers Authority Outfall Preliminary Design Report;
2. Approve the Agreement with Kennedy/Jenks Consultants for the San Elijo Land Outfall Final Design and Permitting for an Amount not to Exceed \$403,068; and
3. Discuss and take action as appropriate.

Staff Reference: General Manager

### 16. SAN ELIJO JOINT POWERS AUTHORITY AND ENCINA WASTEWATER AUTHORITY EMPLOYEE LEASING AGREEMENT

1. Adopt Resolution 2016-01 – Employee Leasing Agreement Authorization between the San Elijo Joint Powers Authority and the Encina Wastewater Authority; and
2. Discuss and take other action as appropriate.

Staff Reference: General Manager

17. CLOSED SESSION

A closed session will be held per Government Code Section 54957, Public Employee Performance Evaluation: General Manager.

A closed session may be held at any time during this meeting of the San Elijo Joint Powers Authority for the purposes of discussing potential or pending litigation or other appropriate matters pursuant to the "Ralph M. Brown Act".

18. CONSIDERATION OF GENERAL MANAGER COMPENSATION PER CURRENT EMPLOYMENT AGREEMENT AND POTENTIAL CHANGES TO EMPLOYMENT TERMS AND COMPENSATION

1. Discuss and take action as appropriate.

Staff Reference: General Manager

19. GENERAL MANAGER'S REPORT

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

20. GENERAL COUNSEL'S REPORT

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

21. 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.

22. ADJOURNMENT

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Monday, September 14, 2015 at 9:00 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 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: July 8, 2015

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 BOARD MEETING  
HELD ON JUNE 8, 2015  
AT THE  
SAN ELIJO WATER RECLAMATION FACILITY

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David Zito, Chair

Catherine S. Blakespear, Vice Chair

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A meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, June 8, 2015, at 9:00 a.m., at the San Elijo Water Reclamation Facility at 2695 Manchester Avenue, Cardiff by the Sea, California.

1. CALL TO ORDER

Chair Zito called the meeting to order at 9:01 a.m.

2. ROLL CALL

*Directors Present:*

Catherine S. Blakespear  
Ginger Marshall  
Mark Muir  
David Zito  
David Ott (Solana Beach Alternate)

*Directors Absent:*

None

*Others Present:*

General Manager  
Director of Operations  
Director of Finance & Administration  
HR/Safety Administrator  
Administrative Assistant/Board Clerk

Michael Thornton  
Christopher Trees  
Paul Kinkel  
Marisa Buckles  
Jennifer Basco

*SEJPA Counsel:*

Procopio, Cory, Hargreaves & Savitch

Tracie Stender

*City of Solana Beach*

Interim City Manager  
Director of Engineering/Public Works

David Ott  
Mohammad "Mo" Sammak

*City of Encinitas:*

Director of Engineering and Public Works

Glenn Pruim

3. PLEDGE OF ALLEGIANCE

Chair Zito led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

None

5. PRESENTATION OF AWARDS

None

6. CONSENT CALENDAR

Moved by Board Member Muir and seconded by Board Member Marshall to approve the Consent Calendar.

Motion carried with unanimous vote of approval.

Consent Calendar:

Agenda Item No. 7	Approval of Minutes for the May 11, 2015 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
Agenda Item No. 11	Award of Annual Supplies and Services Contracts for the San Elijo Joint Powers Authority

12. ITEMS REMOVED FROM CONSENT CALENDAR

None

13. ADOPTION OF THE SAN ELIJO JOINT POWERS AUTHORITY (SEJPA) FISCAL YEAR 2015-16 BUDGET, INVESTMENT POLICY, AND APPOINTMENT OF TREASURER

General Manager Thornton reported that the Recommended Budget for FY 2015-16 was presented to both Member Agencies and other government agencies that receive services by the SEJPA. From these meetings, there were no requested changes to the proposed budget. In addition, at this time, staff is not recommending any changes to the SEJPA's investment policy; and recommended that Paul F. Kinkel be appointed Treasurer for FY 2015-16.

Moved by Board Member Muir and seconded by Board Member Marshall to:

1. Adopt Resolution No. 2015-02, Resolution Approving the San Elijo Joint Powers Authority Operating and Capital Improvement Budgets for Fiscal Year 2015-16; and
2. Adopt Resolution No. 2015-03, Resolution Approving the San Elijo Joint Powers Authority Investment Policy and Guidelines and Appointment of Paul F. Kinkel as SEJPA Treasurer.

Motion carried with unanimous vote of approval.

14. GENERAL MANAGER'S REPORT

The General Manager updated the Board of Directors on the status of the Integrated Regional Water Management (IRWM) Proposition 84 Round 4 grant funding. The SEJPA submitted a grant proposal, "Conservation 101", together with its project partners: City of Solana Beach, City of Encinitas, Olivenhain Municipal Water District, and the San Elijo Lagoon Conservancy. Project supporters include the Santa Fe Irrigation District and San Dieguito Water District. Each project partner brought together elements for Conservation 101 which included: constructing new pipelines to expand local use of recycled water; improvements to streetscapes to improve storm water quality through treatment using low-impact design; building solar power at the SEWRF to offset the energy use of developing more recycled water; and an educational element with the San Elijo Lagoon Conservancy reaching out to schools in disadvantaged communities. Conservation 101 received a grant award recommendation of \$2.5 million. The next step is for the San Diego County Water Authority Board of Directors to vote to approve the project.

The General Manager stated that staff is currently talking with water districts to gauge interest in updating the SEJPA Recycled Water Master Plan, which was last completed in 2005. An updated Recycled Water Master Plan will provide project priorities for future pipeline expansions; computer model the hydraulic capacity of the pipeline system; identify system improvements; and assess the recycled water treatment and disinfection system. The General Manager would like to update the master plan in the next 12 months.

15. GENERAL COUNSEL'S REPORT

None

16. BOARD MEMBER COMMENTS

None

17. CLOSED SESSION

The Board of Directors adjourned to closed session at 9:41 a.m., with Michael Thornton per Government Code Section 54957: Public Employee Performance Evaluation. Title: General Manager.

The Board of Directors came out of closed session at 10:32 a.m. with no reportable action.

18. ADJOURNMENT

The meeting adjourned at 10:32 a.m. The next Board of Directors meeting will be held on July 13, 2015.

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****15-07****For the Month of June 2015**

<b>Warrant #</b>	<b>Vendor Name</b>	<b>G/L Account</b>	<b>Warrant Description</b>	<b>Amount</b>
31700	Aflac	EE Deduction Benefits	Aflac - June	693.36
31701	American Compressor Company	Repair Parts Expense	Repair part	218.45
31702	Arrowhead	Supplies - Lab	Kitchen and lab supplies	420.82
31703	AT&T	Utilities - Telephone	DSL - 04/20/15 - 05/19/15	89.78
31704	AT&T	Utilities - Telephone	Alarm service	391.03
31705	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	554.88
31706	Bay City Electric Works	Services - Maintenance	Service generator	400.00
31707	Boot World, Inc.	Uniforms - Boots	Safety boots	150.00
31708	Brenntag Pacific, Inc	Supplies - Chemicals	Sodium Hydroxide	2,705.04
31709	The Brickman Group Ltd	Services - Landscape	Landscape service - June	385.00
31710	Coast Waste Management, Inc.	Services - Grit & Screenings	Disposal	1,609.89
31711	Department of Consumer Affairs	Dues & Memberships	Civil engineer renewal	115.00
31712	DMV	Services - Other	Safety records - 03/01/15 - 04/30/15	11.00
31713	Alliant Insurance Service	Prepaid - Insurance	ACIP Crime Renewal - 07/01/15 - 07/01/16	575.00
31714	EDCO Waste & Recycling Service	Utilities - Trash	Trash service - May	234.21
31715	City of Encinitas	Service - IT Support	Admin Network - June	2,500.00
31716	Endress & Hauser	Repair Parts Expense	Repair parts	1,769.86
31717	Euronfins Calscience, Inc.	Services - Laboratory	Testing water samples	288.00
31718	Grainger, Inc.	Supplies - Shop & Field	Clipboard	65.27
31719	Hoch Consulting, APC	Services - Professional	Project engineering services	6,300.00
31720	Home Depot Credit Services	Supplies - Shop & Field	Plumbing and electric supplies	290.12
31721	Jani-King of CA, Inc.	Services - Janitorial	Janitorial services - June	882.64
31722	Jennifer Basco	Subsistence - Travel	Mileage	43.15
31723	Konica Minolta	Services - Maintenance	Copier maintenance service	130.10
31724	Casey Larsen	Subsistence - Travel	Mileage	11.49
31725	The Lawton Group	Services - Intern Program	Weeks worked - 05/18/15 - 05/29/15	852.50
31726	Marine Taxonomic Services, Ltd	Services - Contractors	Ocean offshore monitoring	740.00
31727	McMaster-Carr Supply Co.	Repair Parts Expense	Plumbing supplies and repair parts	181.77
31728	Olin Corp - Chlor Alkali	Supplies - Chemicals	Sodium Hypochlorite	2,881.89
31729	Olivenhain Municipal Water District	Rent	Pipeline rental payment	3,604.50
31730	Pacific Pipeline Supply	Repair Parts Expense	Plumbing supplies	185.76
31731	Public Employees-Retirement	Retirement Plan - PERS	Retirement - 05/23/15 - 06/05/15	15,863.13
31732	Preferred Benefit Insurance	Dental/Vision	Vision - June	316.70
31733	ProBuild Company, LLC	Supplies - Shop & Field	Shop supplies and repair parts	146.96
31734	Roesling Nakamura Terada	Services - Professional	Construction documents and needs assessment	2,141.00
31735	San Diego SHRM	Dues & Memberships	Membership	150.00
31736	San Dieguito Water	Utilities - Water	Recycled water	8,175.30
31737	San Dieguito Water District	Services - Contractors	Repair service	4,795.99
31738	Santa Fe Irrigation District	Utilities - Water (Suppl.)	Recycled water	2,602.15
31739	Santa Fe Irrigation District	Utilities - Water	Recycled water	78.93
31740	Santa Fe Irrigation District	Services - Professional	Potable reuse	6,551.17
31741	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - May	1,603.31
31742	San Diego IPMA-HR	Dues & Memberships	Membership	75.00
31743	Smart & Final	Supplies - Office	Kitchen supplies	56.42
31744	Sun Life Financial	Life Insurance/Disability	Life and disability insurance - June	1,330.58
31745	Tierra Data Inc.	Service - Laboratory	Water Monitoring - March, April, and May	2,175.00
31746	Unifirst Corporation	Services - Uniforms	Uniform service	317.04
31747	Univar USA Inc.	Supplies - Chemicals	Hydrochloric Acid	332.72
31748	Underground Service Alert/SC	Services - Alarm	May -2015	70.50
31749	Vantagepoint Transfer Agents	EE Deduction Benefits	457 - ICMA	6,116.73
31750	Vantagepoint Transfer Agents	ICMA Retirement	401a - ICMA	2,797.41
31751	WEX Bank	Fuel	Fuel - May	774.57
31752	State Water Resources Control Board	Fees - Permits	Industrial Storm Water General Permit	1,791.00
31753	Ag Tech, LLC	Services - Biosolids Hauling	Biosolid hauling - May	13,663.32
31754	Airgas West	Minor Equip - Shop & Field	Cutter plasma cutmaster	999.97
31755	All American First Aid & Safet	Supplies - Office	First aid supplies	123.61
31756	Aquatic Bioassay	Services - Laboratory	Testing samples	1,040.00
31757	Arbor West Tree Surgeons, Inc.	Services - Landscape	Tree trimming service	4,350.00
31758	AT&T	Utilities - Telephone	DSL - 05/10/15 - 06/06/15	89.32
31759	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	554.88
31760	BankCard Center	Supplies - Safety	Repair parts, meetings, office and shop supplie	1,946.55
31761	B.J.'s Rental Store	Equipment Rental/Lease	Boom crane	400.00

**SAN ELIJO JOINT POWERS AUTHORITY****PAYMENT OF WARRANTS****15-07****For the Month of June 2015**

<b>Warrant #</b>	<b>Vendor Name</b>	<b>G/L Account</b>	<b>Warrant Description</b>	<b>Amount</b>
31762	Brenntag Pacific, Inc.	Supplies - Chemicals	Hydrochloric acid and sodium triphosphate	884.18
31763	Marisa Buckles	Supplies - Office	Supplies	39.99
31764	Corodata	Rent	Record storage	79.53
31765	Del Mar Blue Print	Printing	Service area map	25.92
31766	DMV	Services - Other	Safety records	3.00
31767	Euronfins Calscience, Inc.	Services - Laboratory	Testing water samples	569.00
31768	Fisher Scientific	Supplies - Chemicals	Sodium Dodecylbenzenesul	400.56
31769	Global Capacity	Utilities - Internet	T-1 Service - July	279.27
31770	Guardian	Dental/Vision	Dental - July	2,007.89
31771	Heaslett Sales Inc.	Repair Parts Expense	Gasket, sleeve, and spacer kit	186.84
31772	John Deere Landscapes, Inc.	Repair Parts Expense	Plumbing supplies	544.74
31773	Kennedy/Jenks Consultants	Services - Engineering	Land ocean outfall, recycled water relocation	43,759.35
31774	The Lawton Group	Services - Intern Program	Weeks worked - 06/01/15 - 06/12/15	1,010.63
31775	Leighton Consulting, Inc.	Services - Engineering	Generator project	627.20
31776	McMaster-Carr Supply Co.	Supplies - Safety	Repair parts, safety, and office supplies	297.53
31777	Midas Shop	Vehicle Maintenance	Oil changes	256.24
31778	MTGL, Inc.	Services - Contractors	SEHPS Emergency power project	83.75
31779	Olin Corp.	Supplies - Chemicals	Sodium Hypochlorite	2,950.77
31780	Pacific Green Landscape	Services - Landscape	Landscape service - June	1,125.00
31781	Pall Corporation	Repair Parts Expense	Repair parts	374.66
31782	P.E.R.S.	Medical Insurance - PERS	Health	19,213.93
31783	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 06/06/15 - 06/19/15	15,863.13
31784	Polydyne Inc.	Supplies - Chemicals	Clarifloc	11,426.40
31785	Procopio Cory Hargreaves	Services - Legal	General; labor and employment for May	7,951.50
31786	Rising Tide Partners	Services - Professional	Solar energy evaluation	5,125.00
31787	Rockwell Solutions	Repair Parts Expense; Capital	Repair parts, impeller, cutter bar plate, pump	23,090.61
31788	Sigma-Aldrich RTC	Supplies - Lab	Lab supplies	390.20
31789	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 05/06/15 - 06/07/15	56,450.16
31790	Sigma-Aldrich	Supplies - Lab	Lab supplies	216.00
31791	Sun Life Financial	Life Insurance/Disability	Life and disability insurance - July	1,330.58
31792	Michael Thornton	Subsistence - Meals	IRWM projects	22.41
31793	Mr. Tony Lipka	Training - Safety	Confined space	2,250.00
31794	Trussell Technologies, Inc	Services - Engineering	Process engineering; coliform study	4,183.45
31795	Unifirst Corporation	Services - Uniforms	Uniform service	544.91
31796	The San Diego Union-Tribune	Advertising	Landscape bids	227.20
31797	Univar USA Inc.	Supplies - Chemicals	Citric Acid	825.20
31798	UPS	Postage/Shipping	Mailing parts	10.39
31799	USA Bluebook	Repair Parts Expense	Repair parts	1,084.80
31800	Vantagepoint Transfer Agents	EE Deduction Benefits	457 - ICMA	6,116.73
31801	Vantagepoint Transfer Agents	ICMA Retirement	401a - ICMA	2,797.41
31802	Verizon Wireless	Utilities - Telephone	Cell phones and equipment	1,161.20
31803	VWR International, Inc.	Supplies - Lab	Lab supplies	602.19
31804	WorkPartners Occupational	Services - Medical	Employee's vaccines	260.00
	San Elijo Payroll Account	Payroll	Payroll - 06/12/15	62,111.08
	San Elijo Payroll Account	Payroll	Payroll - 06/26/15	60,444.15
				<u>\$ 449,914.45</u>

SAN ELIJO JOINT POWERS AUTHORITY

PAYMENT OF WARRANTS SUMMARY

**For the Month of June 2015  
As of June 30, 2015**

PAYMENT OF WARRANTS		\$ 449,914.45
Reference Number	15-07	

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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Paul F. Kinkel  
Director of Finance & Administration

STATEMENT OF FUNDS AVAILABLE FOR PAYMENT OF WARRANTS  
AND INVESTMENT INFORMATION  
As of June 30, 2015

<u>FUNDS ON DEPOSIT WITH</u>	<u>AMOUNT</u>
 <b>LOCAL AGENCY INVESTMENT FUND</b> <i>(MAY 2015 YIELD 0.29%)</i>	
RESTRICTED SRF RESERVE	\$ 630,000.00
UNRESTRICTED DEPOSITS	\$ 6,726,517.95
 <b>CALIFORNIA BANK AND TRUST</b> <i>(MAY 2015 YIELD 0.01%)</i>	
REGULAR CHECKING	\$ 35,455.60
PAYROLL CHECKING	\$ 5,000.00
 TOTAL RESOURCES	 \$ 7,396,973.55

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS –  
MONTHLY REPORT

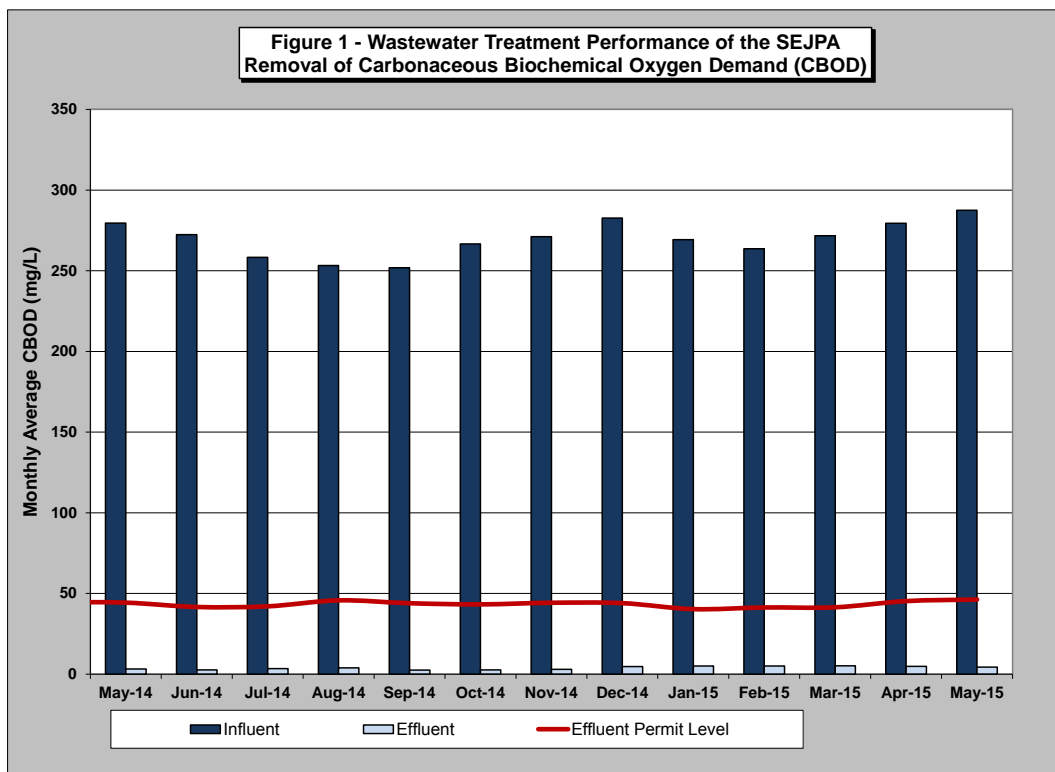
RECOMMENDATION

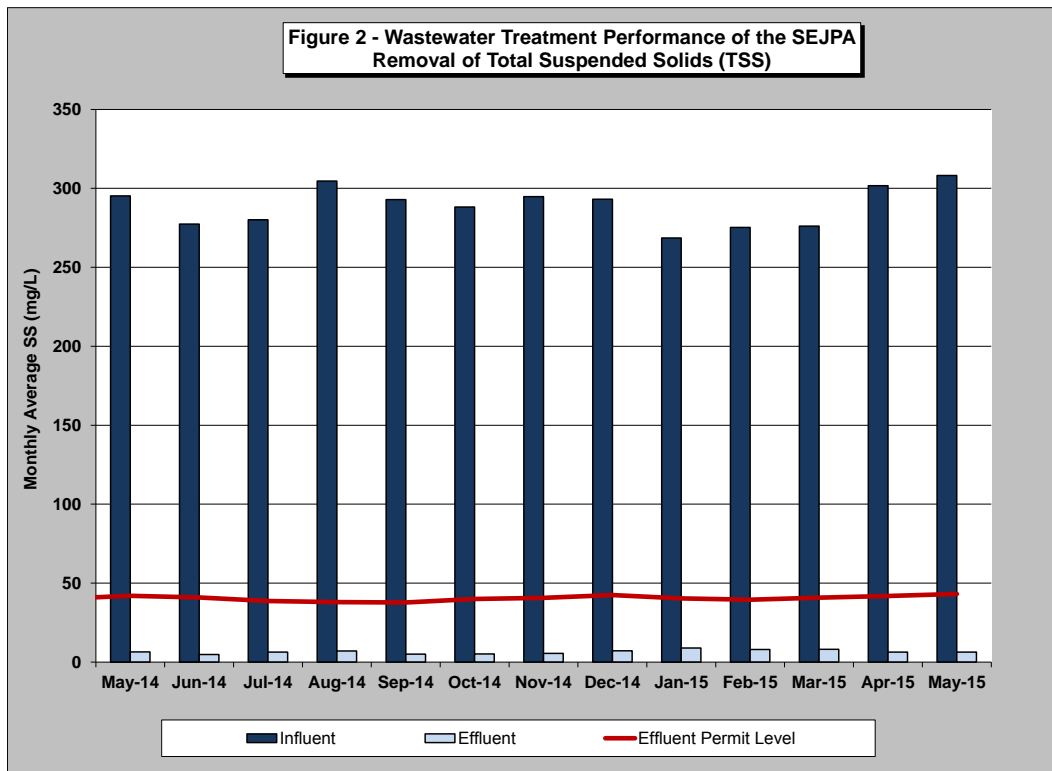
No action required. This memorandum is submitted for information only.

DISCUSSION

Monthly Treatment Plant Performance and Evaluation

Wastewater treatment for the San Elijo Joint Powers Authority (SEJPA) met all NPDES ocean effluent limitation requirements for the month of May 2015. 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. For the month of May, treatment levels for CBOD and TSS were 98.5 and 97.9 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 May. Average daily influent flows were recorded for each Member Agency. Total effluent flow was calculated for the San Elijo Water Reclamation Facility.

	May	
	<u>Influent (mgd)</u>	<u>Effluent (mgd)*</u>
Cardiff Sanitary Division	1.209	0.545
City of Solana Beach	1.149	0.518
Rancho Santa Fe SID	0.117	0.053
<b>Total San Elijo WRF Flow</b>	<b>2.475</b>	<b>1.116</b>

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

Table 1 (next page) 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 ELIJO 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	SB	TOTAL PLANT	CSD	RSF	SB	TOTAL PLANT	CSD EDUS	RSF CSD EDUS	SB EDUS	TOTAL EDUS	CSD	RSF	SB	TOTAL PLANT
Jun-10	1.437	0.122	1.453	3.012	0.650	0.055	0.657	1.362	8,202	474	7,728	16,404	175	258	188	184
Jul-10	1.375	0.119	1.466	2.960	0.694	0.061	0.740	1.495	8,204	475	7,728	16,407	168	251	190	180
Aug-10	1.366	0.125	1.451	2.942	0.585	0.053	0.621	1.259	8,205	475	7,728	16,408	166	263	188	179
Sep-10	1.346	0.114	1.342	2.802	0.627	0.053	0.626	1.306	8,207	475	7,728	16,410	164	240	174	171
Oct-10	1.413	0.123	1.311	2.847	1.177	0.102	1.092	2.371	8,207	477	7,728	16,412	172	258	170	173
Nov-10	1.399	0.117	1.297	2.813	1.090	0.091	1.011	2.192	8,209	478	7,728	16,415	170	245	168	171
Dec-10	1.605	0.215	1.375	3.195	1.417	0.189	1.214	2.820	8,212	478	7,728	16,418	195	450	178	195
Jan-11	1.452	0.158	1.338	2.948	1.272	0.139	1.172	2.583	8,227	478	7,728	16,433	176	331	173	179
Feb-11	1.413	0.156	1.339	2.908	1.176	0.130	1.114	2.420	8,228	480	7,728	16,436	172	325	173	177
Mar-11	1.387	0.208	1.343	2.938	1.186	0.178	1.148	2.512	8,229	480	7,728	16,437	169	434	174	179
Apr-11	1.320	0.181	1.323	2.824	0.867	0.118	0.869	1.854	8,248	482	7,728	16,458	160	376	171	172
May-11	1.327	0.162	1.320	2.809	0.564	0.069	0.561	1.194	8,248	483	7,728	16,459	161	336	171	171
Jun-11	1.343	0.156	1.390	2.889	0.545	0.063	0.564	1.172	8,249	483	7,728	16,460	163	323	180	176
Jul-11	1.293	0.151	1.430	2.874	0.425	0.050	0.470	0.945	8,250	484	7,728	16,462	157	312	185	175
Aug-11	1.292	0.150	1.405	2.847	0.479	0.056	0.521	1.056	8,252	485	7,728	16,465	157	310	182	173
Sep-11	1.262	0.146	1.333	2.741	0.564	0.066	0.596	1.226	8,254	486	7,728	16,468	153	301	172	166
Oct-11	1.260	0.142	1.303	2.705	0.730	0.082	0.755	1.567	8,260	486	7,728	16,474	153	292	169	164
Nov-11	1.338	0.167	1.307	2.812	1.099	0.137	1.074	2.310	8,261	486	7,728	16,475	162	344	169	171
Dec-11	1.299	0.164	1.305	2.768	1.103	0.139	1.108	2.350	8,264	487	7,728	16,479	157	337	169	168
Jan-12	1.291	0.145	1.303	2.739	1.032	0.116	1.042	2.190	8,266	488	7,728	16,482	160	232	169	166
Feb-12	1.259	0.137	1.283	2.679	1.006	0.109	1.025	2.140	8,268	488	7,728	16,484	152	281	166	163
Mar-12	1.313	0.153	1.255	2.721	0.968	0.113	0.925	2.006	8,269	488	7,728	16,485	159	314	162	165
Apr-12	1.348	0.145	1.209	2.702	0.906	0.097	0.813	1.816	8,278	488	7,728	16,494	163	297	156	164
May-12	1.333	0.150	1.211	2.694	0.577	0.065	0.525	1.167	8,280	488	7,728	16,496	161	308	157	163
Jun-12	1.365	0.143	1.237	2.745	0.547	0.057	0.496	1.100	8,284	489	7,728	16,501	165	293	160	166
Jul-12	1.372	0.126	1.296	2.794	0.457	0.042	0.431	0.930	8,289	489	7,728	16,506	166	258	168	169
Aug-12	1.383	0.128	1.291	2.802	0.473	0.044	0.441	0.958	8,290	490	7,728	16,508	167	261	167	170
Sep-12	1.349	0.142	1.220	2.711	0.544	0.058	0.492	1.094	8,291	490	7,728	16,509	163	290	158	164
Oct-12	1.327	0.123	1.203	2.653	0.678	0.063	0.615	1.356	8,294	490	7,728	16,512	160	251	156	161
Nov-12	1.343	0.128	1.181	2.652	0.862	0.082	0.758	1.702	8,299	490	7,728	16,517	162	261	153	161
Dec-12	1.383	0.141	1.197	2.721	1.261	0.129	1.091	2.481	8,300	490	7,728	16,518	167	288	155	165
Jan-13	1.357	0.145	1.215	2.717	1.155	0.124	1.034	2.313	8,300	490	7,728	16,518	163	296	157	164
Feb-13	1.349	0.138	1.201	2.688	1.048	0.108	0.933	2.089	8,301	490	7,728	16,519	163	282	155	163
Mar-13	1.402	0.154	1.235	2.791	0.905	0.100	0.797	1.802	8,302	493	7,728	16,521	169	314	160	169
Apr-13	1.297	0.124	1.237	2.658	0.531	0.051	0.506	1.088	8,304	493	7,728	16,523	156	253	160	161
May-13	1.339	0.126	1.185	2.650	0.376	0.036	0.333	0.745	8,304	493	7,728	16,525	161	256	153	160
Jun-13	1.341	0.126	1.190	2.657	0.269	0.025	0.239	0.533	8,307	493	7,728	16,528	161	256	154	161
Jul-13	1.366	0.144	1.269	2.779	0.482	0.050	0.448	0.980	8,309	493	7,728	16,530	164	292	164	168
Aug-13	1.342	0.168	1.258	2.768	0.380	0.048	0.356	0.784	8,311	494	7,728	16,533	161	340	163	167
Sep-13	1.343	0.117	1.193	2.653	0.403	0.036	0.358	0.797	8,311	494	7,728	16,533	162	237	154	160
Oct-13	1.319	0.132	1.184	2.635	0.629	0.063	0.565	1.257	8,314	494	7,728	16,536	159	267	153	159
Nov-13	1.348	0.133	1.194	2.675	0.932	0.092	0.826	1.850	8,315	494	7,728	16,537	162	270	155	162
Dec-13	1.341	0.134	1.191	2.666	1.030	0.103	0.915	2.048	8,316	494	7,728	16,538	161	272	154	161
Jan-14	1.322	0.135	1.194	2.651	0.851	0.087	0.768	1.706	8,318	495	7,728	16,541	159	273	155	160
Feb-14	1.314	0.127	1.172	2.613	0.954	0.093	0.851	1.898	8,323	495	7,728	16,546	158	257	152	158
Mar-14	1.339	0.134	1.185	2.658	0.858	0.086	0.760	1.704	8,324	496	7,728	16,548	161	270	153	161
Apr-14	1.326	0.128	1.128	2.582	0.449	0.043	0.382	0.874	8,328	498	7,728	16,554	159	257	146	156
May-14	1.353	0.124	1.127	2.604	0.159	0.015	0.132	0.306	8,333	498	7,728	16,559	162	249	146	157
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

CSD: Cardiff Sanitary Division

RSF CSD: Ranch Santa Fe Community Service District

SB: Solana Beach

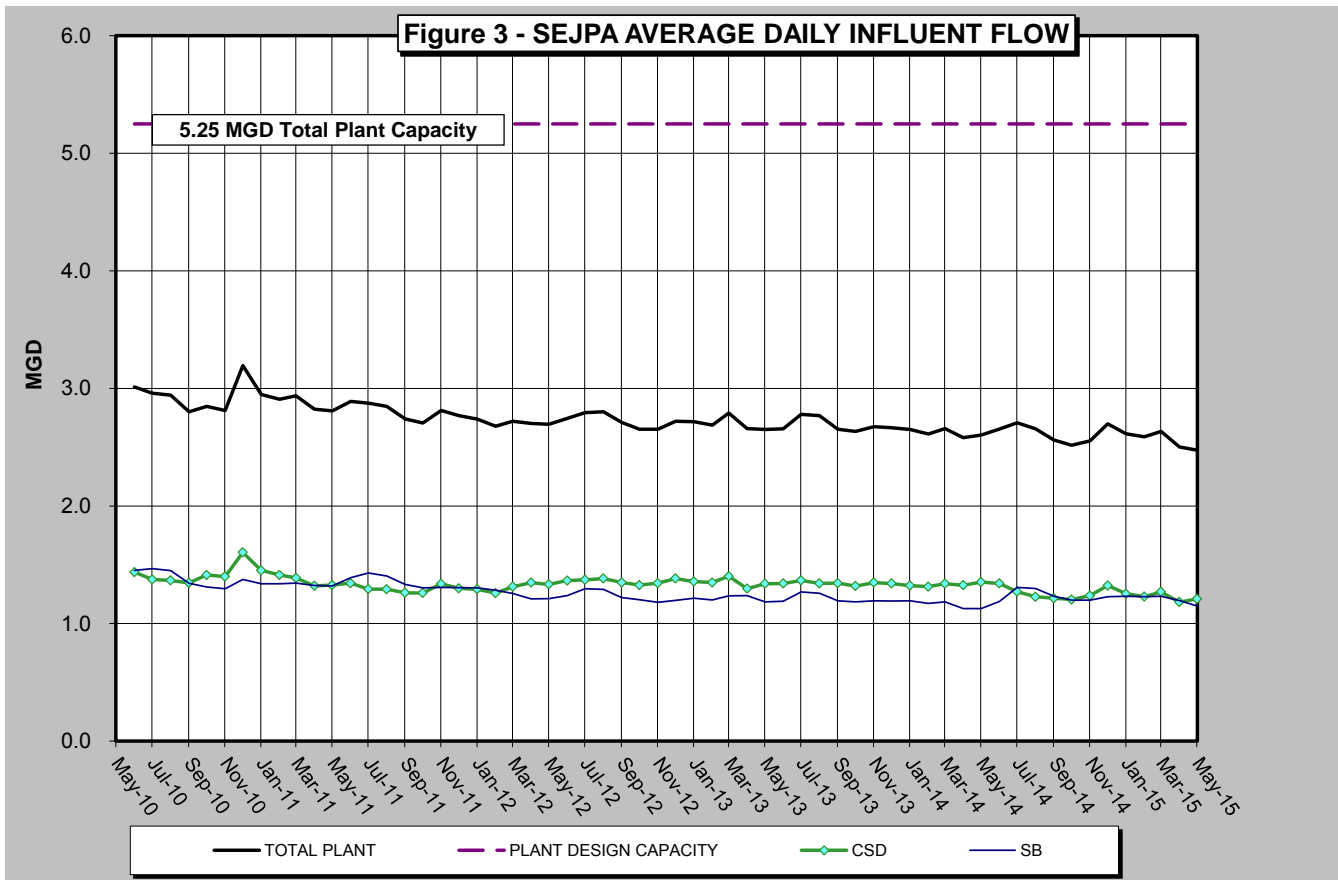
EDU: Equivalent Dwelling Unit

ASSUMPTIONS: SB average flow includes San Elijo Hills flow of 0.131 mgd

SB Connected EDUs includes 300 EDUs for the City of San Diego

EDU Numbers Revised by Dudek for March and April 2013

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. As shown in the figure, the average treated flow has been approximately 2.6 million gallons per day (mgd). 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 2.5 mgd, and Rancho Santa Fe Community Service District leases 0.25 mgd.





City of Escondido Flows

The average and peak flow rate from the City of Escondido Hale Avenue Resource Recovery Facility, which discharges through the San Elijo Ocean Outfall, is reported below. The following average flow rate and peak flow rate is reported by the City of Escondido for the month of May 2015.

	<b>Flow (mgd)</b>
Escondido (Average flow rate)	10.27
Escondido (Peak flow rate)	18.1

Connected Equivalent Dwelling Units

The City of Solana Beach updated the connected EDUs number that is reported to the SEJPA in January 2015. 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 is as follows:

	<b>Connected (EDU)</b>
Cardiff Sanitary Division	8,367
Rancho Santa Fe SID	505
City of Solana Beach	7,640
San Diego (to Solana Beach)	337
<b>Total EDUs to System</b>	<b>16,848</b>

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO WATER RECLAMATION PROGRAM – MONTHLY REPORT

RECOMMENDATION

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

DISCUSSION

*Recycled Water Production*

For the month of May 2015, recycled water demand was 140.40 acre-feet (AF), which was met using 140.13 AF of recycled water and 0.27 AF of supplementation with potable water. Recycled water demand for the month of May was approximately 10% lower than anticipated due to the higher than normal rainfall received.

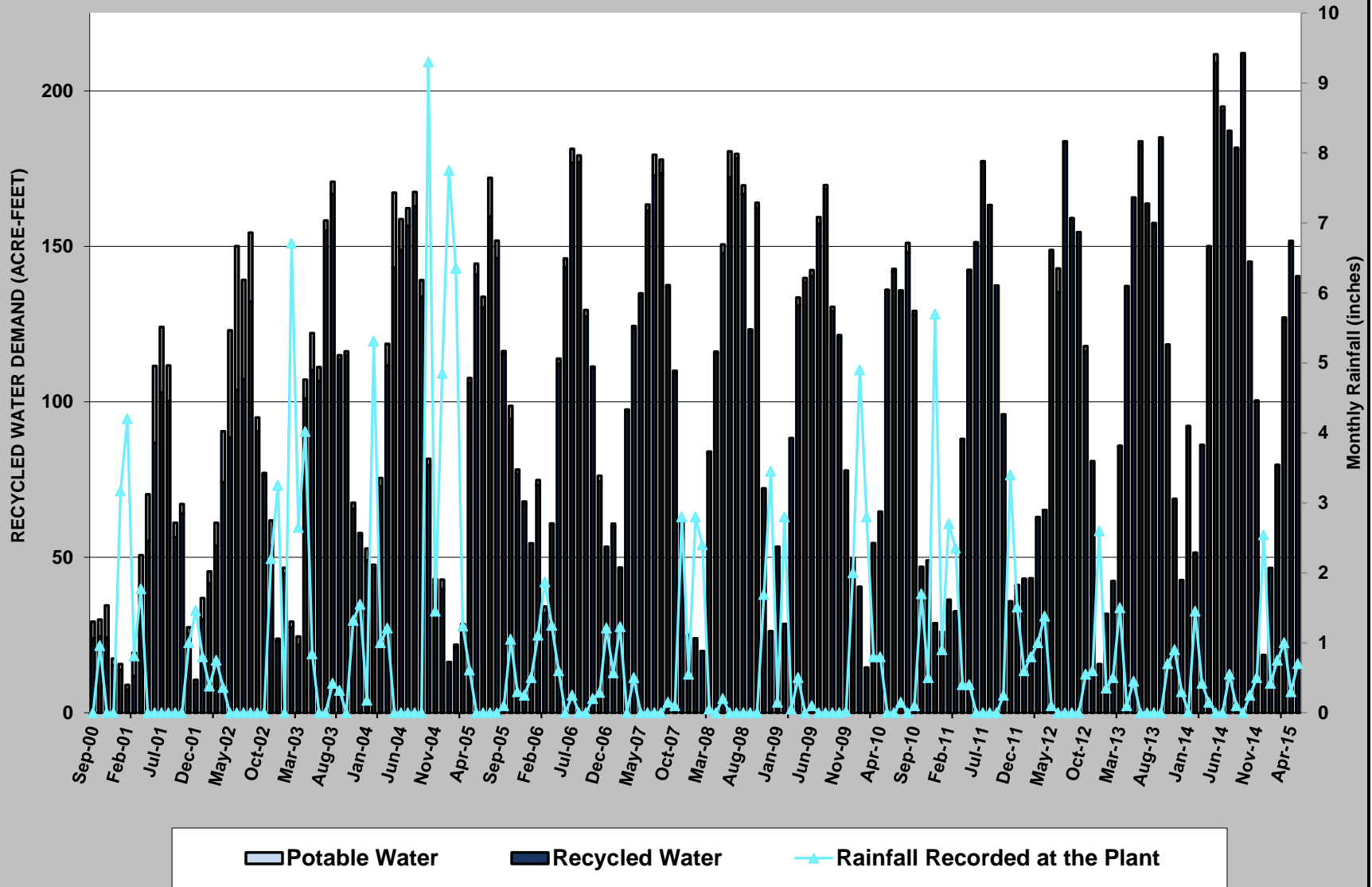
Figure 1 (attached) provides monthly supply demands for recycled water since September 2000. Figure 2 (attached) provides a graphical view of annual recycled water demand spanning fourteen fiscal years. Figure 3 (attached) shows the monthly recycled water demand for each May since the program began.

Respectfully submitted,

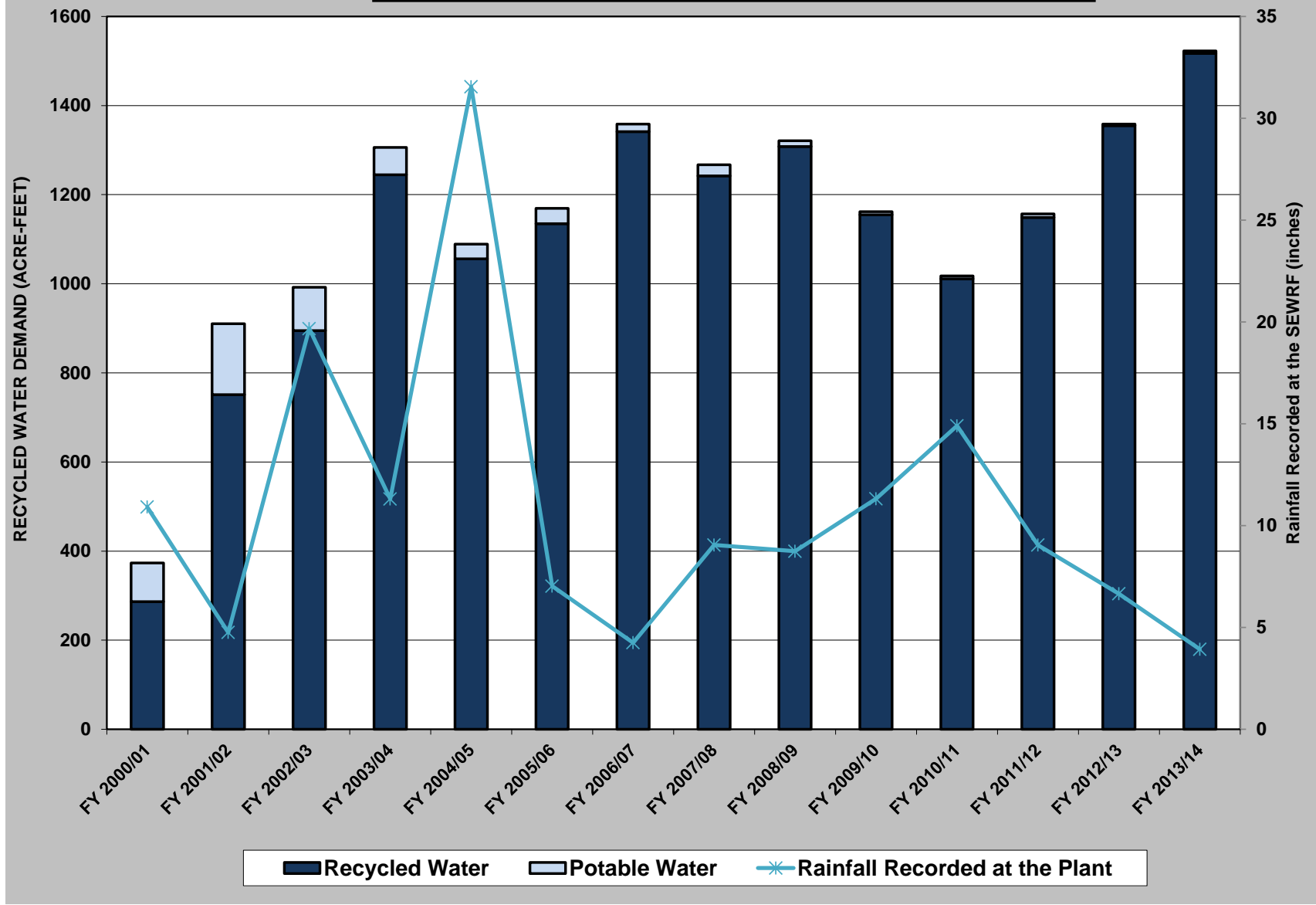


Michael T. Thornton, P.E.  
General Manager

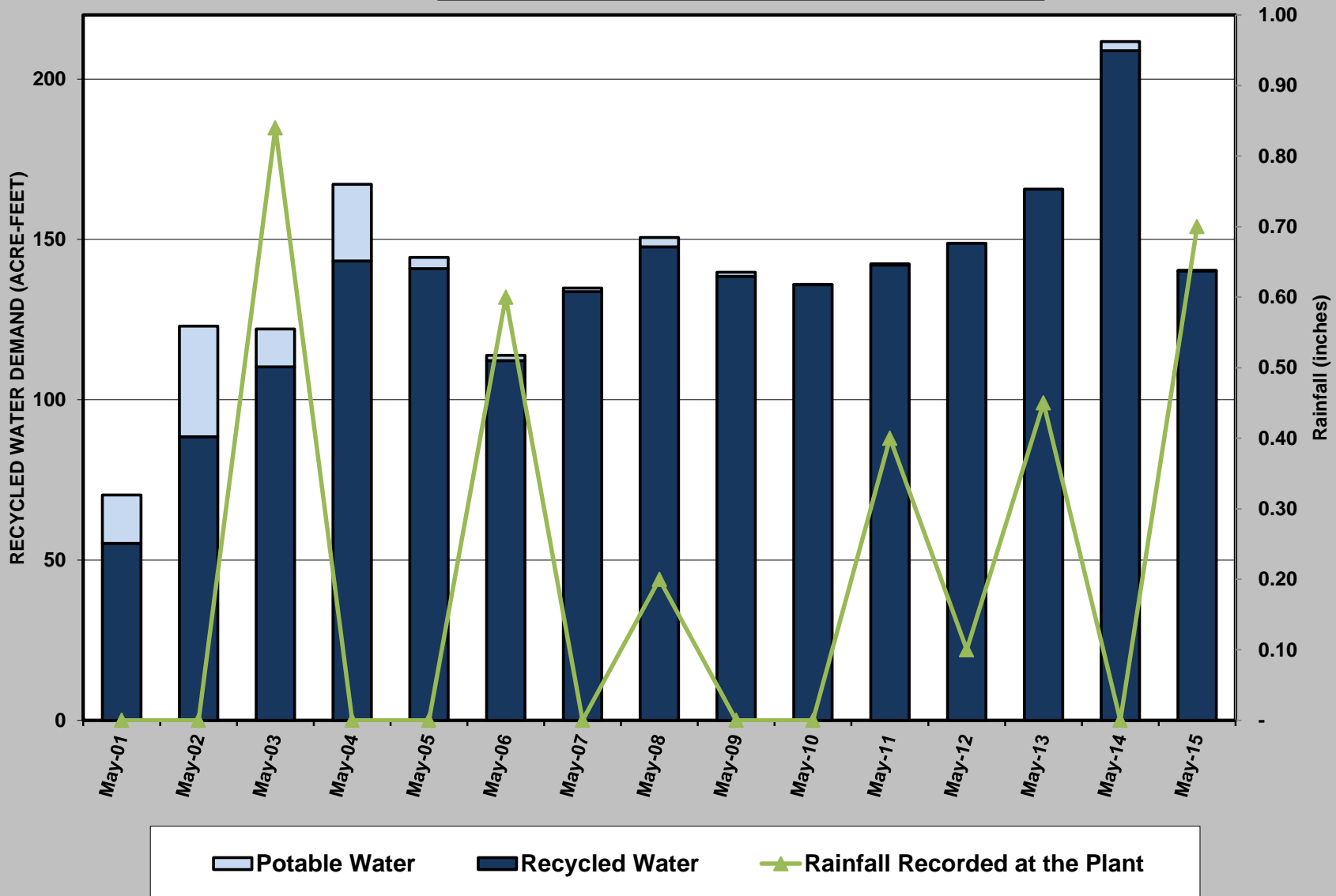
**Figure 1 - MONTHLY RECYCLED WATER DEMAND**



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



**Figure 3 - MAY RECYCLED WATER DEMAND**



SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: VILLAGE PARK RECYCLED WATER PROJECT UPDATE

RECOMMENDATION

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

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns and operates a recycled water utility that supplies recycled water to the Santa Fe Irrigation District (SFID), San Dieguito Water District (SDWD), Olivenhain Municipal Water District (OMWD) and the City of Del Mar; and sells directly to the Encinitas Ranch Golf Authority through an interruptible service agreement.

At the October 2013 SEJPA Board meeting, the General Manager presented opportunities for expanding recycled water deliveries. The staff report highlighted several projects that could be developed in partnership with the local water districts. The General Manager provided the Board a letter-of-intent for expanding recycled water sales to both OMWD and SFID. The Board of Directors provided direction to the General Manager to move forward with developing the project concepts.

At the July 2014 SEJPA Board meeting, the General Manager recommended partnering with OMWD to expand recycled water service to the Village Park community of the City of Encinitas. The Board approved the agreements for delivering recycled water to the project and for cost sharing capital costs.

The Village Park project will include more than 7 miles of new recycled water pipelines, the conversion of an existing potable water reservoir to recycled water storage, and the construction of a new water pressure boosting station. The project will provide recycled water for landscape irrigation for streetscape, greenbelts, and several schools (Figure 1). The recycled water for this project will be produced at the San Elijo Water Reclamation Facility. It is anticipated that the project will ultimately conserve 90 million gallons of potable water per year by converting existing irrigation systems to recycled water.



FIGURE 1

## DISCUSSION

The project was publicly bid by OMWD, with construction bids being opened on January 22, 2015. The construction bids were reviewed by both SEJPA and OMWD for acceptability. On February 11, 2015, the OMWD Board of Directors approved a construction contract with SC Valley in the amount of \$7,966,800. The cost for the SEJPA's element of the Village Park Project is \$1,032,250 of the \$7,966,800 construction contract.

Construction began in March 2015. During potholing of the existing utilities in Balour Drive and Via Cantebria, numerous conflicts were identified and the contractor was directed to pothole additional locations so that a new alignment for the pipeline could be designed. This additional work and the change of pipeline alignment is an added cost to the contract and change orders have been submitted to the SEJPA for cost recovery. The SEJPA has reviewed the Contractor's claim to extra work and concurs with the Contractor.

## FINANCIAL IMPACT

The SEJPA budget for the Village Park project is \$1,316,588. The construction bid for the SEJPA's element of the Village Park Project was \$1,032,250. The SEJPA has a budget cost

of \$30,000 for a SCADA control panel that was not included in the contract, which is expected to increase the construction cost to \$1,062,250. Engineering and planning for the project is expected to be completed at \$95,000. Construction management and construction contingency are budgeted at \$53,113 and \$106,225, respectively.

<b>Village Park Project Budget</b>			
		<b>Budget</b>	<b>Est. Cost at Completion</b>
<b>Engineering/Planning</b>	\$	<b>95,000</b>	\$ <b>95,000</b>
<b>Construction</b>	\$	<b>1,062,250</b>	\$ <b>1,157,314</b>
<b>Construction Management</b>	\$	<b>53,113</b>	\$ <b>51,750</b>
<b>Contingency</b>	\$	<b>106,225</b>	\$ <b>12,524</b>
<b>Total</b>	\$	<b>1,316,588</b>	\$ <b>1,316,588</b>

The contractor has submitted change orders in the amount of \$31,533 due to additional potholing, \$40,435 for the relocation of the pipeline on Balour Drive, \$9,966 for relocation on Via Cantabria, and \$13,130 for addition of a tee and valve in Encinitas Blvd for a total of \$95,064 in change orders. Incorporating the change orders into the project construction cost by using contingency funds, results in the project cost staying within the project budget of \$1,316,588. As of June 30, 2015, approximately 80% of the SEJPA pipeline has been installed and the project has \$12,524 in remaining contingency funding.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager



SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: Director of Finance/Administration

SUBJECT: WASTEWATER TREATMENT AND OCEAN OUTFALL CAPITAL BOND  
FINANCING

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to request proposals from underwriters to pursue municipal bond financing of approximately \$22.4 million; and
2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) has historically used financing for Wastewater Treatment and Ocean Outfall infrastructure upgrades and expansion. These projects were successfully financed using municipal bonds and state loans.

In 1990, the SEJPA issued revenue bonds to upgrade and expand the Wastewater Treatment and Ocean Outfall systems. These bonds were subsequently refunded in 1993, 2003, and in 2011 to reduce interest expense. The California Energy Commission loan in 2007 provided funds for energy efficiency and treatment system improvements. This loan was paid off with funds from the 2011 Refunding Bond proceeds. The 2011 Refunding Bonds will be substantially paid off in FY 2019-20. The total outstanding balance for Wastewater Treatment and Ocean Outfall Programs is \$5.6 million.

## DISCUSSION

### *Wastewater Treatment and Ocean Outfall Programs*

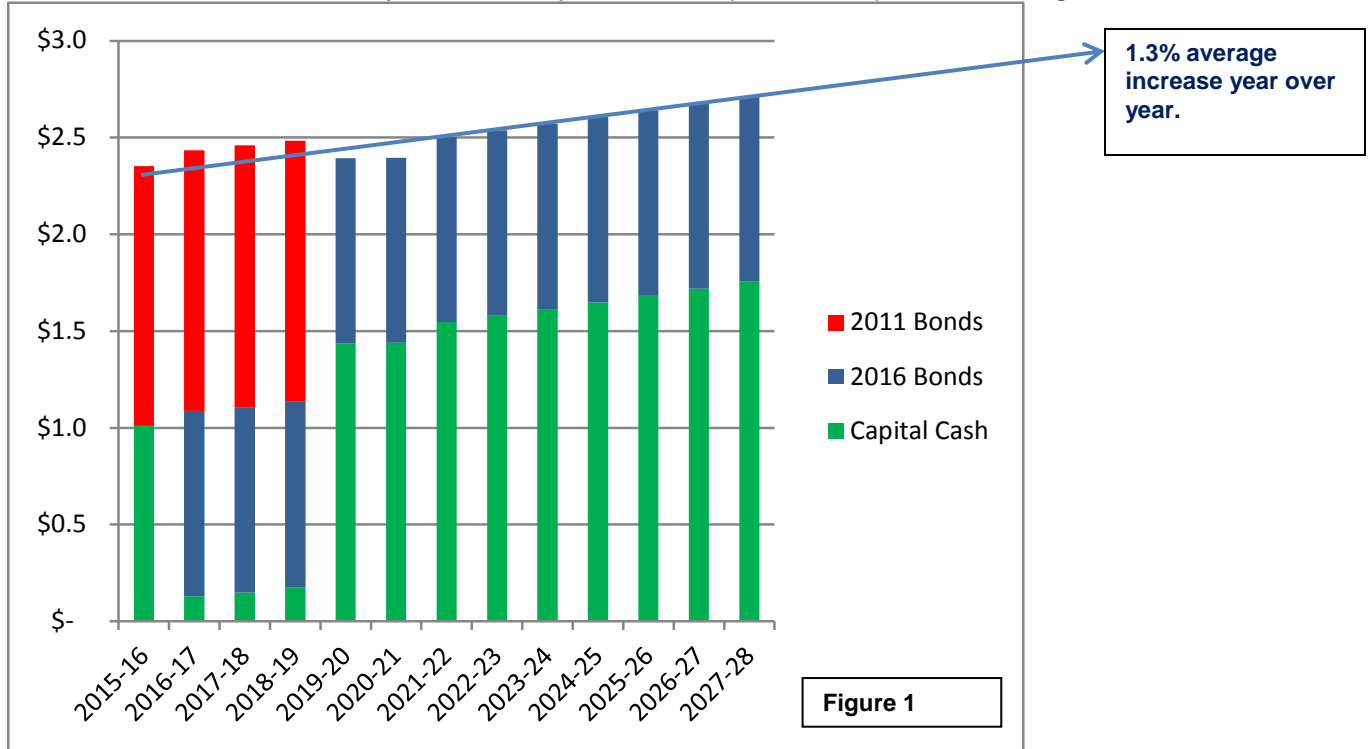
The 2015 Facility Plan included a list of prioritized projects. From this list, eleven projects were identified to be constructed by 2020 for an estimated cost of \$22.4 million. These projects are listed below:

<b>Project</b>	<b>Capital Cost</b>	<b>FY15-16</b>	<b>FY16-17</b>	<b>FY17-18</b>	<b>FY18-19</b>
Land Outfall Evaluations	\$ 5.2	\$ 2.7	\$ 2.5	\$ -	\$ -
Administration & Operations Buildings & Seismic Upgrades	7.0	0.7	2.9	3.4	
Preliminary Treatment Upgrades	2.4	0.1	1.0	1.3	
Site Improvements & Security	0.9	0.2	0.3	0.4	
SCADA	1.1	0.1	0.3	0.7	
Electrical Upgrades	0.7		0.2	0.5	
Solar	0.4		0.4		
Aeration Upgrades & Return Flow Upgrades	0.9			0.4	0.5
Dewatering Upgrades	1.7			0.6	1.1
DAF Upgrades & Co-Thickening	0.4			0.1	0.3
Digester Improvements	1.7			0.2	1.5
<b>TOTAL CIP COST</b>	<b>\$ 22.4</b>	<b>\$ 3.8</b>	<b>\$ 7.6</b>	<b>\$ 7.6</b>	<b>\$ 3.4</b>

To support recommending that the Board consider funding these projects, staff has evaluated each project for its necessity and the affordability of financing. Based on this evaluation, staff concurs with the projects selected and has confirmed that the Member Agencies' sewer rate structure can support the debt obligation of these projects. To keep the sewer rates stable, staff proposes redirecting annual capital requests to debt service until the 2011 Refunding Bonds are retired. Capital requests are defined as cash payments contributed annually for pay-as-you-go infrastructure projects. For FY 2015-16 annual value of the capital request is \$1.297 million, or approximately \$505,000 to each Member Agency, \$237,000 to the City of Escondido, and \$50,000 to Rancho Santa Fe Community Service Districts. Applying this cash value to the proposed new bond payments allows the SEJPA to complete more capital projects sooner to gain operational efficiencies and to avoid risk of infrastructure failures.

As shown in Figure 1, the capital demands to the Member Agency sewer rates remain stable with a projected annualized increase of 1.3%. The 2011 Refunding Bonds are retired in FY 2019-20, providing the opportunity to complete additional projects identified in the 2015 Facility Plan and to build capital reserves for ongoing asset management. This strategy provides the allowance for “smoothing” future sewer rates while maintaining essential wastewater infrastructure.

**Wastewater Treatment and Outfall Capital and Debt Expense Structure (in millions \$'s) to the Member Agencies**



**Figure 1**

The assumptions used to estimate the capital and debt service requirements are:

- Bonds issued in FY 2015-16 in the amount of \$22.4 mil, 4.0%, and 30 year term
- Capital cash contributions escalate at 2% each year beginning FY 2022-23
- Del Mar participates in new capital projects beginning FY 2016-17

## FINANCIAL IMPACT

There is no financial impact associated to the recommendation of this staff report. At a future Board meeting, the General Manager will update the Board with underwriter proposal information. This information should include bond market conditions, underwriting fees, bond schedule, and other financing considerations.

It is, therefore, recommended that the Board of Directors:

1. Authorize the General Manager to request proposals from underwriters to pursue municipal bond financing of approximately \$22.4 million; and
2. Discuss and take action as appropriate.

Respectfully submitted,



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Paul F. Kinkel  
Director of Finance/Administration

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: Director of Finance/Administration

SUBJECT: RECYCLED WATER CAPITAL PROJECT BOND FINANCING

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to request proposals from underwriters to pursue bond financing of approximately \$4.8 million; and
2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) has historically used financing for the Recycled Water infrastructure upgrades and expansion. This program has utilized state loans, private placement bonds, and local agency financing.

The Recycled Water utility was originally financed in 1998 by the State Revolving Fund (SRF) loan, and upgraded in 2011 with the Advanced Water Purification (AWP) loan. The recycled water distribution system was expanded with the Santa Fe Irrigation District (SFID) Pipeline loan in 2012. The SRF, AWP, and SFID loans will be paid off in FY 2020-21, FY 2032-33, and FY 2032-33, respectively. The total outstanding balance for Recycled Water Program is \$6.8 million.

DISCUSSION

The SEJPA has a series of planned or ongoing recycled water capital projects. These projects include extending recycled water pipelines to serve new customers in the cities of Encinitas and Solana Beach, adding new system storage, and relocating pipelines that are in conflict with the I-5 Freeway Widening Project. The total value of these projects is approximately \$8.0 million. Several of these projects have qualified for grant funding in an amount of approximately \$2.1 million. The cash invested is \$1.1 million and the estimated financing required to complete these projects is \$4.8 million.

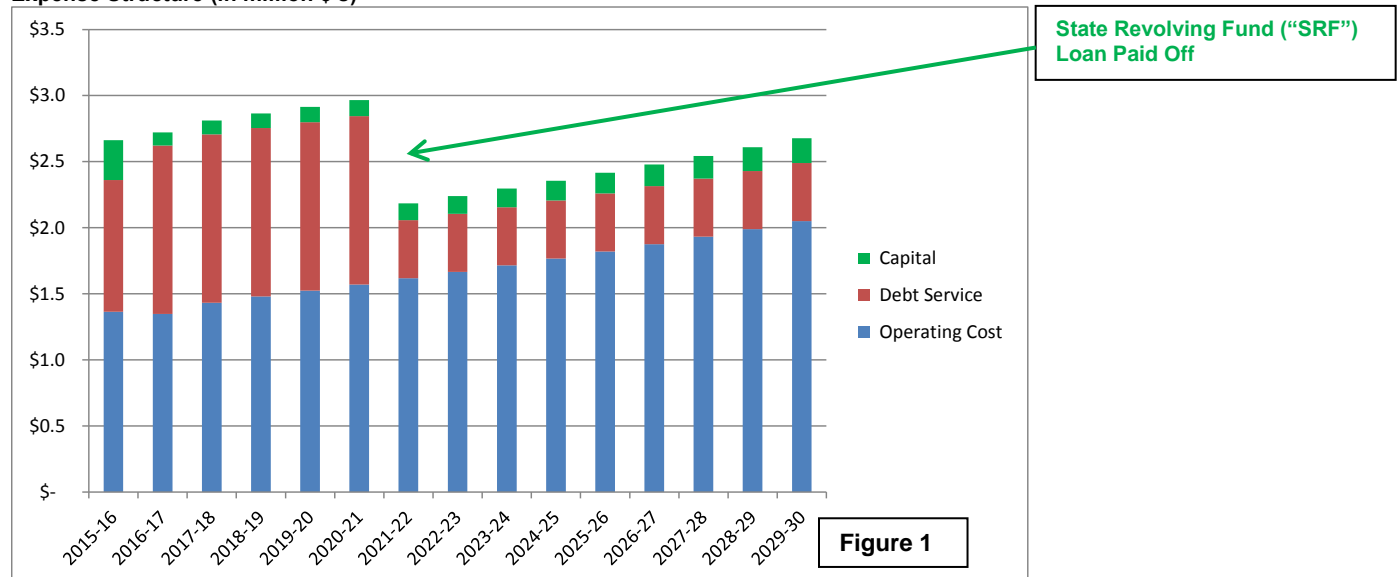
Staff has evaluated the ability for the Recycled Water Program to service the new proposed debt. Based on this evaluation, staff concludes the program has the financial strength to incur the proposed \$4.8 million debt.

The financial evaluation was based on the following assumptions:

- FY 2015-16 Budget provided revenue and expense baseline.
- Acre Feet (“AF”) sold increases from 1,520 in FY 2015-16 to 1,800 in FY 2019-20. This increase in acre-feet sold is planned sales to Olivenhain Municipal Water District (215 AF), San Dieguito Water District (35 AF), and Santa Fe Irrigation District (30 AF).
- Recycled Water Price increases 5% in FY 2016-17, and 3% thereafter.
- Metropolitan Water District (“MWD”) and San Diego County Water Authority (“CWA”) incentives cap out at 1,600 AF per year until the agreement ends FY 2024-25.
- Operating expenses escalate at 3% annually
- Bonds issued in FY 2015-16 in the amount of \$4.8 million at 4.0%.

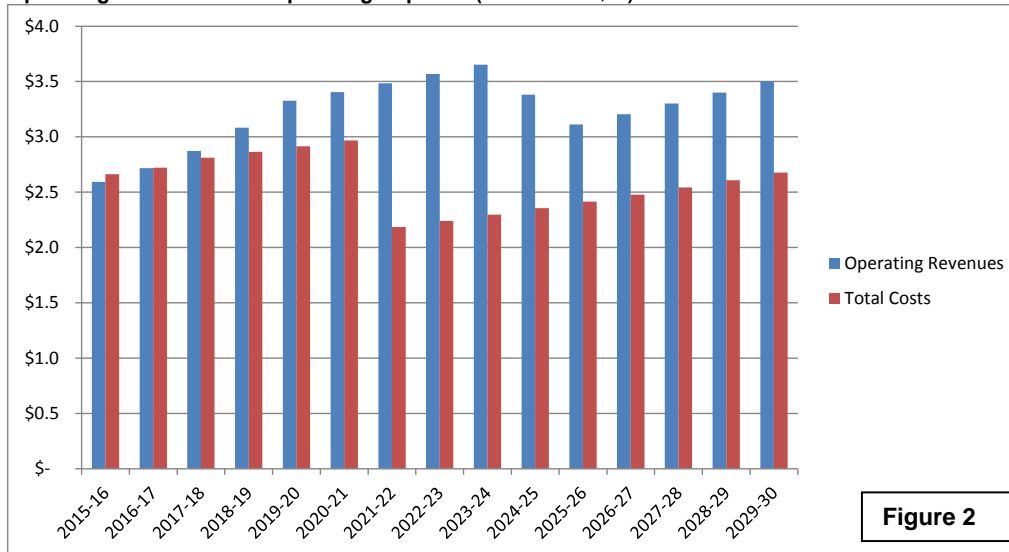
Below is the projected expense structure that includes the new debt service.

Expense Structure (in million \$’s)



Below are the forecasted revenues and expenses:

**Operating Revenues and Operating Expense (in millions \$'s) with MWD and CWA incentives**

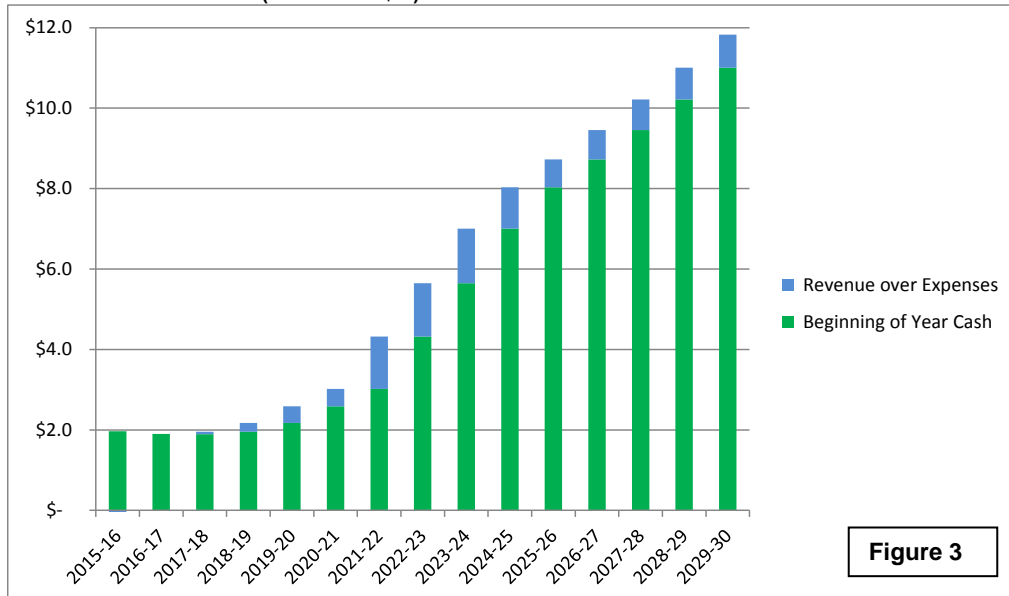


**Figure 2**

Based on the predicted revenues (including the MWD and CWA incentives), the program generates sufficient revenue to support additional debt service (Figure 2).

Figure 3 illustrates the forecast for the Recycled Water Program’s cash reserve. The financial evaluation indicates the program’s cash balance will grow in future years creating financial strength and ability to address long-term infrastructure maintenance.

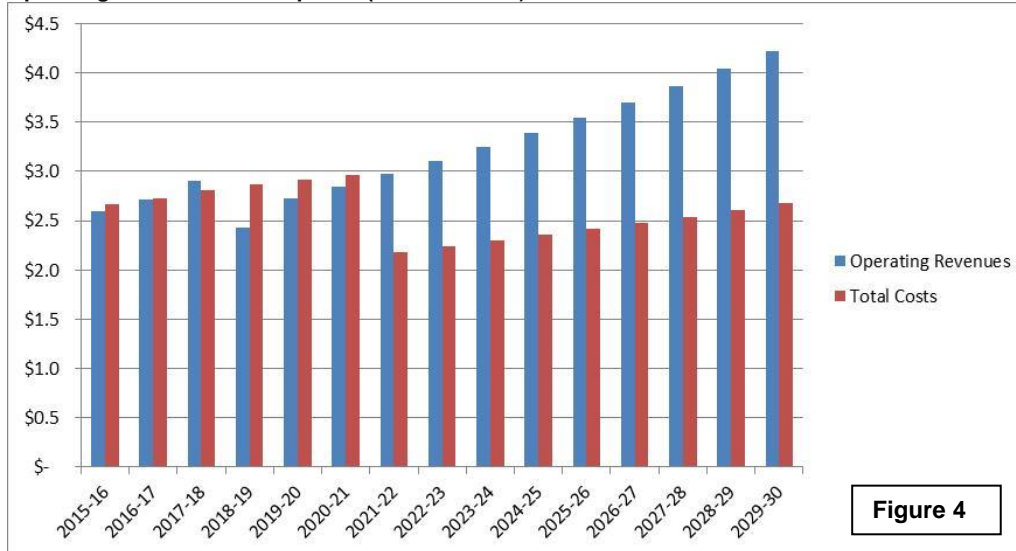
**Estimated Cash Balance (in millions \$'s) with both MWD and CWA incentives**



**Figure 3**

Staff applied stress testing to the financial model by eliminating the MWD and CWA incentives beginning FY 2018-19. This reduced annual revenues by \$720,000. To offset part of this revenue loss, future recycled water rates were modeled at escalating 4.5% annually (Figure 4).

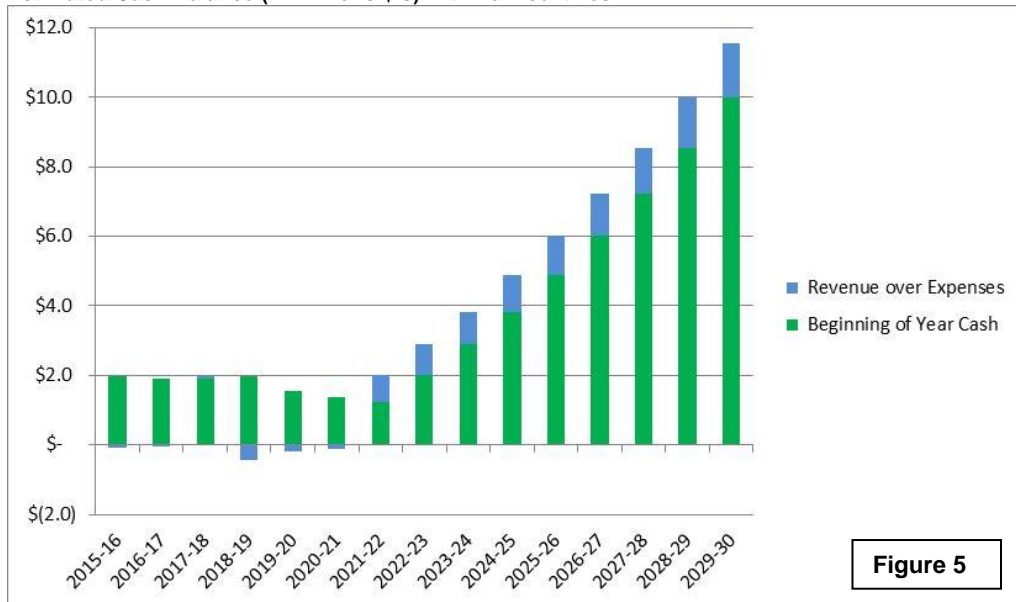
**Operating Revenues and Expense (in millions \$'s) with no incentives**



**Figure 4**

Using the results of the revenues and total costs without MWD and CWA incentives, the predicted cash balances of the program remains positive.

**Estimated Cash Balance (in millions \$'s) with no incentives**



**Figure 5**

Figure 5 provides the Recycled Water Program's estimated cash balance without incentives. This sensitivity analysis validates that if the MWD or CWA agreements end prematurely, the Recycled Water Program remains financially sustainable, although future recycled water rates will likely experience greater rate increases.



Under this scenario, the Program still has adequate financial strength to address long-term infrastructure maintenance.

### FINANCIAL IMPACT

There is no financial impact associated to the recommendation of this staff report. At a future Board meeting, the General Manager will update the Board with underwriter proposal information. This information will include bond market conditions, underwriting fees, bond schedule, and other financing considerations.

It is, therefore, recommended that the Board of Directors:

1. Authorize the General Manager to request proposals from underwriters to pursue bond financing of approximately \$4.8 million; and
2. Discuss and take action as appropriate.

Respectfully submitted,



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Paul F. Kinkel  
Director of Finance/Administration

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: AWARD OF CONTRACT FOR SAN ELIJO LAND OUTFALL FINAL DESIGN  
AND PERMITTING

RECOMMENDATION

It is recommended that the Board of Directors:

1. Accept and file the San Elijo Joint Powers Authority Outfall Preliminary Design Report;
2. Approve the Agreement with Kennedy/Jenks Consultants for the San Elijo Land Outfall Final Design and Permitting for an Amount not to Exceed \$403,068; and
3. Discuss and take action as appropriate.

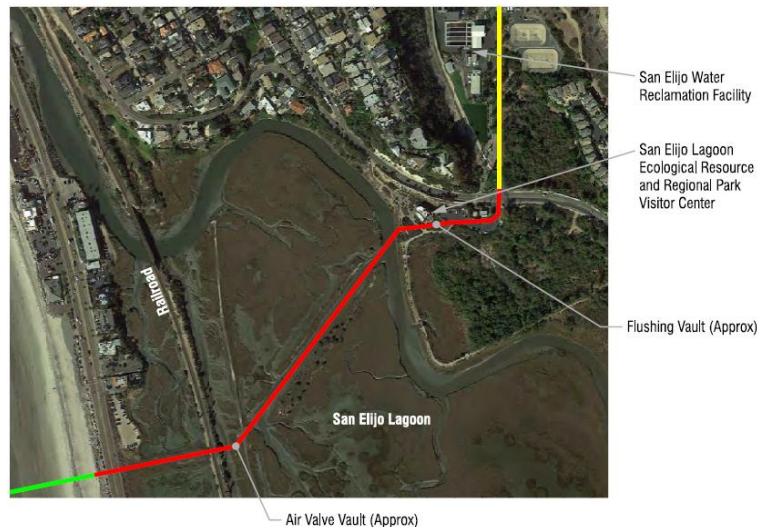
BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) is the managing authority for the San Elijo Ocean Outfall, which provides ocean disposal of treated wastewater for City of Escondido and the SEJPA. The outfall was constructed in 1965 by the SEJPA, and the outfall was extended further into the ocean in 1974 when the City of Escondido became a partner to the outfall. The outfall conveys up to 25.5 million gallons per day (MGD) of treated wastewater and is considered critical wastewater infrastructure as it is in constant use. As shown in Figure 1, the ocean outfall transverses the San Elijo Lagoon, crossing under the railroad tracks and Coast Highway, then out into the ocean about 1.5 miles. It is the land portion of the ocean outfall that has been identified for replacement. The pipeline through the San Elijo Lagoon is approximately 50 years old and, based on the pipe material and corrosive nature of the lagoon soil, is considered to be at or near the end of its useful life.

The replacement of this pipeline is a high priority project for the SEJPA as failure of this pipeline will have both environmental and financial impacts. The San Elijo Lagoon has been designated by the State of California as a marine reserve due to its biological significance and discharging treated wastewater into the lagoon would likely result in negative impacts. Furthermore, the SEJPA is subject to fines up to \$10 per gallon for spills from the outfall. Therefore, a significant failure of the outfall pipeline could result in a multi-million dollar fine. To date, the SEJPA has not experienced wastewater spills associated with the outfall and

keeping the pipeline in good operation is of utmost importance to the agency. The project ranking section of the 2015 Facility Plan identified the land outfall as the highest priority project based on environmental, financial, and social considerations.

In February 2015, the Board authorized the General Manager to initiate the Preliminary Design of Land Outfall Replacement and Permitting project with Kennedy/Jenks Consultants. The SEJPA requested proposals from six engineering firms for the project, four of which provided details of their experience with similar projects and outlines of their approach for replacing the pipeline. Kennedy/Jenks was selected based on their qualifications, experience, project understanding, and value based approach.



SEWRF LAND OUTFALL

FIGURE 1

## DISCUSSION

The preliminary design report (PDR), was completed in June 2015 (attached). The PDR examined installation alternatives for replacing or rehabilitating the lagoon/land section of the outfall. The analysis included pipeline rehabilitation and replacement methods, permitting strategies, and cost estimates in order to determine the solution that provides the best value to the agency. The decision matrix included an evaluation of the following criteria for each proposed method:

- Ease of Permitting/Minimizing Environmental Impact
- Constructability
- Cost
- Hydraulic Impacts
- Construction Risk
- Scheduling and Coordination with other Projects
- Expected Useful Life of each Alternative

The Kennedy/Jenks PDR identified horizontal directional drilling (HDD) beneath the lagoon from the beach to the Nature Center (Option 1) as the preferred alternative. This installation method has a proven track record of success in the San Elijo lagoon, presents the lowest risk of impacts

to the environment, maintains our current pipeline capacity, increases the expected useful life of the pipeline, and is the lowest cost option.

With the completion of the PDR, the project is now ready to move into final design. The SEJPA requested a proposal from Kennedy/Jenks for the final outfall design based on the recommended alternative. To date, the Kennedy/Jenks team has provided quality deliverables, responsive customer service, and creative cost reduction strategies while maintaining their schedule and budget. They have played a key role in the San Elijo Lagoon Project Integration Team that consists of local transportation agencies, non-governmental organizations, engineering firms, and contractors participating in the lagoon restoration and I-5 North Coast Corridor projects that pose significant impacts to SEJPA infrastructure.

Staff has met with representatives from Kennedy/Jenks to develop the final design and permitting scope of work and fee. The proposal from Kennedy/Jenks outlines the proposed project team, scope of work, schedule and estimated design fee to prepare the final bid set for construction of the outfall replacement. This phase of the project will include final drawing and technical specification development, permitting, development of a detailed construction cost estimate, and bidding support services. The negotiated contract fee with Kennedy/Jenks is \$403,068 for this scope of work.

#### FINANCIAL IMPACT

The 2015 Facility Plan estimated the total project cost at approximately \$6.265 million as presented below.

#### **Land Outfall Replacement Project Budget**

<b>Project Element</b>	<b>Budget</b>
Engineering, Permitting, Administration & Legal	\$1,044,000
Construction	\$4,348,000
Contingency funding	\$873,000
<b>TOTAL</b>	<b>\$6,265,000</b>

The project budget and construction cost estimate was refined during the preliminary design. The opinion of probable construction cost provided from the Preliminary Design Report indicates that the HDD option may be completed at a lower cost between \$4.0 million and \$5.25 million. Based on the ownership agreement with the City of Escondido, funding is provided through the Ocean Outfall Capital Program and is shared based on flow capacity of 21% SEJPA and 79% Escondido.

The Outfall Program has already expended funds for completing the preliminary design and CEQA permitting in the amount of \$167,912, which includes the development of an Initial Study/Mitigated Negative Declaration (IS/MND) document. The cost of the final design and permitting (\$403,068) will be funded by the current ocean outfall reserve, which has an estimated remaining balance of \$583,000. Once the final design and permitting has been completed Staff will bring construction bids to the Board for consideration of approval.

It is therefore recommended that the Board of Directors:

1. Accept and file the San Elijo Joint Powers Authority Outfall Preliminary Design Report;
2. Approve the Agreement with Kennedy/Jenks Consultants for the San Elijo Land Outfall Final Design and Permitting for an Amount not to Exceed \$403,068; and
3. Discuss and take action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

Attachment 1: Kennedy/Jenks Consultants – Outfall Preliminary Design Report

Attachment 2: Kennedy/Jenks Consultants – Proposal – San Elijo Joint Powers Authority (SEJPA) Final Design of San Elijo Water Reclamation Facility (SEWRF) Outfall Replacement

**Kennedy/Jenks Consultants**

# San Elijo Joint Powers Authority Outfall Preliminary Design Report



June, 2015

# Table of Contents

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- I. Background**
  
- II. Discussion of Installation Alternatives**
  - A. Open Cut Installation**
  - B. Trenchless Installation**
  - C. Rehabilitation of Existing Pipe**
  
- III. Permitting**
  
- IV. Cost Estimates**
  
- V. Evaluation**
  - A. Evaluation Criteria**
  - B. Hydraulics Comparisons**
  - C. Decision Matrix**
  
- VI. Recommendations**

## Attachments

Figure 1: Soil Borings Performed for Previous Projects

Figure 2: Trenchless Option 1

Figure 3: Trenchless Option 2

Figure 4: Pipe Rehabilitation

Cost Estimates

## I. Background

The San Elijo Joint Power Authority (SEJPA) owns the San Elijo Water Reclamation Facility (SEWRF), which includes a water pollution control facility and water reclamation facility that utilizes an ocean outfall for effluent discharge. The SEWRF outfall system consists of approximately 3,000 linear feet of 30-inch class 100 asbestos cement pipe across the San Elijo Lagoon installed in 1964, and 4,192 linear feet of 30-inch RCP and 4,000 linear feet of 48-inch reinforced concrete pipe ocean outfall. The outfall portion on land crosses the San Elijo Lagoon, the existing railroad tracks, and Highway 101. Under the railroad tracks the pipe is encased for 90 feet in a 50-inch internal diameter steel pipe casing with 5/8 inch wall thickness, in which the void space is filled with sand. In April 2015, SEJPA completed a Facility Master Plan, which included a desktop condition assessment of the existing outfall system. This desktop assessment indicates the pipe is likely nearing the end of its useful life.

Several other projects are currently in planning and design that will affect the lagoon in the immediate vicinity of the outfall. San Diego Association of Governments (SANDAG) plans to expand the existing railroad tracks that cross the lagoon. This is referred to as the Double Track Project. The expansion of the railroad is of particular concern because there will be additional soil loads and live loads applied to the existing outfall pipe. The additional fill is anticipated to cause new settlement of the soil around the outfall pipe, which could result in damage to the outfall if not appropriately protected. The railroad work is being planned simultaneously with the North Coast Corridor expansion of the I-5 Freeway. In addition, the Lagoon Restoration project will be taking place. All of these projects have the potential to greatly impact the lagoon because they include construction of levees, grading and altering the water level within the lagoon. Since the SEJPA is interested in replacement or rehabilitation of the land portion of their outfall in the near future, it would be most advantageous to replace or rehabilitate this outfall prior to or concurrently with other proposed construction work in the vicinity. Per SEJPA's understanding, the construction timeframe of various other projects' activities that are of a particular interest to the SEJPA Outfall Project are outlined in Table 1.

**Table 1. Related Project Schedule Milestones (Approximate)**

Year	Quarter	Activities
2016	Q1	Begin lining of existing Escondido sewer in Manchester
2016	Q1	Construction of levee and water control at I-5 crossing lagoon and install water control levee at lagoon opening
2016	Q3	Establish laydown area on beach in area of outfall pipeline Install a sleeve casing under railroad for lagoon discharge piping
2016	Q4	Levee installed across lagoon with water control. Levee is upland side of outfall pipe
2017	Q1	Flooding of Lagoon south of levee across lagoon for 7 months duration
2017	Q2	Shore disposals in vicinity of our outfall tie-in
2017	Q3	Lagoon work around north rim of lagoon
2017	Q4	Most of Lagoon work is done



The intent of this report is to evaluate alternatives for replacing or rehabilitating the lagoon/land section of the outfall. The alternatives to be evaluated include the following and each will be discussed in further detail below:

- ❖ Open Cut Installation
- ❖ Trenchless Installation
  - Single HDD
  - HDD with Pipe Ramming
- ❖ Rehabilitation
  - Sliplining
  - Cast-in-place liner (CIPP)

## **II. Discussion of Installation Alternatives**

### **A. Open Cut Installation**

An open cut installation of the pipeline may be possible because a portion of the lagoon will be temporarily isolated with a levee and dewatered. The open cut could be installed on the “dry” side of the levee, or it could be installed in the levee itself. Installing the pipe in the levee would require crossing two channels, which are spanned by pedestrian bridges. Since open cut construction in the channel areas would likely be prohibited for environmental reasons, the only available option may be to attach the outfall to the pedestrian bridge, which is not likely to be feasible. The construction of this option would also need to be closely coordinated with the levee work, which may cause scheduling and coordination issues for multiple contractors working in the same area concurrently.

The dewatering operations of the Double Track and Lagoon Restoration Projects may also be insufficient for constructing a new outfall. The groundwater level for the above projects would have to be lowered by an additional 6 ½ feet in elevation to allow for the new outfall pipe trench excavation. The added depth of dewatering will increase the cost of this alternative.

An open trench installation would also require use of heavy equipment throughout the lagoon area. The soft soil typical in the lagoon is not only environmentally sensitive; the weak nature of this soil may make use of heavy equipment on the lagoon bottom impractical.

Finally, Kennedy/Jenks has been advised by the California Coastal Commission that an open trench outfall construction option would likely be denied because of the invasive nature of construction.

Although a new pipeline can be considered to have a useful life of 100 years, due to the significant cost, environmental and permitting issues discussed above, this option is considered infeasible and is therefore eliminated from further consideration as a viable option.

## **B. Trenchless Installation**

Construction of a new outfall pipeline across the railroad tracks would mitigate risk of damaging the older existing asbestos cement outfall during construction of the Double Track Project. However, in order to do this, the schedule of the trenchless construction would have to take place prior to the Double Track construction. This would require an accelerated schedule for the design and construction of the new outfall.

Trenchless installation of the pipeline across the lagoon presents unique challenges and advantages. The environmental impacts of a trenchless installation are significantly reduced in comparison to open trench construction, making it easier to permit. Some encroachment in the lagoon may be necessary for construction of the launching and receiving areas, but large excavated pits are not required for surface launched Horizontal Directional Drilling (HDD). Two HDD approaches have been evaluated and are presented below.

1. A single Horizontal Directional Drilling (HDD) operation launched from the visitor center area can extend all the way to the beach. In doing so, HDD would cross both the RR tracks and Highway 101. See Figure 2.
2. HDD from the east side of the railroad tracks across the lagoon to the visitor center could also be considered. A pipe ramming installation with a casing could be used to cross the railroad tracks. A separate pipe ramming installation crossing Hwy 101, ending on the beach, would also be required. See Figure 3. Pipe ramming is most ideal for these shorter stretches because it limits the potential for settlement under the tracks and Hwy 101 and can be constructed in high groundwater areas, if the entrance shaft is dewatered.

Once the lagoon is crossed, a bend is required to cross the visitor center parking lot, since the turning radius limitations of an HDD will not accommodate a continuous alignment in the visitor center area. Both of these options would have an HDD staging area at the west end of the visitor center parking lot and extend easterly across the parking lot using open cut construction methods. The open trench section of pipe would be about 500 linear feet across the length of the parking lot and would connect to the junction structure near its entrance, then end at the PVC pipe north of Manchester in the SEJPA driveway.

## ***Geotechnical Considerations - HDD Construction***

Kennedy/Jenks has obtained and reviewed three recent geotechnical reports from nearby projects: the Double Track (Ninyo & Moore, 2012), the Visitor Center (Ninyo & Moore, 2007), and the Solana Beach Force Main installation (Allied Geotechnical Engineers, 2006). A map of the available soil borings is shown on Figure 1. The geotechnical exploration for the railroad Double Track Project encountered loose to medium dense sand with varying amounts of silt (estuary deposits) near the alignment of the proposed outfall pipeline. The siltstone and claystone of the Del Mar Formation was encountered approximately 95 feet below ground surface (bgs) in the boring closest to the proposed alignment, near the southern portion of the project area. However, the top of the Del Mar Formation was encountered much closer to the ground surface in borings north of the project area, as well as in the borings taken for the Visitor Center Improvements. At the location of the visitor's center, the top of the Del Mar formation may be as shallow as two feet below ground surface, while beneath the San Elijo Lagoon it is likely significantly deeper. Therefore, either trenchless option under consideration would likely involve drilling through both the sand and silt of the estuary deposits and the silt and claystone of the Del Mar Formation.

Both the estuary deposits and the Del Mar Formation would be feasible units for HDD construction, although the Del Mar Formation would be a slower drilling process. The ideal geotechnical conditions for HDD are clay-rich fine-grained soils, followed by cohesionless fine sands and silts that can be suspended in the drilling fluid for sufficient amounts of time, allowing for effective transportation of the soil cuttings. Soils should ideally be medium dense to dense to promote borehole stability and steering response. Both the denser portions of the estuary deposits and the sedimentary bedrock should result in a stable borehole with reduced risk of hydro fracture and settlement at the ground surface. Design features can be implemented to minimize geotechnical risks, including conductor casings near the surface, and proactive specification requirements such as annular space pressure monitoring.

### **1. Option 1: Single HDD**

This HDD option would begin just south of the visitor center and end on the beach just west of Hwy 101 (Figure 2). In order to avoid impacts to both the lagoon channel and Hwy 101, the HDD entry and exit points would need to be set back from these features. The bore alignment will also be designed with sufficient depth below these features, with 40 feet or more below ground surface. The proposed alignment is limited by the minimum bend radius of the steel rods used to drill the borehole.

*a) Pipe Insertion Options*

It is preferable that the product pipe be completely assembled and pulled into the borehole in one continuous length in order to reduce the risk of borehole collapse mid-pull.

If the borehole is drilled from north to south, the pipe could be assembled off-site and then pulled into the borehole from the ocean using the assistance of tugboats or other marine support. This is not an uncommon practice for HDD outfall installations. Some projects where this method was utilized include the Hueneme Outfall Pipeline for the Calleguas Municipal Water District in Port Hueneme, CA. Pullback of 2,300 feet of 36-inch HDPE was performed in 2010. The pipe was assembled at the Navy Base at Point Mugu south of the drill. Another recent project was the Lake Oswego Tigard Joint Water Partnership (2014), where 4,000 feet of 36-inch steel pipe was assembled in North Portland and towed to Lake Oswego down the Willamette River in 300-foot sections. Once they reach the project area, the sections are welded together in the water using barges.

If the borehole is drilled from south to north, pipe could be assembled within the visitor center parking lot and along the shoulder of Manchester Avenue. This option would likely interrupt Visitor Center traffic for approximately 3 weeks. Some mitigating measures to the traffic impact may include temporary parking at SEJPA treatment plant across the street, or constructing a temporary pipe truss system over the driveway entrance to the visitor center allowing cars to drive underneath.

*b) Pipe Material Considerations*

Both high density polyethylene (HDPE) and fusible polyvinyl chloride (fPVC) are being considered for this installation. The primary advantage of fPVC over HDPE is a higher tensile strength with a reduced wall thickness, resulting in a larger flow rate for a given outer diameter. This can have an impact on the price and complexity of the HDD, as both cost and risk are correlated with external pipe diameter. However, fPVC has a larger minimum bend radius as compared to HDPE which will result additional easement from State Lands Commission.

It is important to note that this alignment assumes that crossing the railroad tracks is possible without the use of a casing pipe, which is the standard North County Transit District (NCTD) railroad permit requirement. A variance to this requirement is often granted to projects if they can be proven to have minimal impact to the rail. Potential railroad impacts will be minimal to non-existent, as the borehole will likely be more than 40 feet deep at the crossing location. Discussions with NCTD have yielded that they approve of this approach

and final approval of a permit would be contingent upon review of the project plans at each submittal phase.

## **2. Option 2: HDD with Pipe Ramming**

Option 2 is similar to Option 1, but ends on the east side of the railroad tracks (Figure 3). Because it is likely not feasible to loft product pipe over the railroad tracks for pullback, product pipe laydown would need to be on the north side, using the visitor center parking lot and the shoulder of Manchester Avenue. As discussed above, this option would likely interrupt Visitor Center traffic for approximately 3 weeks. Some mitigating measures to the traffic impact may include temporary parking at SEJPA treatment plant across the street, or constructing a temporary pipe truss system over the driveway entrance to the visitor center allowing cars to drive underneath.

To reach the beach, the outfall pipeline would require two short trenchless crossings of Hwy 101 and the railroad tracks. Due to the length of the crossings, the size of the anticipated casing to be installed, and the presence of groundwater at or near the ground surface, it is likely that these crossings would be constructed using pipe ramming, which typically provides greater protection against settlement and other surface impacts than open-faced methods such as auger boring (jack and bore) below the water table. Dewatering of the inlet pit for pipe ramming will be required. As the distance is too far to do the entire crossing in one drive, two separate borings would be installed for the pipeline to cross the railroad tracks and Hwy 101.

### **Comparison of HDD Options 1 and 2**

Both HDD options would have a pipe installed via open trench across the visitor center parking lot from the HDD staging area to the junction structure, across Manchester and tie into existing pipe in the SEWRF driveway. This disturbance to visitor center traffic can be minimized by providing temporary public parking at the SEWRF facility across the street. A crossing guard could be provided to facilitate safe public crossing.

Of the two options, Option 1 is both less expensive and will result in significantly reduced impacts to the lagoon area. In contrast, Option 2 will require a large amount of construction work within the lagoon, including a large work area for the HDD entry point just east of the railroad tracks, and construction of shafts on either side of both the railroad tracks and Hwy 101. Therefore, provided a casing is not required by the railroad, it is recommended to pursue Option 1.

One potential risk of trenchless construction is that the gradient of the pipeline may deviate from the design grades slightly. This may result in minimal loss of capacity, but compared to optimal hydraulics is not deemed significant enough to affect the outfall capacity. Other

inherent risks of trenchless installation include contact with unknown subsurface utilities/structures along the bore path. Due to these factors, trenchless installation is considered to have a construction risk, but considering the expected lagoon impact from other techniques, places it in a lower risk category by comparison and a much lower environmental risk profile. The useful life of a new HDPE or fPVC pipe installed using trenchless methods is expected to be ~100 years.

### **C. Rehabilitation of Existing Pipe**

In 2014, SEJPA as part of the Master Plan performed a desktop condition assessment of the existing 30-inch pipeline. It was estimated that the cost of a physical inspection via acoustic pipe wall stiffness assessment would be approximately \$77,000. A physical pipe inspection would not necessarily be an accurate representation of the entire pipeline or the remaining useful life of the pipe. Since there is currently no physical data to document the actual condition of the pipeline, it is unknown if the existing pipe has structural deficiencies or would be a suitable candidate for a liner. At a minimum, it is recommended that a video inspection of the pipe be performed prior to further consideration of a CIPP liner. The cost of a video inspection would be ~\$25/ft, or \$62,500, which does not include the cost of a bypass. One option is to cleanse the outfall to the extent possible with clear recycled water and conduct the video under submerged conditions. The other is to install a bypass to allow CCTV through the outfall in an empty state.

For the area where the existing pipe crosses the railroad tracks, SANDAG worked with HDR Consultants to prepare a 30-inch Sewer Outfall Protection Memorandum for the San Elijo Lagoon Double Track Project, dated February 5, 2015. The purpose of the memorandum was to evaluate protection of the existing 30-inch asbestos cement outfall during the construction of the railroad. "The proposed SELDT (San Elijo Lagoon Double Track) project second track will be about 3.5 feet higher and offset 15 feet east of the existing mainline. This will require additional fill and rail loading on a portion of the sewer which is not protected by steel casing. The additional fill is anticipated to cause new settlement of the soil around the outfall pipe, which could result in damage to the outfall if not appropriately protected. In order to accommodate the second track and embankment the sewer will require an additional 50 feet of linear protection." Various sewer protection alternatives were considered in the memo, and HDR recommends that if the outfall is to remain in place, constructing a protection slab on piles for approximately 50 feet along the outfall is the best method of protecting the existing pipe in place.

One major consideration with pipe lining techniques is that they have not been tested over a long time span. Insituform, a noted CIPP installer, has documented the installation of a CIPP liner over a 40-year span. They have performed core samples every ten years on test

sections of the liner. Based on the results of the core samples, Insituform states that the life expectancy of a new CIPP installation would be up to 100 years. However, for the purposes of this evaluation, we base the expected life of a CIPP liner on the documented installation and assume that the life of a rehabilitated pipeline will be 50 years.

The rehabilitation of existing pipe would require a full shut down of the existing pipe and the installation of a bypass system. Since the outfall is currently rated at 25.5 MGD, the bypass system should be capable of transferring this peak flow, with an appropriate factor of safety. The anticipated shut down time of the outfall would be approximately 2 weeks, which includes cleaning the pipe and installing a new CIPP liner. The bypass pipe would have to cross the railroad and the Hwy 101. Crossing the railroad may be possible by temporarily using a steel casing which will be installed as part of the Double Track work. This would require strategic scheduling with the double track contractor. Options to cross Hwy 101 are somewhat limited, and may require installation of a new pipe installed via pipe ramming. The bypass pipe could potentially follow the outlet from the lagoon and extend through the existing culvert under the railroad and Hwy 101.

To install CIPP for the entire 2,500 linear foot outfall, installation will need to be performed in two sections, approximately 1,250 linear feet each. This would require an access structure in the center of the lagoon. Building this structure is an additional cost and would likely need to be installed with a barge. There would need to be dewatering during the installation of the access structure. See Figure 4.

### **III. Permitting**

The project is located within the jurisdiction of multiple local, state, and federal agencies that will require permits in order to successfully implement the project. The agencies having jurisdiction over the project include the United States Army Corps of Engineers (USACE), United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), California Coastal Commission (CCC), City of Encinitas, North County Transit District (NCTD), and California State Lands Commission (CSLC). Initial contact was made with these agencies to acquire a preliminary idea of what permits each agency might require. An overview of the project and the different installation alternatives that are being considered to be utilized were discussed with the agencies. Through these discussions, the agencies provided their preliminary thoughts on what permits might be required for the project. The table below summarizes what permits might be required for the various agencies and the expected timeframe for the permitting process. More detailed summaries for the expected permitting process for each agency are provided below.

**Table 2. Expected Permits and Timeframes**

<b>Agency</b>	<b>Expected Permits Required</b>	<b>Expected Permitting Timeframe (Approx.)</b>
USACE	Nationwide Permit 12	45 days – 12 months
	Individual Permit	6 – 12 months
USFWS	No permit required but an informal or formal consultation might be	Informal: A couple days or months Formal: 3 months or more
CDFW	Lake and Streambed Alteration	30 – 90 days
RWQCB	401 Water Quality Certification	6 – 12 months
	Waste Discharge Requirements	6 – 12 months
CCC	Coastal Development Permit	3 – 6 months
City of Encinitas	Coastal Development Permit	3 – 6 months
	Major Use Permit	6 – 12 months
NCTD	Right of Entry Permit	1 – 2 months
CSLC	Easement in Lagoon	3 months

**United States Army Corps of Engineers**

The USACE indicated that one of two different permits would be required. The first permit that could be required is the Nationwide Permit 12 which is for utility line activities. The Nationwide Permit 12 could take 45 days to permit as a best case scenario, but a timeframe of about 6 months should be planned for. If open cut installation is selected this permit could take approximately 9-12 months to permit. The second permit that could be required is the Individual Permit, which is required if the project doesn't qualify for a Nationwide Permit 12. The individual permit requires more public involvement and is evaluated under a public interest review. The Individual Permit could take approximately 6-12 months to process. The USACE does not require final, stamped plans to apply for these permits, although it is recommended to be as far along as possible before applying to minimize changes and the potential for having to resubmit. The USACE recommended that a pre-project consultation meeting (hosted by CDFW and attended by USACE) be attended to discuss the project and permitting process in more detail. The USACE indicated that they would be willing to schedule an individual meeting also.

**United States Fish and Wildlife Service**

The USFWS indicated that no individual permit is required from them. The USFWS coordinates with the USACE and would get involved through them. If the USACE determines that listed species will



be impacted by the project the USFWS will get involved. If the USACE determines that listed species will not be impacted by the project then the USFWS will not get involved, unless they disagree with the USACE's determination in which case they can get involved. The work USFWS completes is in accordance with Section 7 of the Endangered Species Act and is required if the USACE requires an Individual Permit. The USFWS will conduct either a formal or informal consultation to void or minimize impacts of the project. An informal consultation is more like an agreement that says the project might have an effect and measures will be taken to minimize the effects to an insignificant level. An informal consultation can take from a couple of days up to over a year, but it is anticipated that it would be a shorter timeframe. A formal consultation is more detailed in what conservation measures are going to be used to void or minimize impacts. A formal consultation requires more coordination between the USFWS and representatives of the project on what conservation measures will occur, and as a result this process generally takes at least 3 months. The preferred installation method would be HDD as it would be the least invasive and might not require the USFWS to get involved. The USFWS recommended that a pre-project consultation meeting be attended to discuss the project and potential involvement of USFWS in more detail.

#### California Department of Fish and Wildlife

The CDFW indicated that regardless of what installation method is selected a Lake and Streambed Alteration (LSA) notification would be required. The LSA could take approximately 30-90 days to process, but the clock stops if CDFW is waiting any information or documents needed to process the LSA. Applying for the LSA can occur before final, stamped plans are developed, but the final, stamped plans will need to be submitted when they are ready. The CDFW would be willing to schedule a pre-project consultation meeting to discuss the project and permitting process in more detail. Pre-project consultation meetings are hosted by CDFW and held on the second Tuesday of every month, and the USFWS, USACE, and the RWQCB typically attend these meetings as well.

#### Regional Water Quality Control Board

The RWQCB indicated if the USACE requires a Section 404 Permit then they would require a 401 Water Quality Certification regardless of what installation method is selected. If a 401 Water Quality Certification is not required then a Waste Discharge Requirements would be required. The CEQA process would need to be finalized and submitted prior to applying for permits from the RWQCB. The permitting process for RWQCB could take approximately 6 months – 1 year. Depending on what installation method is selected additional permits such as dewatering permits, construction storm water permits, stockpiling permits, groundwater extraction permits, etc would be required. RWQCB recommended that construction storm water permits be applied for regardless of the installation method selected. Construction storm water permits require a SWPPP to be completed. Final, stamped plans are not required to begin the permitting process, but changes would have to be noted and approved once final plans are developed. RWQCB attends the

pre-project consultation meetings hosted by CDFW and recommended that it would be a good idea to attend one of these meetings to discuss the project and permitting in more detail.

### California Coastal Commission

The CCC indicated that a Coastal Development Permit (CDP) would be required for the portion of the project within San Elijo Lagoon. This permit could take approximately 3-6 months to permit if an installation method with little to no impacts is selected, and more time to permit if a more invasive installation method is selected. The CCC advised that open cut installation would most likely not get permitted due to how invasive it would be. Applying for the CDP can occur before final, stamped plans are developed. The CCC indicated that they would like to be involved with the project as early as possible to minimize potential issues down the road during design, and that they would be willing to schedule a meeting to discuss the project and permitting process in more detail.

### City of Encinitas

The City of Encinitas indicated that several permits would be required. In addition to a CDP being required by the CCC, a CDP would also be required by the City of Encinitas. Both agencies have the authority to issue CDPs, and the project falls within both of their jurisdictions. The CDP could take approximately 3-6 months to permit. The CDPs for both agencies might be able to be combined into one overall CDP. The project would also most likely trigger a Major Use Permit (MUP), which would take approximately 6-12 months to permit. The permitting process for the CDP and the MUP would run concurrently. The various departments within the City of Encinitas would also review the plans for the project and be signatory to the plans. Prior to construction activities, an encroachment permit would be required which would be filed for and obtained by the contractor. The City of Encinitas would be willing to schedule a Staff Advisory Committee meeting, which occur every Wednesday, to discuss the project and permitting process in more detail.

### North County Transit District

The NCTD indicated that a Right of Entry Permit (REP) would be required regardless of the type of installation method selected. The REP permitting process could take approximately 1-2 months. NCTD's standard practice is to require a casing whenever a pipe crosses the NCTD easement. The possibility of obtaining a waiver for the requirement of a casing under the railroad tracks was a discussed with NCTD. There are several factors that go into determining if a casing is required such as depth of the pipe, material of the pipe, expected service life of the pipe, types of joints used, etc. NCTD wants to ensure that the possibility of leaks and floods are minimized as much as possible. A meeting was held with NCTD at San Elijo Water Reclamation Facility on June 5 to discuss the project specifics with NCTD. NCTD staff indicates that the HDD concept without a casing (Option 1) is accepted based on final approval of plans and specifications. Kennedy/Jenks will continue to coordinate with NCTD throughout the final design phase to promote NCTD acceptance.

## California State Lands Commission

The CSLC is responsible for issuing the necessary easement to SEJPA for the path of the outfall. The outfall is currently located in an existing 30 foot wide easement that SEJPA has. A request has been made to the CSLC to extend this easement an additional 10 feet on each side of the pipe to make the total easement 50 feet wide. If a new pipe is installed, it is likely that additional easement within the lagoon would be required. When the final pipe alignment is determined, Kennedy/Jenks will prepare and submit a legal description along with the easement application.

## IV. Cost Estimates

Preliminary Class 4 Cost Estimates have been prepared for Trenchless Option 1, Trenchless Option 2, and outfall rehabilitation with CIPP Lining. The estimate was prepared using civil construction cost estimating software and was drawn from information provided about the project available at the time. The source of the unit costs are recent cost data from similar projects size and type, unit cost information from contractors and suppliers, and trenchless cost information provided by Staheli Trenchless and trenchless construction contractors. The construction cost estimate was based on California prevailing wages to be paid by the contractor to its construction team members. A breakdown of these estimates is attached to the report.

**Table 3. Cost Estimate Summary**

Installation Alternative	Estimated Range of Probable Cost	
	Total Est.	+30%
Trenchless Option 1: Single HDD	\$4,040,000	\$5,252,000
Trenchless Option 2: HDD with Pipe Ramming	\$4,830,000	\$6,279,000
Rehabilitation CIPP Lining	\$5,010,000	\$6,513,000

## V. Evaluation

### A. Evaluation Criteria

SEJPA has identified Criteria to be used in evaluating each of the installation methods. Applying these criteria each installation method will receive a score of 1-10 based on how well the alternative fulfills the criteria, with 10 being the most positive score. The Criteria include:

- Ease of Permitting/ Minimizing Environmental Impact
- Constructability

- Cost
- Hydraulics
- Construction Risk
- Scheduling and Coordination with Other Projects/ Preference of other Entities
- Useful Life

### *Ease of Permitting*

Extensive coordination will need to take place with several different agencies including the U.S. Army Corps of Engineers (USACOE), U.S. Fish and Wildlife (USFWS), California Dept. of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC).

### *Constructability*

Evaluation of constructability will consider the feasibility/suitability of the installation technology for the specific conditions provided by this project.

### *Cost*

An Opinion of Probable Construction Cost (OPCC) estimate, Class 4, has been prepared for installation alternatives deemed to be feasible in other categories.

### *Hydraulics*

Hydraulic influences of each option is discussed and evaluated. This includes impacts resulting from any changes in inside diameter, changes in material/lining, or changes in slope.

### *Construction Risk*

Evaluation of construction risk entails consideration of the likelihood of a change in cost during construction, and anticipated safety risks.

### *Scheduling and Coordination with Other Projects*

The construction of the outfall replacement/ refurbishment will need to be coordinated with the North Coast Corridor Project (NCCP), the SANDAG Double Track project, and the Lagoon Restoration Project. The ease with which the installation method can cooperate with these projects is a major determining factor. A San Elijo Lagoon Integration Core Team Charter has been formed to facilitate the communication and coordination of these projects in order to enhance environmental protection, safety, public perception and to minimize costs.

## Useful Life

The existing asbestos cement outfall pipe is 50 years old and according to the SEJPA Facility Update Plan (April 2015 Final Report), is nearing the end of its useful life. Because of the environmentally sensitive habitat, the SEJPA values the ability to maximize the life of its infrastructure so that the potential for disturbing the habitat is minimized. Additionally, longer service life for infrastructure means lower capital costs over the life of an asset.

## B. Hydraulics Comparisons

Although a full hydraulic analysis of the pipeline has not been performed within the scope of this report, a general cross-sectional hydraulic analysis has been prepared to compare various materials and commercially available sizes. As discussed previously in this report, HDPE and fPVC have been identified as favored materials for installation of a new pipe.

In the case of a new trenchless installation, a commercially available pipe size would be selected to have an inside diameter (I.D.) as close to 30-inches as possible to match the I.D. of the existing pipe, while keeping in mind that increases in outside diameter drives up the cost and risk of the project. Therefore, pipe I.D. sizes of 29.91 and 28.73 inches for fPVC and HDPE, respectively, were selected.

A sliplining application would require a new pipe with an outside diameter (O.D.) small enough to fit inside the existing 30-inch pipe. The commercially available size of fPVC that would fit in the existing AC pipe has an O.D. of 25.80 inches, and an I.D. of 24 inches. A 24 inch pipe is considered to restrict the flow too much compared to the existing 30 inch and would therefore not be a suitable material for sliplining.

**Table 4. Existing Pipe Hydraulic Conditions**

Pipe Type	Pipe Flow		Pipe O.D.	Pipe I.D.	Pipe Area	Velocity	C factor	H <sub>L</sub> /100 ft
	mgd	gpm	in	in	sqft	fps		ft
AC	25.5	17,708	--	30	4.91	8.04	140	0.53

**Table 5. Proposed Pipe Hydraulic Conditions (based on existing flow)**

Pipe Type	Pipe O.D.	Pipe I.D.	Pipe Area	Pipe Flow		Velocity	C factor	H <sub>L</sub> /100 ft
	in	in	sqft	mgd	gpm	fps		ft
<b>Replace with new HDPE pipe</b>								
HDPE (IPS)	32	28.73	4.50	25.5	17,708	8.76	150	0.58
<b>Replace with new Fusible PVC</b>								
Fusible C-905	32	29.91	4.88	25.5	17,708	8.09	150	0.47
<b>Slipline with new HDPE pipe</b>								
HDPE (IPS)	28	25.17	3.46	25.5	17,708	11.42	150	1.10

The existing outfall pipeline has been rated for 25.5 MGD. Assuming the flow is maintained, each of the materials and pipe sizes have been checked for what resulting velocity could be anticipated. A high velocity number would indicate that hydraulic pressures would be increased in the pipeline, resulting in greater hydraulic losses and potential decreased capacity of the system. Based on this analysis, installing a new fPVC pipe via trenchless methods or a CIPP liner would provide optimal system hydraulics compared to the other options.

### C. Decision Matrix

As discussed in the body of this report, there are very different considerations of each alternative if the project is rolled in with the construction and permitting of the larger Double Track/Lagoon Restoration projects, or if the project is built and permitted independently of the other work. For this reason, two separate decision matrixes have been prepared.

**Table 6. Decision Matrix**

	Ease of Permitting	Constructability	Cost	Hydraulics	Construction Risk	Interfacing with other Projects	Useful life	Total (Max 70)	Score
<b>Open Trench</b>	1	2	8	9	4	5	10	39	<b>56%</b>
<b>Trenchless Option 1: Single HDD</b>	9	8	8	8	6	9	10	58	<b>83%</b>
<b>Trenchless Option 2: HDD with Pipe Ramming</b>	8	8	7	8	6	7	10	54	<b>77%</b>
<b>Rehabilitation Sliplining</b>	6	8	6	4	8	8	8	48	<b>69%</b>
<b>Rehabilitation CIPP Lining</b>	6	6	6	8	7	8	6	47	<b>67%</b>

## VI. Recommendations

Based on the evaluation criteria stated above, a pipe installation via HDD Option 1 is recommended for the following reasons:

- This option has the least environmental impact of all the options as it avoids disturbance within the lagoon limits.
- Of the feasible installation options, HDD option 1 is the least expensive.
- No major obstacles are anticipated during the permitting process. Based on our conversations with NCTD, they approve of the approach and will be willing to work with SEJPA during the design to facilitate a waiver of the casing requirements.
- If the outfall is replaced prior to the double track work, the risk of damaging the existing pipe will be mitigated. Additional protection measures for the existing pipe

would not need to be installed by NCTD, which not only saves in project costs but also reduces associated risks of damaging the existing pipeline.

- This option provides the greatest independence from the NTCD and Lagoon Restoration Projects. The project can be installed virtually independent from the other projects, minimizing coordination efforts, and maximizing schedule flexibility.
- Option 1 provides the greatest expected service life (100 years).



**Kennedy/Jenks Consultants**

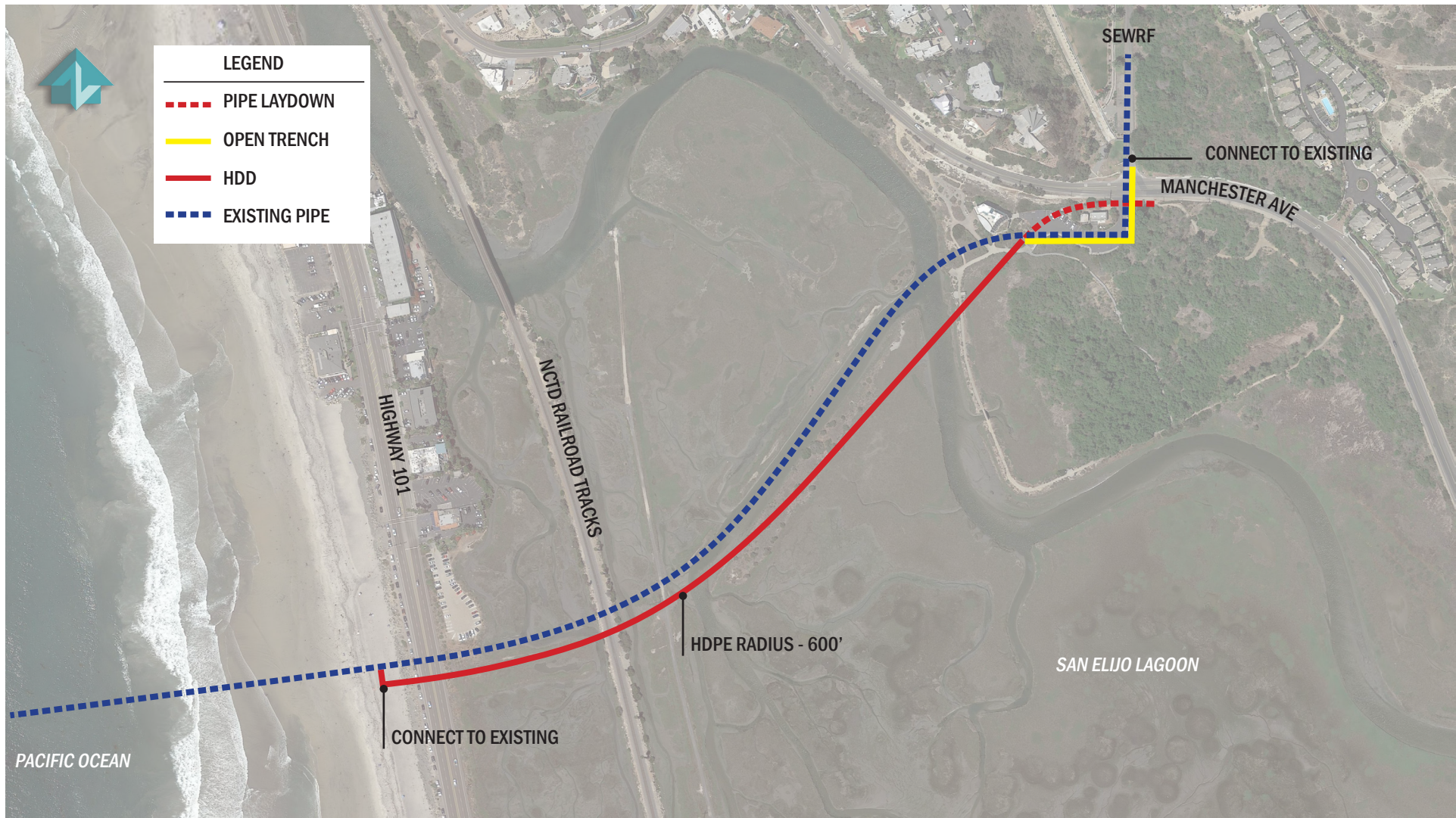
SAN ELIJO JOINT POWERS AUTHORITY  
FINAL REPORT

SOIL BORINGS PERFORMED FOR PREVIOUS PROJECTS

JUNE 2015

FIGURE 1





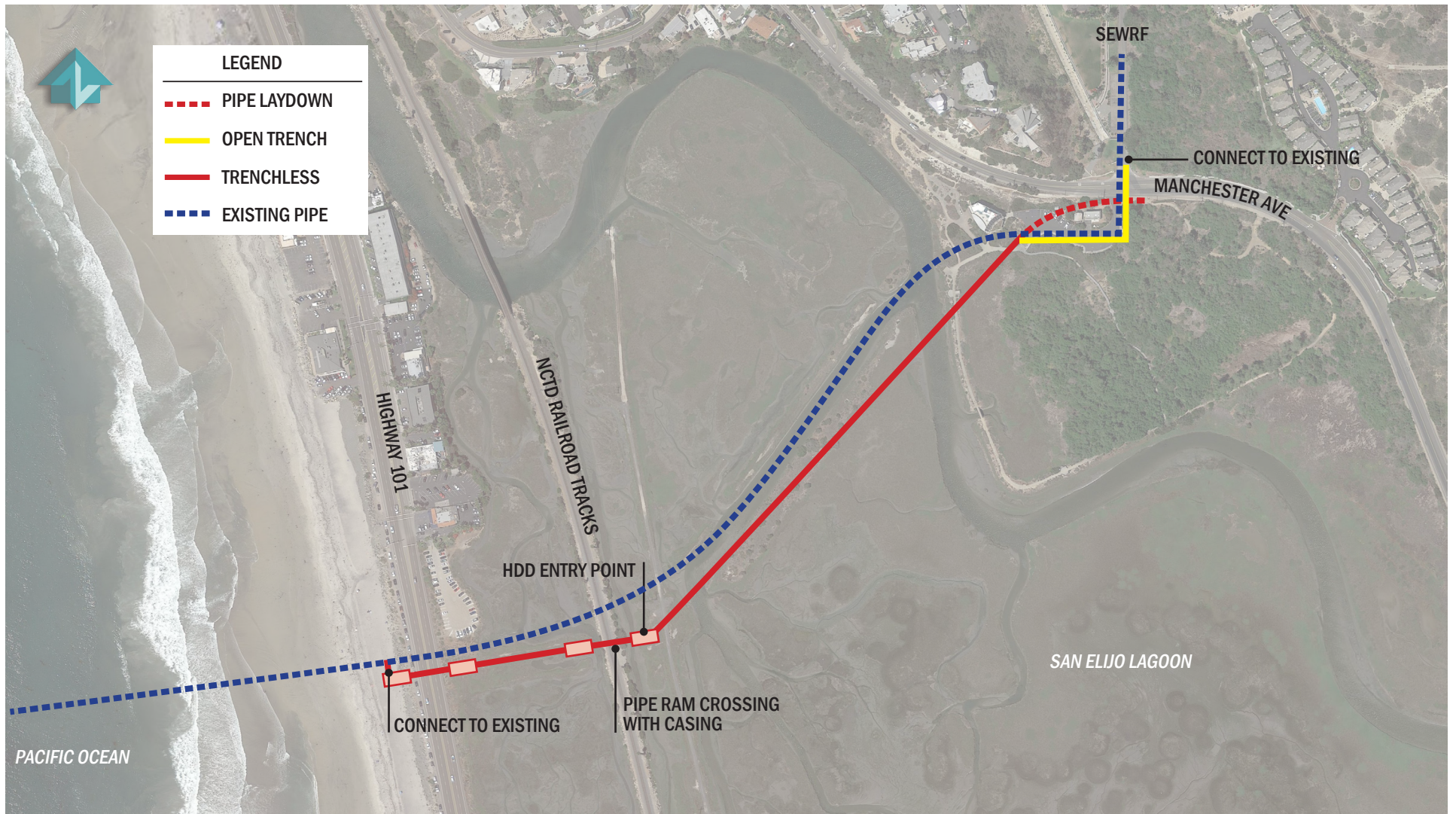
**Kennedy/Jenks Consultants**

SAN ELIJO JOINT POWERS AUTHORITY  
FINAL REPORT

TRENCHLESS OPTION 1 HDD ALIGNMENT

JUNE 2015

FIGURE 2



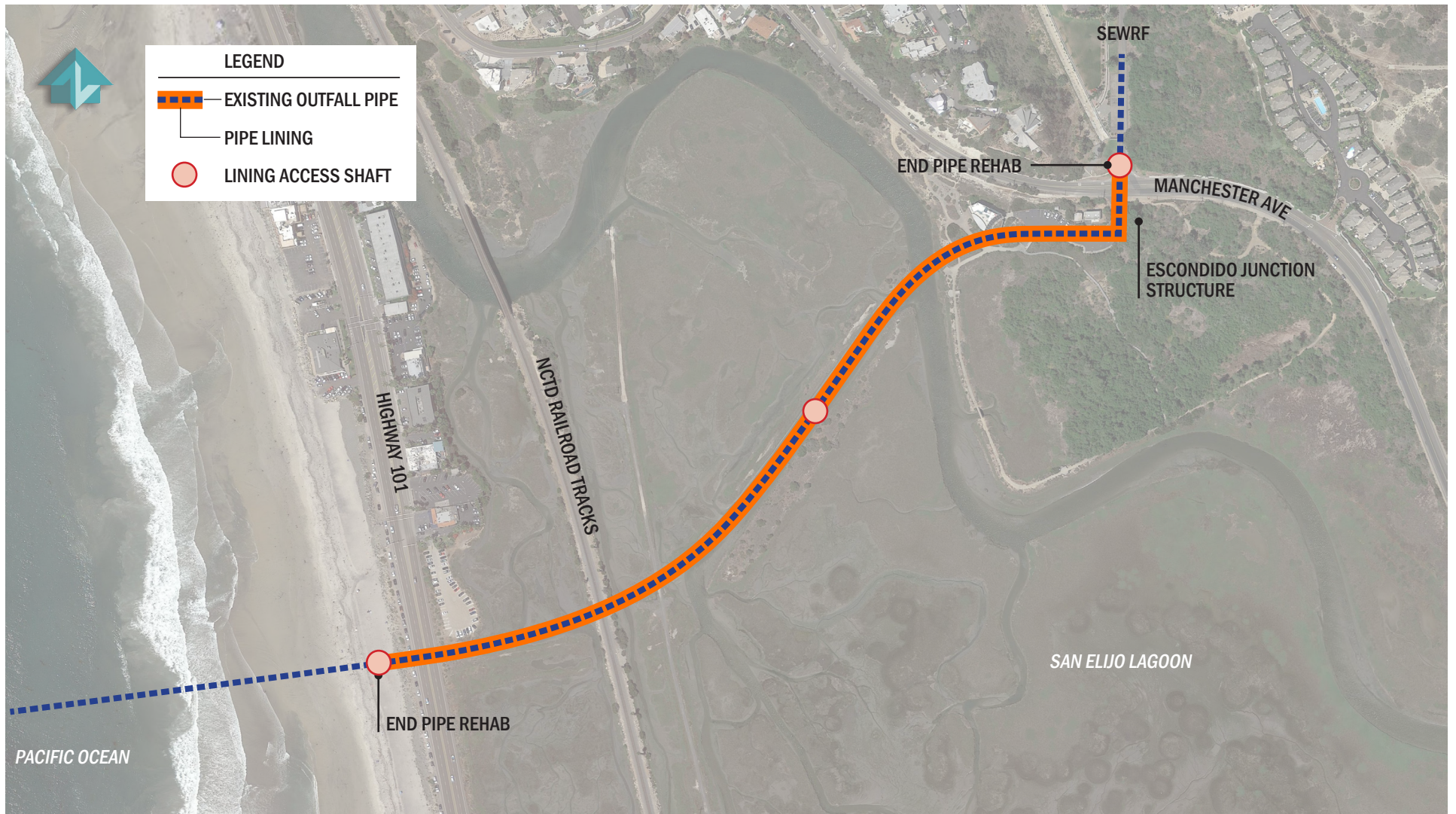
**Kennedy/Jenks Consultants**

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FINAL REPORT

TRENCHLESS OPTION 2 HDD/PIPE RAM ALIGNMENT

JUNE 2015

FIGURE 3



**Kennedy/Jenks Consultants**

SAN ELIJO JOINT POWERS AUTHORITY  
FINAL REPORT

**PIPE REHABILITATION**

JUNE 2015

FIGURE 4

**OPINION OF PROBABLE CONSTRUCTION COST**

**KENNEDY/JENKS CONSULTANTS**

Project: San Elijo Joint Powers Authority Outfall

Prepared By: JLH/SBW

Date Prepared: 27-Jun-15

Building, Area: Option 1 - HDD Alignment

K/J Proj. No. 1544100\*00

Current at ENR 10,981

Escalated to ENR \_\_\_\_\_

Months to Midpoint of Construct 6

Estimate  Conceptual  Construction  
 Type:  Preliminary (w/o plans)  Change Order  
 Design Development @  % Complete

Spec. No.	Item No.	Description	Qty	Units	Materials \$/Unit	Materials Total	Installation \$/Unit	Installation Total	Sub-contractor \$/Unit	Sub-contractor Total	Total
<b>Site Prep</b>											
		Surveying	1	LS			5,000.00	5,000			5,000
		Erosion Sediment Controls (Silt Fences, Straw Wattles, Catch Basin protection & Maint)	1	LS			10,000.00	10,000			10,000
		Temporary Fencing	1	LS			5,000.00	5,000			5,000
<b>HDD Pipeline (2100 LF)</b>											
		Mobilize HDD	1	LS					50,000	50,000	50,000
		HDD Pipeline 30"	2,100	LF	185.00	388,500			536	1,125,000	1,513,500
		Hydrostatic Testing	2,100	LF			4.00	8,400			8,400
		Traffic Controls (for HDD laydown)	1	MO			10,000.00	10,000			10,000
		Landscape Restoration/ Repairs (From HDD)	1	LS	5,000.00	5,000	20,000.00	20,000			25,000
<b>Open Cut Pipeline - Visitors Center &amp; across Manchester (500 LF)</b>											
		Sawcutting Paving	1,000	LF					2	2,000	2,000
		Remove & Dispose Paving (8' wide)	444	SY					15	6,667	6,667
		HDPE Pipe 30"	500	LF	185.00	92,500	41.00	20,500			113,000
		HDPE Pipe Fittings	3	EA	1,800.00	5,400	1,000.00	3,000			8,400
		Trenching 6' wide x 8' deep (Excavation & Backfill, Trenchbox)	500	LF			35.00	17,500			17,500
		Pipe Bedding	500	LF	18.00	9,000	10.00	5,000			14,000
		Dewatering Trench	500	LF			20.00	10,000			10,000
		Repaving over Trench 8' wide	444	SY					45	20,000	20,000
		Hydrostatic Testing	500	LF			4.00	2,000			2,000
		Traffic Controls (in parking lot/ Manchester)	1	LS	1,000.00	1,000	5,000.00	5,000			6,000
		Utility Tie Ins/ Repairs	1	LS			5,000.00	5,000			5,000
		Landscape Restoration/ Repairs (From open Cut)	1	LS	3,000.00	3,000	7,000.00	7,000			10,000
<b>Connection At Junction Structure</b>											
		Additional Excavation at Junction Structure	1	LS			3,000.00	3,000			3,000
		Additional Dewatering	1	LS			5,000.00	5,000			5,000
		Coordinate Shutdown/ Tie In	1	LS			2,500.00	2,500			2,500
		Piping Connection	1	LS	5,000.00	5,000	5,000.00	5,000			10,000
		Grout & Plug Existing Pipeline	1	LS	1,000.00	1,000	4,000.00	4,000			5,000
<b>Connection to Existing At Beach</b>											
		Excavation (Beach)	167	CY			20.00	3,333			3,333
		Shoring	1,050	SF	15.00	15,750	15.00	15,750			31,500
		Dewatering Pit (Beach)	1	LS					50,000	50,000	50,000
		Dewatering Water Treatment	1	LS	5,000.00	5,000	5,000.00	5,000			10,000
		Backfill & Compaction	167	CY			20.00	3,333			3,333
		Coordinate Shutdown/ Tie In	1	LS			2,500.00	2,500			2,500
		Piping Connection	1	LS	5,000.00	5,000	5,000.00	5,000			10,000
		Grout & Plug Existing Pipeline	1	LS	1,000.00	1,000	4,000.00	4,000			5,000
<b>Subtotals</b>						537,150		191,817		1,253,667	1,982,633
Division 1 Costs					@ 8%	42,972		15,345		100,293	158,611
<b>Subtotals</b>						580,122		207,162		1,353,960	2,141,244
Taxes - Materials Costs					@ 8.00%	46,410					46,410
<b>Subtotals</b>						626,532		207,162		1,353,960	2,187,654
Contractor OH&P					@ 15%						328,148.06
<b>Subtotals</b>											2,515,802
Contractor Bonds & Insurance					@ 2%						50,316
<b>Subtotals</b>											2,566,118
Estimate Contingency					@ 25%						641,529
<b>Subtotals</b>											3,207,647
Escalate to Midpoint of Construct					@ 3%						48,115
<b>Estimated Construction Cost</b>											<b>3,256,000</b>
Design Engineering					@ 10%						325,600
Permitting											200,000
Construction Management					@ 8%						260,480
<b>Total Estimated Project Cost</b>											<b>4,040,000</b>

Estimate Accuracy	
+30%	-15%

Estimated Range of Probable Cost		
+30%	Total Est.	-15%
\$5,252,000	\$4,040,000	\$3,434,000

**OPINION OF PROBABLE CONSTRUCTION COST**

**KENNEDY/JENKS CONSULTANTS**

Project: San Eljio Joint Powers Authority Outfall

Prepared By: JLH/SBW

Date Prepared: 27-Jun-15

Building, Area: **Option 2 - HDD/ Pipe Ramming Alignment**

K/J Proj. No. 1544100\*00

Current at ENR 10,981

Escalated to ENR

Months to Midpoint of Construct 6

Estimate  Conceptual  Preliminary (w/o plans)  Construction  Change Order  
 Type:  Design Development @  % Complete

Spec. No.	Item No.	Description	Qty	Units	Materials		Installation		Sub-contractor		Total
					\$/Unit	Total	\$/Unit	Total	\$/Unit	Total	
<b>Site Prep</b>											
		Surveying	1	LS				5,000.00	5,000		5,000
		Erosion Sediment Controls (Silt Fences, Straw Wattles)	1	LS				10,000.00	10,000		10,000
		Temporary Fencing	1	LS				5,000.00	5,000		5,000
<b>HDD Pipeline (1300 LF)</b>											
		Excavation Receiving Area (Visitor Center)	167	CY				15.00	2,500		2,500
		Backfill & Compaction Receiving Area	167	CY				15.00	2,500		2,500
		Mobilize HDD	1	LS						50,000	50,000
		HDD Pipeline 30"	1,300	LF	185.00	240,500				596	775,000
		Hydrostatic Testing	1,300	LF				4.00	5,200		5,200
		Traffic Controls (for HDD laydown)	1	MO				10,000.00	10,000		10,000
		Landscape Restoration/ Repairs (From HDD)	1	LS	5,000.00	5,000		20,000.00	20,000		25,000
<b>Pipe Ramming (300 LF)</b>											
		Prepare Launch Shaft									
		Excavation Launching Pits (2)	583	CY				15.00	8,750		8,750
		Shoring Launch Pit	3,000	SF	15.00	45,000		15.00	45,000		90,000
		Dewatering Launch Pit	2	WKS						20,000	40,000
		Dewatering Water Treatment	1	LS	5,000.00	5,000		20,000.00	20,000		25,000
		Backfill & Compaction Launch Pit	583	CY				15.00	8,750		8,750
		Base course Launch Pit	39	CY	25.00	972		10.00	389		1,361
		Excavation Receiving Pits (2)	250	CY				15.00	3,750		3,750
		Shoring Receiving Pit (2)	1,800	SF	15.00	27,000		15.00	27,000		54,000
		Dewatering Receiving Pit (2)	2	WKS						20,000	40,000
		Dewatering Water Treatment (2)	1	LS	5,000.00	5,000		20,000.00	20,000		25,000
		Backfill & Compaction Receiving Pit (2)	250	CY				15.00	3,750		3,750
		Mobilize Pipe Ramming	1	LS						40,000	40,000
		42" Rammed Steel Casing (2 drives)	300	LF						1,025	307,500
		30" HDPE Carrier Pipe DR 17	300	LF	125.00	37,500					37,500
		Hydrostatic Testing	2,100	LF				4.00	8,400		8,400
		Traffic Controls (for HDD laydown)	1	MO				10,000.00	10,000		10,000
		Landscape Restoration/ Repairs (From Pipe Ramming)	1	LS	5,000.00	5,000		20,000.00	20,000		25,000
<b>Open Cut Pipeline - Between Shafts (500 LF)</b>											
		HDPE Pipe 30" DR 11	500	LF	185.00	92,500		41.00	20,500		113,000
		HDPE Pipe Fittings		EA	1,800.00			1,000.00			
		Trenching 6' wide x 8' deep (Excavation & Backfill, Trenchbox)	500	LF				35.00	17,500		17,500
		Pipe Bedding	500	LF	18.00	9,000		10.00	5,000		14,000
		Dewatering Trench	500	LF				20.00	10,000		10,000
		Hydrostatic Testing	500	LF				4.00	2,000		2,000
		Landscape Restoration/ Repairs (From open Cut) Between Shafts	1	LS	5,000.00	5,000		10,000.00	10,000		15,000
<b>Open Cut Pipeline - Visitors Center &amp; across Manchester (500 LF)</b>											
		Sawcutting Paving	1,000	LF						2	2,000
		Remove & Dispose Paving (8' wide)	444	SY						15	6,667
		HDPE Pipe 30"	500	LF	185.00	92,500		41.00	20,500		113,000
		HDPE Pipe Fittings	3	EA	1,800.00	5,400		1,000.00	3,000		8,400
		Trenching 6' wide x 8' deep (Excavation & Backfill, Trenchbox)	500	LF				35.00	17,500		17,500
		Pipe Bedding	500	LF	18.00	9,000		10.00	5,000		14,000
		Dewatering Trench	500	LF				20.00	10,000		10,000
		Repaving over Trench 8' wide	444	SY						45	20,000
		Hydrostatic Testing	500	LF				4.00	2,000		2,000
		Traffic Controls (in parking lot/ Manchester)	1	LS	1,000.00	1,000		5,000.00	5,000		6,000
		Utility Tie Ins/ Repairs	1	LS				5,000.00	5,000		5,000
		Landscape Restoration/ Repairs (From open Cut)	1	LS	3,000.00	3,000		7,000.00	7,000		10,000
<b>Connection At Junction Structure</b>											
		Additional Excavation at Junction Structure	1	LS				3,000.00	3,000		3,000
		Additional Dewatering	1	LS				5,000.00	5,000		5,000
		Coordinate Shutdown/ Tie In	1	LS				2,500.00	2,500		2,500
		Piping Connection	1	LS	5,000.00	5,000		5,000.00	5,000		10,000
		Grout & Plug Existing Pipeline	1	LS	1,000.00	1,000		4,000.00	4,000		5,000
<b>Connection to Existing At Beach</b>											
		Additional Excavation (Beach)	167	CY				20.00	3,333		3,333
		Shoring	1,050	SF	15.00	15,750		15.00	15,750		31,500
		Additional Dewatering (Beach)	1	LS						30,000	30,000
		Additional Dewatering Water Treatment	1	LS				5,000.00	5,000		5,000
		Backfill & Compaction	167	CY				15.00	2,500		2,500
		Coordinate Shutdown/ Tie In	1	LS				5,000.00	5,000		5,000
		Piping Connection	1	LS	5,000.00	5,000		5,000.00	5,000		10,000
		Grout & Plug Existing Pipeline	1	LS	1,000.00	1,000		4,000.00	4,000		5,000
<b>Subtotals</b>											
		Division 1 Costs	@	8%		616,122		436,072		1,311,167	2,363,361
		Subtotals				49,290		34,886		104,893	189,069
		Taxes - Materials Costs	@	8.00%		665,412		470,958		1,416,060	2,552,430
		Subtotals				53,233					53,233
		Contractor OH&P	@	15%		718,645		470,958		1,416,060	2,605,663
		Subtotals									390,849.44
		Contractor Bonds & Insurance	@	2%							59,930
		Subtotals									3,056,443
		Estimate Contingency	@	25%							764,111
		Subtotals									3,820,553
		Escalate to Midpoint of Construct	@	3%							57,308
		<b>Estimated Construction Cost</b>									<b>3,878,000</b>
		Design Engineering	@	10%							387,800
		Permitting									250,000
		Construction Management	@	8%							310,240
		<b>Total Estimated Project Cost</b>									<b>4,830,000</b>

Estimate Accuracy	
+30%	-15%

Estimated Range of Probable Cost		
+30%	Total Est.	-15%
\$6,279,000	\$4,830,000	\$4,105,500

**OPINION OF PROBABLE CONSTRUCTION COST**

**KENNEDY/JENKS CONSULTANTS**

Project: San Elijo Joint Powers Authority Outfall

Prepared By: JLH/SBW  
 Date Prepared: 27-Jun-15  
 K/J Proj. No. 1544100\*00

Building, Area: **Option 3 - Rehabilitation of Existing Pipe**

Current at ENR 10,981  
 Escalated to ENR  
 Months to Midpoint of Construct 6

Estimate  Conceptual  Construction  
 Type:  Preliminary (w/o plans)  Change Order  
 Design Development @  % Complete

Spec. No.	Item No.	Description	Qty	Units	Materials		Installation		Sub-contractor		Total
					\$/Unit	Total	\$/Unit	Total	\$/Unit	Total	
<b>Prep Work</b>											
		Video Inspection of Existing Pipe	2,500	LF			25.00	62,500			62,500
		Pipe Inspection - Accoustic Wall Stiffness	2,500	LF			31.00	77,500			77,500
		Surveying	1	LS			5,000.00	5,000			5,000
		Erosion Sediment Controls (Silt Fences, Straw Watt	1	LS			10,000.00	10,000			10,000
		Temporary Fencing	1	LS			3,000.00	3,000			3,000
<b>CIPP Lining Existing Pipe</b>											
<b>Midway Point Access port for CIPP:</b>											
		Temporary Roadway to Access Port Manhole Work	1	EA					100,000		
		Temporary Bridge for Construction Equipment to Cr	1	LS					150,000		
		Excavation for Access Manhole(Lagoon)	167	CY			50.00	8,333			8,333
		Shoring	900	SF	20.00	18,000	35.00	31,500			49,500
		Install Manhole for Lining Access (Lagoon)	1	EA	15,000.00	15,000	35,000.00	35,000			50,000
		Dewatering Excavation (Lagoon)	1	LS					40,000	40,000	40,000
		Dewatering Water Treatment	1	LS	5,000.00	5,000	25,000.00	25,000			30,000
		Install Manhole in Lagoon for Lining Access (Lagoo	1	EA	10,000.00	10,000	15,000.00	15,000			25,000
		Landscape Restoration/ Repairs (Lagoon)	1	LS	25,000.00	25,000	100,000.00	100,000			125,000
		Mobilize CIPP Liner	1	LS					25,000	25,000	25,000
		Clean Existing Pipe	2,500	LF					23	56,250	56,250
		CIPP Liner	2,500	LF					225	562,500	562,500
		Hydrostatic Testing	2,500	LF			4.00	10,000			10,000
		Traffic Controls (at Junction Structure)	1	LS			2,500.00	2,500			2,500
<b>Connection to Existing At Beach</b>											
		Excavation (Beach)	125	CY			20.00	2,500			2,500
		Shoring	1,050	SF	15.00	15,750	15.00	15,750			31,500
		Install Manhole for Lining Access (Beach)	1	EA	15,000.00	15,000	15,000.00	15,000			30,000
		Dewatering Excavation (Beach)	1	LS					50,000	50,000	50,000
		Dewatering Water Treatment	1	LS	5,000.00	5,000	20,000.00	20,000			25,000
		Backfill & Compaction	125	CY			15.00	1,875			1,875
		Coordinate Shutdown/ Tie In	1	LS			5,000.00	5,000			5,000
<b>Bypass Piping</b>											
		30" Bypass Pipe	2,500	LF	30.00	75,000	50.00	125,000			200,000
		Bypass Pipe Supports/ Anchors	2,500	LF	10.00	25,000	10.00	25,000			50,000
		Pumps	3	WKS			20,000.00	60,000			60,000
		Full Time Monitoring	3	WKS			25,200.00	75,600			75,600
		Landscape Restoration/ Repairs (From Bypass Pipin	2,500	LF			15.00	37,500			37,500
<b>Pipe Ramming (300 LF) to place bypass under 101 and RR</b>											
		Prepare Launch Shaft									
		Excavation Launching Pits (2)	583	CY			15.00	8,750			8,750
		Shoring Launch Pit	3,000	SF	15.00	45,000	15.00	45,000			90,000
		Dewatering Launch Pit	2	WKS					20,000	40,000	40,000
		Dewatering Water Treatment	1	LS	5,000.00	5,000	20,000.00	20,000			25,000
		Backfill & Compaction Launch Pit	583	CY			15.00	8,750			8,750
		Base course Launch Pit	39	CY	25.00	972	10.00	389			1,361
		Excavation Receiving Pits (2)	250	CY			15.00	3,750			3,750
		Shoring Receiving Pit (2)	1,800	SF	15.00	27,000	15.00	27,000			54,000
		Dewatering Receiving Pit (2)	2	WKS					20,000	40,000	40,000
		Dewatering Water Treatment (2)	1	LS	5,000.00	5,000	20,000.00	20,000			25,000
		Backfill & Compaction Receiving Pit (2)	250	CY			15.00	3,750			3,750
		Mobilize Pipe Ramming	1	LS					40,000	40,000	40,000
		42" Rammed Steel Casing (300 LF, 2 drives)	300	LF					1,025	307,500	307,500
		Landscape Restoration/ Repairs (From Pipe Rammi	2	LS	5,000.00	10,000	10,000.00	20,000			30,000
<b>Subtotals</b>											
		Division 1 Costs	@	8%		301,722		925,947		1,161,250	2,388,919
		Subtotals				24,138		74,076		92,900	191,114
		Taxes - Materials Costs	@	8.00%		325,860		1,000,023		1,254,150	2,580,033
		Subtotals				26,069				26,069	26,069
		Contractor OH&P	@	15%		351,929		1,000,023		1,254,150	2,606,102
		Subtotals								390,915	390,915
		Contractor Bonds & Insurance	@	2%						2,997,017	2,997,017
		Subtotals								59,940	59,940
		Estimate Contingency	@	30%						3,056,957	3,056,957
		Subtotals								917,087	917,087
		Escalate to Midpoint of Construct	@	3%						3,974,045	3,974,045
		<b>Estimated Construction Cost</b>								59,611	59,611
		Design Engineering	@	10%						403,400	403,400
		Permitting								250,000	250,000
		Construction Management	@	8%						322,720	322,720
		<b>Total Estimated Project Cost</b>								<b>5,010,000</b>	<b>5,010,000</b>

Estimate Accuracy	
+30%	-15%

Estimated Range of Probable Cost		
+30%	Total Est.	-15%
\$6,513,000	\$5,010,000	\$4,258,500

**Kennedy/Jenks Consultants**  
**Engineers & Scientists**

9665 Granite Ridge Drive, Suite 210  
San Diego, California 92123  
858-676-3620  
FAX: 858-292-1694

July 1, 2015

Mr. Michael T. Thornton, P.E.  
General Manager  
San Elijo Joint Powers Authority  
2695 Manchester Avenue  
Cardiff by the Sea, California 92007-1077

Subject: San Elijo Joint Powers Authority (SEJPA) Final Design of San Elijo Water  
Reclamation Facility (SEWRF) Outfall Replacement

Dear Mr. Thornton:

Kennedy/Jenks Consultants is pleased to work with the San Elijo Joint Powers Authority to perform the final design and permitting of the SEJPA SEWRF Outfall Replacement. Kennedy/Jenks has been actively working with SEJPA, and the San Elijo Lagoon Integration Core Team to determine the most appropriate alternative for replacing or rehabilitating the lagoon section of the outfall. Kennedy/Jenks previously submitted our predesign conclusions in a report dated June, 2015. The predesign report evaluated open cut method, trenchless installation methods, and rehabilitation methods. The conclusion of the predesign report is that a horizontal directional drill (HDD) installation method continuously from the visitor center, across the lagoon, railroad tracks and Highway 101, and terminating at the beach is the recommended installation method. At this time, we look forward to proceeding with this design decision and preparing final bid set for construction of the outfall replacement. The following letter summarizes our project team, proposed scope of work, schedule and estimated design fee.

**Project Team**

The proposed team includes professionals who have knowledge and previous experience with the predesign of this project and are experts in pipeline design. Our project team's key personnel include:

- Pat Huston, Principal-in-Charge
- Sarah Williams, Project Manager and Lead Project Engineer
- Timothy Waters, Staff Engineer
- Corey Young, Permitting

Mr. Michael T. Thornton, P.E.  
San Elijo Joint Powers Authority  
1 July 2015  
Page 2

- Al Shewey, Quality Assurance/ Quality Control
- Laura Wetter, Staheli Trenchless, HDD Consultant
- Tim Belzman, Helix Environmental, CEQA and Permitting Support

### **Scope of Work**

The following is a scope of work to provide professional engineering services for the final design of the SEWRF Outfall Replacement. This scope of work builds on the predesign prepared by Kennedy/Jenks.

### **Task 1 Final Design**

#### **Task 1.1 Prepare Contract Documents**

Kennedy/Jenks will prepare final contract documents for construction of the outfall pipeline based on the recommendation and decisions made during the preliminary design phase. The following submittals will be prepared:

1. 50% Design
  - a. 11"x17" Design Drawings (3 sets)
  - b. 24"x36" Design Drawings (1 set)
  - c. Draft Contract Specifications (PDF)
  - d. Opinion of Probable Construction Cost (OPCC) Class 3
2. 90% Design
  - a. 11"x17" Design Drawings (3 sets)
  - b. 24"x36" Design Drawings (1 set)
  - c. Contract Specifications (PDF)
  - d. Design Calculations (2 sets)
  - e. OPCC Class 2 (Draft)
3. 100% Design
  - a. 11"x17" Design Drawings (3 sets & PDF)
  - b. 24"x36" Design Drawings (1 set & PDF)
  - c. Contract Specifications (3 sets & PDF)
  - d. Design Calculations (2 sets & PDF)
  - e. OPCC Class 2



Mr. Michael T. Thornton, P.E.  
 San Elijo Joint Powers Authority  
 1 July 2015  
 Page 3

4. Final Signed and Stamped Construction Drawings and Specifications
  - a. 11"x17" Design Drawings (3 sets & PDF)
  - b. Signed Mylars, 24"x36" (1 set)
  - c. Final Contract Specifications (3 sets & PDF)
  - d. Electronic Drawings in DWG and PDF Format
  - e. OPCC Class 2

Anticipated list of final drawings is as follows:

G-1	Cover Sheet, List of drawings, Vicinity Map
G-2	Abbreviations
G-3	General Symbols, Construction Notes
C-1	Key Plan and Contractor's Access Plan
C-2	Plan and Profile – I
C-3	Plan and Profile – II
C-4	Plan and Profile – III
C-5	HDD Launch Site Enlargement Plan
C-6	HDD Receiving Site Enlargement Plan
C-7	Connection Details
C-8	Miscellaneous Details - I
C-9	Miscellaneous Details - II

A survey was prepared during predesign phase and it is assumed that no additional survey is needed. Additionally, the pipe to be installed is anticipated to be HDPE or fPVC and we assume no corrosion study or protection will need to be designed. No potholing is included in this scope. Drawings will be produced using Microstation V8 and will be per Kennedy/Jenks' drawing standards. Technical specifications will be prepared for the project and it is assumed that SEJPA standard front end specifications will be provided.

**Task 1.3 Project Management**

Kennedy/Jenks will conduct management of the project including scheduling reviews, budget control, invoice preparation and coordination with SEJPA. Sarah Williams, Kennedy/Jenks' project manager will review the status of the project with San Elijo JPA's project manager on a monthly basis. A monthly status report will be provided throughout final design (total 6), including an update on the status of the project budget, and an updated project Gantt chart schedule.

Mr. Michael T. Thornton, P.E.  
San Elijo Joint Powers Authority  
1 July 2015  
Page 4

### **Task 1.4 Project Meetings**

Kennedy/Jenks' project team will hold (2) project meetings with SEJPA staff during the final design phase, at the San Elijo Water Reclamation Facility. The meetings are anticipated to address the following:

- (1) 50% Submittal Comment Review Meeting
- (1) 90% Submittal Comment Review Meeting

Kennedy/Jenks will prepare an agenda for each meeting and will distribute minutes to each of the meeting participants.

Additionally, Kennedy/Jenks will be in attendance to up to ten (10) select San Elijo Lagoon Integration Core Team meetings, which occur on a regular basis. The meetings to be attended will be determined by discussion between the SEJPA project manager and the Kennedy/Jenks project manager.

### **Task 1.5 Quality Assurance/ Quality Control (QA/QC)**

Kennedy/Jenks will provide QA/QC review of the design consistent with Kennedy/Jenks' policies as outlined in our QA/QC & Quality Management Manual. Our QA/QC and quality management procedures establish and maintain a structure for providing adequate reviews of all work products and adherence to industry design standards. The quality reviewer will be Kennedy/Jenks' pipeline specialist, Al Shewey, who has over 30 years of experience in pipeline design. Specific QA/QC tasks will include:

- Review design criteria as set forth in previous Kennedy/Jenks evaluation letters
- Review of design draft drawings, calculations, and specifications for quality and incorporation of design criteria, which will occur at each level of submittal.

## **Task 2 Geotechnical Exploration**

### **Task 2.1 Soil Boring and Sample Analysis**

Kennedy/Jenks has reviewed existing available geotechnical information from recent projects and an additional exploration is recommended in the area of the proposed outfall near highway 101. Subsurface exploration will be performed consisting of drilling, logging, and sampling of a hollow-stem auger soil boring. The boring would be drilled in the parking lot of the Las Olas restaurant on the east side of Coast Highway to a depth up to roughly 80 feet below existing ground surface or to refusal. Geotechnical laboratory testing on selected soil samples will be performed to evaluate appropriate soil parameters. Testing will include moisture-density, grain size, shear strength (including friction angle and cohesion), soil corrosion (pH, resistivity, chloride content, and sulfate content), and R-value. A geotechnical evaluation report will be

Mr. Michael T. Thornton, P.E.  
 San Elijo Joint Powers Authority  
 1 July 2015  
 Page 5

provided with findings, conclusions, and recommendations. The required DEH permit for the boring is included in the scope of work for Task 2.1. The City of Encinitas has informed us that no city permits will be required for this boring.

**Task 2.2 Pre-Activity Surveys and Biological Monitoring for Proposed Geotechnical Boring.**

This task will be required to ensure no impacts to sensitive biological resources would occur during geotechnical boring activities. Three pre-activity surveys (one week apart) will be performed starting three weeks prior to proposed geotechnical activities within the unpaved parking lot of Las Olas restaurant. The surveys will include 100 percent coverage of the area planned to be temporarily impacted by the geotechnical activities, in addition to areas within 500 feet, as necessary. The survey focus will be to verify that no sensitive biological resources occur within areas that could be potentially impacted by the geotechnical activities. In addition, biological monitoring during the geotechnical activities will be performed to ensure that no impacts to sensitive biological resources occur. The monitoring will further ensure that best management practices (BMPs) are being implemented in such a manner to as eliminate potential impacts to sensitive biological resources. A monitoring memorandum will be prepared for record and submitted at the conclusion of the monitoring activities.

**Task 3 Permitting**

Permitting is needed to take place with multiple agencies. The following list of permit applications will be prepared and submitted by Kennedy/Jenks.

City of Encinitas	<ul style="list-style-type: none"> <li>• Discretionary Application including Coastal Development Permit and Major Use Permit (CDP/MUP)</li> <li>• Citizen Participation Plan</li> </ul>
California Coastal Commission	<ul style="list-style-type: none"> <li>• Coastal Development Permit</li> </ul>
North County Transit District	<ul style="list-style-type: none"> <li>• Right of Entry Permit</li> <li>• Request for Variance</li> </ul>
California State Lands	<ul style="list-style-type: none"> <li>• Encroachment Permit</li> </ul>
California DFW	<ul style="list-style-type: none"> <li>• Lake and Streambed Alteration Notification</li> <li>• Incidental Take Permit 2081</li> </ul>
US Army Corp of Engineers	<ul style="list-style-type: none"> <li>• 404 Nationwide Permit #12</li> </ul>

Mr. Michael T. Thornton, P.E.  
 San Elijo Joint Powers Authority  
 1 July 2015  
 Page 6

	<ul style="list-style-type: none"> <li>• Jurisdictional Delineation</li> </ul>
US Fish and Wildlife (USFWS)	<ul style="list-style-type: none"> <li>• Informal Consultation</li> <li>• Focused Survey</li> </ul>
RWQCB	<ul style="list-style-type: none"> <li>• 401 Water Quality Certification</li> </ul>

The following will be implemented in preparation for submittal of regulatory permitting materials:

**Joint CWA Section 404/RHA Section 10 Nationwide Permit (NWP) and Joint ESA/MSA Informal Consultation.** Assuming that permanent impacts to all waters of the U.S. (tidal and non-tidal) would be less than 0.5 acre and potential adverse effects on endangered species are not likely, the project would be expected to qualify for a joint Clean Water Act (CWA) Section 404/Rivers and Harbors Act (RHA) Section 10 NWP 12 from the USACE and Informal Consultation with the USFWS to address compliance with the Endangered Species Act (ESA) and National Marine Fisheries Service (NMFS) to address Essential Fish Habitat (EFH) and compliance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The following draft materials will be prepared as part of the permit applications and requests to initiate consultation: Cover Letter, Application Form 4345 or Pre-Construction Notification, Jurisdictional Delineation Letter Report, PJD, Informal Consultation Initiation Request Letter, and initial Avoidance, Minimization, Mitigation, Conservation Measures. It is assumed that SEJPA will provide National Historic Preservation Act Section 106 compliance (e.g., Cultural Resources Technical Report, Historical Resources Technical Report, etc.) In addition, the results of endangered species surveys will need to be submitted to the USFWS and/or NMFS. Endangered species surveys are not included in this task.

**Joint CWA Section 404 Individual Permit/RHA Section 10 Permit and Joint ESA/MSA Section 7 Consultation.** Based on the information available, it is assumed that the project will likely require a Clean Water Act (CWA) Section 404 Individual Permit from the USACE and Endangered Species Act (ESA) Section 7 Formal Consultation with the USFWS, at minimum. In addition, depending upon whether impacts would occur to tidal waters and Essential Fish Habitat (EFH), the project may require a Rivers & Harbors Act Section 10 Permit from the USACE and consultation with National Marine Fisheries Service (NMFS) pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The following draft materials will be prepared as part of the permit applications and requests to initiate consultation: Cover Letter, Application Form 4345 or Pre-Construction Notification, Environmental Assessment 404 (b)(1) Public Interest Review, Jurisdictional Delineation Letter Report, PJD, Biological Assessment (BA), Consultation Initiation Request Letter, and initial Avoidance, Minimization, Mitigation, Conservation Measures. SEJPA will provide documentation prepared by others addressing National Historic Preservation Act Section 106 compliance (e.g., Cultural Resources Technical Report, Historical Resources Technical Report, etc.) and a complete description of the project alternatives and preferred project. In addition, the results of endangered species surveys will need to be submitted to the USFWS and/or NMFS. Endangered species surveys are not included in this task.

Mr. Michael T. Thornton, P.E.  
San Elijo Joint Powers Authority  
1 July 2015  
Page 7

**CWA Section 401 Request for Water Quality Certification.** Based on the information available, it is assumed that the project will require the preparation and submittal of a 401 Request for Water Quality Certification from the RWQCB for impacts to waters of the State subject to CWA Section 401 and/or State Porter-Cologne Water Quality Control Act. Issuance of a 401 certification or demonstration that the RWQCB did not take action on the certification request is a material part of fulfilling the conditions of the CWA Section 404 permit. The following draft materials will be prepared as part of the 401 certification request: Cover Letter, Request for Water Quality Certification application form, PJD, and initial Mitigation Proposal. It is assumed the Water Quality Management Plan (WQMP), Hydrology and Hydraulics Study, Storm Water Pollution Prevention Plan (if available), and detailed description and plans for Best Management Practices, will be provided by the contractor and will also be included in the 401 certification request.

**California Fish and Game Code Section 1602 Notification of Lake or Streambed Alteration.** Based on information available, it is assumed that the project will require the preparation and submittal of a 1602 Notification of Lake or Streambed Alteration. The following draft materials will be prepared as part of the 1602 agreement request: Cover Letter and Notification of Lake or Streambed Alteration application form. In addition, the results of endangered species surveys will need to be submitted to the CDFW. Endangered species surveys are not included in this task because it is not known at this time which surveys will be required.

**California Endangered Species Act Section 2081 Incidental Take Permit.** Based on information available, it is assumed that the project could require additional consultation with CDFW for a 2081 Incidental Take Permit (ITP). The 2081 ITP cover letter and application materials will be prepared. The results of endangered species surveys will need to be submitted to the CDFW. Endangered species surveys are not included in this task because it is not known at this time which surveys will be required.

The City of Encinitas has informed Kennedy/Jenks of the required permitting for the project which will include a Coastal Development Permit, a Major Use Permit, and Citizen Participation Plan. A total of 48 hours of labor has been allocated for this task under the assumption that SEJPA and the City of Encinitas, as a member agency of the JPA, can work together to make the permitting process as efficient as possible. Any additional effort required for these permits will require additional authorization from SEJPA.

CEQA documentation is being provided under a separate contract and is not included in this task. Review of existing information, refinements to project design and construction methods, and the general biological survey has determined that additional focused surveys for sensitive species are likely going to be needed; however, an initial habitat assessment survey is required to confirm which surveys will be required. Focused surveys for sensitive species are not included in this permitting scope of work and would require a scope modification and additional costs. It is assumed that all permitting fees will be paid by SEJPA and are not included in this

Mr. Michael T. Thornton, P.E.  
San Elijo Joint Powers Authority  
1 July 2015  
Page 8

estimate. The final contract documents will require that any discharge permits required during construction will be the responsibility of the contractor. Our assumption is that no permits will be required from the County of San Diego (County), and any coordination with the County is not included in this estimate. Since the area of disturbance is less than one acre, it is assumed that a SWPPP will not be required and is not included in this estimate. The contract documents will require the contractor to submit BMP's and a storm water plan, therefore these items are not included in this scope of work. Additionally, traffic control is not included in this proposal and will be in the scope of the contractor.

#### **Task 4 Bid Services**

##### **Task 4.1 Bidding Assistance**

Kennedy/Jenks will address questions from prospective bidders during the bid period. Questions received in writing or through verbal communications will be documented. Questions received and the corresponding responses will be summarized in written form and forwarded to the SEJPA for its distribution to all plan holders following the pre-bid meeting, which will be attended by Kennedy/Jenks.

##### **Task 4.2 Addenda**

Kennedy/Jenks will prepare addenda to include the distribution of minutes and responses to questions received during the pre-bid meeting and to clarify items omitted or changed in the bid documents. Additional addenda will be issued, if required, to further clarify technical questions asked by bidders and as instructed by the SEJPA. All addenda will be submitted to the SEJPA for its review and approval, and will be signed and stamped by a State of California Registered Civil Engineer. For cost estimating purposes, our proposal assumes that one (1) addendum will be issued during bidding. It is assumed that the SEJPA will distribute the addendum to all plan holders.

##### **Task 4.3 Bid Review**

Kennedy/Jenks will attend the bid opening to be conducted by the SEJPA and will review and analyze the bids received and provide a letter summarizing the review and recommendation for the award of the construction contract.

#### **Proposed Fee Estimate**

Kennedy/Jenks proposes to provide the above described scope of services on a time and materials basis in accordance with schedule of charges per existing San Elijo Water Reclamation Facility Outfall Replacement and Permitting/CEQA Compliance Contract (dated February 17, 2015) for an estimated fee of \$403,068. We will not exceed this budget without prior authorization by SEJPA.

Mr. Michael T. Thornton, P.E.  
San Elijo Joint Powers Authority  
1 July 2015  
Page 9

**Proposed Project Schedule**

Kennedy/Jenks is prepared to proceed with work on this project immediately following a notice to proceed. Kennedy/Jenks can provide deliverables as outlined on the attached Gantt chart summarizing the envisioned project schedule.

Kennedy/Jenks hopes to perform this work in conjunction with the Recycled Water Replacement Project. Our staff is committed to providing both projects on a concurrent schedule with high quality results. By designing both the outfall project and the recycled waterline relocation project, Kennedy/Jenks will minimize workloads on SEJPA staff while maximizing efficiencies with agency coordination.

We are confident that the Kennedy/Jenks team can provide all services as needed throughout this design phase, resulting in a high quality design product. Should you have any questions regarding this proposal or would like to request additional information, please do not hesitate to contact me.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Patrick T. Huston, P.E.  
Vice President

**Proposal Fee Estimate**

**Kennedy/Jenks Consultants**

CLIENT Name: San Elijo Joint Powers Authority  
 Final Design of Land Outfall Replacement and  
 PROJECT Description: Permitting  
 Proposal/Job Number: \_\_\_\_\_ Date: 7/1/2015

January 1, 2015 Rates	Eng-Sci-9	Eng-Sci-8	Eng-Sci-7	Eng-Sci-6	Eng-Sci-5	Eng-Sci-4	Eng-Sci-3	Eng-Sci-2	Eng-Sci-1	CAD Technician	Designer	Project Admin.	Admin. Assist.	Total	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses	
Classification:														Hours		Fees		Fees	
Hourly Rate:	\$270	\$250	\$235	\$215	\$190	\$175	\$160	\$145	\$130	\$120	\$155	\$90	\$110						
<b>Task 1 - Final Design</b>																			
Task 1.1 - Prepare Contract Documents	12			102			176	12			132	6	14	454	\$77,610	\$30,500	\$3,881	\$111,990	
Task 1.2 - Project Management	12			60									20	92	\$18,340	\$0	\$917	\$19,257	
Task 1.3 - Meetings (12)				48			48							96	\$18,000	\$0	\$900	\$18,900	
Task 1.4 - Quality Assurance and Quality Control	12	24	24										8	68	\$15,760	\$0	\$788	\$16,548	
Task 1.5 - Cost Estimating		60												60	\$15,000	\$0	\$750	\$15,750	
<b>Task 1 - Subtotal</b>	<b>36</b>	<b>84</b>	<b>24</b>	<b>210</b>	<b>0</b>	<b>0</b>	<b>224</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>132</b>	<b>6</b>	<b>42</b>	<b>770</b>	<b>\$144,710</b>	<b>\$30,500</b>	<b>\$7,236</b>	<b>\$182,445</b>	
<b>Task 2 - Geotechnical Exploration</b>																			
Task 2.1 - Soil Boring and Sample Analysis				4			4							8	\$1,500	\$16,170	\$75	\$17,745	
Task 2.2 - Biological Monitoring				4			4							8	\$1,500	\$3,740	\$75	\$5,315	
<b>Task 2 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>\$3,000</b>	<b>\$19,910</b>	<b>\$150</b>	<b>\$23,060</b>	
<b>Task 3 - Permitting</b>																			
Task 3 - Permitting ** See attached Fee Breakdown			138				234				24		22	418	\$76,010	\$103,136	\$3,801	\$182,947	
<b>Task 3 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>234</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>22</b>	<b>418</b>	<b>\$76,010</b>	<b>\$103,136</b>	<b>\$3,801</b>	<b>\$182,947</b>	
<b>Task 4 - Bid Services</b>																			
Task 4.1 - Bidding Assistance				16			16							32	\$6,000	\$0	\$300	\$6,300	
Task 4.2 - Addenda				8			4				4			16	\$2,980	\$0	\$149	\$3,129	
Task 4.3 - Bid Review				20			4							24	\$4,940	\$0	\$247	\$5,187	
<b>Task 4 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>\$13,920</b>	<b>\$0</b>	<b>\$696</b>	<b>\$14,616</b>	
<b>All Phases Total</b>	<b>36</b>	<b>84</b>	<b>162</b>	<b>262</b>	<b>0</b>	<b>0</b>	<b>490</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>160</b>	<b>6</b>	<b>64</b>	<b>1694</b>	<b>\$237,640</b>	<b>\$153,546</b>	<b>\$11,882</b>	<b>\$403,068</b>	



Proposal Fee Estimate

Kennedy/Jenks Consultants

CLIENT Name: San Elijo Joint Powers Authority  
 PROJECT Description: Outfall Replacement Permitting  
 Proposal/Job Number: \_\_\_\_\_ Date: 6/28/2015

January 1, 2015 Rates	Eng-Sci-9	Eng-Sci-8	Eng-Sci-7	Eng-Sci-6	Eng-Sci-5	Eng-Sci-4	Eng-Sci-3	Eng-Sci-2	Eng-Sci-1	Designer	CAD Technician	Project Admin.	Admin. Assist.	Total	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses
Classification:														Hours				Fees
Hourly Rate:	\$270	\$250	\$235	\$215	\$190	\$175	\$160	\$145	\$130	\$155	\$120	\$90	\$110					
<b>Task 3.1 - City of Encinitas</b>																		
Task 3.1.a - Discretionary Application (CDP/MUP)			8				16			4			4	32	\$5,500	\$0	\$275	\$5,775
Task 3.1.b - Citizen Participation Plan			4				4							8	\$1,580	\$0	\$79	\$1,659
Task 3.1.c - Meetings (2)			8											8	\$1,880	\$0	\$94	\$1,974
<b>Task 3.1 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>48</b>	<b>\$8,960</b>	<b>\$0</b>	<b>\$448</b>	<b>\$9,408</b>
<b>Task 3.2 - California Coastal Commission</b>																		
Task 3.2.a - Coastal Development Permit			20				50			8			8	86	\$14,820	\$0	\$741	\$15,561
Task 3.2.b - Meetings (2)			6				8							14	\$2,690	\$0	\$135	\$2,825
<b>Task 3.2 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>100</b>	<b>\$17,510</b>	<b>\$0</b>	<b>\$876</b>	<b>\$18,386</b>
<b>Task 3.3 - North County Transit District</b>																		
Task 3.3.a - Right of Entry Permit			8				24			4			4	40	\$6,780	\$0	\$339	\$7,119
Task 3.3.b - NCTD Review Comment Incorporation (3 reviews)			8				20						2	30	\$5,300	\$0	\$265	\$5,565
Task 3.3.c - Meetings (3)			12				12							24	\$4,740	\$0	\$237	\$4,977
<b>Task 3.3 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>94</b>	<b>\$16,820</b>	<b>\$0</b>	<b>\$841</b>	<b>\$17,661</b>
<b>Task 3.4 - California State Lands</b>																		
Task 3.4.a - Coordination/Permitting			8				24			4			4	40	\$6,780	\$0	\$339	\$7,119
Task 3.4.b - Easements			8				8			4				20	\$3,780	\$4,466	\$189	\$8,435
Task 3.4.c - Meetings (2)			6				8							14	\$2,690	\$0	\$135	\$2,825
<b>Task 3.4 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>74</b>	<b>\$13,250</b>	<b>\$4,466</b>	<b>\$663</b>	<b>\$18,379</b>
<b>Task 3.5 - California DFW</b>																		
Task 3.5.a - Lake and Streambed Alteration Notification			4				4							8	\$1,580	\$12,760	\$79	\$14,419
Task 3.5.b - Incidental Take Permit			4				4							8	\$1,580	\$0	\$79	\$1,659
Task 3.5.b - Meetings (1)			3				4							7	\$1,345	\$0	\$67	\$1,412
<b>Task 3.5 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>\$4,505</b>	<b>\$12,760</b>	<b>\$225</b>	<b>\$17,490</b>
<b>Task 3.6 - US Army Corps of Engineers</b>																		
Task 3.6.a - 404 Nationwide Permit #12			4				8							12	\$2,220	\$22,770	\$111	\$25,101
Task 3.6.b - Jurisdictional Delineation			2				4							6	\$1,110	\$20,625	\$56	\$21,791
Task 3.6.c - Meetings (2)			6				8							14	\$2,690	\$0	\$135	\$2,825
<b>Task 3.6 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>\$6,020</b>	<b>\$43,395</b>	<b>\$301</b>	<b>\$49,716</b>
<b>Task 3.7 - US Fish and Wildlife</b>																		
Task 3.7.a - Informal Consultation			4				8							12	\$2,220	\$14,520	\$111	\$16,851
Task 3.7.b - Focused Survey			2				4							6	\$1,110	\$12,760	\$56	\$13,926
Task 3.7.c - Meetings (2)			6				8							14	\$2,690	\$0	\$135	\$2,825

**Proposal Fee Estimate**

**Kennedy/Jenks Consultants**

CLIENT Name: San Elijo Joint Powers Authority  
 PROJECT Description: Outfall Replacement Permitting  
 Proposal/Job Number: \_\_\_\_\_ Date: 6/28/2015

January 1, 2015 Rates	Eng-Sci-9	Eng-Sci-8	Eng-Sci-7	Eng-Sci-6	Eng-Sci-5	Eng-Sci-4	Eng-Sci-3	Eng-Sci-2	Eng-Sci-1	Designer	CAD Technician	Project Admin.	Admin. Assist.	Total	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses
Classification:	\$270	\$250	\$235	\$215	\$190	\$175	\$160	\$145	\$130	\$155	\$120	\$90	\$110	Hours				Fees
<b>Task 3.7 - Subtotal</b>	0	0	12	0	0	0	20	0	0	0	0	0	0	32	\$6,020	\$27,280	\$301	\$33,601
<b>Task 3.8 - RWQCB</b>																		
Task 3.8.a - 401 Water Quality Certification			4				4							8	\$1,580	\$15,235	\$79	\$16,894
Task 3.8.b - Meetings (1)			3				4							7	\$1,345	\$0	\$67	\$1,412
<b>Task 3.8 - Subtotal</b>	0	0	7	0	0	0	8	0	0	0	0	0	0	15	\$2,925	\$15,235	\$146	\$18,306
<b>All Phases Total</b>	0	0	138	0	0	0	234	0	0	24	0	0	22	418	\$76,010	\$103,136	\$3,801	\$182,947

### San Elijo Joint Powers Authority SEWRF Outfall Replacement Final Design Schedule

ID	Task Name	Duration	Start	Finish	June 6/7	July 7/5	August 8/2	September 8/30	October 9/27	November 10/25	December 11/22	January 12/20	February 1/17	March 2/14	April 3/13	May 4/10	5/8	June 6/5	July 7/3	August 7/31	September 8/28	October 9/25	November 10/23	December 11/20	January 12/18	February 1/15
1	Notice to Proceed	1 day	Mon 6/15/15	Mon 6/15/15																						
2	<b>Task 1 - Final Design</b>	<b>113 days</b>	<b>Tue 6/16/15</b>	<b>Fri 11/20/15</b>																						
3	<b>Task 1.1 - 50% Design</b>	<b>49 days</b>	<b>Tue 6/16/15</b>	<b>Mon 8/24/15</b>																						
4	Prepare 50% Design	45 days	Tue 6/16/15	Mon 8/17/15																						
5	SUBMIT 50% Design to SEJPA	0 days	Mon 8/17/15	Mon 8/17/15				◆ 8/17																		
6	SEJPA Comments DUE	0 days	Mon 8/24/15	Mon 8/24/15				◆ 8/24																		
7	<b>Task 1.2 - 90% Design</b>	<b>39 days</b>	<b>Tue 8/25/15</b>	<b>Mon 10/19/15</b>																						
8	Prepare 90% Design	35 days	Tue 8/25/15	Mon 10/12/15																						
9	SUBMIT 90% Design to SEJPA	0 days	Mon 10/12/15	Mon 10/12/15					◆ 10/12																	
10	SEJPA Comments DUE	0 days	Mon 10/19/15	Mon 10/19/15					◆ 10/19																	
11	<b>Task 1.3 - 100% Design</b>	<b>24 days</b>	<b>Mon 10/19/15</b>	<b>Fri 11/20/15</b>																						
12	Prepare 100% Design	20 days	Mon 10/19/15	Fri 11/13/15																						
13	SUBMIT 100% Design to SEJPA	0 days	Fri 11/13/15	Fri 11/13/15																						
14	SUBMIT Final Design Submittal (Mylars)	0 days	Fri 11/20/15	Fri 11/20/15																						
15	<b>Task 2 - Project Management</b>	<b>411 days</b>	<b>Mon 6/15/15</b>	<b>Mon 1/9/17</b>																						
16	Task 2.1 - Project Management	115 days	Mon 6/15/15	Fri 11/20/15																						
17	Task 2.2 - Meetings	114 days	Tue 6/16/15	Fri 11/20/15																						
18	50% Submittal Meeting	0 days	Wed 8/19/15	Wed 8/19/15				◆ 8/19																		
19	90% Submittal Meeting	0 days	Wed 10/14/15	Wed 10/14/15					◆ 10/14																	
20	Caltrans Meetings (Dates TBD)	114 days	Tue 6/16/15	Fri 11/20/15																						
21	Task 2.3 - QAQC	114 days	Tue 6/16/15	Fri 11/20/15																						
22	Task 2.4 - Cost Estimate (Class 2)	15 days	Mon 9/14/15	Fri 10/2/15																						
23	<b>Task 3 - Permitting</b>	<b>260 days</b>	<b>Tue 6/16/15</b>	<b>Mon 6/13/16</b>																						
27	<b>Task 4 - Bid Services</b>	<b>20 days</b>	<b>Tue 6/14/16</b>	<b>Mon 7/11/16</b>																						
28	<b>Tech Studies and CEQA Compliance/MND (Not in this contract)</b>	<b>260 days</b>	<b>Tue 6/16/15</b>	<b>Mon 6/13/16</b>																						
29	<b>Estimated Construction</b>	<b>130 days</b>	<b>Tue 7/12/16</b>	<b>Mon 1/9/17</b>																						

Project: SEJPA Outfall Date: Wed 7/1/15	Task		Client Reviews		Inactive Task		Manual Task		Manual Summary	
	Milestone	◆	Optional Tasks		Inactive Milestone	◆	Duration-only		Start-only	
	Summary		Inactive Task		Inactive Summary		Manual Summary Rollup		Finish-only	

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

July 13, 2015

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO JOINT POWERS AUTHORITY AND ENCINA WASTEWATER  
AUTHORITY EMPLOYEE LEASING AGREEMENT

RECOMMENDATION

It is recommended that the Board of Directors:

1. Adopt Resolution 2016-01 – Employee Leasing Agreement Authorization between the San Elijo Joint Powers Authority and the Encina Wastewater Authority; and
2. Discuss and take other action as appropriate.

BACKGROUND

In July of 2012, the Board of Directors authorized the General Manager to evaluate opportunities for resource sharing between the Encina Wastewater Authority (EWA) and the San Elijo Joint Powers Authority (SEJPA). This preliminary evaluation indicated that opportunities do exist and, as a result, the Board of Directors subsequently directed staff to work collaboratively with the EWA to identify and implement targeted resource sharing strategies and report back. One opportunity that was identified was the short-term sharing of employees between the agencies. This can provide a cost effective option for the agencies to move staff to meet work demands. This could be used to assist on emergency projects, to leverage specific staff skills, or to address temporary effects of workforce attrition. This program may also result in opportunities for further development of staff skills through new work opportunities. Adoption of Resolution 2016-01 (Attachment 1) establishes a working agreement (Attachment 2) for the leasing of employees between the SEJPA and EWA.

DISCUSSION

SEJPA and EWA are analogous high-performing organizations that protect public health and the environment. Like the SEJPA, EWA operates, maintains, and administers a jointly owned wastewater treatment plant, an ocean outfall, and multiple sub-regional wastewater pumping stations. EWA's member agencies are the Cities of Carlsbad, Vista and Encinitas, Vallecitos

Water District, Buena Sanitation District, and the Leucadia Wastewater District. The Encina Water Pollution Control Facilities (EWPCF) has a treatment capacity of 40.5 million gallons per day (MGD) liquid and 43.3 MGD solids. Both the SEJPA and EWA operate recycled water facilities that produce more than one billion gallons of recycled water annually. In addition to similar operating environment and labor classifications, both agencies have similar governance structures. An agency comparison profile is provided as Attachment 3.

Working collaboratively with EWA staff, a preliminary evaluation was undertaken for the purpose of identifying resource sharing opportunities that have the potential to improve organizational effectiveness and reduce expenditures at both EWA and SEJPA. The Preliminary Evaluation indicated that immediate (1-12 months), short-term (1-3 years), and long-term (greater than 3 years) opportunities existed. From this effort, the concept of an Employee Leasing Agreement was developed to address fluctuating workloads, specialty services, and cross training. The EWA Board approved the attached agreement (Attachment 2) on June 14, 2015.

### FISCAL IMPACT

The expected financial impact is a net cost reduction to the SEJPA and EWA through staffing optimization. The General Manager will provide the Board periodical updates on the performance, both organizational and financial, of this program.

It is therefore recommended that the Board of Directors:

1. Adopt Resolution 2016-01 – Employee Leasing Agreement Authorization between the San Elijo Joint Powers Authority and the Encina Wastewater Authority; and
2. Discuss and take other action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

Attachment 1: Resolution 2016-01 – Employee Leasing Agreement Authorization

Attachment 2: Employee Leasing Agreement

Attachment 3: Agency Comparison at a Glance

ATTACHMENT 1

**RESOLUTION NO. 2016-01**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
SAN ELIJO JOINT POWERS AUTHORITY  
FOR EMPLOYEE LEASING AGREEMENT AUTHORIZATION**

**WHEREAS**, the Encina Wastewater Authority (EWA) is a Joint Powers Authority organized in accordance with the Joint Powers Act, California Government Code 6500 et seq; and,

**WHEREAS**, San Elijo Joint Powers Authority (SEJPA) is a Joint Powers Authority organized in accordance with the Joint Powers Act, California Government Code 6500 et seq; and,

**WHEREAS**, EWA and SEJPA are each referred to individually as "Party" and collectively as "Parties"; and,

**WHEREAS**, EWA and SEJPA each employ individuals that are experienced, competent, and qualified to provide a variety of services to the other Party; and,

**WHEREAS**, the Parties desire to lease from, and to one another, employees to perform certain services in accordance with the provisions of this Agreement; and,

**WHEREAS**, the purpose of this Agreement is to establish the terms under which the EWA and SEJPA shall lease employees to and from one another and to allocate the costs and potential liabilities of the Parties in carrying out this Agreement; and,

**WHEREAS**, the intent of the Parties that, insofar as possible, the Lessee Party shall bear its fair share of the costs that are incurred by the Lessor Party for the maintenance of the personnel, materials, equipment, and other services and supplies to provide the Leased Employees to the Lessee Party, at the levels specified in this Agreement; and,

**WHEREAS**, it is also the intent of the Parties that any liabilities by the Parties arising out of the provision of services provided by the Leased Employees to the Lessee Party under this Agreement be allocated to and borne by the Lessee Party.

**NOW, THEREFORE**, it is hereby resolved the SEJPA Board of Directors approves the Employee Leasing Agreement hereto as Attachment 1.

PASSED AND ADOPTED this 13<sup>th</sup> day of July, 2015, by the following vote:

AYES: Boardmembers:

NOES: Boardmembers:

ABSENT: Boardmembers:

ABSTAIN: Boardmembers:

ATTEST:

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David Zito, Chairperson  
SEJPA Board of Directors

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Michael T. Thornton, P.E.  
Secretary of the Board

**EMPLOYEE LEASING AGREEMENT**

This EMPLOYEE LEASING AGREEMENT (“Agreement”), dated as June 24, 2015 (the “Effective Date”), is made and entered into between the Encina Wastewater Authority (“EWA”), and the San Elijo Joint Powers Authority (“SEJPA”). EWA and SEJPA are each referred to individually as “Party” and collectively as “Parties.”

**RECITALS**

WHEREAS, EWA is a Joint Powers Authority organized in accordance with the Joint Powers Act, California Government Code 6500 et seq; and,

WHEREAS, SEJPA is a Joint Powers Authority organized in accordance with the Joint Powers Act, California Government Code 6500 et seq; and,

WHEREAS, EWA and SEJPA each employ individuals that are experienced, competent, and qualified to provide a variety of services to the other Party; and,

WHEREAS, the Parties desire to lease from, and to one another, employees to perform certain services in accordance with the provisions of this Agreement (“Leased Employees”); and,

WHEREAS, for purposes of drafting and executing this Resolution and Agreement, the Party leasing out its employees is referred to as the “Lessor” or “Lessor Party” and the Party leasing the employees will be referred to as the “Lessee” or “Lessee Party”; and,

WHEREAS, the purpose of this Agreement is to establish terms beneficial to EWA, SEJPA and their respective owner agencies according to which the contemplated employee leasing shall occur and to accurately allocate the costs and potential liabilities of the Parties in carrying out this Agreement; and,

WHEREAS, it is the intent of the Parties that, insofar as possible, the Lessee Party shall bear its fair share of the costs that are incurred by the Lessor Party for the maintenance of the personnel, materials, equipment, and other services and supplies to provide the Leased Employees to the Lessee Party, at the levels specified in this Agreement; and

WHEREAS, it is also the intent of the Parties that any liabilities by the Parties arising out of the provision of services provided by the Leased Employees to the Lessee Party under this Agreement be allocated to and borne by the Lessee Party.

NOW, THEREFORE, BE IT RESOLVED, that in consideration for the promises and the mutual agreements of the Parties contained herein and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Parties hereby agree as follows:

**1. Leased Employees Services.** Each Party agrees to lease to the other Party certain employees on the following terms and conditions:

(a) Employee Leases – Generally All employees of both Parties are eligible to be leased from one Party to the other Party subject to the approval of the Lessor Party’s General Manager after

taking into consideration any and all agency specific staffing requirements. The Lessor Party's General Manager shall retain unilateral authority to identify the employees to be leased. The Lessee Party shall submit in writing a Request for Leased Employees (Request) to the Lessor Party's General Manager that shall conform to the requirements set forth in Paragraph 1(c) below.

(b) Delivery of Services. The Leased Employees will perform functions comparable to those services the leased employee performs for the Lessor Party (the "Services"). The Leased Employees will perform the Services in a professional manner.

(c) Request for Leased Employees. The Lessee Party shall submit in writing a "Request for Leased Employees" (Request) to the Lessor Party's General Manager. Such requests shall, at a minimum, include the following information:

- (i) A statement of the anticipated scope of services the Leased Employees are expected perform;
  - (ii) The number of Leased Employees Lessee anticipates to be required;
  - (iii) The desired start date, and, both expected and not-to-exceed end dates anticipated by the Lessee for each requested Leased Employee;
  - (iv) The proposed work schedule, shifts, and work week for each Leased Employee;
- and,
- (v) A proposed completion standard that is objective and measurable.

(d) Notice of Determination on Request for Leased Employees. Within five (5) working days of receiving the Request, the Lessor Party's General Manager shall provide written notice to the Lessee General Manager that the Request has been approved or disapproved. The General Managers shall utilize their best efforts to accommodate the request. If the request is denied, the reasons for such denial shall be set forth in the notice. If approved, this written notice shall include:

- (i) the final agreed up scope of services;
- (ii) number and identity of leased employees;
- (iii) start, end, and not to exceed dates for each leased employee;
- (iv) work schedule, shifts, and work week for each leased employee; and,
- (v) the agreed upon completion standard including the source of any required data and method of calculation.

## **2. Lessor Party Responsibilities**

(a) Leased Employees' Compensation and Benefits. The Lessor Party shall continue to be financially responsible and operationally responsible for meeting payroll and providing compensation and employee benefits and the associated personnel, payroll and benefit administration services for the



Leased Employees providing Services to the Lessee Party. In furtherance of the foregoing, the Lessor Party shall:

(i) Properly secure coverage for workers' compensation coverage for the Leased Employees while they are performing Services pursuant to this Agreement;

(ii) Be fully responsible for payment of all payroll, payroll taxes, collection of taxes, unemployment insurance, and other administrative functions customarily performed by an employer and required under applicable federal, state, or local laws; and,

(iii) Without regard to payment by Lessee Party, assume such responsibilities as are required by applicable federal, state, and local wage and hour laws for payment of wages to the Leased Employees.

(b) Additional Responsibilities. In addition, the Lessor Party shall be responsible for:

(i) Notifying all Leased Employees of their assignment to provide services to the Lessee Party and complying with any applicable provisions of any collective bargaining agreement or other employment agreements, policies or rules;

(ii) Notifying the Lessee Party immediately upon the release, termination or cessation of employment of any Leased Employee;

(iii) Promulgating and administering employment and safety policies and ensuring safe working conditions in respect to the Lessor Party's premises, facility and equipment;

(iv) Disciplining, replacing, and terminating the employment of the Leased Employees and designating the date of separation from employment;

(v) Rewarding, promoting, reassigning, and determining the wages, hours, terms, and conditions of employment of the Leased Employees;

(vi) Resolving and deciding grievances and disputes of the Leased Employees;

(vii) Managing workers' compensation issues including, declinations, claims, claim filings, and related procedures; and,

(viii) On a monthly basis calculating the direct costs of the Leased Employees it leased to Lessee Party and sending a bill to the Lessee Party for those costs, pursuant to Section 4 of this Agreement.

**3. Lessee Party Responsibilities.** The Lessee Party shall be responsible for:

(a) Ensuring that it complies with all wage and hour laws, including any provisions of the California Labor Code, the Fair Labor Standards Act, any regulations set forth by the Occupational Safety and Health Administration ("OSHA"), Cal OSHA, and any and all other laws and regulations applicable to workplace administration and safety with respect to the terms and conditions under which the Leased Employees shall work. This includes, without limitation, compliance with meal and rest periods as required by applicable federal, state, and local labor laws and compliance with timecard reporting;

- (b) Providing the personnel necessary for effective communication with the Lessor Party;
- (c) Promptly approving the Leased Employees' timecards, if applicable;
- (d) Keeping accurate records regarding the Leased Employees' work for the purposes of computing and making provisions for the Lessor Party's payment of the Leased Employees' salary and benefits. Lessee Party shall submit copies of these records to the Lessor Party not less often than once a month; and
- (e) Providing payment to the Lessor Party pursuant to Section 4 of this Agreement.

**4. Compensation.**

(a) As compensation for each Leased Employee's Services, the Lessee Party agrees to cover the direct costs of employing the Leased Employee including, without limitation, the costs of benefits, any employment taxes, and total gross wages paid to the Leased Employee as part of the Lessor Party's regular payroll.

(b) The Lessor Party shall bill the costs of employing its respective Leased Employees to the Lessee Party on a monthly basis. The Lessee Party shall reimburse the Lessor Party for the costs of employing the respective Leased Employees within thirty (30) days of receiving the bill.

(c) The Lessor Party shall continue to be financially and operationally responsible for meeting payroll and providing compensation and employee benefits and the associated personnel, payroll, and benefit administration services for the Leased Employees performing work under this Agreement for the Lessee Party in accordance with applicable federal, state, and local laws, including but not limited to, collection, reporting, and payment of all applicable federal, state, and local payroll taxes, unemployment and disability insurance withholding, administration of workers compensation programs, maintenance of payroll benefit and safety records; and compliance with the Immigration Reform and Control Act of 1986. No Leased Employee assigned to perform duties for the Lessee Party shall be considered an employee of the Lessee Party for the purpose of accruing any benefits afforded to Lessee Party employees.

**5. Employment Relationship.**

(a) Nothing in this Agreement shall confer upon any employee of the Lessor Party any rights or remedies, including any right to employment or continued employment for any specified period. Each Party hereto intends that this Agreement does not benefit or create any right or cause of action in or on behalf of any party other than the Parties.

(b) All Leased Employees shall be and remain employees of the Lessor Party and shall at all times be subject to the direction, supervision, and control of the Lessor Party or the JPA.

(c) Lessee Party shall have no right to discharge Leased Employees from employment with Lessor Party. However, Lessee Party may, upon fifteen (15) days prior notice terminate any particular Leased Employee's Services provided to Lessee Party. Furthermore, Lessee Party may

terminate this Agreement and therefore, all Leased Employees' Services by providing the notice required in Section 7 of this Agreement.

**6. Allocation of Liabilities, Insurance, and Indemnification.** The Parties recognize that under Government Code section 895, they are jointly and severally liable for liabilities arising out of the Services of the Leased Employees; however, this Agreement may provide for indemnification and rights of contribution which effectively allocate such potential liabilities.

(a) Indemnification. SEJPA agrees to defend, indemnify, and hold harmless EWA for liabilities to third parties incurred by EWA arising out of the Services provided by Employees leased to SEJPA by EWA under this Agreement, to the extent not covered by liability or workers compensation insurance maintained by the Parties pursuant to this Agreement

(i) EWA agrees to defend, indemnify and hold harmless SEJPA for liabilities to third parties incurred by SEJPA arising out of the Services provided by Employees leased to EWA by SEJPA under this Agreement, to the extent not covered by liability or workers compensation insurance maintained by the Parties pursuant to this Agreement.

(ii) The Parties agree that the SEJPA's liability insurance shall be primary and EWA's liability insurance shall be secondary regarding claims or liabilities arising out of the Services provided by Employees leased to SEJPA by EWA and that EWA's liability insurance shall be primary and SEJPA's liability insurance shall be secondary regarding claims or liabilities arising out of the Services provided by Employees leased to EWA by SEJPA.

(b) Liability Insurance. The Lessee Party shall ensure that it has sufficient liability insurance to cover the Services of the Leased Employees. Both SEJPA and EWA acknowledge that their liability insurance will cover the activities of leased employees while they are performing duties pursuant to this Agreement. The Parties should contact their respective insurance companies to confirm this.

**7. Term and Termination.** This Agreement shall begin on the Effective Date and shall continue until termination of this Agreement. Either Party may terminate this Agreement by providing the other Party with at least thirty (30) days written notice.

**8. Amendment.** This Agreement may not be modified in any manner other than by an agreement in writing signed by the Parties.

**9. Entire Agreement.** This Agreement comprises the entire integrated understanding between EWA and SEJPA concerning the subject matter of this Agreement and it supersedes all prior negotiations, representations, agreements and understandings, both written and oral, between the Parties with respect to the subject matter of this Agreement.

**10. Agreement Binding on Successors.** This Agreement shall be binding upon, and inure to the benefit of, the Parties and their respective successors and assigns, and it is not intended to create any obligations to, or rights in respect of, any person other than the Parties and their respective successors and assigns.

**11. Governing Law.** The interpretation, validity, and enforcement of this Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without regard to the conflicts of laws principles thereof. The Parties shall be responsible for complying with all federal, state, and local laws whether or not said laws are expressly stated or referred to herein.

**12. Notices.** Any notice required or permitted under this Agreement shall be deemed given when actually delivered or when deposited in the mail, certified or registered, postage prepaid, addressed as follows:

**TO EWA:**

Encina Wastewater Authority  
Attn: General Manager  
6200 Avenida Encinas  
Carlsbad, California 92011-1095  
Telephone: (760) 438-3941  
Facsimile: (760) 431-7493

**TO SEJPA:**

San Elijo Joint Powers Authority  
Attn: General Manager  
2695 Manchester Ave.  
Cardiff by the Sea, California 92007-7077  
Telephone: (760) 753-6203  
Facsimile: (760) 753-5935

**With a Copy to:**

Gregory V. Moser, General Counsel  
Procopio Cory Hargreaves & Savitch LLP  
525 B Street, Suite 2200  
San Diego, California 92101  
Telephone: (619) 515-3208  
Facsimile: (619) 235-0398

**13. Counterparts.** This Agreement may be executed in the original or in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

**14. Signatures.** The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of the respective legal entities of EWA and SEJPA.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be signed and delivered by their duly authorized representatives as of the Effective Date.

**ENCINA WASTEWATER AUTHORITY**

**SAN ELIJO JOINT POWERS AUTHORITY**

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

Elaine Sullivan, Chairperson

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

David Zito, Chairperson

ATTEST:

ATTEST:

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

Paula Clowar, Secretary

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

Michael T. Thornton, Secretary

APPROVED AS TO FORM:  
Gregory V. Moser, General Counsel

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

### ATTACHMENT 3

#### SEJPA – EWA AT A GLANCE COMPARISON

<b>Agency Comparison at a Glance</b>		
	<b>SEJPA</b>	<b>EWA</b>
Agency Structure	Joint Powers Authority	Joint Powers Authority
Bidding Required	Yes	No
No. of Member Agencies	2	6
FY 2015-16 Operating Budget (excluding debt)	\$5.7 million	\$14.6 million
FY 2015-16 Capital Budget	\$1.6 million	\$15.1 million
FY 2015-16 Annual Debt Service Payment	\$2.5 million	n/a
FY 2015-16 Recycled Water Revenue	\$2.6 million	\$0.88 million
Capital Asset Value at Cost (FY 2013-14 Audit)	\$67.7 million	\$236.9 million
Accumulated Depreciation	\$28.1 million	\$131.4 million
Debt Service to Revenue Ratio	0.27	n/a
Debt Service to Asset Ratio	0.05	n/a
Re-Investment Ratio	2.8%	5.8%
Depreciation Ratio	41.8%	55.5%
Number of Employees	22	67
OPEB Unfunded Liability	\$102,263	\$239,553
OPEB UAAL / EE	\$4,648	\$3,575
WW Treatment Capacity / Average Flow (MGD)	5.25 / 3.00	43.30 / 21.10
Operates Recycled Water Distribution Facilities	Yes	Yes
Operated Water Reclamation Capacity	3.0 MGD	5.0 MGD
Operates Ocean Outfall	Yes	Yes
Non-Point Source Control Program	No	Yes
Daily Power Production Capacity	N/A	3.0 mW
No. of Remote Facilities / Programs Operated	12	5