AGENDA SAN ELIJO JOINT POWERS AUTHORITY MONDAY JANUARY 11, 2016 AT 9:00 AM SAN ELIJO WATER RECLAMATION FACILITY – CONFERENCE ROOM 2695 MANCHESTER AVENUE CARDIFF BY THE SEA, CALIFORNIA

- 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 DECEMBER 14, 2015 MEETING
- 8. * <u>APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT</u> <u>REPORTS</u>
- 9. * <u>SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS –</u> <u>MONTHLY REPORT</u>
- 10. * <u>SAN ELIJO JOINT POWERS AUTHORITY RECYCLED WATER PROGRAM –</u> <u>MONTHLY REPORT</u>
- 11. * PROFESSIONAL SERVICES CONTRACT FOR CONSTRUCTION MANAGEMENT INSPECTION SERVICES
- 12. * <u>AWARD OF CONTRACT FOR PROFESSIONAL UNMANNED AERIAL VEHICLE</u> <u>VIDEOGRAPHY SERVICES</u>
- 13. * <u>APPROVE PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR</u> <u>TRUSSELL TECHNOLOGIES, INC.</u>
- 14. * ITEMS REMOVED FROM CONSENT CALENDAR

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

15. ELECTION OF OFFICERS AND SCHEDULE OF BOARD MEETINGS

- 1. Appoint the Chairperson and Vice Chairperson for the 2016 SEJPA Board of Directors;
- 2. Select the regular meeting place and time for 2016; and
- 3. Discuss and take action as appropriate.

Staff Reference: Director of Finance and Administration

16. PROPOSED 2016 CLASSIFICATION AND COMPENSATION SCHEDULE

- 1. Approve the proposed SEJPA Classification and Compensation Schedule and Organizational Chart; and
- 2. Discuss and take action as appropriate.

Staff Reference: General Manager

17. SAN ELIJO OCEAN OUTFALL 2015 ANNUAL INSPECTION REPORT

- 1. Accept and file the San Elijo Ocean Outfall Year 2015 Annual Inspection Report prepared by Marine Taxonomic Services, Ltd.; and
- 2. Discuss and take action as appropriate.

Staff Reference: Director of Operations

18. GENERAL MANAGER'S REPORT

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

19. <u>GENERAL COUNSEL'S REPORT</u>

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

20. 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.

21. <u>CLOSED SESSION</u>

The Board will adjourn to Closed Session to discuss item identified below. Closed Session is not open to the public; however, an opportunity will be provided at this time if members of the public would like to comment on any item listed below. (Three minute limit.) 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".

Pursuant to Government Code Section 54957.6/Conference with Labor Negotiator; Agency Negotiator: Michael T. Thornton, General Manager; Unrepresented Employees: All Non-Contract Employees

22. ADJOURNMENT

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Monday, February 8, 2016 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 <u>www.sejpa.org</u>. 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: January 6, 2016

11____

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

SAN ELIJO JOINT POWERS AUTHORITY MINUTES OF THE BOARD MEETING HELD ON DECEMBER 14, 2015 AT THE SAN ELIJO WATER RECLAMATION FACILITY

David Zito, Chair

Catherine S. Blakespear, Vice Chair

A meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, December 14, 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 9:00 a.m.

2. ROLL CALL

Directors Present:

Catherine S. Blakespear Ginger Marshall Mark Muir David Zito

Michael Thornton

Christopher Trees

Paul Kinkel

Jennifer Basco

Adriana Ochoa

Mohammad "Mo" Sammak

Greg Wade

Bill Wilson

None

Directors Absent:

Others Present: General Manager Director of Operations Director of Finance & Administration Administrative Assistant/Board Clerk

SEJPA Counsel: Procopio, Cory, Hargreaves & Savitch

City of Solana Beach: City Manager Director of Engineering/Public Works

City of Encinitas: Public Works Management Analyst

3. <u>PLEDGE OF ALLEGIANCE</u>

Chair Zito led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

None

5. PRESENTATION OF AWARDS

None

6. <u>CONSENT CALENDAR</u>

Vice Chair Blakespear removed Agenda Item No. 8, Approval for Payment of Warrants and Monthly Investment Report, from the Consent Calendar and moved it to Agenda Item No. 11.

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

Motion carried with unanimous vote of approval.

Amended Consent Calendar:

Agenda Item No. 10	San Elijo Joint Powers Authority Recycled Water Program – Monthly Report				
Agenda Item No. 9	San Elijo Water Reclamation Facility Treated Effluent Flows – Monthly Report				
Agenda Item No. 7	Approval of Minutes for the November 9, 2015 meeting				

11. ITEMS REMOVED FROM CONSENT CALENDAR

Agenda Item No. 8 – Approval for Payment of Warrants and Monthly Investment Report. Vice Chair Blakespear recused herself from this item.

Moved by Board Member Muir and seconded by Board Member Marshall to approve Agenda Item No. 8. Motion carried with the following vote of approval:

AYES:	Marshall, Muir, Zito
NOES:	None
ABSENT:	None
ABSTAIN:	Blakespear

At this point, General Manager Thornton, moved Agenda Item No. 12 to be presented to the Board of Directors after Agenda Item No. 14.

13. <u>PROFESSIONAL SERVICES AGREEMENT – ARCHITECTURAL SERVICES FOR</u> <u>BUILDING IMPROVEMENT PROGRAM</u>

General Manager Thornton updated the Board of Directors on the Building Improvement Program at the SEWRF. At the September 2015 Board meeting, three building alternatives were presented and discussed by the Board of Directors. Based on the direction provided by the Board, Staff and Roesling Nakamura Terada Architects (RNT) began researching methods to reduce initial capital costs and provide financing strategies. The building options originally developed are being revisited to ensure the appropriate size and scale of the project, and to eliminate unnecessary expenses. Also the viability of an administration building with tenant lease space is being considered. Mr. Thornton stated that additional work, including general site design, utility layout, development of conceptual building budgets and figures, and funding support are required prior to completion of a revised Building Improvement Program report. RNT submitted a proposal to complete the pre-design services in the amount not to exceed \$45,000.

Moved by Board Member Muir and seconded by Vice Chair Blakespear to:

1. Authorize professional services agreement with Roesling, Nakamura, Tereda Architects for an amount not to exceed \$45,000.

Motion carried with unanimous vote of approval.

14. CLASSIFICATION AND COMPENSATION ANALYSIS

General Manager Thornton informed the Board of Directors that the SEJPA completed a classification and compensation review of all SEJPA labor positions using salary data from agencies within an approximate 30-mile radius. The analysis was a directive under Resolution No. 2012-06, related to the expiring SEJPA employee labor agreement. Monthly salary ranges were obtained for each SEJPA labor classification from the surveyed agencies where there were comparable positions. When analyzing the maximum salary range for each labor class, the majority of the SEJPA positions are near the median of the survey group. The top of the salary range for most SEJPA positions is within plus or minus 5 percent of the survey group average. No position was more than 5.3 percent above its peer group average, and three staffed positions fall short of the previous Board of Directors' goal of setting position pay ranges within 5 percent (plus or minus) of the market average. The General Manager will prepare recommendations for adjustments to the Classification and Compensation Schedule and will present them at the next Board meeting.

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

Board Member Muir left the meeting at 9:27 a.m. to attend another event.

12. PROJECT UPDATE – LAND OUTFALL REPLACEMENT

The General Manager updated the Board of Directors on the San Elijo Land Outfall Replacement project. The project engineer, Kennedy Jenks Consultants, estimates that the construction design drawings and specifications will be complete in January 2016. Concurrent with the design effort, Staff is working with the design team to prepare the necessary environmental documents, obtain land easements, and construction permits. Staff has been working to obtain the easements for several months, and based on current information, the final easement agreements are expected in the first quarter of 2016. Obtaining all necessary project permits is expected to take longer. The General Manager stated that Staff is working with the permitting agencies to fast track the permit process. The agencies are aware of the upcoming San Elijo Lagoon Restoration and North Coast Corridor projects, which are impacted by the Land Outfall Replacement project. Mr. Thornton highlighted various regional benefits if the outfall is replaced prior to the related lagoon projects. The goal to fast track the project is receiving positive support from Caltrans, North County Transit District, San Diego Association of Governments, cities of Encinitas and Solana Beach, California Coastal Commission, and San Elijo Lagoon Conservancy. As the Land Outfall Replacement project progresses, the next action items for the Board of Directors are anticipated to be presented at the March 2016 Board meeting.

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

Vice Chair Blakespear and Board Member Marshall left the meeting at 9:38 a.m. to attend another event, and there was no longer a quorum of Board Members present.

15. <u>2015 YEAR IN REVIEW – RECOGNIZING AGENCY ACHIEVEMENTS AND</u> <u>SUCCESSES</u>

General Manager Thornton presented highlights of the SEJPA's accomplishments and successes for calendar year 2015. Included in the highlights were the agency's permit compliance record, safety record, public outreach events and engagements, and collaborations with other government agencies. Mr. Thornton also reviewed industry recognition awards that the SEJPA received in 2015, including the American Membrane Treatment Association Membrane Plant of the Year, as well as the \$2.5 million grant award commitment received from the Integrated Regional Water Management Program. Finally, Mr. Thornton reviewed the capital infrastructure projects that the SEJPA completed in 2015.

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

16. <u>GENERAL MANAGER'S REPORT</u>

None

17. <u>GENERAL COUNSEL'S REPORT</u>

None

18. BOARD MEMBER COMMENTS

None

19. CLOSED SESSION

None

20. ADJOURNMENT

The meeting adjourned at 9:50 a.m. The next Board of Directors meeting will be held on January 11, 2016.

Respectfully submitted,

16

Michael T. Thornton, P.E. General Manager

SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS 16-01

For the Month of December 201	15
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32366 32367 32368 32369 32370 32371	Advanced Air & Vacuum Aflac Aire Filter Products-Calif	Services - Maintenance	Air compressor inspection	190.00
32368 32369 32370		FF Daduction Develop		
32369 32370	Aire Filter Products-Calif	EE Deduction Benefits	Aflac - November and December	1,386.72
32370		Repair Parts Expense	Air filters	157.52
	Atlas Pumping Service Inc.	Services - Grit & Screenings	Grit and screening; grease and scum pumping	1,019.79
32371	BankCard Center	Supplies - Shop & Field	Tools, meetings, parts, seminars, IT support	1,919.75
	Barrett Engineered Pumps	Repair Parts Expense	Diaphragm kit	294.24
32372	BAVCO	Repair Parts Expense	CRD repair kit	160.53
32373	Boot World, Inc.	Uniforms - Boots	Safety boots	150.00
32374	Brown & Bigelow	Dedication Ceremony	Wiegand tank dedication	791.71
32375	California Water Technologies	Supplies - Chemicals	Ferric Chloride	4,141.29
32376	Calpers	Retirement Plan - PERS	Calpers	11,906.00
32377	Coast Waste Management, Inc.	Services - Grit & Screenings	Grit and screening	3,528.62
32378	Comoso	Supplies - Shop & Field	Grease, hydraulic oil, water suction hose	1,017.83
32379	CWEA Membership	Dues & Memberships	Laboratory Grade 3	91.00
32380	CWEA Membership	Dues & Memberships	Membership	164.00
32381	City of Encinitas	Service - IT Support	Admin network - November and December	5,000.00
32382	Flo-Systems, Inc.	Repair Parts Expense	Liner	1,627.61
32383	Global Capacity	Utilities - Internet	T-1 service - December	296.03
32384	Golden Bell Products	Supplies - Chemicals	Granular chlorine	583.20
32385	Guardian	Dental/Vision	Dental - December	2,007.89
32386	Hardy Diagnostics	Supplies - Lab	Lab supplies	837.49
32387	Health and Human Resource	Employee Assistance Program	December	86.30
32388	Hidden Valley Pump Sys., Inc.	Capital Outlay	Floway filter feed pump #1 rebuild	9,293.48
32389	Home Depot Credit Services	Supplies - Safety	Tools, repairs and supplies	447.76
32390	Jennifer Basco	Subsistence - Travel/Rm & Bd	Mileage	35.95
32391	Konica Minolta	Services - Maintenance	Monthly copier maintenance service	218.03
32392	Kooltronic Inc.	Repair Parts Expense	A/C blower motor	584.00
32393	The Lawton Group	Services - Intern Program	Weeks worked - 11/16/15 - 11/29/15	2,399.51
32393 32394	Mar-Con Products, Inc.	Repair Parts Expense	Storm drain riser	503.29
32395	Mar-con Froducts, Inc. McMaster-Carr Supply Co.	Minor Equip - Shop & Field	Plumbing supplies	155.00
32396	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 11/21/15 - 12/04/15	11,878.71
32397	Michael Piper	Accounts Receivable Control	Health benchmark	25.00
32398	Preferred Benefit Insurance	Dental/Vision	Vision - December	301.50
32399	ProBuild Company, LLC	Supplies - Shop & Field	Tools, supplies and repair parts	260.02
32400	ReadyRefresh	Supplies - Office	Kitchen and lab supplies	340.62
32401	Roesling Nakamura Terada Architects		Control room remodel, assessment report	1,746.00
32402	San Dieguito Water	Utilities - Water	Recycled water	7,123.20
32403	Santa Fe Irrigation District	Utilities - Water	Recycled water	950.51
32404	Smart & Final	Supplies - Office	Kitchen supplies	48.89
32405	SWRCB	Fees - Permits	Recycled Water review	290.70
32406	Test America	Services - Laboratory	Water sample testing	181.00
32407	Tierra Data Inc.	Services - Laboratory	Water monitoring - December	725.00
32408	Trussell Technologies, Inc	Services - Engineering	Process engineering and evaluate	1,872.00
32409	Unifirst Corporation	Services - Uniforms	Uniform service	287.98
32410	Underground Service Alert/SC	Services - Alarm	Dig Alert - November	57.00
32411	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	6,212.93
32412	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	2,885.55
32413	WateReuse Association - SD	Dues & Memberships	Membership	75.00
32414	WEX Bank	Fuel	Fuel - November	560.57
32415	Abila	Licenses	Annual renewal - Accounting system	943.00
32416	Ag Tech, LLC	Services - Biosolids Hauling	Biosolids hauling - November	11,359.86
32417	AT&T	Utilities - Telephone	Phone service - 10/13/15 - 12/12/15	1,153.86
32418	VOID	VOID	VOID	0.00
32419	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	832.32
32420	Brenntag Pacific, Inc.	Supplies - Chemicals	Citric Acid and Sodium Hydroxide	3,582.02
32421	Brown & Bigelow	Dedication Ceremony	Wiegand tank dedication	202.58

SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS 16-01

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
32422	Complete Office	Supplies - Office	Office supplies	144.4
32423	Corodata	Rent	Record storage - November	74.8
32424	County of San Diego	Fees - Permits	District fees	284.0
2425	DMV	Services - Other	Safety records - November	3.0
32426	Forte of San Diego	Services - Janitorial	Janitorial service - January	1,000.0
32427	Hoch Consulting, APC	Services - Engineering	Blower #5	13,729.4
32428	International Sensor Tech	Repair Parts Expense	Catalytic bead sensor	291.1
32429	JWC Environmental	Capital Outlay	Grinders	47,440.0
2430	Kennedy/Jenks Consultants	Services - Engineering	Land outfall replacement	50,288.8
32431	Paul Kinkel	Subsistence - Travel	Mileage	76.2
32432	The Lawton Group	Services - Intern Program	Weeks worked - 11/30/15 - 12/11/15	1,913.6
32433	Lomas Santa Fe Country Club	Other Personnel Cost	2016 holiday luncheon	150.00
2434	McMaster-Carr Supply Co.	Supplies - Shop & Field	Signs, emergency lights, and earplugs	675.72
2435	North County Transit District	Fees - Permits	Easement license fee	2,000.0
2436	Napa Auto Parts	Repair Parts Expense	Fuses	3.2
32437	NeWest Construction	Services - Construction	Emergency Power Project	62,545.0
2438	Olin Corp - Chlor Alkali	Supplies - Chemicals	Sodium Hypochlorite	3,051.6
32439	OneSource Distributors, Inc.	Supplies - Safety	ARC flash jacket, bib kit, hot gloves, supplies	1,112.6
32439 32440	Eric ORiley	Seminars/Education	Cross connection	343.5
32440 32441	Pacific Green Landscape	Services - Landscape	Landscape service - December	2,975.0
32442	Palomar Backflow	Services - Maintenance	Repair backflow device	2,975.00
2443	P.E.R.S.	Medical Insurance - Pers	Health - January	20,707.2
2443 2444	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 12/05/15 - 12/18/15	11,878.7
	1 /			•
32445	Michael Piper	Accounts Receivable Control	Health and wellness	35.0
2446	Polydyne Inc.	Supplies - Chemicals	Clarifloc	2,856.6
2447	U.S. Postal Service	Postage/Shipping	Postage stamps	490.0
2448	Procopio Cory Hargreaves	Services - Legal	General - November	3,249.0
32449	Pumping Solutions, Inc.	Repair Parts Expense	Chemical pump for MF system	792.8
2450	Raftelis Financial Consultants	Services - Professional	Recycled Water Cost of Service	2,967.5
32451	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - November	254.1
32452	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 11/05/15 - 12/07/15	50,860.5
32453	Southwest Membrane Operation	Seminars/Education	Membrane operators certifications	1,650.00
32454	Terminix Processing Center	Prepaid - Other	Pest control	485.6
32455	Test America	Services - Laboratory	Water sample testing	854.50
32456	Michael Thornton	Subsistence - Meals; Supplies	Meetings and office equipment	1,334.30
32457	Trussell Technologies, Inc.	Services - Engineering	Process engineering and evaluation	2,446.0
32458	Unifirst Corporation	Services - Uniforms	Uniform service	327.7
2459	UPS	Postage/Shipping	Mailing parts	47.8
32460	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	5,751.93
32461	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	2,885.5
32462	Verizon Wireless	Utilities - Telephone	Phone service - 11/08/15 - 12/10/15	1,088.4
32463	WageWorks	Payroll Processing Fees	Admin and compliance fee	128.7
2464	VOID	VOID	VOID	0.0
2465	AT&T	Utilities - Telephone	DSL - 11/10/15 - 12/09/15	100.5
32466	AT&T	Utilities - Telephone	Alarm service	402.5
32467	VOID	VOID	VOID	0.0
32468	WateReuse Association	Dues & Memberships	Membership	1,029.3 [,]
32469	WateReuse Research Foundation	Dues & Memberships	Membership	1,200.0
	San Elijo Payroll Account	Payroll	Payroll - 12/11/15	63,952.4
	San Elijo Payroll Account	Payroll	Payroll - 12/24/15	63,386.1
				\$ 534,216.1

SAN ELIJO JOINT POWERS AUTHORITY

PAYMENT OF WARRANTS SUMMARY

For the Month of December 2015 As of December 30, 2015

PAYMENT OF WARRANTS Reference Number 16-01 \$ 534,216.11

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.

Paul F. Kinkel Director of Finance & Administration

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

FUNDS ON DEPOSIT WITH	A	MOUNT
LOCAL AGENCY INVESTMENT FUND (NOVEMBER 2015 YIELD 0.374%)		
RESTRICTED SRF RESERVE UNRESTRICTED DEPOSITS	\$ \$	630,000.00 6,052,636.20
CALIFORNIA BANK AND TRUST (NOVEMBER 2015 YIELD 0.01%)		
REGULAR CHECKING PAYROLL CHECKING	\$ \$	58,795.00 5,000.00
TOTAL RESOURCES	\$	6,746,431.20

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: General Manager
- SUBJECT: SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS MONTHLY REPORT

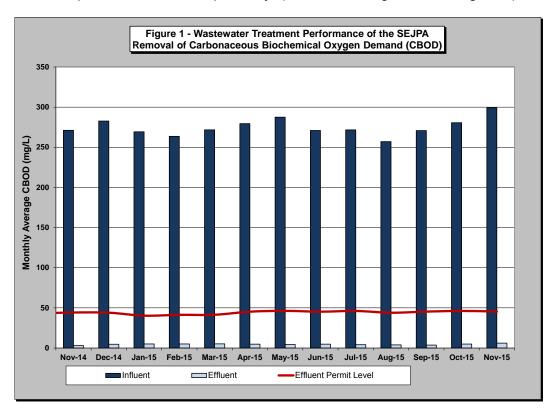
RECOMMENDATION

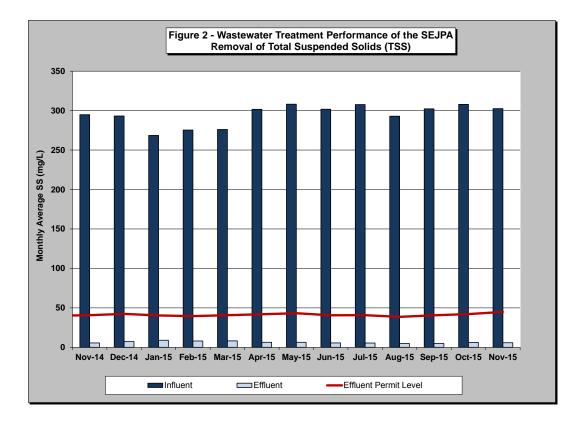
No action required. This memorandum is submitted for information only.

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 November 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 November, treatment levels for CBOD and TSS were 98.0 and 98.1 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 November. Average daily influent flows were recorded for each Member Agency. Total effluent flow was calculated for the San Elijo Water Reclamation Facility.

	November				
	Influent (mgd)	Effluent (mgd)*			
Cardiff Sanitary Division	1.250	0.792			
City of Solana Beach	0.994	0.630			
Rancho Santa Fe SID	0.100	0.063			
Total San Elijo WRF Flow	2.344	1.485			

* 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.

UNL UNL <th></th> <th colspan="3">AVERAGE DAILY INFLUENT FLOW RATE AVERAGE DAILY EFFLUEN</th> <th></th> <th colspan="4">FLOW RATE CONNECTED EDUS</th> <th colspan="3">AVERAGE UNIT INFLUENT FLOW RATE</th> <th>OWRATE</th>		AVERAGE DAILY INFLUENT FLOW RATE AVERAGE DAILY EFFLUEN				FLOW RATE CONNECTED EDUS				AVERAGE UNIT INFLUENT FLOW RATE			OWRATE				
Metrine CSD BSP CSD BB PLANT CSD REF CSD <thref csd<="" th=""> REF CSD REF CSD</thref>			(MG	iD)	TOTAL		(MG	D)	TOTAL	090			TOTAL		(GAL/ED	U/DAY)	TOTAL
Da-b0 Da-b1 Da-b1 <th< th=""><th>MONTH</th><th>CSD</th><th>RSE CSD</th><th>SB</th><th></th><th>CSD</th><th>RSF CSD</th><th>SB</th><th></th><th></th><th></th><th></th><th></th><th>CSD</th><th>RSF</th><th>SB</th><th>TOTAL PLANT</th></th<>	MONTH	CSD	RSE CSD	SB		CSD	RSF CSD	SB						CSD	RSF	SB	TOTAL PLANT
Feb-1 1413 0.168 1.339 2.088 1.176 0.1.80 1.144 2.420 480 7.728 16.437 16.448 16.37 32.3 16.3 17.37 17.28 16.447 13.33 16.37 17.27 16.440 16.37 32.2 16.447 13.27 32.2 16.457 32.2 16.447 13.37 17.28 16.446 17.38 16.446 17.38 16.446 17.38 16.447 13.39 22.2 16.97 16.37 16.37 16.37 16.37 16.37 16.37 16.37 16.38 23.24 46.87 17.28 16.47 16.38 16.39 16.37 16.37 16.38 23.21 16.39 16.33																	195
Marti 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 <th2< th=""> 2 2 2</th2<>	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
Apr-11 1320 0.161 1.322 2.626 0.867 0.116 0.869 1.844 8.248 482 7.728 16.488 1616 336 171 177 177 Jun-11 1.330 1.530 2.889 0.545 0.050 0.646 1.728 1.848 163 332 180 177 Jun-11 1.320 0.151 1.430 2.874 0.827 0.668 0.252 4.857 7.728 1.648 157 332 180 177 1.648 157 332 180 177 1.648 157 330 182 1.728 1.648 157 330 182 1.619 1.618 1.628 4.89 7.728 1.648 157 337 168 1.61 1.62 2.50 2.50 1.628 4.89 7.728 1.648 159 341 168 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.63	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
hey-th 1 1327 0.162 1.320 2.800 0.564 0.193 2.824 483 7.728 16.442 173 333 2.31 183 2.32 185 173 133 2.31 185 173 133 2.31 185 173 133 2.31 185 173 131 133 2.31 185 173 131 135 2.31 155 1.66 1.62 2.35 155 1.56 1.66 1.22 18.24 486 7.72 16.442 133 2.17 1.09 0.137 1.074 2.316 8.256 486 7.728 16.475 16.2 3.44 16.3 2.22 16.475 1	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
Ju-11 1243 0.151 1.302 2.884 0.645 0.063 0.644 0.772 8.280 448 7.728 16.465 157 312 185 177 Aug-11 1222 0.160 1.445 2.874 0.479 0.056 0.521 1.056 8.222 485 7.728 16.465 157 310 182 177 Cen-11 1.280 0.146 1.333 2.741 0.684 0.066 0.521 1.056 8.222 486 7.728 16.471 152 2.414 163 2.21 199 116 110 110 2.350 8.264 487 7.728 16.479 157 337 166 152 16.44 152 2.161 161 162 163 2.264 488 7.728 16.479 157 137 166 150 153 150 152 157 152 156 157 152 157 153 152 158 <													,				172
j.H.1 1283 0.151 1.430 2.847 0.425 0.046 8.250 484 7.728 1.64.21 157 310 182 177 Sep-11 1282 0.164 1.333 2.714 0.564 0.566 0.521 1.568 7.728 16.448 153 321 128 1.712 16.448 153 321 128 1.712 16.475 152 149 164 133 167 130 0.32 130 0.137 1.014 2.310 8.264 486 7.728 16.475 152 164 164 152 211 166 166 166 166 167 313 161 164 164 164 164 164 164 164 163 377 164 160 166 166 166 166 166 166 166 166 166 166 167 211 166 166 166 166 166 166 166<	-																171
Age-Int 1292 0.146 1.345 2.741 0.647 0.056 0.221 1.056 8.252 486 7.728 16,445 153 301 112 107 CeL-11 1280 0.147 1.303 2.755 0.730 0.082 0.755 8.264 486 7.728 16,474 153 202 149 169 Dect-11 1280 0.144 1.305 2.785 1.108 2.300 8.264 486 7.728 16,474 152 337 169 166 Fab-12 1.280 0.145 1.282 2.791 10.66 0.109 1.022 2.140 8.286 488 7.728 16,444 152 2.81 160 1.11 300 1.107 16 1.101 3.11 1.102 2.140 8.280 488 7.728 16,444 163 301 1.101 300 1.101 300 1.101 3.101 1.101 3.101 1.101 3.101																	176
Spint 1 1222 0.468 1.333 2.741 0.066 0.566 1.226 8.264 466 7.728 16.468 153 0.01 172 16.76 Nor-11 1.338 0.167 1.307 2.121 0.030 0.730 0.822 0.756 1.820 468 7.728 16.475 162 3.34 169 17 Jan-12 1.281 0.464 1.303 2.791 10.30 0.130 1.022 2.108 8.264 488 7.728 16.475 162 3.31 165 160 166 166 Mart2 1.313 0.151 1.252 2.006 8.264 488 7.728 16.464 163 2.031 166 16																	
Oci-11 1280 0.147 1383 0.173 0.082 0.757 1.647 1.867 8.280 488 7.28 1.647 1.518 2.92 1.98 1.98 1 1289 0.144 1.305 2.841 1.03 1.042 2.108 8.264 487 7.28 1.647 1.53 3.273 1.033 1.03 1.042 2.108 8.264 487 7.28 1.642 1.66 1.64 1.06 1.01 1.042 2.108 8.264 488 7.28 1.644 1.52 2.81 1.66 1.64 1.64 1.06 1.65 1.64 1.66 1.66 1.64 1.64 1.64 1.66 1.6	-																
Nev+1 1338 0.164 1307 2.12 10.09 0.137 1.108 2.301 8.281 4.86 7.728 16.475 162 3.44 169 17.7 Jan+12 2.191 0.444 1.033 2.793 1.032 0.116 1.042 2.190 8.264 488 7.728 16.445 150 3.14 16.2 16.0																	
De-h1 1299 0.164 1.005 2.789 1.013 0.118 0.130 0.118 0.230 1.02 0.177 0.820 4.827 7.728 16.472 157 3.37 169 168 Feb-12 1.290 0.157 1.285 2.771 1.006 0.069 0.103 0.118 0.262 4.86 7.728 16.445 152 2.81 166 166 4.94-12 1.348 0.155 1.270 0.066 0.077 0.66 6.228 488 7.728 16.449 161 3.08 1778 16.449 161 3.08 1.29 4.837 1.83 1.649 1.61 3.08 1.69 1.63 2.91 1.68 1.66 1.66 2.58 1.68 1.63 2.91 1.68 1.68 1.63 2.90 1.68 1.63 2.90 1.68 1.61 1.62 2.91 1.63 1.64 1.63 2.90 1.68 1.63 2.90 1.63																	171
Fab-12 1259 0.137 12.83 2.879 1006 0.059 0.140 10.25 2.140 8.288 488 7.728 16.484 152 2.81 166 162 164 152 2.81 166 162 164 153 2.97 156 167 156 167 156 167 156 167 156 167 156 167 157 156 167 157 156 167 157 156 167 157 156 167 157 156 167 157 156 167 157 156 157 158 160 167 256 163 168 140 157 168 167 256 163 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>168</td></th<>																	168
Mar-12 1.31 0.153 1.255 2.721 0.988 0.143 0.925 2.006 8.299 488 7.728 18.494 159 3.14 192 186 May-12 1.333 0.150 1.211 2.335 0.143 1.227 2.454 0.577 0.065 0.525 1.167 8.280 488 7.728 16.664 161 3.08 157 165 163 120 165 233 100 167 Ju-12 1.355 0.143 1.226 2.474 1.333 0.128 1.220 1.65 1.67 241 1.67 241 1.67 241 1.67 241 1.67 241 1.67 241 1.61 1.67 241 1.67 241 1.63 1.61 1.61 201 1.62 281 1.63 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61 1.61	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
Apent2 13.48 0.145 1.209 2.702 0.506 0.507 0.813 1.816 8.276 488 7.728 16.484 103 2.97 158 167 167 Jun+12 1325 0.143 1237 2.745 0.547 0.067 0.496 1.107 8.280 489 7.728 16.506 165 283 160 166 Aup12 1333 0.182 1.291 2.902 0.473 0.044 0.998 8.290 490 7.728 16.506 167 281 167 188 16. CcL 12 1.337 0.142 1.348 0.182 0.682 0.682 0.781 1.094 8.201 490 7.728 16.516 167 261 165 167 166 153 166 168 168 166 56 156 167 166 163 160 156 167 166 153 160 154 150 156 <td< td=""><td>Feb-12</td><td>1.259</td><td>0.137</td><td>1.283</td><td>2.679</td><td>1.006</td><td>0.109</td><td>1.025</td><td>2.140</td><td>8,268</td><td>488</td><td>7,728</td><td>16,484</td><td>152</td><td>281</td><td>166</td><td>163</td></td<>	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
May-12 13.3 0.160 1.211 2.894 0.577 0.066 0.525 1.167 8.200 448 7.728 16.861 161 308 197 165 Jul-12 13.72 0.166 1.246 1.247 2.338 0.128 1.246 1.287 1.650 1.65 2.81 1.68 1.65 2.81 1.68 1.65 2.81 1.68 1.65 2.81 1.68 1.65 2.81 1.65 1.65 2.81 1.65 1.65 2.81 1.65 1.65 2.81 1.65 1.65 2.81 1.65 1.65 2.81 1.65 2.81 1.65 2.81 1.65 2.81 1.65 2.81 1.65<	Mar-12				2.721				2.006			7,728	16,485				165
Jun-12 1365 0.143 1.237 2.745 0.657 0.067 0.496 1.100 8.284 499 7.728 16.001 166 228 168 166 228 168 166 228 168 166 228 168 167 228 16.00 167 228 16.00 167 228 16.00 167 228 16.00 167 228 16.00 163 220 158 167 Sep-12 1.343 0.141 1.161 2.527 0.862 0.862 0.82 1.044 1.350 1.651 166 2.81 167 2.86 167 2.86 167 167 2.86 163 2.96 1.630 4.90 7.728 16.518 163 2.86 163 2.86 163 2.86 163 2.86 163 2.86 163 2.86 163 2.86 163 2.86 163 2.86 163 164 160 164	-																164
Jul-12 1.372 0.128 1.288 2.784 0.042 0.043 0.928 0.289 490 7.728 16.090 167 2.61 167 777 Sep12 1.349 0.142 1.220 2.711 0.544 0.063 0.451 1.356 8.294 490 7.728 16.609 163 251 165 166 256 165 166 165 261 153 166 165 166 261 153 166 167 281 155 166 165 166 261 153 161 152 161 151 156 166 265 166 165 166 261 156 165 166 261 153 161 261 153 161 261 153 166 253 160 166 263 160 164 261 153 166 263 160 164 261 153 164 261 153 1	-																163
Aug-12 1383 0.128 1.291 2.802 0.443 0.444 0.898 2.291 4.490 7.728 16.508 167 221 167 177 0.051 1.327 0.123 1.203 2.633 0.078 0.063 0.645 1.366 8.294 490 7.728 16.512 160 251 155 166 167 281 16.513 162 251 155 166 167 281 16.51 162 281 155 166 167 162 281 155 166 167 165 161 282 155 166 1.367 0.144 1.215 2.717 1.155 0.124 1.034 2.026 4.301 4.90 7.728 16.521 163 226 156<																	166
Sp-12 1349 0.142 1203 2.711 0.544 0.058 0.402 1.014 8.294 490 7.728 16.509 163 290 158 166 Nov-12 1343 0.128 1.181 2.652 0.662 0.063 0.618 1.702 8.299 490 7.728 16.517 162 2.81 155 166 Nu-13 1.357 0.145 1.215 2.717 1.155 0.124 1.342 2.303 490 7.728 16.519 163 2.82 155 166 Apr.13 1.204 0.134 1.001 2.68 1.001 0.772 16.523 166 2.55 161 2.56 153 166 164 166 164 4.93 7.728 16.523 161 2.56 151 166 2.56 161 2.56 151 166 2.56 161 2.56 161 2.56 151 166 1.56 161 1.56																	
Cat 12 12.27 0.123 1.203 2.663 0.678 0.082 0.786 1.366 8.294 490 7.728 16.512 160 2.51 156 165 Nov+12 1.343 0.124 1.181 2.652 0.682 0.788 1.702 8.390 490 7.728 16.516 167 288 155 165 Jan-13 1.357 0.144 1.215 2.717 1.155 0.124 1.034 2.313 8.300 490 7.728 16.518 163 298 157 16 Mar-13 1.402 0.154 1.237 2.680 0.371 0.100 0.707 1.802 8.304 493 7.728 16.518 161 265 161 265 161 265 161 265 161 265 161 265 161 265 161 265 161 265 161 265 161 266 153 166 173 184	-																170
Nov-12 1.343 0.128 1.181 2.662 0.862 0.788 1.702 8.280 490 7.728 16.518 162 261 153 167 Jarla 1.337 0.145 1.215 2.717 1.155 0.124 1.034 2.318 8.300 490 7.728 16.518 163 228 155 168 Feb-13 1.349 0.138 1.201 2.688 1.048 0.030 2.089 8.302 493 7.728 16.521 163 238 160 166 Apr-13 1.297 0.124 1.235 2.717 0.462 0.036 0.333 0.748 8.304 493 7.728 16.525 161 256 153 160 163 163 164 256 164 163 163 163 163 163 163 163 163 163 163 163 163 163 163 163 163 163 163 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																	
Jan-13 1357 0.145 1215 2.717 1.155 0.124 1.034 2.033 8.300 490 7.728 16.519 163 266 155 163 Rah-13 1.442 0.154 1.233 2.791 0.905 0.100 0.977 1.802 8.302 493 7.728 16.521 169 314 160 164 Apr.13 1.402 0.124 1.237 2.665 0.376 0.333 0.745 8.304 493 7.728 16.521 164 266 153 160 166 Jun-13 1.344 0.168 1.480 0.269 0.225 0.239 0.533 8.307 493 7.728 16.533 161 266 153 164 226 164 163 164 223 164 166 163 163 162 237 154 166 163 163 162 237 155 166 163 163 164 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>161</td></td<>																	161
Feb-13 1.349 0.138 1.201 2.888 1.048 0.033 2.089 8.301 400 7.728 16.519 163 2.22 155 163 Mar-13 1.402 0.154 1.235 2.791 0.905 0.005 0.066 1.088 8.302 493 7.728 16.521 169 314 160 166 May-13 1.39 0.126 1.185 2.660 0.531 0.056 0.088 8.304 493 7.728 16.523 161 256 154 164 Jul-13 1.342 0.168 1.265 0.492 0.050 0.448 0.900 8.309 493 7.728 16.533 161 340 163 166 Jul-13 1.342 0.168 1.265 0.403 0.365 0.797 8.311 494 7.728 16.533 161 240 163 166 261 164 163 161 250 164 163	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
Mar-13 1.402 0.154 1.235 2.791 0.005 0.100 0.797 1.802 8.302 493 7.728 16.621 156 2.341 160 166 Apr.13 1.237 0.124 1.185 2.650 0.576 0.036 0.333 0.745 8.304 493 7.728 16.523 161 2.56 153 164 Jun-13 1.346 0.166 1.269 0.267 0.269 0.264 0.480 0.809 4.307 4.39 7.728 16.523 161 2.56 154 164 166 Aug-13 1.342 0.166 1.258 2.768 0.448 0.809 8.307 493 7.728 16.533 161 2.66 153 155 Sep13 1.343 0.113 1.184 2.675 0.630 0.565 1.257 8.314 494 7.728 16.53 162 2.70 155 165 Jan-14 1.320 1.135 <td>Jan-13</td> <td>1.357</td> <td>0.145</td> <td>1.215</td> <td>2.717</td> <td>1.155</td> <td>0.124</td> <td>1.034</td> <td>2.313</td> <td>8,300</td> <td>490</td> <td>7,728</td> <td>16,518</td> <td>163</td> <td>296</td> <td>157</td> <td>164</td>	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
Apr-13 1.297 0.124 1.297 2.658 0.531 0.051 0.056 1.088 8.304 493 7.728 16.523 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 161 256 164 166 163 160 163 161 161 161 161 161 161 161 161 161 161 161 161 161	Feb-13												16,519				163
May-13 1.339 0.126 1.185 2.650 0.036 0.033 0.745 8.304 493 7.728 16.525 161 2.56 153 166 Jun-13 1.344 0.126 1.190 2.657 0.269 0.239 0.533 8.307 493 7.728 16.530 161 2.56 154 166 Aug-13 1.342 0.168 1.258 2.768 0.380 0.048 0.356 0.774 8.311 494 7.728 16.533 161 3.00 163 166 Sep-13 1.343 0.117 1.184 2.653 0.629 0.063 0.565 1.577 8.314 494 7.728 16.536 161 2.67 153 166 Jun-14 1.322 0.135 1.194 2.661 0.851 0.86 1.706 8.318 495 7.728 16.54 159 2.71 153 166 Jun-14 1.322 0.135 1.128 <td></td> <td>169</td>																	169
Jun-13 1.341 0.126 1.190 2.667 0.269 0.025 0.239 0.533 8.307 493 7.728 16.528 161 2.56 154 165 Jul-13 1.366 0.144 1.259 2.779 0.482 0.050 0.448 0.900 8.301 493 7.728 16.533 161 240 164 292 164 166 Sep-13 1.349 0.117 1.193 2.653 0.629 0.063 0.556 1.257 8.314 494 7.728 16.533 161 2.70 155 166 0x0-13 1.348 0.133 1.194 2.666 1.030 0.015 2.048 8.316 494 7.728 16.537 161 2.70 155 166 Jan-14 1.322 0.135 1.194 2.651 0.087 0.788 1.708 8.316 494 7.728 16.546 159 2.77 152 156 Jan-14																	161
Jul-13 1.366 0.144 1.289 2.778 0.482 0.050 0.448 0.900 8.309 493 7.728 16.530 164 2.92 164 166 Aug-13 1.342 0.168 1.258 2.768 0.300 0.048 0.356 0.777 8.311 494 7.728 16.533 162 237 154 166 Oct-13 1.319 0.132 1.184 2.635 0.629 0.063 0.566 1.257 8.314 494 7.728 16.537 162 207 155 166 Dec13 1.341 0.132 1.194 2.666 1.030 0.013 0.915 2.448 8.316 494 7.728 16.546 158 2.57 162 2.73 155 166 Jan-14 1.329 0.134 1.182 2.658 0.858 0.866 1.704 8.324 496 7.728 16.546 158 2.57 146 155	-																
Aug-13 1.342 0.168 1.258 2.768 0.380 0.048 0.356 0.774 8.311 494 7.728 16.533 161 340 163 165 Sep-13 1.343 0.117 1.133 2.653 0.403 0.036 0.356 0.777 8.311 494 7.728 16.533 162 2.37 154 166 Nov-13 1.348 0.133 1.194 2.675 0.932 0.092 0.826 1.850 8.315 494 7.728 16.531 161 2.70 155 166 Dec.13 1.344 0.134 1.191 2.666 1.030 0.013 0.915 2.048 8.316 494 7.728 16.541 159 2.71 155 166 Feb.14 1.314 0.127 1.12 2.613 0.654 0.093 0.851 1.808 8.322 495 7.728 16.541 159 2.71 152 158 162 164 156 159 2.71 16.54 166 158 2.72 16.55																	
Sep-13 1.343 0.117 1.193 2.653 0.403 0.036 0.358 0.797 8.311 494 7,728 16,533 162 237 154 166 0ct-13 1.319 0.132 1.144 2.635 0.629 0.663 0.565 1.257 8.314 494 7,728 16,536 159 267 153 156 Dec-13 1.341 0.134 1.191 2.666 1.030 0.103 0.915 2.048 8.316 494 7,728 16,538 161 270 155 166 Jan-14 1.322 0.135 1.194 2.651 0.851 0.087 0.768 1.706 8.318 495 7,728 16,546 158 257 152 156 Mar-14 1.326 0.128 1.128 2.652 0.449 0.043 0.362 0.874 8.328 498 7,728 16,554 159 227 146 156 May-14 1.336 0.124 1.127 2.640 0.159 0.0132 0.306 8.333																	167
Oct-13 1319 0.132 1.184 2.635 0.629 0.063 0.565 1.257 8.314 494 7.728 16.537 152 270 153 156 Nov-13 1.348 0.133 1.194 2.675 0.932 0.092 0.826 1.806 8.316 494 7.728 16.537 162 270 155 166 Jan-14 1.322 0.135 1.194 2.661 0.851 0.087 0.768 1.706 8.318 495 7.728 16.544 159 2.77 15.5 166 Apr-14 1.326 0.128 1.128 2.652 0.449 0.033 0.822 0.874 8.324 496 7.728 16.554 159 2.57 146 155 Apr-14 1.326 0.128 0.660 7.070 1.734 8.333 498 7.728 16.559 161 2.33 146 155 Jun-14 1.326 0.130 0.130 <td>-</td> <td></td> <td>160</td>	-																160
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 2.72 154 165 Jan-14 1.322 0.135 1.194 2.611 0.851 0.087 0.788 1.706 8.318 495 7.728 16,546 158 273 155 166 Feb-14 1.339 0.134 1.185 2.663 0.954 0.093 0.851 1.898 8,323 495 7.728 16,546 161 270 153 166 Apr-14 1.326 0.128 1.128 2.682 0.449 0.043 0.382 0.874 8,332 498 7.728 16,559 161 253 154 165 Jun-14 1.341 0.124 1.127 2.604 0.159 0.013 0.306 8,333 498 7.728 16,559 161 253 154 166 Jun-14 1.271 0.130 1.307 2.708 0.232 0.024 0.239 0.495 8,335		1.319	0.132	1.184	2.635	0.629	0.063	0.565	1.257	8,314	494			159	267	153	159
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 16,546 158 257 152 152 Mar-14 1.339 0.124 1.128 2.652 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 16,559 161 253 154 166 Jun-14 1.341 0.126 1.188 2.655 0.207 0.020 0.139 0.410 8,338 498 7,728 16,559 161 2.33 154 166 364 166 352 261 169 165 152 261 169 156 154	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
Feb-14 1.314 0.127 1.172 2.613 0.954 0.093 0.851 1.898 8,323 495 7,728 16,546 158 257 152 153 Mar-14 1.339 0.134 1.185 2.668 0.858 0.086 0.760 1.704 8,324 496 7,728 16,548 161 270 153 166 Apr-14 1.326 0.128 1.128 2.662 0.449 0.033 0.382 0.874 8,328 498 7,728 16,559 162 249 146 155 Jun-14 1.341 0.126 1.188 2.655 0.207 0.020 0.183 0.410 8,333 498 7,728 16,559 161 253 154 166 Jul-14 1.271 0.130 1.207 2.708 0.232 0.024 0.239 0.490 8,345 500 7,728 16,573 145 226 159 156 156 152 261 166 166 166 166 166 166 166 166<	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
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Nov-15 1.250 0.100 0.994 2.344 0.792 0.063 0.630 1.485 8,376 511 8,003 16,889 149 196 124 138	Oct-15	1.243	0.106	1.002	2.351	0.681	0.058	0.549	1.288	8,373	511	8,003	16,886	148	208	125	139
CSD: Cardiff Sanitary Division				0.994	2.344	0.792	0.063	0.630	1.485	8,376	511	8,003	16,889	149	196	124	139

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

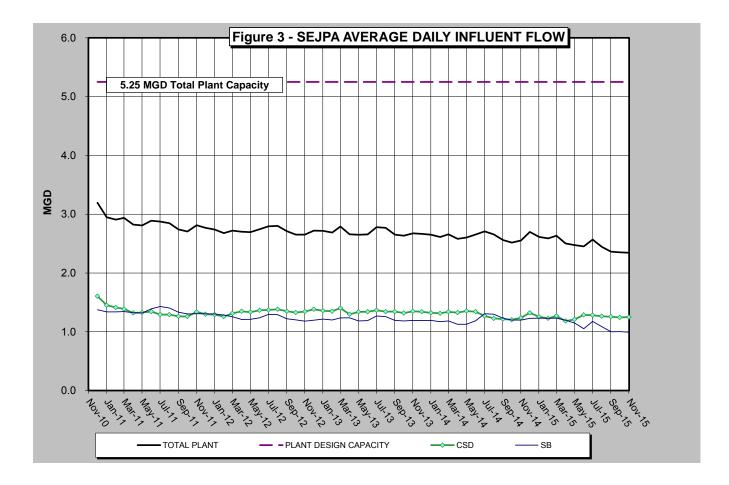
RSF CSD: Ranch Santa Fe Community Service District

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 2.4 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 November 2015.

	Flow (mgd)
Escondido (Average flow rate)	8.17
Escondido (Peak flow rate)	17.8

Connected Equivalent Dwelling Units

The City of Solana Beach updated the connected EDUs number that is reported to the SEJPA in July 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:

	Connected (EDU)
Cardiff Sanitary Division	8,376
Rancho Santa Fe SID	511
City of Solana Beach	7,666
San Diego (to Solana Beach)	337
Total EDUs to System	16,889

Respectfully submitted,

16-

Michael T. Thornton, P.E. General Manager

AGENDA ITEM NO. 10

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

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

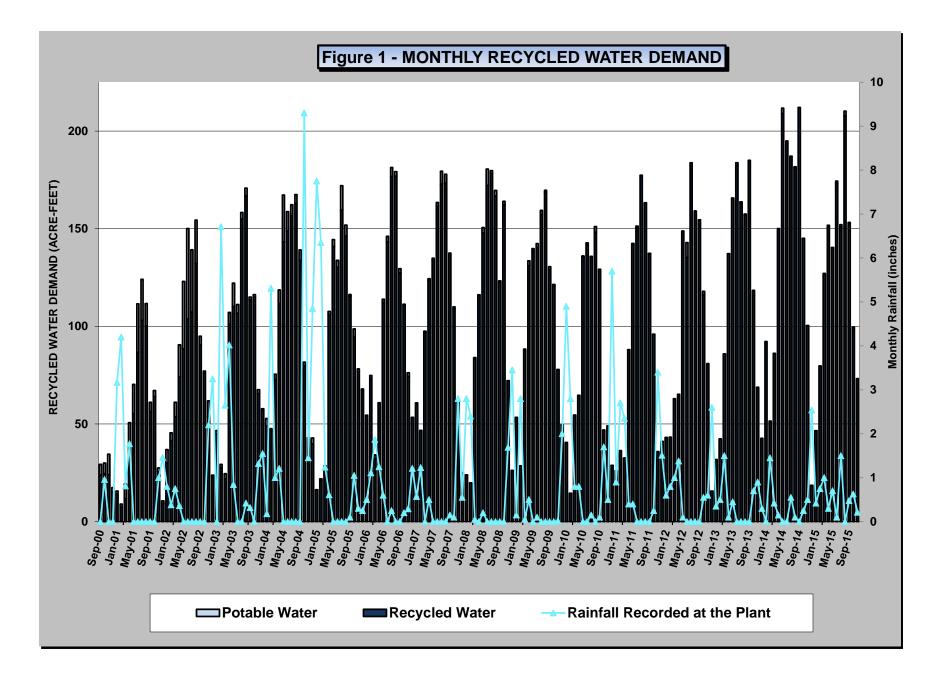
For the month of November 2015, recycled water demand was 73.24 acre-feet (AF), which was met using 73.24 AF of recycled water and 0.00 AF of supplementation with potable water. The distribution system was designed to use potable water during peak summer demands.

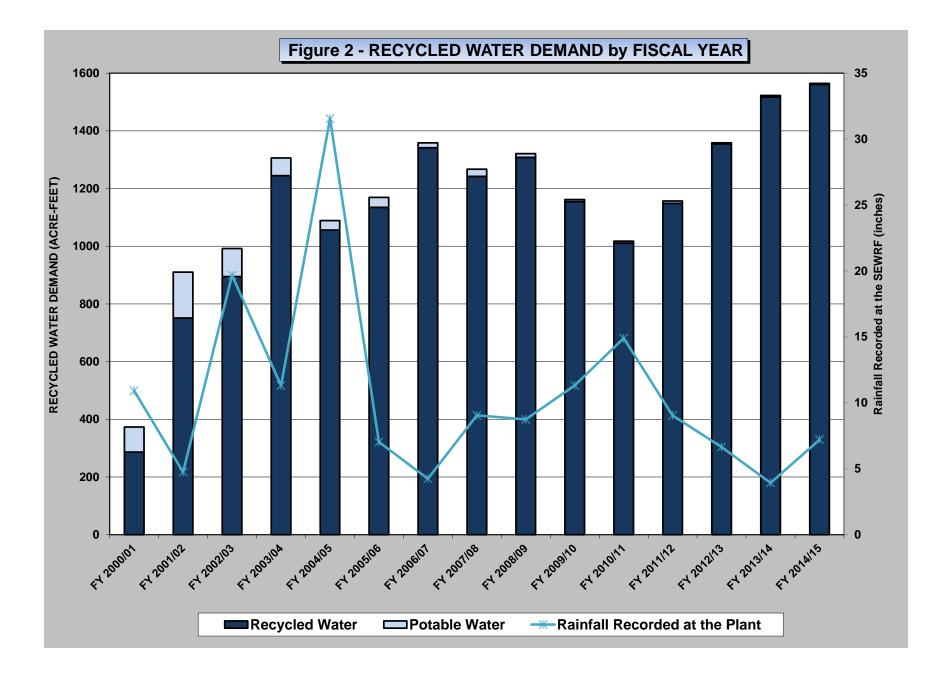
Figure 1 (attached) provides monthly supply demands for recycled water since November 2000. Figure 2 (attached) provides a graphical view of annual recycled water demand spanning sixteen fiscal years. Figure 3 (attached) shows the monthly recycled water demand for each November since the program began.

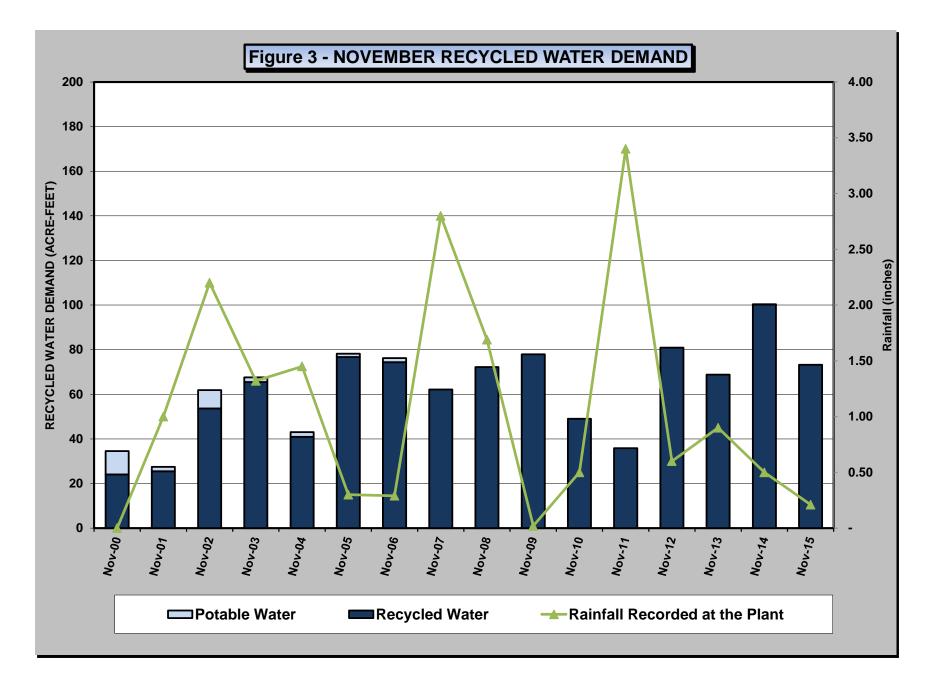
Respectfully submitted,

16

Michael T. Thornton, P.E. General Manager







AGENDA ITEM NO. 11

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: General Manager

SUBJECT: PROFESSIONAL SERVICES CONTRACT FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES

RECOMMENDATION

*

It is recommended that the Board of Directors:

- 1. Authorize the General Manager to execute an agreement with Dudek to provide construction management and inspection services for an amount not to exceed \$119,075; and
- 2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns recycled water distribution pipelines within the City of Solana Beach. In partnership with the Santa Fe Irrigation District, the SEJPA provides recycled water for landscape irrigation and industrial uses to customers within Solana Beach. Currently, recycled water distribution pipelines are mostly located in the eastern part of the city. To increase its sustainability, Solana Beach has designed a recycled water pipeline extension west to the 101 Highway corridor. In April 2015, the SEJPA Board authorized the General Manager to fund a portion of the engineering design of this pipeline to serve the western part of the City, including the Coastal Rail Trail and nearby home owner associations and businesses.

As the design of the pipeline was being completed, SEJPA teamed with the City of Solana Beach on a grant application to fund part of the construction of the pipeline. Both agencies collaborated with the City of Del Mar to include the pipeline construction bid in a street paving and pipeline project along Via De La Valle known as the Sewer, Water, and Arterial Paving (SWAP) project. The City of Del Mar accepted bids in November 2015 for the Project and issued the Notice to Proceed on December 1, 2015. The SWAP project involves the construction of a new sewer force main, road improvements on Via De La Valle and Coast Boulevard, recycled water pipelines, and conversion of the Coastal Rail Trail to use recycled water for irrigation. As the SEJPA will eventually have the responsibility to own, operate, and maintain the pipelines as part of the existing distribution system; the SEJPA will inspect and manage the pipeline construction.

DISCUSSION

The SEJPA requested qualifications, information, and project approach proposals from four experienced construction management firms including Hoch Consulting, IEC, Valley CM, and Dudek. Hoch Consulting has performed well on similar projects for SEJPA in the past, IEC designed the recycled water pipeline project that is being constructed, Valley CM is currently managing the Village Park recycled water project for OMWD, and Dudek has pipeline inspection experience and is managing and inspecting the SWAP project for the City of Del Mar.

Based on the knowledge of the existing projects, experience in the industry, project team, and the project approach, the SEJPA staff is recommending award of a contract to Dudek to manage the construction and inspect the pipeline installation. The advantage of having Dudek manage both the SWAP project and the recycled water line construction provides for efficiencies and less potential for conflict between different consultants on the project.

The total contract value for the proposed contract is \$119,075, which is in line with the anticipated cost of similar construction management and inspection projects. This is a "time & materials not to exceed" proposal and includes an authorization for \$20,000 of contingency funding to cover unanticipated inspection time resulting from construction in a heavily traveled roadway.

FINANCIAL IMPACT

Funds are available in the Recycled Water Fund to be applied to the proposed Dudek agreement. There is no impact to the member agencies as the Recycled Water Fund derives revenue from the sale of recycled water. This project is part of the Conservation 101 Project included in the Integrated Regional Water Management (IRWM) Proposition 84, Round 4 grant award.

It is recommended that the Board of Directors approve the following:

- 1. Authorize the General Manager to execute an agreement with Dudek to provide construction management and inspection services for an amount not to exceed \$119,075; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E. General Manager

Attachment: Dudek Proposal dated December 17, 2015 for Recycled Water Pipeline Construction Management and Inspection Services Proposal **ATTACHMENT**

DUDEK

RECYCLED WATER PIPELINE CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES

PREPARED FOR San Elijo Joint Powers Authority



PREPARED BY

Dudek 605 Third Street Encinitas, CA 92024 800.450.1818 www.dudek.com

December 17, 2015



CORPORATE OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 760.942.5147 T 800.450.1818 F 760.632.0164

December 17, 2015

Mr. Mike Konicke Associate Engineer San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff-by-the-Sea, California 92007

Subject: Recycled Water Pipeline Construction Management and Inspection

Dear Mr. Konicke:

We are pleased to submit our proposal for construction management and inspection 1. services for the Recycled Water Pipeline as part 2. of the Sewer, Water, Arterial, Paving (SWAP) Project. Dudek has provided construction 3. management and inspection services for 4. several recycled water projects and recycled irrigation conversion projects, and is

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experienced in working on projects with the SWAP general contractor, PAL Engineering.

Background and Project Understanding. The SWAP project involves the construction of a new force main; road improvements on Via Del La Valle, Camino Del Mar, and Coast Blvd.; recycled water pipelines serving both the City of Del Mar and Solana Beach; and a recycled water irrigation conversion on the Coastal Rail Trail in Solana Beach. The project has a tight schedule requiring completion of all construction in less than six (6) months by May 25, 2016 involving several stakeholders: City of Del Mar, San Diego Fairgrounds, SEJPA, City of Solana Beach, and Santa Fe Irrigation District. The project also includes two bridge crossings, one over the San Dieguito River and another above the NCTD RXR ROW. The project also includes coordination with three different design engineers – IEC (recycled pipelines), Nasland (roadwork) and Atkins (sewer force main). A portion of the project also involves multiple funding sources requiring a strict adherence to project labor compliance procedures.

The Dudek Advantage. Dudek is currently managing and inspecting the SWAP project for the City of Del Mar, including the recycled water pipeline within the Camino Del Mar corridor. SEJPA will be the owner and operator of the Recycled Pipeline within the City of Solana Beach. We feel Dudek is the ideal selection since we would maintain a high level of continuity, effective communication with all stakeholders, and offer a cost savings since we will manage and inspect the Recycled Water Pipeline for SEJPA with the same team currently working on the SWAP project for the City of Del Mar. We understand the level of effort required to manage and inspect this project due to the inexperience of the general contractor performing pipeline work, since we completed a pipeline project with this general contractor in Del Mar earlier this year.

Our approach will be to provide SEJPA with turnkey construction management and inspection services, including special inspection, taking charge to oversee this project. We will manage this project to ensure all requirements of the plans and specifications are strictly adhered to and completed in a timely manner resulting in a high-quality project. Our proposed senior project manager, George Litzinger, and Construction Manager Jason Linsdau will manage this project on behalf of SEJPA. Garrett White will provide the day-to-day inspection services for this project. Bill Reeves will provide the welding/bolting special inspection for the bridge work and Southern California Soils and Testing will provide the third party onsite sampling and testing of soils and asphalt.

Dudek will provide the following services for this project:

- 1. Administer and manage the project.
- 2. Coordinate with the City of Del Mar, City of Solana Beach, Santa Fe Irrigation District, and County Department of Health as necessary and perform all necessary inspection and cross connection testing.
- 3. Review materials submittals and respond to RFI's, prepare record drawings, review change orders and provide recommendation regarding all change requests, review and process progress payments, and review schedules.
- 4. Inspect all of the recycled pipeline work to ensure it meets SEJPA standards and recycled water regulations.
- 5. Perform special inspection and material testing services.
- 6. Review and process final contractor payment and closeout.

To complete the Scope of Work described above, we propose a time and materials fee not to exceed \$118,925. For a detailed breakdown of the fee estimate please see Section 5 of our proposal.

The time and materials fee provided in this proposal represents an estimate of the anticipated level of effort required to complete the tasks described in the proposal. Should the actual effort required to complete the tasks be less than anticipated, the amount billed will be less than the total fee. No work in excess of the proposed fee or outside of the proposed scope of work will be performed without written authorization from SEJPA.

If there are any questions or if additional information is required, please do not hesitate to call or email me at 619-980-7048 or glitzinger@dudek.com.

Sincerely,

George Litzinger, PE Project Principal

DUDEK

1 Company Information

TABLE 1. IDENTIFICATION OF RESPONDER

Legal Name :	DUDEK
Corporate Headquarters:	605 Third Street, Encinitas, California 92024 Tel: (760) 942-5147 Fax: (760) 632-0164
Legal Form of Company:	California Corporation
Identify Parent Companies:	N/A
Addresses of Offices Located in San Diego County:	605 Third Street Encinitas, California 92024 1645 S. Rancho Santa Fe Road, Suite 201 San Marcos, California 92078
Name, Title, Telephone Number, Email, and Business Address of Person to Contact Concerning the Proposal Subnittal:	George Litzinger, PE, CM Division Manager 1645 S. Rancho Santa Fe Road, Suite 201, San Marcos, California 92078 Tel: (619) 980-7048 Email: glitzinger@dudek.com

2 Experience and Technical Competence

Specialized Experience Related to This Project

FPVC Fusible Pipe and Bridge Experience

Dudek's inspector has inspected thousands of lineal of fusible PVC pipeline projects and several pipeline installations on bridges.

Recycled Pipeline Experience

Dudek's team has years of experience and completed over 12 miles of recycled water pipeline projects.

San Elijo Joint Powers Authority Experience

Dudek's team members have worked for SEJPA on a variety of projects in the past with great results. They know the SEJPA expectations.

Experience Working with PAL Engineering

Dudek recently completed two projects with PAL Engineering and has in-depth understanding of how they work, deficiencies, and lack of experience in this type of work. Dudek was able to work with this contractor to finish a difficult pipeline and road project within budget and on time.

Recycled Water System Expansion Project

Client: City Client Reference: Am Project Completion: May

City of San Clemente Amir Ilkhanipour, 949.361.6130 May 2014 Key Staff:

George Litzinger, Chad Costello, Garrett White

The City of San Clemente expanded its recycled water system by constructing multiple projects in three concurrent phases – Water Reclamation Plant Expansion and Pump Station (Project1), Cordillera and Recycled Water Reservoirs and Pipeline Schedule III & IV (Project 2), and Pipeline Schedule I & II (Project 3). Dudek provided construction management and inspection services for projects 2 & 3 and also coordinated with the treatment plant construction. Projects 2 & 3 included over 10 miles of recycled water transmission mains (6-inch to 20-inch PVC and ductile iron), an existing reservoir conversion and a new small reservoir. These projects were funded from several Federal and State grants and an SRF loan. The project was bid as three separate construction contracts and Dudek managed two separate contractors.



Dudek also provided corrosion protection engineering services and

inspection on Project 1 (the City provided construction management on this project). Dudek coordinated with all stakeholders involved on the projects, including several City Departments and its consultants for required special inspection, geotechnical engineering, environmental, engineering, traffic control plans, County Department of Health, and all utility companies.

Rancho Santa Fe Road Improvement Project, Phase I and II

Client: Client Reference: Project Completion: City of Carlsbad Skip Hammann, 760.802.5605 June 2007 Key Staff:

nann, 760.802.5605 Key Staff: George Litzinger, Jason Linsdau, Garrett White

Both projects for the City of Carlsbad involved the realignment and widening of a 2.2-mile section of Rancho Santa Fe Road. Construction involved installation of curb and gutter, sidewalks, 15,000 feet of water and recycled water lines 4- 8-, 10- (PVC) & 18-, 24-, and 30-inch (CML&C), and, cathodic protection, joint utility trench, street lights, five new intersections and traffic signal systems, and 2.2 miles of asphalt concrete pavement. 5 acres of landscaping and recycled water irrigation system with multiple controllers and services were also constructed as part of this project. The project included a cast-in-place Pressure Reducing Station Vault and a pre-cast Metering Station Vault,



instrumentation, ventilation system, sump pumps, access hatches. Coordination with the following municipalities was necessary: Caltrans, City of San Marcos, Leucadia Wastewater District, Olivenhain Municipal Water District, and Vallecitos Water District. Dudek conducted community outreach with the public and the media, being the first direct, personal source for the community's concerns, information, and comments during construction operations.

Alga Road, Poinsettia Lane, and Melrose Drive Recycled Water Transmission Main

Client:City of CarlsbadClient Reference:Skip Hammann, 760.802.5605Project Completion:June 2005Key Staff:George Litzinger

Dudek was responsible for the overall quality assurance/quality control for the construction of nearly 2 miles of 30-inch welded steel (CML&C) recycled water transmission main. This project included the excavation, backfill, compaction, Class II base, asphalt pacing, installation, testing, and disinfection of 9,222 linear feet of 30-inch welded CML tape wrap steel pipe, with mortar shield; 260 linear feet of 24-inch welded CML tape wrap steel pipe, with mortar shield; 370 linear feet of 12-inch ductile iron class 350 pipe; and 2750 linear feet of 12-inch class 150 recycled PVC pipe. This also included all of the appurtenances, such as gate valves, butterfly valve, air release and vacuum valve assemblies, blow-offs, cathodic protection, and traffic control.



Jimmy Durante Blvd. 2015 Street and Drainage Project

Client:	City of Del M	ar	
Client Reference:	Joe Bride, 85	8.755.3294	
Project Completion:	June 2015	Key Staff:	Jason Linsdau, Garrett White

Dudek provided construction management, inspection, and special inspection on this project. As part of a multi-year project, street, sidewalk, waterline, sewer and drainage improvements along a southeast portion of Jimmy Durante began in mid-February. This multi-phase project included the construction of about 2,500 feet of new curbs and gutters, 16,000 square feet of sidewalks, five retaining walls, 2,000 feet of 10-inch fusible PVC slip lined water line replacement, and 200,000 square feet of pavement rehabilitation with extensive traffic control and public outreach effort. The project was completed from Camino del Mar from 22nd Street to the San Dieguito River



Bridge. The project also included 5 new retaining walls, 6 pedestrian ramps, and median improvements.

This project was funded by a Transnet Funds administered through SANDAG. Dudek was responsible for administering the funding during the project and enforcing work force and prevailing wage requirements in accordance with prevailing wage requirements. The project was completed on time and under budget.

3 Project Organization and Key Personnel

Dudek's team has extensive experience providing construction management and inspection services to Southern California public agencies. Our team members recognize the importance of quickly integrating with agency staff in order to function as an extended part of your team.

We have assembled an experienced team of professionals, beginning with our Senior Project Manager, George Litzinger, PE, who is your go-to manager and will provide oversight of the CM team, assuring that they provide only the best quality of service. **Figure 1, Organizational Chart** outlines our team for the project. Full resumes detailing each team members' education, certifications, and related experience can be found in **Appendix A**.

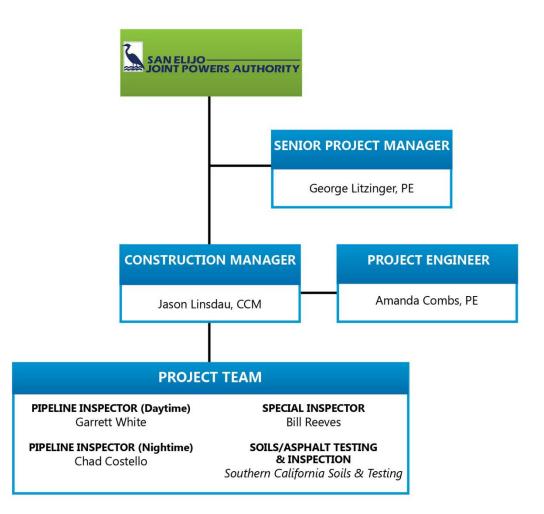


FIGURE 1, ORGANIZATIONAL CHART

4 Project Approach

Management Approach

Dudek is currently managing and inspecting the SWAP project for the City of Del Mar. Dudek is the ideal selection since we would maintain the continuity, communication with all stakeholders and offer a cost savings to manage and inspect the Recycled Water Pipeline for San Elijo Joint Powers Authority (SEJPA) with the same team currently working on the Del of the remaining components on SWAP project. Dudek does understand the level of effort required to manage and inspect required on this project due to the inexperience of the general contractor performing pipeline work.

Our approach will be to provide SEJPA with a turn-key construction management, project engineering and inspection services, including special inspection taking charge to oversee this project. Our proposed construction manager Linsdau will manage this project on behalf of SEJPA. Mr. George Litzinger is available for assistance on the project and will be utilized for any claims dispute. Garrett White will provide the day to day inspection services and special inspection of the slip lining on the bridge for this project. Bill Reeves will provide the welding/bolting special inspection for the bridge work and Southern California Soils and Testing will provide the third party onsite sampling and testing of soils and asphalt.

The Dudek team has extensive experience in the construction of Recycled pipeline projects, including slip lining, and external pipeline installation on bridges.

Our goal will be to develop and propose solutions to issues, implement a management plan that addresses the scope of work, and provides a "hands-on" team of construction professionals that will be maintained throughout the project. Dudek will be the SEJPA's representative and sole point of contact for project-related communication. We will coordinate this project with all stakeholders to make sure all project requirements are met.

"Put it in Writing"

Documentation is critically important in construction management. Within reason, all communication will be provided to the contractor and other affected parties in writing. Our philosophy is to write things down so they are not misunderstood and, more importantly, not forgotten. We stress the positive side of requiring things in writing, as opposed to doing paperwork as a means of preparing for litigation. In fact, doing paperwork helps our clients stay out of court. A strict chain of command, lines of communication, and RFI procedure with the contractor will be implemented.

Coordination and General Project Management

The construction manager will maintain ongoing interaction with the SEJPA, City of Del Mar, City of Solana Beach, permitting agencies, contractor, design engineers, and key suppliers through progress meetings and project updates conducted at regular intervals after start of construction. Dudek will conduct weekly progress meetings at the site with, at a minimum, the SEJPA, stakeholders and contractor attending.

Project Understanding

The pre-construction meeting for the City of Del Mar portion of the SWAP project was held on December 1, 2015, with the general contractor PAL Engineering, stakeholder agencies, and design engineers. The City of Del Mar issued the Notice to Proceed on the same day with a final contract completion date of May 25, 2016. The

first order of work on the project will be to pothole the entire recycled pipeline alignment and submit a detailed pothole report showing depths and locations of utilities crossing the recycled pipeline trench as well as tie-in locations for the pipeline. The pothole report will allow time to make any engineering adjustments or start the utility relocation process that may be required prior to the contractor commencing trenching operations. Utility conflicts are typically the #1 cause and cost for extra work on a pipeline project with unknown soil conditions a close second. Dudek will ensure the general contractor completes the pothole report in a timely manner allow sufficient time make any elevation or alignment changes needed. We will also have our subconsultant geotechnical engineer review any potholes of concerns due to unsuitable soils and make a recommendation prior to commencing trenching. Our goal will be to get two steps ahead of the contractor's trenching operations to minimize any unknowns to resulting in extra costs and delays.

The most challenging part of the Recycle Water Pipeline project is the installation of the pipeline at the bridge abutments and hanging on the bridge above the NCTD RXR tracks due to number utilities at bridges and lead time required to obtain a Right-of-Entry (ROE) permit for the contractor to complete this work. In our past experience obtaining an ROE permit from NCTD can take several months even after a licensing agreement is in place with owner of the utility. We will track, coordinate, and assist the general contractor as much as practically possible to obtain the ROE and schedule NCTD flagman to complete this work.

Prior to the start of a new work item, new subcontractor, testing, tie-in Dudek will conduct field coordination meetings with the general contractor and any required stakeholder to discuss the inspection requirements, requirements, submittals, RFI's and changes to avoid miscommunications and delays by addressing issues prior to starting the new work item.

Scope of Work

Task 1 Construction Management Services

Construction Management

Dudek will be on site daily or as needed during construction on the project. The team will be available by cell phone at all times to the contractor to answer any questions and resolve issues whenever they are not at the site. Our goal is to always solve issues at the lowest level possible while keeping the client informed of all project issues and scheduling.

The construction manager will be the key point of contact for the entire project between all stakeholders, utilities and the contractor during the course of the work. The construction will not direct the contractor's work, but insure the project is being built according to the plans and specifications. The construction manager will manage and take charge of the project; coordinate with the SEJPA, general contractor, and stakeholders; manage subconsultant; and conduct weekly progress meetings with the contractor. At the weekly progress meetings, the team and the contractor will discuss old and new business issues in detail, develop action items, review progress to date, present the contractor's 3-week look-ahead schedule, and discuss interest items from SEJPA. We will assist SEJPA as necessary in preparation of Board memos, presentations, and reports as needed.

Construction Progress Meetings

Dudek will schedule and lead weekly and monthly meetings with representatives of the contractor, subcontractors, and SEJPA to resolve all project matters. Responsibilities for response will be assigned to appropriate participants. Action list monitoring of issues will be implemented to insure compliance and timely response by all parties. The meetings will be documented and distributed to all stakeholders, contractor, and

design engineer for a complete record of project transactions and will be included in the project files. Meeting minutes will be prepared and distributed to participants the next working day.

Project Coordination

We will maintain a firm and fair policy in dealing with the contractor with this general contractor on this project. Our approach is to be diligent in controlling the work through enforcing good workmanship and ensuring conformance of materials and equipment to the contract documents. Dudek will assist the contractor by alerting him to special project requirements, such as project standards, and coordination and inspection with other utilities. This will be essential due to the contractor's lack of experience in pipeline construction. Jason Linsdau will be the 'hub' in coordinating between the City of Del Mar, City of Solana Beach, Santa Fe Irrigation District (SFID) while keeping SEJPA's interests a top priority on the SWAP project.

Track the Project

Dudek has developed a master submittal log to crosscheck the contractor's submittal log. This identifies what we expect, and we can tell the contractor what items are lacking, which will be critical with the long lead time of pumping and electrical equipment. We will set our filing system according to the SEJPA's requirements for RFIs, RFPs, submittals, correspondence, and procedures for tracking and reporting projects.

Scheduling

The contractor's schedule will be closely reviewed by Dudek, assuring all project items and dates are accurate and in compliance with the contract documents, including submittal review times, long lead/lag items, etc.

Labor Compliance

We will work closely with the contractor to verify that the certified payroll reports are submitted on a monthly basis to SEJPA Labor Compliance Representative to insure their employees are being paid in accordance with state prevailing wage regulations. We will insure the contractor submits the correct certified payroll report(s) with each monthly progress invoice in accordance with funding source requirements.

Progress Payments

Dudek will review contractor pay request quantities and reconcile the work done with the pay request. The lead inspector will meet with the contractor and discuss the status of billable quantities, schedule of values, and asbuilts seven (7) days before the end of the month. The construction manager will make a recommendation to the SEJPA for the amount of the monthly progress payment application paid through Del Mar's SWAP Project.

Contractor's Claims and Extra Work

Dudek will maintain change-order log in a format accessible to SEJPA. We will provide an estimate and analysis of all change requests and, after negotiations, provide a complete record of negotiation for the change, the reason for the change, and a detailed report on the additional labor, equipment, material, and other costs. Dudek will carefully document all force account work and document labor, materials, and equipment utilized. George Litzinger will assist with contractor claims resolutions.

Change Orders

Dudek will have no authority to issue changes or modifications to the contract documents without SEJPA approval. The changes will be initiated by SEJPA (and or coordinated with City of Del Mar and Solana Beach) requested by the contractor. We will track, document, and negotiate all changes for added costs or credits with the contractor and evaluate all schedule impacts of changes, in addition to advising SEJPA of equitable costs and time adjustments for proposed or authorized changes.

Task 2 Inspection Services

Dudek's inspectors will provide the majority of the inspection duties, from day to day pipeline inspection, special inspection of the work on the bridges and night work to complete intersection pipeline crossings on Via Del La Valle. Our proposed lead inspector Garrett White will provide the day to day inspection of the recycled pipelines, which are the same services he is provided for the City of Del Mar on their segment of the Recycled Pipeline. Chad Costello will provide the night time inspection during the intersection crossings.

Our inspectors will check the contractor's work to verify quality installation conformance with the contract documents and SEJPA standards, and make certain that the contractor uses the highest-quality materials and workmanship. Our inspector will witness all pipeline laying, bolt ups, thrust blocks and coupling installation prior to it being buried to verify it is installed per specification. We strictly enforce the project specifications and standard specifications of public works construction to verify a quality installation that meets or exceeds the project requirements. Garrett White will witness all required hydrostatic testing of the pipeline and make a final recommendation to SEJPA once the line should accepted to be put in service once all work is completed per specification. With the extent of night work, it will be imperative that inspection coordination and requirements are fully communicated to all team members, Chad Costello will provide full time inspection of the pipeline installation during the night work. All of our inspector's will be provide daily reports in format acceptable to SEJPA and photo document the progress of the project.

Garrett White will perform daily inspections of the contractor's BMP's in accordance with the approved SWPPP and Coastal Development permit requirements.

Photo Documentation

Dudek will maintain regular progress photos that are all time-stamped, captioned, digital images depicting the progress of work from beginning to end of the project.

Record Drawings

Dudek will keep an independent set of record drawings. During the course of construction, Dudek will regularly inspect the record drawings being maintained by the contractor. When construction work has been completed and accepted by the City, Dudek will prepare a complete set of redlined record drawings and submit them to the SEJPA.

Task 3Special Inspection Welding/Bolting and Slip Lining on Bridge

Dudek's special inspector Bill Reeves will provide the special inspection services for welding and bolting on the pipeline installed on the bridge. We will visually inspect the quality of all field welding of all pipe brackets/rollers, steel sleeve and all adhesive anchor bolted connections required to attached the Recycled Pipeline to the Via Del La Valle Bridge. Garrett White will be the special inspector for the slip lining fusion and installation of the 6-inch recycled pipeline within the steel sleeve on the bridge.

Task 4Soil, Asphalt and Concrete Testing Services

Dudek's subconsultant; Southern California Soils & Testing (SCST), to provide all of the necessary field and laboratory testing for all soil, concrete and asphalt materials on this project. SCST will also be providing similar services for the City of Del Mar on the remainder of the SWAP project. Dudek will be responsible for scheduling these inspections, ensuring any inspections, materials testing, or geotechnical recommendations are done in a timely manner. We will collect representative samples of the fill materials and test them to verify compliance

with the project material specifications. We will observe and test the processing, placement, and compaction of all fill materials during project construction. As-needed site visits by our registered geologist will be conducted if problems are encountered during construction to provide geotechnical engineering recommendations.

Task 5 Submittal and RFI Review

Dudek's Project Engineer Amanda Combs, PE will provide professional project engineering services on this project for technical RFI and submittal reviews. We will coordinate with the design engineer of record Infrastructure Engineering Corporation on changes to design intent and serve a role in submittal review as well.

RFIs

Dudek will respond timely to RFIs in order to prevent construction delays. Amanda Combs, PE Project Engineer will review technical RFI's. Dudek will prepare drawings, sketches, and written replies as needed to assist the design engineer's response to RFI's (should the design engineer IEC need to be involved). Dudek will advise the SEJPA of any potential changes in the construction scope of work that may arise through RFIs.

Submittals

Dudek will review shop and work drawings submitted by the contractor for compliance with the project specifications and plans prior to sending to the design engineer. The review will be prompt. Amanda Combs, PE Project Engineer will review material and shop drawing submittals on behalf of SEJPA. Dudek will track and log all shop drawing submittals. Dudek will review vendor and lab reports, certifications, material testing results and inspections, and correlate such reports with the intentions of the Plans and Specifications. Dudek will log and track all reviews.

Task 6 Project Closeout

Project Closeout

Dudek will coordinate with SEJPA and SFID to complete the required cross connection testing to complete the recycled system installation and conversion. Dudek will coordinate and schedule a joint final walk-through with SEJPA, City of Del Mar, City of Solana Beach and SFID and the contractor. We will compile a punch list based on items that were identified during the walkthrough and our list. We will make it clear to the contractor that (1) the project is not complete until the punch list is complete, and (2) punch-list work is contract work to be completed within the specified contract time. Once the punch list is complete we will review and drafting a closeout change order and processing final progress payment.

Level of Effort

We anticipate the project will require part time construction management effort, approximately 8-10 hours per week average and up to 20 hours per week average for pipeline inspection during the course during the project duration of 5 months. A full time special inspector will be utilized during the bridge crossing estimated to take 8-10 days to complete and intermittent soils testing and inspection during trench backfill and paving operations.

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Team Member	George Litzinger, PE	Jason Linsdau, CCM	Garrett White/ Chad Costello	Bill Reeves	Amanda Combs, PE			
Role	Senior Project Manager	Construction Manager	Pipeline Inspector	Special Inspector	Project Engineer	Lahor		
Hourly Rate	\$150	\$150	\$125	\$125	\$165	Subtotals	Subcontractor	Total
Construction Management Services	10	120	0	0	0	\$19,500	I	\$19,500
Inspection Services	0	0	400	0	0	\$50,000	-	\$50,000
Special Inspection Welding/Bolting on Bridge	0	0	10	20	0	\$7,500	Ĭ	\$7,500
Soils and Asphalt Testing and Inspection	0	0	0	0	0	0	\$14,375	\$14,375
Submittal and RFI Reviews	0	0	0	0	30	\$4,950		\$4,950
Project Closeout	0	10	10	0	0	\$2,750	T	\$2,750
SUBTOTAL:						\$84,700	\$14,375	\$99,075
Contingency						\$20,000		\$20,000
Task Subtotal	10	130	420	50	30	\$104,700	\$14,375	\$119,075
					-TON	TO-EXCEED G	NOT-TO-EXCEED GRAND TOTAL	\$119,075

*Our proposed fee is based on a 6-month total project duration for services based with 5 months of construction (1 month of post construction support services). Dudek will bill only actual hours worked per day on a time and material basis, any un-used hours will not be billed

10



Resumes

George Litzinger, PE

Senior Project Manager

George Litzinger has more than 30 years' experience, leadership, and supervision in engineering and construction. As project director, he supervises the construction management division and is responsible for all of Dudek's construction projects and programs ranging between \$50 million and \$100 million. In managing construction projects, his duties typically include: contract administration, cost control, scheduling, contract bidding/award, constructability reviews, field engineering, project coordination, claims management, and estimating.

Mr. Litzinger has managed a variety of projects for both the private and public sectors including water treatment plants, reservoirs, pipelines, golf courses, small dams, subdivisions, streets and roads, drainage projects, sewage treatment plants and fire stations.

Project Experience

Water/Wastewater

EDUCATION

United States International University, San Diego BS, Civil Engineering, 1985

CERTIFICATIONS

Professional Civil Engineer CA No. 47544 California Contractor Engineering Class "A" License No. 731744

Landscape License C-27

PROFESSIONAL AFFILIATIONS

Construction Management Association of America American Society of Civil Engineers

Building Industry Association Construction Industry Federation

Water Recycling Demonstration Project, City of Anaheim, Anaheim, California. Mr. Litzinger was the project principal for Dudek on this project. Dudek provided construction management, inspection and initial operation services on this project. The project consisted of constructing a new state of the art 50,000 gpd treatment facility within 2,000 SF building constructed adjacent to City Hall that incorporated several treatment methods: membrane bioreactor, ozone and UV disinfection to treat raw sewage into title 22 recycled water for toilet and irrigation use throughout the City. The project also included the construction of new lift station and force main.

Rancho Cielo Recycled Water Distribution System, San Diego, California. Mr. Litzinger worked as a project engineer for the design of a large water reclamation distribution system. The design consisted of a 70-acre-foot reservoir, three 1,000 gpm pump stations and 75,000 feet of 10-inch distribution pipe. His tasks on this project involved the preparation of detailed drawings for the pump station and pressure-reducing stations and the design, layout, sizing, and alignment of the distribution lines. He also prepared the hydrological calculations for two open reservoir spillways and the required calculations for the project's irrigation demands.

Goleta Sanitary District (District) WWTP Expansion. Mr. Litzinger and the Dudek CM Team are currently providing construction management and inspection services for a \$50 million upgrade to the District's wastewater treatment plant that services the cities of Goleta and Santa Barbara. The project is nearly complete. Dudek is currently providing closeout phase services on this project.

Avenue 48 Wastewater Treatment Plant Expansion, City of Coachella. Dudek provided construction management and inspection of this 18-month, \$30-million treatment plant expansion, which was funded by the State of California's Revolving Fund Program. Mr. Litzinger and his construction management team performed a constructability review for this project as well as managed the bid process on behalf of the City. Dudek's construction QA (CQA) experts coordinated every aspect of the construction process with the contractor and provided inspection of all civil, structural, mechanical, and electrical/instrumentation work.

Ramona Municipal Water District Construction Management Services. Over a 6-year period, Mr. Litzinger provided construction management services for over \$30 million worth of Ramona Municipal Water District Capital Improvement Projects. These projects upgraded and expanded the District's water system and increased capacity to higher elevations. Projects included:

- San Vicente Storage Reservoir: 200-acre-foot earth-filled small dam
- Mt. Woodson Reservoir: rehabilitation of 10 mg open reservoir involving several lining systems
- San Vicente Treatment Plant: 150,000 gpd expansion
- Dye Road Booster Pump Station: installation of new 75 hp booster pump station and associated appurtenances
- Dye Road Pipelines: 4 miles of 12- to 20-inch ductile iron, steel and PVC pipelines.

Olivenhain Pipelines Phase II (\$25 Million), San Diego County Water Authority. Mr. Litzinger was the project manager for the San Diego County Water Authority's Olivenhain Pipelines Phase II project. This pipeline project included 11,288 feet of 78-inch buried welded-steel pipe and 11,500 feet of 48-inch buried welded-steel pipe. Specifications consisted of:

- Isolation valve and blowoff pipeline appurtenances
- Graded and improved access roads
- Aqueduct connections to Pipelines 4 and 5
- Construction of three tunnels under the existing aqueducts
- Removal and reconstruction of an existing 30-inch outfall sewer
- Environmental mitigation requirements and protection of sensitive biological habitat.

Imperial Water Treatment Plant Expansion, City of Imperial. Mr. Litzinger was project manager for the City of Imperial's \$15 million water treatment plant upgrade and expansion. The project doubled the City's treatment capacity to 7 mgd and was constructed by a design build construction team. The project was one of the first of its kind using an Engineer, Procure, Construct (EPC) contract with a guaranteed maximum price. The project was completed on time, within budget, and free of litigation. Constructed facilities included:

- Seven mgd water treatment plant and associated appurtenances
- One 50 hp pump station
- Rehabilitation of two steel water storage tanks
- 24-inch PVC pipeline
- SCADA system upgrade.

Poway and Olive Street Pump Stations, Ramona Municipal Water District. Mr. Litzinger was responsible for construction management services for the Poway Pump Station and Olive Street Pump Station for the Ramona Municipal Water District. Construction management and inspection were provided for all aspects of construction, including grading, concrete, masonry, electrical, and instrumentation work.

The Olive Street Pump Station is a new station that provides system pressure throughout the Ramona community. The station contains two new 40 hp and two new 20 hp vertical-turbine pumps. The Poway Pump Station is a high-pressure water booster station. This station included the installation of two new 900 hp vertical-turbine pumps into a building that was retrofitted to accept the new pumps. The pump station transfers water up a 400-foot grade to an open reservoir that serves the town of Ramona, California.

Jason Linsdau, CCM

Construction Manager

Jason Linsdau has more than 15 years' supervision and leadership experience in engineering and construction. As a construction manager/resident engineer, he manages construction projects ranging between \$1.5 million and \$25 million. His responsibilities include project management, contract administration, cost control, scheduling, constructability reviews, field engineering, project coordination, claims management, and estimating. Mr. Linsdau has worked on a variety of projects for public agencies and municipalities, including parks, fire stations, administration buildings, reservoirs, pipelines, pump stations, treatment plants, golf courses, dams, roads, and drainage projects.

EDUCATION

San Diego State University BS, Civil and Environmental Engineering **CERTIFICATIONS** CMCI Certified Construction Manager, ID #5042 AGC Advanced SWPPP Training 8-Hour Course **PROFESSIONAL AFFILIATIONS**

Member of CMAA

Project Experience

Water/Wastewater

Water Recycling Demonstration Project, City of Anaheim, California. Mr. Linsdau was the construction manager for Dudek on this project. In addition to these duties, he reviewed submittals and RFIs, negotiated change orders, oversaw claims management, and reviewed the project schedules. Dudek provided construction management, inspection and initial operation services on this project. The project consisted of constructing a new state-of-the-art 50,000 gpd treatment facility within a 2,000 SF building constructed adjacent to City Hall that incorporated several treatment methods: membrane bioreactor, ozone, and UV disinfection to treat raw sewage into Title 22 recycled water for toilet and irrigation use throughout the city. The project also included the construction of new lift station and force main.

Home Plant Lift Station and Force Main Replacement Project, City of Carlsbad, California. Mr. Linsdau provided construction management and inspection services to construct a new submersible lift station with a PVC-lined wet well, bubbler level control, odor control bed, new emergency generator, emergency storage structure, influent sewer piping and manholes, flow meter and valve/camlock vaults, new controls and electrical panel located in the control building, new site fencing, new and restored landscaping, recycled irrigation, asphalt paving, and 1,900 LF of 8-inch HDPE force main.

Terramar Lift Station and Force Main Replacement, City of Carlsbad, California. Mr. Linsdau provided construction management and inspection services to construct a new pre-cast 6' diameter wet well with two submersible pumps and new valve vault. The project was constructed in the road and behind the sidewalk of a major thoroughfare through the City. Two of the 4-inch submersible pumps were controlled by an ultrasonic level control system. The project included the installation of a new 400 LF 6-inch PVC force main and a mobile emergency generator. The existing lift station was taken out of service and continuously bypassed for approximately three months until the new lift station and force main were put in service. The project also included the CIPP lining of approximately 200 LF of 8-inch gravity sewer line.

Galloway Pump Station and Force Main, County of San Diego, California. Mr. Linsdau was responsible for the inspection, testing, and startup of the project. The project consisted of the demolition of existing systems and new construction of a concrete PVC coated wet well, a hydraulic sewage grinder, two vertical

1,500 gpm sewage pumps with variable-speed drive control, discharge piping and valves in the dry well, a diesel engine generator, and electrical switchgear and PLC for the existing station. The project also included the installation of 5,600 LF of 10-inch-diameter ductile iron force main and pre-cast manholes.

Rancho Santa Fe Road Widening Phases 1 and 2, Carlsbad, California. As resident engineer, Mr. Linsdau was responsible for overall project management, public affairs, and resolving day-to-day construction issues. He also inspected the project on a daily basis, reviewed submittals and construction schedules, and negotiated contract change orders. Both projects for the City of Carlsbad involved the realignment and widening of a 2.2-mile section of Rancho Santa Fe Road. The project goal was to increase roadway safety and minimize construction impacts. Construction involved installation of curb and gutter, sidewalks, 12,000 feet of storm drains (RCP, 18- to 72-inch diameter), 3,000 feet of sewer line (gravity and force main, 8- to 24-inch diameter), 20,000 feet of waterline (PVC, welded steel, and ductile iron, 8- to 36 inch diameter), 3,000 feet of joint utility trench, street lights, five new intersections and traffic signal systems, and 2.2 miles of asphalt concrete pavement. Construction included two new 400-foot cast-in-place bridges over San Marcos Creek. Coordination with the following municipalities was necessary: City of San Marcos, Leucadia Waste Water District, OMWD, and Vallecitos Water District.

Sewer Main Lining Rehabilitation Project (Phase II and III) and Lining of Abandoned 10" Braddock Force Main, City of Culver City, California. Mr. Linsdau was the construction manager for the rehabilitation of 92,000 LF of sewer mains, 90 full wrap lining of lateral connections and 30 manholes that were located in busy urban areas as well as backyard easements. The project also involved the CIPP lining of 4,600 LF of a 10-inch force main and two force main tie-ins into the 60-inch WLAS sewer interceptor. Over 20 open trench point repairs were also completed during the project. This was a challenging citywide project requiring coordination with multiple agencies (City of Los Angeles, Army Corp. and Golden State Water Company), thousands of residents, and large corporations (Sony Studios, Culver Movie Studios and NFL Network). Dudek inspected traffic control and site SWPPP as well.

Yorktown 30" Transmission Main Corrosion Rehabilitation, City of Huntington Beach, California. Mr. Linsdau provided construction management as part of Dudek's as-needed contract with the city. He reviewed submittals and RFIs, negotiated change orders, oversaw claims management, and reviewed the project schedules. This project included the corrosion rehabilitation of 18,000 LF of 30-inch CMLC pipeline, installation of over sixteen 30-inch butterfly valves, multiple air and vacuum valves, blow assemblies, blind flange replacements, access manholes, aged interconnection, inline valves, replacement of 25 interconnections to existing PVC and AC distribution lines between 6-inches to 20-inches and high-lining private and commercial services, traffic control, asphalt paving, and replacement of sidewalk.

Lift Station 26 and Force Main Replacement, City of Huntington Beach, California. Mr. Linsdau was the construction manager on this project. In addition to these duties, he reviewed submittals and RFIs, negotiated change orders, oversaw claims management, and reviewed the project schedules. This project involved replacement of an existing lift station with new below-grade cast-in-place structure with two dry pit submersible pumps and 1,000 LF of new PVC force main. The project was particularly challenging since it was constructed below sea level in the Bolsa Chica Wetlands, 15' from high-end homes. The construction methods included a major dewatering operation below sea level (200,000 gallons per day), 'press-in' shoring method, instrumentation and controls hardware and software. Mr. Linsdau was also responsible for the implanting de-silting operations and testing plan approved by the Regional Water Quality Control Board (RWQCB) as well as weekly reporting directly to the RWQCB. No correction notices or fines were ever levied by RWQCB on this project. Contract value \$1.5 million.

Amanda Combs, PE

Pipeline Engineer

Amanda Combs is a civil engineer and project manager with over 14 years' professional experience leading high-quality water and wastewater projects, from conceptual planning, preliminary design, and final design, to construction-phase services for pipelines, pump stations, water storage, and treatment plants.

Relevant Experience

Otay II Pipeline Improvements – North Encanto Replacement, City of San Diego Water Department,

EDUCATION

CA No. 67287

Virginia Polytechnic Institute and State University MS, Environmental Engineering, 2001 Virginia Polytechnic Institute and State University BS, Civil/Environmental Engineering, 1998 **CERTIFICATIONS** Professional Civil Engineer,

California. Project manager for the detailed design of 7,600 feet of new 42-inch-diameter CML&C and tape wrapped welded steel pipe to replace an existing aging 36-inch-diameter cast iron pipe. The project involved realigning the pipe through narrow residential streets so that the existing pipe located in backyard easements and open space could be abandoned. The design included 24-inch manway structures, abandonment of existing buried and aboveground pipe, impressed current cathodic protection, rehabilitation of pavement curb ramps, and extensive coordination with City operations for shutdown and connections to the existing transmission main and 65th & Herrick booster pump station.

Sewer Rehabilitation & Replacement Program, Phase 1 and Phase 2, City of South Pasadena, Pasadena, California. Project manager for the design of both phases of the City's sewer rehabilitation and replacement program. The project included reviewing CCTV inspection videos for over 500 sewer segments to determine the recommended rehabilitation or repair strategy for each pipe. The resulting improvements included CIPP lining of approximately 160,000 lf of pipe ranging in diameter from 6-inch to 18-inch, open trench replacement of approximately 6,000 lf of 6-inch and 8-inch pipe, numerous in-situ and open trench point repairs of short defects, and other minor repairs to lateral connections and manholes. The work included analysis of constructability and access constraints for pipes located outside of the street right-of-way so that costs could be appropriately accounted for in contractor bids. Subsequent to the design of the improvements, Ms. Combs was the project manager responsible for securing an \$11 Million SRF Loan to fund the City's sewer rehabilitation program. Responsibilities included coordination with the City and preparation of the financial assistance application including all required attachments and CEQA-Plus environmental documentation.

Inland Empire Brine Line Reach V Rehabilitation and Improvements, Santa Ana Watershed Project Authority, Riverside, California. Ms. Combs served as project engineer to prepare the preliminary design report and final design documents for this project. The project addressed accessibility and pipe condition concerns along approximately seven miles of 24-inch PVC pipe within Reach V of the Brine Line. Improvements consisted of adding 27 maintenance access structures, including isolation valves, to facilitate future inspection and maintenance of the line and installing a fully structural CIPP liner. As operating pressures in Reach V of the Brine Line reach nearly 60 psi, a glass reinforced CIPP liner was specified. Other project features included the design of a flow bypassing system that allowed up to 11,000 lf of the pipeline to be taken out of service at one time during construction, a specialized laser profiling inspection strategy to measure pipe ovality prior to CIPP lining, and reinstatement of air valves and blow-off connections along the pipeline after CIPP lining.

AMANDA COMBS, PE – CONTINUED

84-Inch Plant No. 2 Primary Influent Line, Orange County Sanitation District, Fountain Valley, California. Ms. Combs served as the project engineer responsible for performing Preliminary engineering, including alternative analysis and selection based on factors such as life-cycle cost and overall constructability. The project involved in-situ rehabilitation of approximately 200 If of existing 84-inch RCP pipe due to concrete and rebar deterioration at the crown. Based on concerns about the structural integrity of the pipe, the District desired a fully structural rehabilitation solution. Sliplining the pipe with a thin-walled glass reinforced pipe was selected as the preferred alternative. This option utilized an existing meter vault along the pipe as the point of access. After sliplining, the vault was abandoned as part of the project.

Dana Point Town Center Infrastructure Improvements, South Coast Water District, Dana Point, California. Ms. Combs was the project engineer responsible for preparation of plans, specifications, and cost estimates. The project consisted of providing hydraulic modeling, preliminary design and design for multiple 8-inch and 10-inch domestic water, 8-inch through 15-inch sewer, and 8-inch recycled water pipelines throughout the Dana Point Town Center redevelopment area (primarily in and around Pacific Coast Hwy and Paseo Del Prado). In total, the project included 11,600-LF of domestic water piping and appurtenances, 3,800-LF of sewer and manholes, and 3,200-LF of recycled water piping.

San Juan Creek 30-Inch Effluent Transmission Main Replacement, Moulton Niguel Water District, Laguna Niguel, California. Project engineer for the design of a new pipe under San Juan Creek to replace the existing exposed crossing pipe. Work included an analysis of trenchless construction methods and creek scour depth and preparation of plans and specifications for the selected slurry microtunneling alternative. A design depth of 45-feet was selected for the approximately 300-foot long tunnel under the Orange County Flood Control District channel. Due to the proximity of the concrete slope lining and flood control levees, shaft construction methods were limited to watertight and non-vibratory methods to protect the adjacent improvements.

Avenue 57 Gravity Sewer and Lift Station 55-14 Decommissioning, Coachella Valley Water District, Coachella, California. Project engineer for the design of a new 5,000-foot long 10-inch gravity sewer and abandonment of an aging lift station. The project also included design of a partial relocation of a 12-inch force main along Airport Boulevard to accommodate road improvements and a new bridge crossing of Highway 111 and the Union Pacific Railroad, requiring coordination with the Railroad and bridge designer.

Sunburst Hydro Systems State Small Water System, Santa Barbara County, California. Lead engineer for the preparation of design plans and the engineering report for the State Small Water System application for an agricultural property owned by Sunburst Farms. The water system consisted of 3 wells, 11 service connections, and a centralized storage site with a capacity of 60,000 gallons.

Age- and Condition-related Sewer Rehabilitation Project, City of Vista, California. Assistant project manager providing design services for an extensive multi-year program to rehabilitate the city's Vista sewer basin. The first phase of rehabilitation consisted of approximately 115,000 linear feet of 8-inch- to 12-inch-diameter cured-in-place-pipe lining and rehabilitation of over 600 manholes on residential and collector streets, and within easements.

Gateway Road and Innovation Way Recycled Water Pipelines, City of Carlsbad, California. Project engineer for the design of 2,500 linear feet of 8-inch PVC recycled pipe, including six connections to the existing recycled water distribution system requiring a detailed construction sequencing plan to convert potable pipes to recycled water service and limit shutdown durations of both distribution systems.

Garrett White

Pipeline Inspector

Garrett White has over 24 years' experience in the rapidly changing construction industry, with an emphasis in the construction of water, wastewater, and storm drain facilities for public agencies. He has been involved with the construction of large- and small-diameter pipelines, treatment plants; pump stations for potable and non-potable distribution systems, horizontal directional drilling (HDD), with an emphasis in trenchless technologies. For the past 9 years, Mr. White has been responsible for providing field inspection services and construction management for various cities and water districts on capital improvement and developer projects. As a field engineer, he is responsible for project coordination, issuing field orders, verifying adherence to submitted schedules, quality control and assurance, project documentation, and review of as-built records.

Project Experience

Recycled Water Expansion Projects 18201C & D, City of San Clemente, California. Mr. White was the inspector on these projects for the City of San Clemente. The City expanded its recycled water

EDUCATION

Palomar College Courses Public Works Inspection I Water Distribution I/Water Treatment I CERTIFICATIONS ACI Concrete Field Testing Technician Grade I ACI Concrete Repair Basics SWPPP Certification OSHA 10-Hour Confined Space Safety and Training Certification NASSCO Certifications: NASSCO certified Trainer Cured-in-Place Pipe (ITCP) Inspection Certification Program Pipeline Assessment Certification Program (PACP) Manhole Assessment and Certification Program (MACP)

system by constructing multiple projects in three concurrent phases – Water Reclamation Plant Expansion and Pump Station (Project1), Cordillera and Recycled Water Reservoirs and Pipeline Schedule III & IV (Project 2), and Pipeline Schedule I & II (Project 3). The treatment and effluent pumping system are being expanded, almost 10 miles of recycled water transmission mains (6-inch to 20-inch PVC and ductile iron) are being constructed, and an existing reservoir converted and new small reservoir constructed.

Water Recycling Demonstration Project, City of Anaheim, California. Mr. White was the inspector for Dudek on this project. The project consisted of constructing a new state of the art 50,000 gpd treatment facility within 2,000 SF building constructed adjacent to City Hall that incorporated several treatment methods: membrane bioreactor, ozone and UV disinfection to treat raw sewage into title 22 recycled water for toilet and irrigation use throughout the City. The project also included the construction of new lift station and force main.

Vancouver Street Sewer HDD Extension, City of Carlsbad, California. Mr. White provided construction inspection and specialty HDD inspection services for the City of Carlsbad during the replacement of the existing Vancouver Lift Station with gravity sewer pipelines. Replacement of the Vancouver Lift Station required the installation of approximately 600 linear feet of 8-inch SDR 35 PVC pipe, approximately 900 linear feet of 10-inch DR9 HDPE pipe using horizontal directional drilling techniques, and six new manholes. The project also included the demolition of the lift station. Contract Value: \$1.75 million.

La Golondrina and El Fuerte Sewer Extension, City of Carlsbad, California. Mr. White was project inspector for the installation of a two new wastewater pipelines using horizontal directional drilling. Installation of these new 8-inch, fusible PVC pipelines allowed the City to eliminate two lift stations. The new pipeline alignment crossed environmentally sensitive habitat and Mr. White assured no harm was done to the land during construction.

Solana Beach Force Main, City of Solana Beach, California. Project involved installation of approximately 3,000 feet of new 16-inch DR11 HDPE pipeline using HDD methods in excess of 45 feet

below the surface. Installation of 1,040 feet of new 16-inch DR11 HDPE pipeline using direct burial methods. Rehabilitating approximately 850 feet of the existing force main with 12-inch FPVC structural lining. Services included on-site inspection and quality control and assurance. Acting as liaison between the construction manager, City Engineer, and San Elijo Joint Powers Authority, Mr. White provided daily documentation, construction observation, strict adherence to contract plans and specifications, progress payment reports, and implementing and maintaining SWPPP requirements and public awareness outreach program. He assured adherence to CEQA mitigation, monitoring, and reporting program requirements, scheduled and co-coordinated wildlife biologists as well as assisting the construction manager with reviewing and filing of RFIs, submittals, and change orders.

Encina Waste Water Authority Project Experience

- Fiscal Year 2011 Major Plant Rehabilitation Project Mr. White provided inspection services during the 2011 plant expansion which included modifications to edge support and replacement of deteriorated concrete, installation for new handrails, pedestrian walkways modification to the chlorination building and installation of new chlorine & sodium hypochlorite tanks & valves Installation and modifications to safety platforms and handrails throughout the treatment plant.
- **Clarifier Replacement Project** Mr. White provided full time onsite inspection services during demolition and removal of the existing clarifier mechanisms, installation of new clarifier mechanisms, corrosion protection (Coating and lining systems) of existing launders, supports and ancillary equipment, new clarifier drain valves and minor structural part re-habilitation.
- **Post Phase V Improvements** Mr White provided inspection services for the various plant improvements including exterior re-painting of six digesters four maintenance buildings the screening, electrical, digester and sludge pump station buildings. Over 21,000 square feet of full depth pavement repairs, over 320,000 square feet of asphalt pavement re-sealing with type I slurry.

Home Plant Lift Station and Force Main Replacement, City of Carlsbad, California. Mr. White provided inspection services for this project. The purpose of the Home Plant Lift Station (HPLS) and Force Main (FM) Replacement project is to reduce several operation and maintenance issues with the existing system. The existing HPLS is an 800 GPM wet/dry well type lift station with 3 VFD controlled 20 HP pumps (2 duty & 1 standby). The station is fed by an 18-inch influent sewer and pumps into a 10-inch force main which ultimately outlets into the Vista/Carlsbad interceptor sewer. The new HLPS will consist of a submersible lift station with a PVC lined wet well, bubbler level control, odor control bed, new emergency generator, emergency storage structure, influent sewer piping and manholes, flow meter and valve/camlock vaults, new controls and electrical panel located in the control building, new site fencing, new and restored landscaping, recycled irrigation, asphalt paving and 1,900 LF of 8-inch HDPE force main.

Terramar Lift Station and Force Main Replacement, City of Carlsbad, California. Mr. White served as inspector on this project for the City of Carlsbad. The project involved replacing the existing lift station with pre-cast 6' diameter wet well with two submersible pumps and new valve vault. The project was constructed in the road and behind the sidewalk of major thoroughfare through the City. Two of the 4" submersible pumps were controlled by an ultrasonic level control system. The project included the installation of a new 400 LF 6" PVC force main and a mobile emergency generator. The existing lift station was taken out of service and continuously bypassed for approximately 3 months until the new lift station and force main were put in service. The project also included the CIPP lining of approximately 200 LF of 8" gravity sewer line.

Chad Costello

Pipeline Inspector

Chad Costello has more than 17 years' of construction experience, the past nine of which have focused on water tank construction inspection. He began his career in working for the local pre-stressing tank contractor working only on concrete reservoir construction projects. Working his way up to superintendent in a very short time period, Mr. Costello left the construction side of pre-stressed tank construction after working on 18 pre-stressed reservoirs. He then began working

EDUCATION

American Concrete Institute 8-hour seminar American Shotcrete Institute 8-hour seminar **PROFESSIONAL AFFILIATIONS** American Shotcrete Institute

as an quality assurance construction inspector specializing in pre-stressed concrete tank construction. With his unparalleled experience, working hands on with this unique type of construction, Mr. Costello is a great asset to any agency able to use his talents.

Chad has constructed tanks ranging in size from 0.5 to 40 million gallons and has performed work throughout Southern California. He has also prepared and presented multiple jobsite pre-stressing demonstrations for private and public clients and design professionals.

Project Experience

Conifer Tank Replacement, Triunfo Sanitation District, Ventura, California. Mr. Costello was the construction manager and inspector on the 2.1 MG Conifer Tank Construction Project. He provided RFI and submittal reviews, contract administration, and public relations services. He also inspected every aspect of the project, coordinating the special inspection and geotechnical/laboratory services.

Recycled Water System Expansion, City of San Clemente, California. Mr. Costello is currently providing resident engineering services on 10 miles of recycled water pipelines that also includes a 200,000 gallon DN tank. He is managing all aspects of construction and providing daily inspection services. He is also handling all resident inquiries and coordinating the city's public relations representative.

Various Pre-stressed Concrete Tanks, Southern California. As a DYK employee, Mr. Costello has worked on pre-stressed concrete water tank construction. He was Superintendent for the following projects:

- City of Vacaville, Vacaville, California, 5 MG Tank
- City of Fullerton, Fullerton, California, 5 MG Tank
- City of Ontario, Ontario, California, 6.0 MG Tank.

Otay Water District, Spring Valley, California. Mr. Costello was project Superintendent for two 10 MG 640-1 & 2 Reservoirs.

Yucaipa Valley Water District, Yucaipa, California. Mr. Costello was project Superintendent for a 4.0 MG concrete tank.

Rancho California Water District, Temecula, California. Mr. Costello was project Superintendent for its 3.5 MG concrete tank.

Irvine Ranch Water District, Irvine, California. Mr. Costello was project Superintendent for the 3.5 MG and 2.2 MG pre-stressed concrete tanks.

City of San Juan Capistrano, San Juan Capistrano, California. Mr. Costello was project Superintendent for the 6 MG pre-stressed concrete tank.

San Diego County Water Authority, San Diego, California. Mr. Costello was project Superintendent for two 7.5 MG pre-stressed concrete tank.

Twin Oaks Reservoir, Vallecitos Water District, San Marcos, California. Mr. Costello was Superintendent for this 40 MG, circular pre-stressed concrete tank which is one of the largest pre-stressed tanks currently in operation. The project involved a large excavation of earthworks to burry the 50 ft tall, .25 mile circumference tank. Bank retention, shotcrete and pre-stressed tendons were all a part of this project.

City of Brentwood, Brentwood, California. Mr. Costello was project Superintendent for a 4.0 MG concrete tank.

City of Brentwood, Brentwood, California / Shea Homes California, Livermore, California. Mr. Costello was project Superintendent for its 4.0 MG concrete tank.

City of Mountain View, Mountain View, California. Mr. Costello was project Superintendent for an 8.0 MG concrete tank.

City of Glendora, Glendora, California. Mr. Costello was project Superintendent for its 3.5 MG concrete tank.

Beaumont Cherry Valley Water District, Beaumont, California. Mr. Costello was project Superintendent for its 5.0 MG concrete tank.

Carpinteria Valley Water District, Carpinteria, California. Mr. Costello was project Superintendent for its 3.8 MG concrete tank.

Los Angeles Department of Water & Power, Los Angeles, California. Mr. Costello was project Superintendent for the City's 7.2 MG concrete tank.

West Basin Municipal Water District, El Segundo, California. Mr. Costello was project Superintendent for the District's 5.0 MG concrete tank.

William Reeves

Special Inspector

William Reeves has more than 26 years' experience in the construction industry, with an emphasis on weld-fabrication. He owned and operated a steel fabrication business for 19 years, and has been a certified inspector for 15 years. As a special inspector, he is responsible for observation and inspection of structural steel and welding for conformance with the approved design drawings, specifications to applicable welding codes and standards, AWS D1.1, D1.3, D1.4, D1.5, API, ASME, FEMA, DSA, AWWA, OSHPD. Mr. Reeves is also experienced in quality control inspection for conformance to applicable codes, safety manager, scheduling, purchasing, documentation, reporting, and site supervision of construction personal.

Project Experience

Special Inspector, AWS CWI, Structural Steel and

EDUCATION

NASSAU Community College, New York Drafting & Technical Drawing S.U.N.Y. at Morrisville, New York Biology Santa Ana Community College, Santa Ana, California General Ed Riverside Community College, Riverside, California Welding Inspection Technology **CERTIFICATIONS** AWS Certified Welding Inspector: AWS CWI Certified ICC Structural Welding Certified ICC Structural Welding Certified ICC Fireproofing City of San Diego Steel and Welding OSHA Certified Safety Technician - OSHA 30 hour Training. MSHA & First-Aid/CPR

Welding. Various in-plant and on-site QA/QC inspection. Responsible for the observation and inspection of structural steel welding and bolting for conformance with the approved design drawings, specifications to applicable welding codes and standards, AWS D1.1, D1.3, D1.4, D1.5, API, ASME, FEMA, DSA, AWWA, OSHPD. Furnish inspection reports to the Building Official, Contractor, Engineer and Architect of record. Piping, bridges, dams, hospitals, schools, public works.

Quality Control Manager, ARB Inc. Responsible for the observation, inspection, examination and reporting of structural steel erection and welding per AWS D1.1 and pipe welding per ASME B31.3. Structural design, welding procedures, welder qualification testing. Furnish inspection and quality reports.

Special Inspector, AWS CWI, Structural Steel and Welding, Fireproofing. Various in-plant and on-site QA/QC inspection. Responsible for the observation and inspection of structural steel and welding/bolting for conformance with the approved design drawings, specifications to applicable welding codes and standards, AWS D1.1, D1.3, D1.4, D1.5, API, ASME, FEMA, DSA, AWWA, OSHPD. Furnish inspection reports to the Building Official, Contractor, Engineer and Architect of record.

Inland Empire Energy Center, Romoland, California. Quality Control Manager/Inspector, Safety Technician responsible for the observation, inspection, and reporting of structural steel erection and welding per AWS D1.1, AWS D1.3. Inspection of welding structural aluminum and welding of aluminum electrical buss ducts and supports per AWS D1.2. Structural design, write welding procedures, welder qualification testing. Furnish inspection and safety reports.

Agate Inc, Phoenix Arizona. Project Superintendent, oversee the erection and construction of Pre-Engineered Metal Buildings at Panoche Energy Center, Fresno, CA. Duties: Quality Control Inspection for conformance to applicable codes, Safety Manager, scheduling, purchasing, documentation, reporting, supervise site construction personal. **Various In-Plant and Site QA/QC Inspection.** Special Inspector, AWS CWI, Structural Steel and Welding. Responsible for the observation and inspection of structural steel and welding work, piping, bridges, dams, hospitals, schools, public works. Inspected for conformance with the approved design drawings, specifications and applicable welding and building codes, AWS D1.1, D1.2, D1.3, D1.4, D1.5, API, AWWA, ASME, DSA, OSHPD. Furnish inspection reports to the Building Official, Contractor, Engineer and Architect of Record.

AB Iron Design. Owner and operator of steel fabricating and welding business. Duties: estimating, design, sales, accounting, fabricating, welding, erection, safety, quality control. Misc iron and structural steel.

In-Plant and Field Inspection Projects Mr. Reeves has worked on:

- UCLA Medical Center, Santa Monica, CA
- HUGHES Corporation., El Segundo, CA
- Los Angeles Southwest College, LA, CA
- Riverside County Hospital, Moreno Valley, CA
- El Monte Adult Education Building, El Monte CA
- Los Angeles Unified School District, LA, CA
- Parkview Community Hospital, Riverside, CA
- Fallbrook Hospital, Fallbrook, CA
- San Francisco Civic Center Complex, SF, CA
- Sutter Medical Center, Castro Valley, CA
- CALTRANS-Arroyo Seco Bridge, Pasadena, CA
- St. John's Hospital, Santa Monica, CA
- Physicians Hospital, Murrieta, CA
- CALTRANS 15 Freeway San Diego Expansion, SD, CA

OFFICES

San Diego 800.450.1818

Orange County 949.450.2525

Inland Empire 951.300.2100 Los Angeles 626.204.9800

Coachella Valley 760.341.6660

Central Coast 805.963.0651 **Bay Area** 415.758.9833

Sacramento 916.443.8335

Sierra Foothills 530.887.8500

ONLINE

info@dudek.com Dudek.com facebook.com/dudeknews

AGENDA ITEM NO. 12

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: Director of Operations
- SUBJECT: AWARD OF CONTRACT FOR PROFESSIONAL UNMANNED AERIAL VEHICLE VIDEOGRAPHY SERVICES

RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Approve the Agreement with Television 101, LLC for Professional Unmanned Aerial Vehicle Videography Services for an amount not to exceed \$23,500; and
- 2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns, operates, and manages a multitude of structures, pipelines, appurtenances, and equipment for wastewater treatment and water reclamation. Routine inspection of these assets is essential to properly plan and manage maintenance and construction activities. Some SEJPA assets have limited access or are located in environmentally sensitive areas. Historically, inspection of these assets may have required the use of aircraft, boat, or hazardous entry by SEJPA personnel. In an effort to reduce inspection risk and cost, Staff began researching alternative inspection technologies.

DISCUSSION

The commercialization of Unmanned Aerial Vehicle (UAV) or "drone" technology has introduced a safe and cost-effective alternative for capital project documentation and asset inspection in remote locations. UAV's provide high-resolution aerial photographs and videographic services that once required the use of expensive aircraft, equipment and large crews to carry out production. UAV videography also provides a more effective visual training tool to convey complex processes, such as Standard Operating Procedures (SOP's), replacing lengthy written documents.

In an effort to improve SEJPA operator training, capital project documentation, and asset management activities, Staff issued a Request for Proposals for professional UAV videography services.

The proposal from Television 101, LLC listed strong experience with UAV videography and production services, including a firm understanding of SEJPA's requirements. Overall, the proposal provided a direct and streamlined approach, led by competent staff, to efficiently complete the requested photography and videography effort.

The proposal includes pre-production, production, post-production, and final videos and photographs to assist Staff in completion of upcoming inspection, site documentation, and training activities.

FINANCIAL IMPACT

The proposed agreement for Professional Unmanned Aerial Vehicle Videography Services is \$23,500. Funds are available in the SEWRF Capital Fund.

It is therefore recommended that the Board of Directors:

- 1. Approve the Agreement with Television 101, LLC for Professional Unmanned Aerial Vehicle Videography Services for an amount not to exceed \$23,500; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Christopher A. Trees Director of Operations

Attachment: Television 101, LLC Proposal

ATTACHMENT



Proposal From The Producers of Television101

For

San Elijo Joint Powers Authority

For

Professional Unmanned Aerial Vehicle Video Footage, Four Standard Operating Procedures (SOPs), and Virtual Tour Video's

Original

Delivered To:

San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff by the Sea, California 92007 (760) 753-6203

Attention: Mike Konicke, Associate Engineer

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television.

Mike Konicke Associate Engineer San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff by the Sea, Ca 92007 (760) 753-6203

Dear Mr. Konicke,

My name is Jeff Orsa and I represent Television101 as a Producer. We are honored and grateful for the opportunity to be considered for the projects described in the "Request for Proposal" presented to us by the SEJPA. The following will present information briefly summarizing my background in the motion picture industry, the background of Television101, and Television101's objectives in terms of working with the SEJPA.

Background Jeff Orsa

I have worked in the motion picture industry for over twenty-five years. I started as a stage manager, moved into lighting, became a Gaffer, was a signed and bonded Cinematographer, held the position of Head of Production at Digital Film Tree, and started Producing and Directing at Television101 a little over ten years ago. I have a great understanding of what the demands consist of in the development of content creation at every level and phase of a project. From Preproduction to Post I have guided projects of all sizes. From commercials and feature length documentaries to corporate video such as this, the basics are the same; always build a strong foundation and deliver the client a finished product that matches or exceeds expectations.

TELEVISION101 BACKGROUND INFORMATION

Television101 was founded in 2003 and is a full service production company. Essentially, full service includes all aspects of content design. From theory and concept to final output and delivery. Consisting of the three basic building blocks of pre-production, production, and post-production. Television101 specializes in Commercials, Web, Narrative (Documentary, Feature, TV) and Corporate film/video creation. Television101 has worked with a long list of clients that include the "Los Angeles Dodgers, the Lemonade Restaurant Chain, Nike, Fuel TV, DFT, Research Affiliates, Isharya, and Proctor and Gamble" to name a few. It is the goal of Television101 to always add value to each project while keeping budgets transparent, honest, and reasonable.

TELEVISION101 OBJECTIVES

Working directly with SEJPA authorized staff and personnel the Producers of Television101 will incorporate all experience shared with Television101 as it

pertains to the set of goals presented by SEJPA in section 2, page 4 of the "Request For Proposal." All knowledge will be integrated and featured in each live action sequence in addition to the in-flight still photographs of the SEWRF facility. The technical objectives will be achieved by using motion picture industry standard equipment. Aerial video footage will be formatted and captured at full 4K video resolutions. The Standard Operating Procedures (SOPs) with be formatted and captured at 4K or 4.6K. Our objective is to capture the initial footage at the highest resolution possible, which will render maximum quality. This is important because it will supply SEJPA with videos that can be used well into the future providing value. Completing all the objectives describe in the "Request for Proposal" will allow the SEJPA to repurpose the footage for a multitude of uses. The footage could be used in the future for marketing, promotions, events, and educational purposes if deemed appropriate by the SEJPA. Our goal is to present a product that will last as long as the SOPs are in place. Basically, our objective is to fabricate upon a well-built foundation. Our principal objective is to deliver a finished product that will complement or exceed the standards set by the SEJPA. Lastly, our final objective is to build a long lasting, honest, candid, and mutually beneficial relationship.

Thank you for your time and consideration.

Respectfully Yours,

Jeff Orsa Producer/Director Television101 323.697.3063

television

SEJPA Proposal

1. Identification

Legal Name: <u>Television101 LLC</u>

Address: 5723 Melrose Ave. Suite 207 Los Angeles, Ca 90038

Legal Form of Company: Limited Liability Company

Parent Companies: N/A

Office Address In San Diego County: <u>701 Palomar Airport Rd Suite 300</u> Carlsbad, Ca 92011

Name, Title, Address, Telephone Number of Contact Person: Jeff Orsa, Producer/Director, 3458 Galveston Ave Santa Susana, Ca 93063, (323) 697-3063

2. Experience and Technical Competence

Section 2 we will provide a sample list of past and ongoing projects based on the most recent completion date to the former. Each project will include a brief description, dates, name of company/owner, name of project manager/contact person, and contact information. We will identify key personnel and consultants as it pertains to SEJPA's project.

2A. Lemonade Restaurant Chain 2015

Television101 was hired to produce a social media campaign for the Lemonade restaurant chain. The spots introduced Lemonade to the San Francisco Bay Area by announcing that ten different locations were soon to be open in early 2016. Using a mixture of 4K, 2.5K, and UAV footage the spots linked the different communities that make-up the San Francisco Bay Area into one. We began pre-production on September 19, 2015 and delivered the final on September 30, 2015. The footage continues to be repurposed for a number of corporate needs.

CEO of Lemonade: Alan Jackson Director of Marketing: JoAnn Cianciulli Contact: (323) 373-4199

Key Personnel Television101

Producer/Director/Writer: Jeff Orsa AD: Mark Miller Director of Photography/UAV/Stills: Chris Kokotos

2B. Ilan Dei Studio in Conjunction with Lemonade Restaurants 2015

This particular project was shot in and on an active construction site. Our goal was to document the manufacturing and installment of a hanging sculpture. The sculpture is suspended inside a rotunda surrounded by thirty-foot windows on three sides. It weights over 1250 lbs and is connected with over a thousand different parts. Eight cameras were used to capture every moment of the installation. UAV shots opened and closed the spot and were interspersed throughout the edit. V/O (Voice Over) was added into the edited time-lapse sequence, which conveyed a virtual tour of the completed project. This task was intended to be used for internal corporate needs for both companies, however, the spot turned out so well it was additionally used for marketing purposes. Preproduction began on June 8, 2015 and finished product was delivered on June 30, 2015.

CEO of Ilan Dei Studio: Ilan Dei Project Manager and Contact: Scott Chamberlain Contact: (310) 302-9222 CEO of Lemonade: Alan Jackson Marketing & Sales Manager: Kate Berry Contact: (323) 373-4199

Key Personnel Television101

Producer/Director/Writer: Jeff Orsa AD: Mark Miller Director of Photography: Chris Kokotos, Jeff Orsa UAV: Chris Kokotos

2C. "Come & Get It" Pilot and Sizzle Reel 2015

"Come & Get It" is an episodic television program that highlights a veteran or an enlisted service member from one of the five branches of our armed forces. Each program links history, travel, culture, and food together by honoring our country's brave men and women. The pilot episode was shot entirely in North County San Diego and will continue to serve as its home base for the shows duration. This is an important project because most of its proceeds will go to support veteran causes. Mix media is used to build each episode. Archival footage seamlessly intercuts with 4K, 2.5K, and aerial video. This is an ongoing project and we work with elements from the DOD along with non-profits, which include the Disabled American Veterans (DAV). Pre-production started in late 2014 and production is ongoing.

Executive Producers: Cathy Derosa, Andy Fellner Contact: (760) 685-7171

Key Personnel Television101

Producers: Mark Miller, Jeff Orsa Director: Jeff Orsa Writer: Mark Miller Director of Photography: Evan Butka, Jeff Orsa Camera Ops: Evan Butka, Chris Kokotos, Jeff Orsa UAV: Chris Kokotos

2D. The Hops Highway 2015

"The Hops Highway" is a multi-media project that encompasses web-site design; maps, marketing, videos, and information associated to the immense popularity of the Craft Beer Industry. Essentially, a single destination or one-stop shop for all things related to Craft Beer. The videos encompass many different aspects of the industry. They range from introducing each Brewery and their eclectic ownership, backgrounds and individual history's, to the process of brewing. The brewing process spots are closely related to Standard Operating Procedure (SOP) videos. Brewing a best selling beer the same way without any deviation in aesthetics or taste a hundred times in a row takes a disciplined set of actions. These actions must be done in an ordered sequence. "The Hops Highway" is another North County creation and it is in Beta form and soon to be Alfa in 2016. Pre-production began in April 2015 and production is on-going.

CEO of Strategic Global: Andy Fellner Contact: (760) 685-7171

Key Personnel Television101

Producers: Mark Miller, Jeff Orsa Director: Jeff Orsa Director of Photography: Chris Kokotos, Jeff Orsa UAV: Chris Kokotos Web-Site Design: Christian Smock

2E. Research Affiliates 2011-2014

Between 2011 and 2014 Television101 teamed with "Research Affiliates" to produce over twenty individual corporate videos. The videos detailed investment strategies established and built upon strong research methods implemented by the firm's culture. Research Affiliates manages over a \$174 billion dollars in worldwide assets and each spot reflected insights and products based in creating value for their clients. The videos culminated with a forty-five minute minidocumentary on Harry Markowitz, a Professor at UCSD and the 1990 Nobel Price recipient in Economic Sciences. CEO of Research Affiliates: Rob Arnott Director of Media and Contact: Darren Wagner Contact: (949) 325-8700

Key Personnel Television101

Producer/Director: Jeff Orsa Director of Photography: Gustavo Oliva, Jeff Orsa Camera Ops: Gustavo Oliva, Alexia Inrt Editor: Lakan de Leon

2F. Lemonade UAE Dubai 2014

This particular project encompassed connecting the Lemonade Restaurant Chain to its Southern California origins. Four different skeleton crews were dispatched throughout the region. Others were in charge of capturing the inner workings of ten different Lemonade facilities. A Robinson R44 Helicopter was mounted with six different cameras and documented from the air. From San Diego to Santa Barbra the geography, architecture, and culture of Southern California was all captured. The finished product effectively illustrated a day in the life of Southern California all built around the eclectic assortment of Lemonade's storefronts. Preproduction began in June of 2014 and the final was delivered on July 30, 2014.

CEO of Lemonade: Alan Jackson Marketing & Sales Manager: Kate Berry Contact: (323) 373-4199

Key Personnel Television101

Producer/Director: Jeff Orsa Director of Photography: Evan Butka, Chris Kokotos Camera Ops: Evan Butka, Chris Kokotos, Mark Miller, Gustavo Oliva, Alexa Inrt Helicopter Provided By: Orbic Air Editor: Lakan de Leon, Jeff Orsa

The previous examples are just a sampling of the work done in the last year. Each of the examples has some type of aerial photography or is connected to the same approach a professional film company would use to complete (SOP) videos. Television101 has worked on a whole host of films and videos that would fit into this category and will be available upon request or can be confirmed and viewed on television101's web site.

3. Project Organization and Key Personnel

Section 3 will describe proposed project organization in terms of role identification, responsibilities of key personnel, specific

role of specialty consultants, and location of main work as describe in "Proposed Scope of Services" in section 3, pages 5-6 in the "Request of Proposal" document.

Producer: Jeff Orsa

The Producer is considered the point person for the production. He will coordinate every aspect of the project from pre-preproduction to final delivery by staying in direct communication with SEJPA officials. The Producer shall incorporate and expand on any and all experience shared by authorized officials or staff from SEJPA into each and every task that the SEJPA deem appropriate. The Producer will hire all crewmembers as it pertains to each task with approval from SEJPA. The Producer will communicate all task deemed suitable to crewmembers and oversee that every task is professionally preformed at industry standards. The Producer shall manage all postproduction and will deliver all rough edits, changes, and final products to SEJPA officials for sign off. The Producer will be involved and work at each in every location where a task is performed.

Director: Jeff Orsa

It is common for the Producer to also be the Director of the same project, especially corporate or industrial videos such as these. The Director's responsibilities will include staying in close contact with the Producer to insure all task required by the client (SEJPA) are being accomplished in a timely manner. Incredibly easy in this case, since the Director is the Producer. The Director will communicate to all crewmembers and guide each task visually as it will be seen on screen. The Director will oversee all aspects of the four individual SOP and the single virtual tour videos. He will be involved in scouts, preproduction, scripting, storyboarding if needed, principal photography, voice over direction, edits, post-production, and final delivery. The Director will be involved and work in every location; though his key role will be connected with the SOP's and virtual tour videos. The locations of the SOP videos have yet to be established, however, once the initial scout is concluded the locations for each individual SOP video will be determined and concluded with authorization from SEJPA officials.

Director Of Photography: Evan Butka

The Director of Photography will direct the look of each individual SOP and single virtual tour video. He will be involved in selecting camera gear, lighting, and grip equipment, as it is needed per individual SOP. The Director of Photography will take part in scouting, pre-production and principle photography of the SOP and virtual tour videos. His main working areas will be dictated by SOP locations, which have yet to be determined.

UAV: Chris Kokotos

The UAV team will consist of one or two members depending on what UAV system is best for each individual aerial task. The team's responsibilities will include video and still image documentation of the "Land Outfall Replacement, Preliminary Treatment Upgrades, Site Security Inspection, Roof Inspections, Aerial Facility Map, and possible portions of the SEWRF Virtual Tour Video." The UAV team leader will take part in all scouts and pre-production meetings. Work locations are stated above.

4. Project Approach

Section 4 of this proposal will consist of the plan for organizing the work and achieving all objectives set forth in Section 2 pages 5-6 in the "Request for Proposal" document. It will identify specific stages and the sequence of each task, as it will be performed. It will discuss how the Producers plan to coordinate with SEJPA's staff and present a preliminary overview of the projects schedule. Lastly, it will offer guidance or ideas on how to effectively improve on meeting the objectives and goals set by the SEJPA.

The project approach will consist of three stages consisting of pre-production, production and post-production.

Pre-production Phase 1

During the pre-production phase the first order of conduct would be to open up a line of communication with a representative or representatives from the SEJPA. It is crucial that we set up an efficient and effective method of command and control. Once communication is opened the next order of business will require that the SEJPA representative along with the Producer/Director, Director of Photography, and the UAV team leader conduct a coordination meeting and scout all locations for every task. This would include locations for the four individual SOP videos. SEJPA Reps will share all information on the topics pertaining to the SOP videos on scout day. A staff member or members will be selected by officials of the SEJPA to appear on camera in each of the SOP videos. During the scout we will check sound levels of any equipment that may be present at each individual SOP location, which will affect on camera dialogue. If there is a problem with the sound level a voice over (V/O) track will be added later in the production process. A shot list along with configuring the information for the SOP videos will then be transcribe into a standard script format, which will be approved by SEJPA Reps. If needed, specialty equipment will be procured and the preliminary schedule will be replaced with a locked shooting schedule approved by SEJPA Reps. Please see attachment "Preliminary Shooting Schedule."

Production Day One Phase 2

The production phase of the project will start one to two days after the scout day; however, production could start the very next day if SEJPA schedule permits. Day one of the production process would begin with Task 1.1 "Land Outfall Replacement Project, which can be seen below. The photo was obtained from the SEJPA web site under Agendas and Minutes dated July 15, 2015 page 15-2.



Air Valve Vault (Approx)

The "Land Outfall Replacement Project" will be captured at a 4K resolution allowing for maximum flexibility in postproduction. After the footage is safely downloaded into a primary and back up hard-drive the footage will be viewed and analyzed by a SEJPA Rep. Once the SEJPA Rep signs off the footage will be marked and sent to postproduction. For the sake of repetition a SEJPA Rep will view and sign off on each and every task before we send it to postproduction unless directed otherwise.

The second undertaking of Day One will be Task 1.6 "Aerial Facility Map." This particular task will require a camera change. The UAV will be mounted with a Canon 5D SLR camera or equivalent and mounted with a profession L series or Carl Zeiss prime lens. The facility photographs will be shot at the highest quality raw format for purposes of blowing-up the negative to 48"x36." When the task is completed and the footage is safely saved a SEJPA Rep will review the photographs. Once the photographs are reviewed three will be selected by the SEJPA Rep and sent directly to the lab where they will be blown-up, enhanced and colored, mounted on foam core, affixed to a solid wood veneer, and attached with mounting hardware.

Production Day 2 Phase 2

Day Two of production will entail two aerial tasks and one SOP. There is the possibility that we may be able to shoot three aerial tasks on day one, however, with the movement of the sun in the winter months we are limited to a restrictive amount of usable sunlight. When shadows become long and defined the shot will lose its utilitarian style. With that said, as of this moment the schedule will reflect

that we complete two per day. Task 1.3 "Site Security Inspection" will be Day Two's first objective. An UAV equipped with a high resolution 4K camera will be used to document and inspect 7,500 lineal feet of the perimeter and internal fencing at the SEWRF. Being that this is about a mile and quarter the filming of this will be broken into sections. Each section will be documented with a starting GPS coordinate and ending GPS coordinate. These coordinates will be added in postproduction and will appear within the video on an opening and closing title card. This will give the observer a better understanding of the exact viewing area.

Task 1.4 "Roof Inspections." An UAV equipped with a high resolution 4K camera will inspect and document the condition of approximately 16 different rooftops for a combination of structures within the plant and nearby pumping stations. Each structure will have a title card added in postproduction describing each building. GPS coordinates can be added upon request. These can be cut as individual spots and/or link together into one sequence and/or both.



Task 1.5 "Standard Operating Procedures." The SOP videos will consist of a small agile crew. The personnel involved will include the Producer/Director, the Director of Photography, a camera assistant, and one utility person. The amount of time allotted to shoot these types of corporate or industrial videos differs and is dictated by a myriad of factors. The factors include the number of locations, number of talent, lighting conditions, the number of camera setups, the length of the script, etc ... With that being said, the amount of time needed to complete the principal photography for each of the four individual SOP videos may differ depending on its content, however, for the benefit of this proposal we will provide an educated estimate of the time needed as six hours per SOP video, which would include load-in and wrap time. Keep in mind that this time estimate may be shorter or longer in duration depending on factors that will become evident on the scout day. Each SOP video will be photographed with a professional Black Magic Ursa PL mount camera. Footage will be captured at a 4.6K and/or 4K resolution. The camera will be mounted with a set of pro series cine lenses, which will provide the best value. Essentially, we build a strong foundation by capturing the initial footage at the best quality possible. Dialogue will be captured on-camera, as voice over (V/O), and text will be added into the videos as an overlay. The viewer will visually see, hear, and read the sequence of events of each "Standard Operating Procedure." All the SOP videos will be photographed in a similar utilitarian style and will convey functionality.



Production Day 3 Phase 2

Task 1.2 "Preliminary Treatment Upgrades Project." An UAV mounted with a high resolution 4K camera will document site conditions for the project construction area. Documentation will initially be preformed on Day 3 of this production during the pre-construction stage. On a later date, yet to be decided, a post-construction documentation will take place. Since the site is approximately 17,000 square feet in size the UAV will film tree different passes. There will be a wide shoot, which will give the viewer an overall perspective. The UAV will capture a medium shot crisscrossing the terrain and then employ a lower pass using the same crisscross navigation to give the viewer detail. A title card will be added to each pass describing the location and movement of the UAV. Information can also be added in the lower thirds of the viewing area in postproduction.

Task 1.5 "Standard Operating Procedures," We will begin and complete principle photography for the second SOP video. If time permits, we will begin the 3rd SOP video. Each video will be shot as describe in the section above as seen in "Production Day 2 Phase 2 Task 1.5."

Production Day 4 Phase 2

Task 1.5 continued. We will complete or begin the 3rd SOP video. If time permits we will begin the 4th and final SOP video.

Production Day 5 Phase 2

On Day 5 of Production we will complete the 4th and final SOP video and begin Task 1.7 "SEWRF Virtual Tour Video." We will conclude principal photography with the "SEWRF Virtual Tour Video." Footage from some if not all of the previous tasks can be repurposed and incorporated for this particular video. Whatever is missing we will integrate in by using a mixture of UAV, SLR and Black Magic footage. Once again everything will be shot at a 4K resolution or higher and voice over (V/O) will be added along with text as instructed by SEJPA Reps.

Note: All voice over (V/O) can be conducted off-site in our studio or on-site at the SEJPA facility. The most cost-effective way would be to do the V/O on-site. We could use a small office and we would build a miniature sound room using furniture pads to deaden the echo and hollowness of an office. This is very easy and films with a hundred million-dollar budgets have been known to it the same way.

Postproduction Phase 3

Postproduction in terms of percentages usually makes up anywhere from 40% to 60% of a production. All the footage from every task will be encoded and ingested into an editing system. Files containing that footage will be named and organized accordingly. Each task will be edited, colored, text will be added where it is needed, sound will be added and sweeten, and a rough edit of each task will be encoded for viewing. Each rough edit will be sent directly to the SEJPA Reps for viewing. Changes will be made if needed and a final version in the correct format will be sent to a SEJPA Rep via a "Drop box or Hightail" account.

5. Consultants Fee Estimate

The typical cost associated with industrial and corporate videos average about \$1,000.00 per finished minute. \$700.00 per finished minute or below would be considered as low budget. Taking into account all the objectives above, we have approximately 45 to 55 finished minutes, which is a conservative estimate. Averaging the finished minute time at 50 and multiplying it by \$700.00 we easily have an estimate of \$35,000.00 for completing all of the objectives described by the SEJPA. In the attachment "Labor Hours and Labor Rates Per Task" all the objectives are broken down individually. When the overall cost for each individual task is added together the total overall cost for all tasks equals \$34,450.00. Essentially, we are right on the \$700.00 mark per finished minute, however, we can take a more resourceful approach. Shooting the entire group of tasks in a one to three week span is more cost-efficient. We will cut the budget over 30 percent to complete all objectives at \$470 per finished minute. The overall cost to complete all objectives set forth by the SEJPA is **\$23,500.00**.

We eagerly wait your reply

Sincerely,

Jeff Orsa Producer/Director Television101

SEJPA Preliminary Schedule

Total Hrs	24	16	40	40	40	40	56	256
Hrs	ω	ω	ω	œ	ω	ω	56	Total Hours
Personnel	SEJPA Rep, Orsa, Butka, Kokotos	Orsa, Kokotos	Orsa, Kokotos, Butka, +2 TBD	Orsa, Kokotos, Butka, +2 TBD	Orsa, Kokotos, Butka, +2 TBD	Orsa, Kokotos, Butka, +2 TBD	Lakan de Leon	
Location	All	Land Outfall Replacement, Areial Facility TBD	Site Security Inspection, Roof Inspections, 1st SOP TBD	Priminary Treatment Upgrades Project, 2nd SOP TBD	3rd and 4th SOP TBD	Complete 4th SOP, TBD, SEWRF Virtual Tour TBD	Studio Off-Site	
Task	Scout	Task 1.1, Task 1.6	Task 1.3, Task 1.4, Task 1.5 1st SOP	Task 1.2, Task 1.5 2nd SOP	Task 1.5 Complete 3rd SOP and begin 4th and Final SOP, complete both if possible	Task 1.5 Complete 4th and Final SOP, Task 1.7	Postproduction	
Date	TBD Scout	TBD Day 1	TBD Day 2	TBD Day 3	TBD Day 4	TBD Day 5	TBD Day 6 through Day 12	

SEJPA Preliminary Schedule

Labor Hours and Labor Rates Per Task

Overall Total Cost		\$2,200.00	8		\$1,100.00	Overall Total Cost				\$1,560.00			Overall Total Cost				\$1,850.00		Overall Total Cost				¢1 560 00	00.000/14	
Direct Cost	\$1,000.00	\$600.00	\$600.00		Total Overall Cost 1/2 Pate	Direct Cost	\$500.00	\$300.00	\$360.00	\$400.00			Direct Cost	\$625.00	\$375.00	\$450.00	\$400.00		Direct Cost	\$500.00	\$300.00	\$360.00		\$400.00	
Labor Cost	\$1,000.00	\$600.00	\$600.00			Labor Cost	\$500.00	\$300.00	\$360.00				Labor Cost	\$625.00	\$375.00	\$450.00			Labor Cost	\$500.00	\$300.00	\$360.00			
Labor Hours	8	ø	8		24	Labor Hours	4	4	4			12	Labor Hours	ы	2	5		15	Labor Hours	4	4	4			12
Hourly Rate	\$125.00	\$75.00	\$75.00		Total Labor Hours	Hourly Rate	\$125.00	\$75.00	\$90.00			Total Labor Hours	Hourly Rate	\$125.00	\$75.00	\$90.00		Total Labor Hours	Hourly Rate	\$125.00	\$75.00	\$90.00			Total Labor Hours
Job Category	Producer	D.P.	UAV Team Leader			Job Category	Producer	UAV Team Leader	Post-Production	Equipment Rental & Storage			Job Category	Producer	UAV Team Leader	Post-Production	Equipment Rental & Storage		Job Category	Producer	UAV Team Leader	Post-Production	Equipment Rental &	Storage	
Task	Scout Task Task 1.1					Task				Task 1.2		Task				Tack 1 3									

Labor Hours and Labor Rates Per Task

Labor Hours and Labor Rates Per Task

Overall Total Cost				\$2,140.00			Overall Total Cost						41 OCO 00	\$4,300.00						\$4,960.00	\$19,840.00	
Direct Cost	\$750.00	\$450.00	\$540.00	\$400.00			Direct Cost	\$750.00	0	0	\$450.00	\$360.00	\$360.00	\$1,440.00	\$650.00	\$150.00	\$200.00	\$200.00	\$400.00	Single Video Total Overall Cost	Total Overall Cost for all Four Videos Completed out	of Sequence
Labor Cost	\$750.00	\$450.00	\$540.00				Labor Cost	\$750.00	Waived	Waived	\$450.00	\$360.00	\$360.00	\$1,440.00								
Labor Hours	9	9	9		81	01	Labor Hours	9	0	0	9	9	9	16						40	160	
Hourly Rate	\$125.00	\$75.00	\$90.00		Total Labor	Hours	Hourly Rate	\$125.00	\$125.00	\$100.00	\$75.00	\$60.00	\$60.00	\$90.00						Total Labor Hours	Total Labor Hours For all Four Videos if Completed	out of Sequence
Job Category	Producer	UAV Team Leader	Post-Production	Equipment Rental & Storage		. (Job Category	Producer	Director	Writer	D.P	Camera Assistant	Utility	Post-Production	Camera Package	Sound	Grip	Lighting	Storage			
Task	Task 1.4 Task 1.5																					

Labor Hours and Labor Rates Per Task

Labor Hours and Labor Rates Per Task

Direct Cost Overall Total Cost	\$500.00 \$300.00 \$1,500.00		Direct Cost Overall Total Cost		0	0	\$450.00	\$360.00	\$450.00 \$4,100.00		\$650.00				
Labor Cost Direc	\$500.00 \$300.00 \$1.		Labor Cost Direc	\$750.00 \$		Waived	\$450.00	\$360.00	\$450.00	\$1,440.00 \$1,					7
Labor Hours	4 4	ω	Labor Hours	9	0	0	9	9	9	16		40	2		
Hourly Rate	\$125.00 \$75.00	Total Labor Hours	Hourly Rate	\$125.00	\$125.00	\$100.00	\$75.00	\$60.00	\$75.00	\$90.00		Total Labor	Hours		
Job Category	Producer UAV Team Leader Photo Lab and mounting 3 Facility Shots		Job Category	Producer	Director	Wtiter	D.P.	Camera Assistant	UAV	Post_Production	Camera Package				
Task	Task 1.6		Task						Task 1.7						

Labor Hours and Labor Rates Per Task

Jeff Orsa Partial Resume

Education

California State University, Northridge Bachelor of Arts in History 2013 Magna Cum Laude

Experience

Year	Role	Production	Company
2015	Producer/Director	Lemonade San Francisco "Cups and Bridges"	Television101
2015	Producer/Director	Ilan Dei Studios in Conjunction with Lemonade Restaurant Chain "Lemons in the Sky	Television101
2015	Producer/Director	"Come & Get It" Television Pilot	Television101
2015	Producer/ Director	"The Hops Highway"	Global Strategic and Television101
2015	Producer/Director	Lemonade Commercial and multi-media Campaign	Television101
2015	Producer/Director	Lemonade UAE, Dubai	Television101
2014	Producer/Director/DP	Tiburon Corporate Research Affiliates	Television101
2014	Producer/Director/DP	Research Affiliates, Harry Markowitz "Portfolio Theory and the Nobel Prize"	Television101
2014	Producer/Director/DP	"When Life Gives You" TV Pilot	Television101
2014	Producer/Director/DP	RAFI multi-media Campaign	Television101
2014	Producer/Director/DP	Pere de Temp Watch Campaign	Television101
2013	Producer/Director/DP	Isharya multi-media Campaign	Television101

2013	Producer/Director	Los Angeles Dodgers "Mike & Sam	Television101
2013	Producer/Director	Nike "Motel No Tell"	Television101
2013	Producer/Director/DP	Authentic Ireland multi-media Campaign	Television101
2013	Producer/Director/DP	Seah Watch Campaign	Television101
2013	Producer/DP/Editor	Fuel TV "Good Advice"	Television101

Once again this is a partial list of projects consisting of the last three years. A full list of work encompassing my complete career is available upon request. Earlier work along with longer formatted projects can be found on the International Movie Data Base (IMDB) web site. It is easy to find, just type in IMDB then search my name and a whole host of projects that I have been involved with will pop up.

Once Again,

Thank You.

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: Director of Operations
- SUBJECT: APPROVE PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR TRUSSELL TECHNOLOGIES, INC.

RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Authorize the General Manager to enter into a Professional Engineering Services Agreement with Trussell Technologies, Inc. for an amount not to exceed \$44,208; and,
- 2. Discuss and take action as appropriate.

BACKGROUND

Trussell Technologies, Inc. is an environmental engineering firm that focuses on the quality and treatment of water, wastewater, and recycled water. Areas of practice include the design and evaluation of processes for the treatment of drinking water and the reclamation of domestic wastewater; the impact of water quality on the materials in treatment plants and distribution systems; and the significance of water contaminants to the public and the environment.

The SEJPA has previously contracted with Trussell Technologies for the design and process modeling of the Performance Optimization of the Activated Sludge Project, the Advanced Water Purification Project, the Operations Plan, and the Potable Reuse Study, as well as various projects to enhance the treatment process through automation.

Dr. Shane Trussell is a Principal at Trussell Technologies, Inc. and has a B.S. in Chemical Engineering from the University of California (U.C.) at Riverside, a M.S. in Environmental Engineering from U.C. Los Angeles, and a Ph.D. in Environmental Engineering from U.C. Berkeley. He is a registered Civil Engineer in the State of California with more than 17 years of experience who has authored more than 80 publications.

DISCUSSION

The SEJPA staff is interested in continuing the relationship with Trussell Technologies for technical support on improving and optimizing the treatment system operations at the San Elijo Water Reclamation Facility (SEWRF). In 2010, Trussell partnered with SEJPA staff to write an

Operations Plan for the wastewater treatment process, which documents system settings and parameters that provide optimum treatment at the SEWRF. The Operations Plan is a valuable tool for training new employees, system diagnostics, and continuity of operations planning.

Since the development of the Operations Plan in 2010, the SEJPA has added new systems and automation to the SEWRF. Staff seeks to incorporate these new elements into an updated Operations Plan.

The SEJPA also seeks an engineer's review of the membrane treatment system (microfiltration and reverse osmosis) operational data to develop recommendations on filter cleaning and chemical addition to optimize treatment performance, membrane life, chemical usage, and energy consumption.

Based on these tasks, Trussell Technologies has provided a proposal to continue support of SEJPA staff with process engineering and water quality services. The proposal includes time and materials, not-to-exceed services in the amount of \$44,208.

FINANCIAL IMPACT

Funds for these services in the amount of \$44,208 were included in the Fiscal Year 2015-16 Budget and are available for commitment to this contract. The cost for this contract will be shared by Wastewater Operations (\$11,160) and Water Reclamation (\$33,048).

It is therefore, recommended that the Board of Directors:

- 1. Authorize the General Manager to enter into a Professional Engineering Services Agreement with Trussell Technologies, Inc. for an amount not to exceed \$44,208; and,
- 2. Discuss and take action as appropriate.

Respectfully submitted,

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

Attachment: Proposal dated January 5, 2016 from Trussell Technologies, Inc.

ATTACHMENT



January 5, 2016

Christopher Trees, P.E. Director of Operations **San Elijo Joint Powers Authority** 2695 Manchester Avenue Cardiff by the Sea, CA 92007

Subject: Update to the 2013 Operations Plan as well as Process Engineering and Water Quality Services

Dear Chris,

We are pleased to submit the enclosed proposal to the San Elijo Joint Powers Authority (SEJPA) for engineering services. These tasks will support the operations of the San Elijo Water Reclamation Facility (SEWRF) with an update to the optimization and implementation of the operations plan at the SEWRF with the following:

Scope of Work

Task 1 – Update the Operations Plan to Practices in 2016

This task will begin with a meeting to review the existing operations plan to discuss necessary modifications and necessary updates to meet current practice. The document will remain user friendly, but operations staff has also indicated that concentrations or chemical doses, not just the gallons of chemical, would be useful. The team will discuss comments like these and ensure that the Operations Plan remains a relevant, user-friendly document for operations staff and management.

Task 2 – Membrane Performance Data Tracking and Updates

The operational data collected by the SEJPA will continue to be evaluated graphically to remain current on any operational issues. This task will provide technical support to SEJPA staff as well as providing some time for as needed field support.

Task 3 – Technical Analyses of Treatment Processes and Water Quality

This task will provide technical support to SEJPA staff with evaluating treatment plant efficiencies, the significance of water quality on recycled water applications, biological process performance and demineralization equipment. Technical advice will be provided along with site visits on an as needed basis.



The SEJPA staff is extremely dedicated and possesses a willingness to innovate in a manner that really moves industry forward. This is done by embracing the latest knowledge and harnessing its potential to improve the efficiency of the treatment facilities, which is something our company specializes in. We admire this spirit and really look forward to working with you as SEJPA continues its evolution forward.

Respectfully, Trussell Technologies, Inc.

5. Twell

R. Shane Trussell, Ph.D., P.E., BCEE President

Professional Services Fee

		R. Shane Trussell	Aleks Pisarenko	Brett Faulkner	Task Total
Task	Description	\$240	\$168	\$122	
1	Update Operations Plan	24	0	80	\$15,520
2	Membrane Performance Data Tracking	24	96	0	\$21,888
3	Technical analyses on process and water quality	8	0	40	\$6,800
ΤΟΤΑ	L	56	96	120	\$44,208

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

TO: Board of Directors San Elijo Joint Powers Authority

FROM: Director of Finance and Administration

SUBJECT: ELECTION OF OFFICERS AND SCHEDULE OF BOARD MEETINGS

RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Appoint the Chairperson and Vice Chairperson for the 2016 SEJPA Board of Directors;
- 2. Select the regular meeting place and time for 2016; and
- 3. Discuss and take action as appropriate.

DISCUSSION

In accordance with Article 3 of the San Elijo Joint Powers Authority (SEJPA) Restatement of Agreement between the Cardiff Sanitation District and the Solana Beach Sanitation District establishing the SEJPA, the SEJPA Board is required to appoint a chairperson and vice chairperson and establish the time and place for its regular meeting by the second meeting of each calendar year. Historically, these appointments occur in January with a term period of one year. The SEJPA's regular meeting schedule has been generally set as 9:00 a.m. on the second Monday of each month, with no meeting in August. It is proposed that we follow this schedule for 2016, with the exception for the month of March, where the proposed meeting is March 7, 2016. The regular meetings have been held at the San Elijo Water Reclamation Facility, located at 2695 Manchester Avenue, Cardiff-by-the-Sea, CA 92007. The proposed scheduled meetings for 2016 is attached.

It is therefore recommended that the Board of Directors:

- 1. Appoint the Chairperson and Vice Chairperson for the 2016 SEJPA Board of Directors;
- 2. Select the regular meeting place and time for 2016; and
- 3. Discuss and take action as appropriate.

Respectfully submitted,

Paul F. Kinkel

Director of Finance and Administration

Attachment: Proposed 2016 Board Meeting Dates

BOARD OF DIRECTORS San Elijo Joint Powers Authority

PROPOSED 2016 BOARD MEETING DATES

January 11 February 8 March 7 April 11 May 9 June 13 July 11 August – No Meeting September 12 October 10 November 14 December 12



SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: General Manager

SUBJECT: PROPOSED 2016 CLASSIFICATION AND COMPENSATION SCHEDULE

RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Approve the proposed SEJPA Classification and Compensation Schedule and Organizational Chart; and
- 2. Discuss and take action as appropriate.

BACKGROUND

The SEJPA employees are currently operating under a 4-year labor agreement (Resolution No. 2012-06), which is scheduled to expire June 30, 2016. The resolution includes the requirement to conduct a Classification and Compensation analysis prior to the end of the labor agreement. In September 2015, the Board directed the General Manager to complete a Classification and Compensation analysis. Under the supervision of the General Manager, a Classification and Compensation analysis was completed and presented to the SEJPA Board on December 14, 2015. The review provided an analysis and evaluation on the following areas:

- Job descriptions and responsibilities
- Employee salaries as compared to the local labor market
- Job classification structure
- Compliance with statutory requirements regarding pay equity legislation

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The survey was conducted using local cities and agencies that have similar characteristics, functions, and services as the SEJPA. The surveyed group included:

- City of Encinitas
- City of Escondido
- City of Oceanside
- City of Solana Beach
- Encina Joint Powers Authority
- Leucadia Water District
- Olivenhain Municipal Water District
- Padre Dam Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- Vallecitos Water District

Monthly salary ranges were obtained from the surveyed agencies for comparable positions to each SEJPA labor classification. In a few cases, some agencies had two positions, one with greater and one with less responsibility and requirements, than that of the SEJPA. In that situation, the position with the greatest level of overlapping responsibility, certification, education, and duties was selected. In a few instances, both the lower and higher level positions were included to recreate a melded pay range.

The collected salary data was graphed for each position. The highest maximum and lowest minimum salary points create the graphed range and the red bar indicates the average maximum salary for the position group. The wide blue bar indicates the SEJPA salary range for the position. Figures No. 1 through No. 4 illustrate SEJPA monthly salary ranges compared to the salary range of the survey pool.

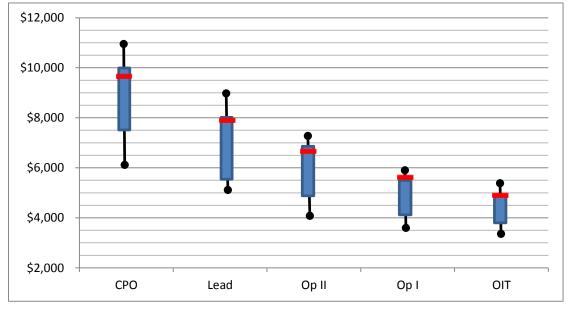


FIGURE No. 1 – Operations

Survey average max SEJPA min and max ranges CPO - Chief Plant Operator Lead - Lead Operator Op - Operator OIT - Operator in Training

Survey min and max ranges

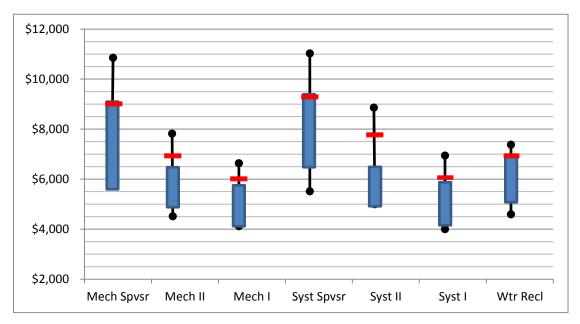


FIGURE No. 2 - Maintenance, Systems and Recycled Water

Mech Spvsr – Mechanical System Supervisor Mech I & II – Mechanic I & II Syst Supvsr - Systems Integration Supervisor Syst I & II - Systems Integration Technician I & II Wtr Recl - Water Reclamation Specialist

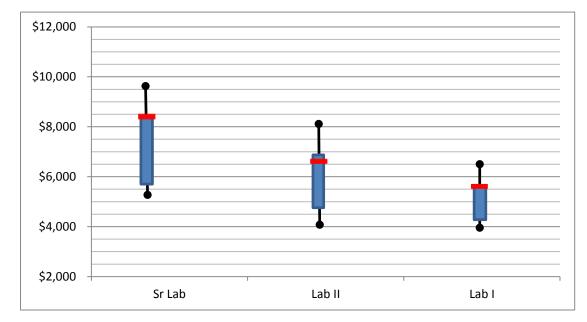


FIGURE No. 3 – Laboratory

Sr. Lab position has been revised to reflect updated information.

Sr Lab - Senior Laboratory Analyst Lab I & II - Lab Analyst I & II

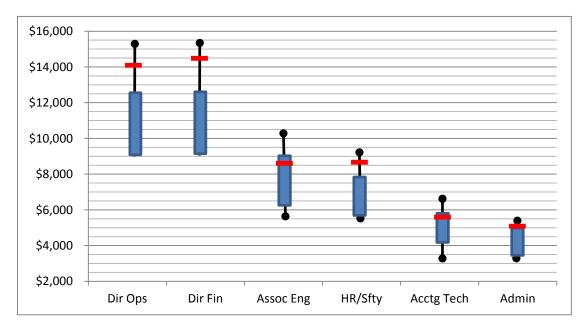


FIGURE No. 4 – Management, Engineering, and Administration

The SEJPA evaluated the survey data based on the average monthly ranges. The average is the sum of the data divided by the number of data points. Using the average to evaluate datasets can be misleading when the dataset includes outlier data points. To ensure the data was not being influenced by outliers, the median or the "middlemost" data point was evaluated to determine if the average was reasonable. As shown in Tables No. 1 - 4, the comparison of the SEJPA salaries to either the median or the average is relatively similar, and is not significant enough to impact the recommendations of the analysis.

For purposes of evaluating the salary ranges, the SEJPA utilized the average exclusively as a measure of central tendency. The tables below show SEJPA's percentage difference to both the average and the median:

Table No. 1 - Operations

	СРО	Lead	Op II	Ор І	ΟΙΤ
SEJPA to Average	2.0%	3.6%	2.7%	2.9%	5.0%
SEJPA to Median	2.3%	4.8%	3.2%	1.6%	2.9%

Table No. 2 – Maintenance, Systems and Recycled Water

	Mech Spvsr	Mech II	Mech I	Syst Spvsr	Syst II	Syst I	Wtr Recl
SEJPA to Average	3.0%	-5.0%	-4.4%	1.7%	-15.4%	-6.6%	2.6%
SEJPA to Median	8.6%	-7.3%	-3.1%	4.9%	-12.5%	-3.3%	3.7%

Table No. 3 Laboratory

	Sr Lab	Lab II	Lab I
SEJPA to Average	-0.4%	4.2%	1.1%
SEJPA to Median	-5.9%	3.6%	1.0%

Table No. 4 Management, Engineering, and Administration

	Dir Ops	Dir Fin	Assoc Eng	HR/Sfty	Acctg Tech	Admin
SEJPA to Average	-11.4%	-14.0%	4.0%	-8.5%	5.3%	0.7%
SEJPA to Median	-10.0%	-15.3%	4.5%	-9.2%	2.0%	-2.9%

DISCUSSION

The goal for the SEJPA is to offer salaries within 5 percent (plus or minus) of the market average. This allows for the SEJPA to develop a classification and compensation schedule that is market competitive and that provides some flexibility for addressing market demands.

Recommended Pay Range Increases

The SEJPA has two staffed positions that are more than 10 percent below the survey group average. Both are Director level positions that have executive level responsibilities. It is recommended to increase the salary ranges of both positions to \$13,468, which is minus 5 percent of the group average for the Director of Operations position.

Director of Finance/Administration	(adjust top of salary range from \$12,552 to \$13,468)
Director of Operations	(adjust top of salary range from \$12,552 to \$13,468)

It is also recommended to adjust the salary ranges of the Mechanical Systems Supervisor and the Sr. Laboratory Analyst by 6 percent and 4 percent, respectively. The Mechanical System Supervisor provides redundancy to the Chief Plant Operator, which requires extensive experience and state certification. The General Manager recommends raising the Mechanical System Supervisor pay range commensurate to that of the Chief Plant Operator. Both positions respond to emergency calls and provide off-hours on-call support for the agency, and both hold the highest level of operation certification and knowledge of the plant.

The General Manager recommends raising the Sr. Laboratory Analyst salary range 4 percent such that it is at plus 5 percent of the survey group average. This position provides oversight of the SEJPA laboratory, laboratory staff, QA/QC policies, and state certification program. For these reasons, it is recommended to use the high end of the salary range goal for this position.

The proposed salary range adjustments to the Mechanical Systems Supervisor and Sr. Laboratory Analyst are as follows:

Mechanical Systems Supervisor	(adjust top of salary range from \$9,191 to \$9,740)
Sr. Laboratory Analyst	(adjust top of salary range from \$8,375 to \$8,790)

Recommended Classification Changes

In conducting the Classification and Compensation analysis, the General Manager examined the effectiveness and efficiency of the existing organizational structure. In general, the Agency is effective and efficient. However, advancement in technology has brought substantial innovations into the water and wastewater industry, including the purification of wastewater to drinking water. Embracing technology and process automation will likely provide the greatest opportunity to gain further efficiencies and expand services into new revenue markets. This will require investments in both technology and in personnel with the necessary skills. To achieve this, the General Manager proposes to elevate the Systems Integration Supervisor to the SCADA Manager. This position will be responsible for the management of the SEJPA's wastewater and recycled water SCADA systems and will have one direct report. The intent is to provide more resources for process automation, remote monitoring and control, and data acquisition and management.

To offset potential costs associated with the recommended classification and compensation changes, the General Manager recommends eliminating the HR/Safety Administrator position and changing the Administrative Assistant position. The SEJPA can outsource HR functions to the Encina Wastewater Authority through the employee-lease agreement. Other duties of this position will be reassigned within the SEJPA. The Administration Assistant position is recommended to be changed into a series position (Administration Assistant I and II), which will provide an entry level position with a lower salary.

The proposed Classification changes are as follows:

New Classifications SCADA Manager Administration Assistant I Administration Assistant II	(salary range \$7,431 to \$10,600) (salary range \$2,253 to \$3,520) (salary range \$3,484 to \$5,121)
Eliminated Classifications Systems Integration Supervisor Administration Assistant HR/Safety Administrator	(salary range \$6,443 to \$9,480) (salary range \$3,484 to \$5,121) (salary range \$5,650 to \$7,774)

FISCAL IMPACT

New Cleasifiestics

The potential FY2015-16 fiscal impact of the proposed Classification and Compensation Schedule is projected to be cost neutral. The elimination of the HR/Safety administrator position offsets anticipated expenses associated with Encina labor sharing, organizational changes, and position range increases. The proposed Classification and Compensation Schedule is consistent with the Approved FY2015-16 Budget and has no anticipated financial impacts to the Member Agencies.

It is therefore recommended that the Board of Directors:

- 1. Approve the proposed SEJPA Classification and Compensation Schedule and Organizational Chart; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

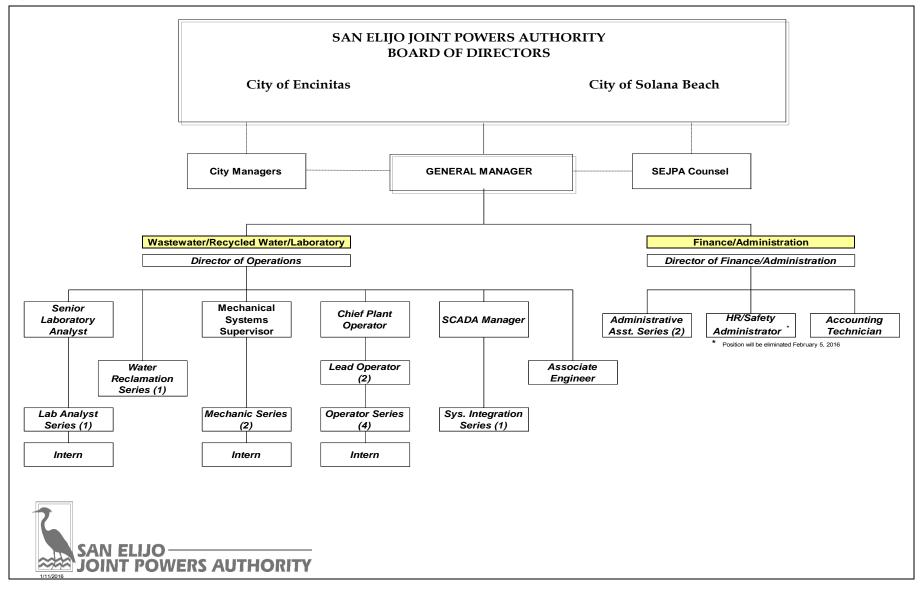
Michael T. Thornton, P.E. General Manager

SAN ELIJO JOINT POWERS AUTHORITY **CLASSIFICATION AND COMPENSATION SCHEDULE** January 11, 2016

	Full-Time	Compensation			
	Equivalent	Monthly		Annual	
Position	(FTE)	Minimum	Maximum	Minimum	Maximum
Accounting Technician	1	\$ 4,133	\$ 5,897	\$ 49,596	\$ 70,764
Administrative Assistant I	1	2,253	3,520	27,036	42,240
Administrative Assistant I I	1	3,484	5,121	41,808	61,452
Human Resources/Safety Administrator ⁽¹⁾	1	5,650	7,774	67,800	93,288
Director of Operations	1	9,160	13,468	109,920	161,616
Associate Engineer	1	6,262	8,978	75,144	107,736
Director of Finance/Administration	1	9,160	13,468	109,920	161,616
General Manager (Under Contract)	1	15,212	15,212	182,539	182,539
Laboratory Series	2				
Laboratory Analyst I		4,169	5,693	50,028	68,316
Laboratory Analyst II		4,744	6,812	56,928	81,744
Senior Laboratory Analyst		5,778	8,790	69,336	105,480
Mechanic Series	3				
Mechanic I		4,212	5,750	50,544	69,000
Mechanic II		4,831	6,597	57,972	79,164
Mechnical Systems Supervisor		5,623	9,740	67,476	116,880
Systems Integration Series	2				
Systems Integration Technician I		4,212	5,749	50,544	68,988
Systems Integration Tecnhnician II		4,831	6,597	57,972	79,164
SCADA Manager		7,431	10,600	89,172	127,200
Wastewater Treatment Operator Series	4				
Operator-In-Training		3,870	5,284	46,440	63,408
Operator I		4,212	5,750	50,544	69,000
Operator II		4,831	6,927	57,972	83,124
Lead Operator	2	5,517	8,106	66,204	97,272
Chief Plant Operator	1	7,565	9,840	90,780	118,080
Water Reclamation Series	1	-	-		
Water Reclamation Specialist		4,928	7,067	59,136	84,804

⁽¹⁾ This position will be eliminated effective February 5, 2016

Organizational Chart



AGENDA ITEM NO. 17

SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

January 11, 2016

TO: Board of Directors San Elijo Joint Powers Authority

FROM: Director of Operations

SUBJECT: SAN ELIJO OCEAN OUTFALL 2015 ANNUAL INSPECTION REPORT

RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Accept and file the San Elijo Ocean Outfall Year 2015 Annual Inspection Report prepared by Marine Taxonomic Services, Ltd.; and
- 2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Ocean Outfall was commissioned in 1965 to discharge treated effluent from the San Elijo Water Reclamation Facility. The outfall was upgraded and expanded in 1974 to include discharge capacity for the City of Escondido's Hale Avenue Resource Recovery Facility. The length of the outfall from the shoreline into the ocean is 8,000 feet, with an end depth of approximately 150 feet below mean sea level. The diffuser section of pipe is composed of 1,176 feet of 48-inch pipe with 200 individual 2-inch diameter diffuser ports. The discharge of treated wastewater to the ocean is subject to strict environmental regulations that stipulate dilution requirements, distance from shore, and depth of water for which the effluent is discharged. To ensure that the ocean outfall is in sound operating condition and that environmental regulations are being met, the San Elijo Joint Powers Authority (SEJPA) inspects the outfall annually.

DISCUSSION

The SEJPA contracted with Marine Taxonomic Services, Ltd (MTS) to complete the 2015 annual outfall inspection. Dive operations were conducted between August 3rd and September 10th, 2015. Diving staff conducted a general inspection of the outfall corridor from approximately the 100-foot ocean depth level to the shore where the pipeline becomes fully buried. Inspection activity was attentive to the following:

- Evidence of surface failure of exposed concrete;
- Cracks or other deficiencies in the outfall;

- Joint integrity;
- Leaks or evidence of degradation;
- Attrition or the loss of the ballast materials as a result of physical, biological, or geologic processes;
- Scour of the nearby marine sediments;
- Inspection of exposed portholes and pile supports;
- Evaluation of cathodic protection at exposed anodes; and
- Clearing kelp that hindered inspection activities or threatened ballast material.

MTS reports that the San Elijo Ocean Outfall was found to be in excellent overall condition. Offshore areas of the outfall were stable and showed no signs of ballast movement; inshore ballast rock showed no significant signs of movement since the 2003 reballasting project. The outfall showed no signs of spalling, cracking, or other deficiencies in the concrete pipe. All observed joints were in alignment with no evidence of leaks. The near shore inspection revealed kelp growth on the pipeline and the surrounding ballast. Because kelp has considerable buoyancy, it was cleared to minimize the threat of ballast movement.

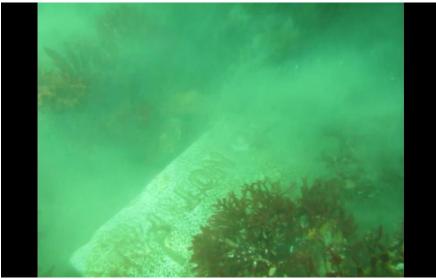


Figure 1 - Porthole cover with zinc @ approximately 65% remaining life expectancy.

The outfall was constructed with five access portholes that have metal covers. These covers use sacrificial zinc anodes for corrosion protection. The anodes on Portholes 1, 2, 3, 4, and 5 appear to have considerable mass remaining. The last anode installed was on porthole 4 in 2011.

During each annual inspection, efforts are made to inspect the 35 pile supports that secure the inshore section of the ocean outfall. Typically, these pile supports are covered by sand and cannot be inspected. This year, 17 of the pile supports were exposed and able to be inspected. All of the exposed pile supports have good, working anodes attached.

SUMMARY AND RECOMMENDATIONS

The following points summarize the major findings of this outfall inspection:

- In general, the San Elijo Ocean Outfall was found to be in excellent overall condition.
- Ballast rock shows no significant sign of movement since the last reballasting project.
- The outfall showed no signs of spalling, rust staining, or cracking and there was no leakage observed from pipe joints or any other location on the outfall.
- Anodes that were visible that could be inspected were in good condition and have considerable mass remaining.
- Overgrown kelp was removed from the pipeline.
- The exposed pile supports surveyed during this inspection were found to be completely protected.
- One diffuser port was blocked and cleared by hand. Some biofouling was observed in the diffuser ports. It is recommended that the biofouling be cleared when it starts to affect flow. This can be easily cleaned in one day by rebreather divers with hand held brushes.



Figure 2 – Pipe Joint

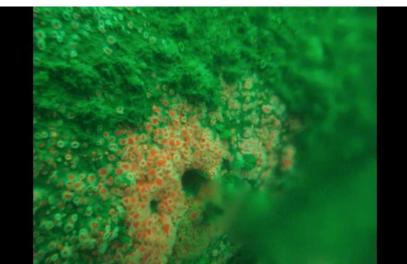


Figure 3 – Diffuser Port

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

- Complete a Remote Operated Vehicle (ROV) or rebreather dive survey of the diffuser section of the outfall pipe at least every two years.
- Continue to cut all kelp off the pipeline and ballast pile to minimize movement.
- Annually monitor and inspect all visible pile support structures.
- Include the pipe protection cowling located at Station 09+75 in the annual pile support inspection.
- Perform "rapid response" overview inspections after periods of extremely high surf or earthquakes in order to identify damage and potential for failure due to scour, high-velocity currents, or major seafloor movement.
- During future inspections, anodes should be replaced when they become ineffective against preventing corrosion to pipe and pile structures.

The full report and a video of the dive inspection is on file in the SEJPA office and available for review.

It is therefore recommended that the Board of Directors:

- 1. Accept and file the San Elijo Ocean Outfall Year 2015 Annual Inspection Report prepared by Marine Taxonomic Services, Ltd; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

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

Attachment: San Elijo Ocean Outfall Year 2015 Annual Inspection Project Summary, Marine Taxonomic Services, Ltd., December 2015

ATTACHMENT

PROJECT SUMMARY

Marine Taxonomic Services, Ltd. (MTS) performed the Year 2015 San Elijo Ocean Outfall annual inspection at the request of the San Elijo Joint Powers Authority (SEJPA) August 3-4, 2015. MTS is an environmental consulting firm committed to providing innovative solutions to help our clients create valuable scientific knowledge while promoting growth in a sustainable manner. MTS provides its clients with a full range of services in marine environments along with technical dive and inspection services. The inspection involved diver examination of the entire outfall, evaluation and examination of the diffusor ports, evaluation of exposed portholes, evaluation of cathodic protection at exposed anodes, a pile support survey, kelp clearing, and a multibeam survey with generated pipeline cross sections.

Photo and video documentation were collected along the entire outfall. The purpose of the inspection was to look for evidence of spalling of the exposed concrete surfaces, cracks or other signs of wear or degradation of the outfall structure. This includes inspecting joint integrity for leaks or evidence of degradation, inspecting diffuser flow, evaluating for other potential hazards and checking attrition or the loss of efficacy of the pipe ballast material.

In general, the San Elijo Ocean Outfall was found to be in excellent overall condition. All areas of the pipeline were stable and the ballast showed minimal signs of movement based on the diver and multibeam data. The outfall showed no signs of spalling, rust staining, or cracking and there was no leakage detected from pipe joints or any other locations on the outfall. Anodes on the exposed manholes were in good condition and have greater than 50% remaining life expectancy. The pile support section of the outfall was about half buried with sand. All exposed metallic structures are currently protected.

