#### AGENDA SAN ELIJO JOINT POWERS AUTHORITY MONDAY SEPTEMBER 14, 2015 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
  - John Boyle 10 Years of Service
  - Michael Henke 15 Years of Service

### 6. \* CONSENT CALENDAR

- 7. \* APPROVAL OF MINUTES FOR THE JULY 13, 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. \* SCADA UPGRADES PROJECT UPDATE
- 12. \* VILLAGE PARK RECYCLED WATER PROJECT UPDATE
- 13. \* AS-NEEDED PAINTING AND COATING CONTRACT AUTHORIZATION

#### 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. <u>BUILDING IMPROVEMENT PROGRAM</u>

- 1. Review the draft Building Improvement Program Report and provide guidance and comments to Staff; and
- 2. Discuss and take action as appropriate.

Staff Reference: General Manager

#### 16. <u>AWARD OF CONTRACT FOR STATE REVOLVING FUND (SRF) LOAN SUPPORT</u> <u>AND CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PLUS</u> <u>DOCUMENTATION</u>

- 1. Approve Professional Service Agreement with Dudek for SRF and CEQA plus Support for an amount not to exceed \$123,340; and
- 2. Discuss and take action as appropriate.

Staff Reference: Director of Finance and Administration

#### 17. <u>AWARD OF CONTRACT FOR THE 2016 RECYCLED WATER COST OF SERVICE</u> <u>RATE STUDY</u>

- 1. Approve the Agreement with Raftelis Financial Consultants for the San Elijo Joint Powers Authority Recycled Water Cost of Service Study for an amount not to exceed \$16,817; and
- 2. Discuss and take other action as appropriate.

Staff Reference: Director of Finance and Administration

#### 18. CLASSIFICATION AND COMPENSATION STUDY

- 1. Provide guidance to the General Manager for the completion of a Classification and Compensation Study; and
- 2. Discuss and take other action as appropriate.

Staff Reference: General Manager

#### 19. <u>GENERAL MANAGER'S REPORT</u>

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

#### 20. <u>GENERAL COUNSEL'S REPORT</u>

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

#### 21. BOARD MEMBER COMMENTS

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

#### 22. CLOSED SESSION

#### None

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".

#### 23. <u>ADJOURNMENT</u>

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Monday, October 12, 2015 at 9:00 a.m.

#### NOTICE:

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

The agenda package and materials related to an agenda item submitted after the packet's distribution to the Board is available for public review in the lobby of the SEJPA Administrative Office during normal business hours. Agendas and minutes are available at <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: September 9, 2015

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

#### SAN ELIJO JOINT POWERS AUTHORITY MINUTES OF THE BOARD MEETING HELD ON JULY 13, 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, July 13, 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 9:02 a.m.

#### 2. <u>ROLL CALL</u>

Directors Present:

Catherine S. Blakespear Ginger Marshall Mark Muir David Zito

Michael Thornton

**Christopher Trees** 

Marisa Buckles

Jennifer Basco

Adriana Ochoa

Mohammad "Mo" Sammak

Greg Wade

Paul Kinkel

None

Directors Absent:

Others Present: General Manager Director of Operations Director of Finance & Administration HR/Safety Administrator 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

#### SolarOpia

Ian Stewart

**Bill Wilson** 

#### 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>

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

Motion carried with unanimous vote of approval.

Consent Calendar:

Agenda Item No. 7	Approval of Minutes for the June 8, 2015 meeting						
Agenda Item No. 8	Approval for Payment of Warrants and Monthly Investment Report						
Agenda Item No. 9	San Elijo Water Reclamation Facility Treated Effluent Flows – Monthly Report						
Agenda Item No. 10	San Elijo Joint Powers Authority Recycled Water Program – Monthly Report						
Agenda Item No. 11	Village Park Recycled Water Project Update						

#### 12. ITEMS REMOVED FROM CONSENT CALENDAR

None

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

Paul Kinkel, Director of Finance and Administration gave a brief history on the use of financing with municipal bonds and state loans for wastewater treatment and ocean outfall infrastructure upgrades and expansion at the San Elijo Water Reclamation Facility (SEWRF). The 2015 Facility Plan for the SEWRF identified eleven capital projects that were recommended for construction in the next four years. Mr. Kinkel stated that staff evaluated each project for purpose, necessity, and affordability of financing, and confirmed that the Member Agencies' sewer rate structure can support the debt obligation of these projects. The cost of the projects is estimated at \$22.4 million. The General Manager stated many of these projects will replace or upgrade infrastructure that was built roughly thirty years ago.

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

1. Authorize the General Manager to request proposals from underwriters to pursue municipal bond financing of approximately \$22.4 million.

Motion carried with unanimous vote of approval.

#### 14. <u>RECYCLED WATER CAPITAL PROJECT BOND FINANCING</u>

Paul Kinkel, Director of Finance and Administration gave a brief history on the use of state loans, private placement loans, and local agency funding for Recycled Water infrastructure upgrades and expansion. The SEJPA currently has a series of planned or ongoing recycled water capital projects, including, extending recycled water pipelines to serve new customers, adding a new storage reservoir, and relocating pipelines that are in conflict with the Caltrans I-5 Freeway Widening Project. The total value of these projects is approximately \$8.0 million. Grant funding in an amount of \$2.1 million and cash in the amount of \$1.1 million are available for these projects. The estimated financing to complete these projects is approximately \$4.8 million.

Mr. Kinkel stated that staff evaluated and confirmed the ability of the Recycled Water Program to service the proposed debt. Based on predicted revenues, the program generates sufficient revenue to support additional debt service. The program's cash balance will grow in future years, creating financial strength and ability to address longterm infrastructure maintenance.

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

1. Authorize the General Manager to request proposals from underwriters to pursue bond financing of approximately \$4.8 million.

Motion carried with unanimous vote of approval.

#### 15. <u>AWARD OF CONTRACT FOR SAN ELIJO LAND OUTFALL FINAL DESIGN AND</u> <u>PERMITTING</u>

Christopher Trees, Director of Operations, gave a brief history of the San Elijo Ocean Outfall, which provides ocean disposal of treated wastewater for the City of Escondido and the SEJPA. The pipeline through the San Elijo Lagoon is approximately 50 years old, and based on the pipe material and corrosive nature of the lagoon soil, is considered to be at or near the end of its useful life. The preliminary design report (PDR), completed in June 2015, examined alternatives for replacing or rehabilitating the lagoon/land section of the outfall. The PDR identified installing a new pipeline using horizontal directional drilling (HDD) as the preferred alternative, as it was estimated to be the lowest cost and least impactful to the lagoon. With the completion of the PDR, the project is now ready to move into final design. The cost of the final design and permitting (\$403,068) will be funded by the current ocean outfall reserve.

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

1. Accept and file the San Elijo Joint Powers Authority Ocean Outfall Preliminary Design Report; and

2. Approve the Agreement with Kennedy/Jenks Consultants for the San Elijo Land Outfall Final Design and Permitting for an amount not to exceed \$403,068.

Motion carried with unanimous vote of approval.

#### 16. <u>SAN ELIJO JOINT POWERS AUTHORITY AND ENCINA WASTEWATER AUTHORITY</u> <u>EMPLOYEE LEASING AGREEMENT</u>

General Manager Thornton stated that the SEJPA has been in discussions with Encina Water Authority (EWA) since 2012 regarding resource sharing opportunities between the two agencies. One opportunity that was identified was the short-term leasing of employees between the agencies. This can provide a cost effective staffing option for meeting work demands associated with special projects, to leverage specific staff skills, or to address temporary effects of workforce attrition. The EWA Board approved the agreement on June 14, 2015.

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

1. Adopt Resolution 2016-01 – Employee Leasing Agreement Authorization between the San Elijo Joint Powers Authority and the Encina Wastewater Authority.

Motion carried with unanimous vote of approval.

17. <u>CLOSED SESSION</u>

The Board of Directors adjourned to closed session at 10:05 a.m., with Michael Thornton per Government Code Section 54957: Public Employee Performance Evaluation. Title: General Manager.

The Board of Directors came out of closed session at 10:25 a.m.

#### 18. <u>CONSIDERATION OF GENERAL MANAGER COMPENSATION PER CURRENT</u> <u>EMPLOYMENT AGREEMENT AND POTENTIAL CHANGES TO EMPLOYMENT</u> <u>TERMS AND COMPENSATION</u>

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

- 1. Extend the Employment Agreement to June 30, 2017; and
- 2. Approve Exhibit B as revised; which includes the revision that effective July 1, 2016, the SEJPA General Manager's base salary will be raised to be equal to the base salary of the Encina Wastewater Authority's Assistant General Manager, to the extent the Encina Wastewater Authority's Assistant General Manager's salary is within three percent (3%) of \$191,318.00, and providing a merit bonus of up to \$10,000 in June 2017.

Motion carried with unanimous vote of approval.

#### 19. <u>GENERAL MANAGER'S REPORT</u>

None

#### 20. <u>GENERAL COUNSEL'S REPORT</u>

Adriana Ochoa stated that a California appellate court recently ruled that billing invoices sent by an attorney to a client are exempt from disclosure under the California Public Records Act.

#### 21. BOARD MEMBER COMMENTS

None

#### 22. ADJOURNMENT

The meeting adjourned at 10:35 a.m. The next Board of Directors meeting will be held on September 14, 2015.

Respectfully submitted,

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Michael T. Thornton, P.E. General Manager

# SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS 16-09

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
31805	Ag Tech, LLC	Services - Biosolids Hauling	Biosolids hauling - June	14,971.89
31806	Alliant Insurance Services, Inc.	Insurance - Liability	Equipment insurance - 07/01/15 - 07/01/16	1,570.00
31807	Arrowhead	Supplies - Lab	Supplies	235.44
31808	AT&T	Utilities - Telephone	Phone service - 05/13/15 - 06/12/15	323.41
31809	AT&T	Utilities - Telephone	DSL - 05/20/15 - 06/19/15	89.79
31810	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping; grit and screening	1,297.23
31811	BankCard Center	Various	Repairs, printing, safety, and office supplies	6,742.81
31812	Barracuda Networks, Inc	Utilities - Internet	Network back-up	50.00
31813	Barrett Engineered Pumps	Repair Parts Expense	Impeller, mechanical seal, washer, and sleeve	1,467.98
31814	B.J.'s Rental Store	Equipment Rental/Lease	Electric boom	400.00
31815	Boot World, Inc.	Uniforms - Boots	Safety boots	145.76
31816	California Water Technologies	Supplies - Chemicals	Ferric Chloride	4,533.87
31817	Calpers	Retirement Plan - PERS	UAL FY 2015-16	11,906.00
31818	Coast Waste Management, Inc.	Services - Grit & Screenings	Disposal	1,101.11
31819	Complete Office	Supplies - Office	Office supplies	496.00
31820	County of San Diego	Fees - Permits	District fees	1,168.00
31821	CA Sanitation Risk Mgmt Auth.	Insurance - Property	Property Insurance - 07/01/15 - 06/30/16	24,035.14
31822	CWEA - TCP	Dues & Memberships	Membership and test	306.00
31823	Detection Instruments Corp.	Repair Parts Expense	H2S logger	1,657.49
31824	Dudek & Associates	Services - Engineering	GIS map update	1,255.00
31825	EDCO Waste & Recycling Service	Utilities - Trash	Trash service - June	234.21
31826	Global Capacity	Utilities - Internet	T-1 Service - August	279.27
31827	Grainger, Inc.	Supplies - Shop & Field	Label cartridge	118.31
31828	Hach Company	Supplies - Lab	Laboratory supplies	2,472.30
31829	Harbor Freight Tools	Supplies - Safety	Safety gloves and tools	250.07
31830	Health and Human Resource	Employee Assistance Program	July	334.40
31831	Hoch Consulting, APC	Services - Professional	Project engineering and support	14,825.00
31832	Home Depot Credit Services	Supplies - Shop & Field	Repairs, shop and field supplies	791.24
31833	Jani-King of CA, Inc.	Services - Janitorial	Janitorial service - July	882.64
31834	Jennifer Basco	Subsistence - Travel	Mileage	80.79
31835	King Lee Chemical Co.	Supplies - Chemicals		2,070.10
21027	Konica Minold	Services - Maintenance	Mileage and meetings	107.97
31837		Subsistence - Travel	Mileage and meetings	1 200 52
21020	Liebert Cossidy Whitmore	Training	Employment relations consertium	2 010 00
31840		Licenses	Employment relations consolitum Exchange license = $07/01/15 = 06/30/16$	1 130 76
31841	Lomas Santa Fe Country Club	Other Personnel Cost	Deposit	225.00
31842	McMaster-Carr Supply Co	Denair Parts Expense	Elouorescent light hulbs flanges and tubing	712.07
31843	Nana Auto Parts	Repair Parts Expense	Coolant	29.69
31844	Nash Fabricators	Services - Maintenance	Belt quard and welded mounting clips	589.00
31845	Olin Corn - Chlor Alkali	Supplies - Chemicals	Sodium Hypochlorite	3 095 40
31846	Olivenhain Municipal Water District	Rent	Pipeline rental payment	6.543.00
31847	Pacific Pipeline Supply	Renair Parts Expense	Plumbing parts	100.66
31848	Pacific Safety Center	Training - Safety	Hazwoper	350.00
31849	Pall Corporation	Repair Parts Expense	Valve solenoid	363.16
31850	Parada Painting	Services - Contractors	Power wash, prep, and finish coat pipes	19,469.97
31851	Public Employees- Retirement	Services - Professional	GASB 68 Reporting Services Fee Plan 1	850.00
31852	Public Employees- Retirement	Services - Professional	GASB 68 Reporting Services Fee Plan 2	850.00
31853	Public Employees- Retirement	Services - Professional	GASB 68 Reporting Services Fee Plan 3	850.00
31854	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 06/20/15 - 07/03/15	11,771.93
31855	U.S. Postal Service	Postage/Shipping	Postage	392.00
31856	Preferred Benefit Insurance	Dental/Vision	Vision - July	316.70
31857	ProBuild Company, LLC	Repair Parts Expense	Plumbing supplies	79.21
31858	Procopio Cory Hargreaves	Services - Legal	General - June	7,046.15
31859	Roesling Nakamura Terada	Services - Professional	Assessment report	2,507.00
31860	RSF Security Systems	Services - Maintenance	On-site service	281.25
31861	Safetyline, Inc.	Supplies - Safety	Ansi mesh vest	221.67
31862	San Dieguito Water District	Utilities - Water	Recycled water	7,262.61
31863	Santa Fe Irrigation District	Utilities - Water	Recycled water	193.94
31864	Santa Fe Irrigation District	Utilities - Water	Recycled water	72.55
31865	Santa Fe Irrigation District	Services - Professional	Potable reuse study	2,904.99

#### SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS

<u>16-09</u>

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
31866	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - June	1,604.34
31867	Smart & Final	Supplies - Office	Kitchen supplies	97.58
31868	Board of Equalization	Accrued Sales Tax Pavable	Sales Tax 2nd Otr - 2015	683.00
31869	Tierra Data Inc.	Services - Laboratory	Water monitoring - June	725.00
31870	Christopher A. Trees	Subsistence - Travel	Meeting with RWOCB	27.76
31871	Trussell Technologies, Inc	Services - Engineering	Process engineering and coliform study	5,193.00
31872	Unifirst Corporation	Services - Uniforms	Uniform service	377.68
31873	Univar USA Inc.	Supplies - Chemicals	Citric Acid and drums	825.20
31874	UPS	Postage/Shipping	Mailing parts and reports	81.62
31875	Underground Service Alert/SC	Services - Alarm	Dig alert - June	111.00
31876	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	6,144,71
31877	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	2,854.98
31878	WageWorks	Payroll Processing Fees	Admin fee and compliance fee	128.75
31879	WEX Bank	Fuel	Fuel - June	1,405.99
31880	Abcana Industries	Supplies - Chemicals	Hydrochloric Acid	440.39
31881	Aflac	EE Deduction Benefits	Medical/Supplemental Life - July	693.36
31882	Arbor West Tree Surgeons, Inc.	Services - Landscape	Tree care service	4,325.00
31883	AT&T	Utilities - Telephone	Phone service - 06/13/2015 - 07/12/2015	334.90
31884	AT&T	Utilities - Telephone	DSL - 06/10/2015 - 07/09/2015	99.33
31885	AT&T	Utilities - Telephone	Alarm service	391.03
31886	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	1,412.32
31887	Bob's Crane Service	Equipment Rental/Lease	Crane	749.00
31888	Carollo Engineers	Services - Engineering	Facility plan update	16,593.67
31889	CFM San Diego, Inc.	Repair Parts Expense	Resilient seated BFV cast iron	547.16
31890	Corodata	Rent	Record storage - June	149.18
31891	Cortech Engineering, Inc.	Capital Outlay	Filter feed pump repair	14,068.28
31892	County of San Diego	Fees - Permits	District fees	292.00
31893	CA Sanitation Risk Mgmt Auth.	Workers Comp. Insurance	Worker's compensation insurance	38,721.00
31894	CWEA Membership	Dues & Memberships	Membership	156.00
31895	CWEA Membership	Dues & Memberships	Membership	156.00
31896	Del Mar Blue Print	Printing	Service area maps	505.44
31897	Dudek & Associates	Services - Engineering	Preliminary Design - Headworks	9,738.45
31898	Hach Company	Repair Parts Expense	Universal controller, UV sun shield	2,209.13
31899	Jani-King of CA, Inc.	Supplies - Janitorial	Janitorial supplies	537.08
31900	McMaster-Carr Supply Co.	Repair Parts Expense	Solenoid valve and lift-off hinge	785.30
31901	Pacific Green Landscape	Sevices - Landscape	Landscape service	2,975.00
31902	Pacific Pipeline Supply	Repair Parts Expense	Cast iron lids and box	597.24
31903	P.E.R.S.	Medical Insurance - PERS	Health - August	19,209.69
31904	Public Employees - Retirement	Retirement Plan - PERS	Retirement - 07/04/2015 - 07/17/2015	11,789.87
31905	Cashier - Jennifer Basco	Board Expense	Replenish petty cash	189.68
31906	Santa Fe Irrigation District	Utilities - Water	Recycled water	58.47
31907	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 06/07/2015 - 07/13/2015	56,699.99
31908	SWRCB - ELAP Fees	Licenses	Environmental Laboratory Accreditation Program	2,359.00
31909	I riple Fresh Solutions Inc.	Services - Maintenance	Replace, clean, and repair carpeting	947.00
31910	Unifirst Corporation	Services - Uniforms	Uniform service	425.34
31911	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 45/	6,144./1
31912	Vantagepoint Transfer Agents	ICMA Retirement	ICMA - 401a	2,859.04
31913	Verizon Wireless	Utilities - Telephone	Cell phone service and equipment	1,137.92
31914	wageworks	Payroll Processing Fees	Admin ree and compliance ree	128.75
31915	WorkPartners Occupational	Services - Medical	Medical services for employees	230.00
31916	Calpers	Retirement Plan - PERS	UAL - FY 2014-15	125,000.00
31917	Clivennain Municipal Water District	Services - Construction	Village Park Recycled Water Project	593,544.00
31918	State water Resources Control Board	Interest Expense - SRF Loan	Clean Water State Revolving Fund Financing	834,675.18
21020	Allyds USA, LLC	Supplies - Salely	Compressed yas and supplies	1 201 01
21021			CallUI alluli Kitchan and lab cuppling	1,201.91 212 22
21022		Juppiles - Lau Litilitios - Tolophono		00.01
31922	Atlas Dumning Service The	Services - Grease & Sour	$D_{2} = 00/20/10 = 07/19/10$	19.91 17 הרך
31020	Auas Fullipiliy Selvice IIIC. American Water Works Assoc	Junes & Membershine	orease and scum pumping Membership	277. <del>44</del> 104.00
31025	American Waler WUIKS ASSUC. BankCard Contor	Supplies - Safaty	Penairs meetings and supplies	104.00
31925	Barracuda Networks Inc	Juppiles - Jaiety Litilities - Internet	Network back-up	50 00
31320				50.00

#### SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS

#### <u>16-09</u>

Warrant #	Vendor Name	Warrant Description	Amount	
31927	Boot World, Inc.	Uniforms - Boots	Safety Boots	136.34
31928	Brenntag Pacific, Inc.	Supplies - Chemicals	Sodium Hydroxide	1,709.75
31929	Marisa Buckles	Supplies - Office	Office supplies	39.99
31930	California Water Technologies	Supplies - Chemicals	Ferric Chloride	4,223.03
31931	Calpers	Retirement Plan - PERS	UAL - FY 2015-16	11,906.00
31932	EDCO Waste & Recycling Service	Utilities - Trash	Trash service - July	235.97
31933	Evantec Lab Supply	Supplies - Lab	Lab supplies	366.13
31934	Guardian	Dental/Vision	Dental - August	2,007.89
31935	Hardy Diagnostics	Supplies - Lab	Ocean outfall supplies	347.57
31936	Health and Human Resource	Employee Assistance Program	August	334.40
31937	Home Depot Credit Services	Supplies - Shop & Field	Electrical supplies and small tools	208.43
31938	Idexx Distribution, Inc.	Supplies - Lab	Lab supplies	392.18
31939	Jennifer Basco	Subsistence - Travel	Mileage and postage	87.06
31940	Kennedy/Jenks Consultants	Services - Engineering	Land ocean outfall; recycled water relocation	37,752.14
31941	Casey Larsen	Repair Parts Expense	Firewall, cable, and soldering iron	348.96
31942	The Lawton Group	Services - Temp	Week worked - 07/13/15	86.94
31943	McMaster-Carr Supply Co.	Supplies - Shop & Field	Repair parts, shop, and field supplies	5/6.42
31944	Napa Auto Parts	Supplies - Shop & Field	Repair parts	25.79
31945	Olin Corp.	Supplies - Chemicals	Sodium Hypochlorite	3,167.42
31946	Pacific Sweeping	Services - Maintenance	Parking lot sweeping service	145.00
31947	Pall Corporation	Service - 11 Support	l echnical phone service annual contract	2,650.00
31948	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 0//18/15 - 0//31/15	11,/89.8/
31949	Preferred Benefit Insurance	Dental/Vision	Vision - August	286.30
31950	Santa Fe Irrigation District	Utilities - Water	Recycled water	3,122.88
31951	Santa Fe Irrigation District	Utilities - water		/2.55
31952	State Water Resources Control	Licenses	Operator certificate	60.00
31953		Life Insurance/Disability	Life and disability insurance - August	1,/1/.98
31954	Test America	Services - Laboratory	Water sample testing	1,819.00
31955	Tevetelift Inc.	Services - Laboratory	Water monitoring - July	725.00
31950	Toyoldill, IIC.		Sevice forkill	/19.94
31957	Unifiest Corporation	Subsistence - Travel	WateReuse and polable reuse meetings	52.90 125.00
31950		Services - Unitornis	Mailing parts	125.90
31959	UPS	Postage/Shipping	Maining parts	100.90
31900	Vantagonoint Transfor Agonts	EE Doduction Bonofite		6 144 71
31962	Vantagepoint Transfer Agents	ICMA Retirement		2 859 04
31963	VM/R International Inc	Supplies - Lab	Lah sunnlies	603 10
31964	WFX Bank	Fuel	Euel - July	879 37
31965	Abcana Industries	Supplies - Chemicals	Hydrochloric Acid	440 39
31966	Aflac	FE Deduction Benefits	Aflac - August	693 36
31967	Ag Tech IIC	Services - Biosolids Hauling	Biosolids hauling - July	15 735 42
31968	AT&T	Utilities - Telephone	DSL - 07/10/15 - 08/09/15	100.81
31969	AT&T	Utilities - Telephone	Alarm service	396.24
31970	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	3,948,58
31971	BAVCO	Repair Parts Expense	Rebuilt kit for clay valve and new float kit	512.00
31972	Boot World, Inc.	Uniforms - Boots	Safety boots	136.04
31973	City of Solana Beach	Due to Member Agencies	Encinitas bond payment	14,469.31
31974	City Treasurer	Seminars/Education	Recycled water site supervisor	180.00
31975	Coast Waste Management, Inc.	Services - Grit & Screenings	Service charge - 07/05/15 - 07/31/15	154.50
31976	Complete Office	Supplies - Office	Supplies	1,390.36
31977	Corodata	Rent	Record storage - July	139.33
31978	County of San Diego	Fees - Permits	Annual permit renewal	2,636.00
31979	CS-Amsco	Services - Maintenance	Service call to start-up actuators; parts	614.48
31980	City of Encinitas	Service - IT Support	Admin network - August	2,500.00
31981	Eurofins Calscience, Inc.	Services - Laboratory	Testing water samples	326.00
31982	Forte of San Diego	Services - Janitorial	August	1,000.00
31983	Gierlich Mitchell, Inc.	Repair Parts Expense	Static sleeve bearing and clamp band	629.68
31984	Golden Bell Products	Supplies - Chemicals	Lift station degreaser	410.40
31985	Golden State Overnight	Postage/Shipping	Mailing lab samples	57.14
31986	Hach Company	Repair Parts Expense	Sensor cap replacement	142.00
31987	Harrington Industrial Plastics	Repair Parts Expense	Plumbing supplies	119.66

#### SAN ELIJO JOINT POWERS AUTHORITY PAYMENT OF WARRANTS

#### <u>16-09</u>

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
31988	Hoch Consulting, APC	Services - Engineering	Blower project and grant support	3,400.00
31989	Konica Minolta	Services - Maintenance	Copier maintenance service	196.96
31990	The Lawton Group	Services - Intern Program	Weeks worked - 08/03/15 - 08/14/15	883.89
31991	Leaf & Cole, LLP	Services - Accounting	Audit - progress billing	2,200.00
31992	Olin Corp.	Supplies - Chemicals	Sodium Hypochlorite	3,159.70
31993	Olivenhain Municipal Water District	Rent	Pipeline rental payment	6,228.00
31994	Pacific Green Landscape	Services - Landscape	Landscape service - August	2,975.00
31995	P.E.R.S.	Medical Insurance - Pers	Health - September	19,209.69
31996	Public Employees - Retirement	Retirement Plan - PERS	Retirement - 08/01/15 - 08/14/15	11,801.72
31997	Polydyne Inc.	Supplies - Chemicals	Clarifloc	11,426.40
31998	ProBuild Company, LLC	Supplies - Shop & Field	Repair parts, tools, and shop supplies	170.86
31999	Procopio Cory Hargreaves	Services - Legal	General - July	5,586.00
32000	RSF Security Systems	Services - Alarm	Alarm maintenance and security	1,563.00
32001	San Dieguito Water	Utilities - Water	Recycled water	9,435.32
32002	Santa Fe Irrigation District	Services - Professional	Potable reuse study	4,879.59
32003	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - July	1,137.40
32004	San Diego Gas & Electric	Utilities - Gas & Electric	Gas and electric - 07/07/15 - 08/05/15	57,152.02
32005	Smart & Final	Supplies - Office	Supplies	108.35
32006	Michael Thornton	Subsistence - Meals	Meetings	90.59
32007	Unifirst Corporation	Services - Uniforms	Uniform service	470.42
32008	Union Bank of CA	Bank Service Charges	Fiduciary fee refunding revenue bonds	2,428.00
32009	UPS	Postage/Shipping	Mailing documents	16.23
32010	USA Bluebook	Repair Parts Expense	Repair parts for belt press	365.73
32011	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA 457	6,147.39
32012	Vantagepoint Transfer Agents	ICMA Retirement	ICMA 401a	2,861.72
32013	Verizon Wireless	Utilities - Telephone	Cell phone services - 07/08/15 - 08/07/15	745.07
32014	WageWorks	Payroll Processing Fees	Admin fee and compliance fee	128.75
	San Elijo Payroll Account	Payroll	Payroll - 07/10/15	62,081.39
	San Elijo Payroll Account	Payroll	Payroll - 07/24/15	68,655.53
	San Elijo Payroll Account	Payroll	Payroll - 08/07/15	61,220.65
	San Elijo Payroll Account	Payroll	Payroll - 08/21/15	65,329.44
				\$2,501,001.92

#### SAN ELIJO JOINT POWERS AUTHORITY

#### PAYMENT OF WARRANTS SUMMARY

#### For the Months of July and August 2015 As of August 26, 2015

#### PAYMENT OF WARRANTS Reference Number 16-09

\$ 2,501,001.92

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 August 26, 2015

FUNDS ON DEPOSIT WITH	AMOUNT		
LOCAL AGENCY INVESTMENT FUND (AUGUST 2015 YIELD 0.33%)			
RESTRICTED SRF RESERVE UNRESTRICTED DEPOSITS	\$ \$	630,000.00 5,932,154.01	
CALIFORNIA BANK AND TRUST (AUGUST 2015 YIELD 0.01%)			
REGULAR CHECKING PAYROLL CHECKING	\$ \$	78,610.06 5,000.00	
TOTAL RESOURCES	\$	6,645,764.07	

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

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

#### RECOMMENDATION

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

#### DISCUSSION

#### Monthly Treatment Plant Performance and Evaluation

Wastewater treatment for the San Elijo Joint Powers Authority (SEJPA) met all National Pollutant Discharge Elimination System (NPDES) ocean effluent limitation requirements for the months of June and July 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. Treatment levels for CBOD and TSS were 98 percent removal for both constituents in June and July (as shown in Figure 1 and Figure 2).





#### Member Agency Flows

Presented below are the influent and effluent flows for the months of June and July. Average daily influent flows were recorded for each Member Agency. Total effluent flow was calculated for the San Elijo Water Reclamation Facility.

	June						
	Influent (mgd)	<u>Effluent</u> (mgd)*					
Cardiff Sanitary Division	1.287	0.362					
City of Solana Beach	1.052	0.296					
Rancho Santa Fe SID	0.113	0.032					
Total San Elijo WRF Flow	2.452	0.690					

	July					
	Influent (mgd)	<u>Effluent</u> (mgd)*				
Cardiff Sanitary Division	1.282	0.392				
City of Solana Beach	1.176	0.359				
Rancho Santa Fe SID	0.110	0.034				
Total San Elijo WRF Flow	2.568	0.785				

Notes: As of July 1995, Rancho Santa Fe Community Services District (CSD) combined SID #2 and SID #3 into one Sewer Improvement District (SID).

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

Table 1 (below) presents the historical average, maximum, and unit influent and effluent flow rates per month for each of the Member Agencies since June 2010. It also presents the number of connected Equivalent Dwelling Units (EDUs) for each of the Member Agencies during this same time period.

	AVERAG	E DAILY INFL (MG	LUENT FL D)	OW RATE	AVERAG	E DAILY EFFI (MGI	LUENT FL D)	OW RATE	CONNECTED EDUs			AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDU/DAY)				OWRATE
MONTH	CSD		SB		CSD		, SB		CSD	RSF CSD	SB	TOTAL	CSD	DQE	SB.	
Jun-10	1 437	0 122	1 453	3 012	0.650	0.055	0.657	1.362	8 202	474	7 728	16 404	175	258	188	184
Jul-10	1.375	0.119	1.466	2.960	0.694	0.061	0.740	1.495	8,204	475	7.728	16,407	168	251	190	180
Aug-10	1.366	0.125	1.451	2.942	0.585	0.053	0.621	1.259	8,205	475	7,728	16,408	166	263	188	179
Sep-10	1.346	0.114	1.342	2.802	0.627	0.053	0.626	1.306	8,207	475	7,728	16,410	164	240	174	171
Oct-10	1.413	0.123	1.311	2.847	1.177	0.102	1.092	2.371	8,207	477	7,728	16,412	172	258	170	173
Nov-10	1.399	0.117	1.297	2.813	1.090	0.091	1.011	2.192	8,209	478	7,728	16,415	170	245	168	171
Dec-10	1.605	0.215	1.375	3.195	1.417	0.189	1.214	2.820	8,212	478	7,728	16,418	195	450	178	195
Jan-11	1.452	0.158	1.338	2.948	1.272	0.139	1.172	2.583	8,227	478	7,728	16,433	176	331	173	179
Feb-11	1.413	0.156	1.339	2.908	1.176	0.130	1.114	2.420	8,228	480	7,728	16,436	172	325	173	177
Mar-11	1.387	0.208	1.343	2.938	1.186	0.178	1.148	2.512	8,229	480	7,728	16,437	169	434	174	179
Apr-11	1.320	0.181	1.323	2.824	0.867	0.118	0.869	1.854	8,248	482	7,728	16,458	160	376	171	172
May-11	1.327	0.162	1.320	2.809	0.564	0.069	0.561	1.194	8,248	483	7,728	16,459	161	336	171	171
Jun-11	1.343	0.156	1.390	2.889	0.545	0.063	0.564	1.172	8,249	483	7,728	16,460	163	323	180	176
Jul-11	1.293	0.151	1.430	2.874	0.425	0.050	0.470	0.945	8,250	484	7,728	16,462	157	312	185	175
Aug-11	1.292	0.150	1.405	2.847	0.479	0.056	0.521	1.056	8,252	485	7,728	16,465	157	310	182	173
Sep-11	1.262	0.146	1.333	2.741	0.564	0.066	0.596	1.226	8,254	486	7,728	16,468	153	301	172	166
UCt-11 Nov 11	1.200	0.142	1.303	2.705	0.730	0.082	0.755	1.507	8,260	480	7,728	16,474	153	292	169	164
NOV-11	1.330	0.167	1.307	2.012	1.099	0.137	1.074	2.310	0,201	400	7,720	16,475	162	344 227	169	169
Jan-12	1.299	0.104	1.303	2.700	1.103	0.139	1.100	2.330	8 266	407	7,728	16,479	160	232	169	166
Feb-12	1 259	0.143	1.303	2.733	1.002	0.109	1.042	2.130	8 268	488	7 728	16 484	152	281	166	163
Mar-12	1.313	0.153	1.255	2.721	0.968	0.113	0.925	2.006	8,269	488	7,728	16,485	159	314	162	165
Apr-12	1.348	0.145	1.209	2.702	0.906	0.097	0.813	1.816	8,278	488	7.728	16,494	163	297	156	164
May-12	1.333	0.150	1.211	2.694	0.577	0.065	0.525	1.167	8,280	488	7,728	16,496	161	308	157	163
Jun-12	1.365	0.143	1.237	2.745	0.547	0.057	0.496	1.100	8,284	489	7,728	16,501	165	293	160	166
Jul-12	1.372	0.126	1.296	2.794	0.457	0.042	0.431	0.930	8,289	489	7,728	16,506	166	258	168	169
Aug-12	1.383	0.128	1.291	2.802	0.473	0.044	0.441	0.958	8,290	490	7,728	16,508	167	261	167	170
Sep-12	1.349	0.142	1.220	2.711	0.544	0.058	0.492	1.094	8,291	490	7,728	16,509	163	290	158	164
Oct-12	1.327	0.123	1.203	2.653	0.678	0.063	0.615	1.356	8,294	490	7,728	16,512	160	251	156	161
Nov-12	1.343	0.128	1.181	2.652	0.862	0.082	0.758	1.702	8,299	490	7,728	16,517	162	261	153	161
Dec-12	1.383	0.141	1.197	2.721	1.261	0.129	1.091	2.481	8,300	490	7,728	16,518	167	288	155	165
Jan-13	1.357	0.145	1.215	2.717	1.155	0.124	1.034	2.313	8,300	490	7,728	16,518	163	296	157	164
Feb-13	1.349	0.138	1.201	2.688	1.048	0.108	0.933	2.089	8,301	490	7,728	16,519	163	282	155	163
Mar-13	1.402	0.154	1.235	2.791	0.905	0.100	0.797	1.802	8,302	493	7,728	16,521	169	314	160	169
Apr-13	1.297	0.124	1.237	2.658	0.531	0.051	0.506	1.088	8,304	493	7,728	16,523	156	253	160	161
Way-13	1.339	0.126	1.185	2.650	0.376	0.036	0.333	0.745	8,304	493	7,728	16,525	101	250	153	160
Jul 13	1.341	0.120	1.190	2.007	0.209	0.025	0.239	0.000	8 300	493	7,720	16,520	164	200	164	168
Δun-13	1 342	0.144	1.209	2.7768	0.402	0.030	0.440	0.300	8 311	495	7 728	16,533	161	340	163	167
Sep-13	1.343	0.100	1 193	2 653	0.000	0.036	0.358	0.797	8,311	494	7 728	16,533	162	237	154	160
Oct-13	1.319	0.132	1.184	2.635	0.629	0.063	0.565	1.257	8,314	494	7.728	16,536	159	267	153	159
Nov-13	1.348	0.133	1.194	2.675	0.932	0.092	0.826	1.850	8.315	494	7.728	16.537	162	270	155	162
Dec-13	1.341	0.134	1.191	2.666	1.030	0.103	0.915	2.048	8,316	494	7,728	16,538	161	272	154	161
Jan-14	1.322	0.135	1.194	2.651	0.851	0.087	0.768	1.706	8,318	495	7,728	16,541	159	273	155	160
Feb-14	1.314	0.127	1.172	2.613	0.954	0.093	0.851	1.898	8,323	495	7,728	16,546	158	257	152	158
Mar-14	1.339	0.134	1.185	2.658	0.858	0.086	0.760	1.704	8,324	496	7,728	16,548	161	270	153	161
Apr-14	1.326	0.128	1.128	2.582	0.449	0.043	0.382	0.874	8,328	498	7,728	16,554	159	257	146	156
May-14	1.353	0.124	1.127	2.604	0.159	0.015	0.132	0.306	8,333	498	7,728	16,559	162	249	146	157
Jun-14	1.341	0.126	1.188	2.655	0.207	0.020	0.183	0.410	8,333	498	7,728	16,559	161	253	154	160
Jul-14	1.271	0.130	1.307	2.708	0.232	0.024	0.239	0.495	8,338	499	7,728	16,565	152	261	169	163
Aug-14	1.228	0.130	1.298	2.656	0.227	0.024	0.239	0.490	8,345	500	7,728	16,573	147	260	168	160
Sep-14	1.215	0.113	1.232	2.560	0.211	0.019	0.214	0.444	8,351	500	7,728	16,579	145	226	159	154
Oct-14	1.204	0.114	1.198	2.516	0.394	0.038	0.392	0.824	8,353	500	7,728	16,581	144	228	155	152
Dec 14	1.237	0.118	1.190	2.003 2.600	0.007	0.003	0.040	1.3/0	0,354	502	1,128	16,584	148	∠35 202	155	104
Jap 15	1.323	0.147	1.229	2.099	0.084	0.129	0.067	2.313	0,000	502	1,120 7077	10,000	100	290 250	159	155
5ai-15 Feb-15	1,200	0.130	1.202	2.010	0.904	0.102	0.307	1 595	8 361	503	7 077	16 841	147	209	154	154
Mar-15	1 269	0.135	1 231	2 635	0.583	0.062	0.566	1 211	8 365	504	7 977	16 846	152	268	154	156
Apr-15	1,183	0.124	1.196	2,503	0,350	0,036	0.354	0.740	8,366	504	7.977	16,847	141	246	150	149
Mav-15	1.209	0.117	1.149	2.475	0.545	0.053	0.518	1.116	8.367	505	7.977	16.848	144	232	144	147
Jun-15	1.287	0.113	1.052	2.452	0.362	0.032	0.296	0.690	8,369	506	7,977	16,852	154	224	132	146
Jul-15	1.282	0.110	1.176	2.568	0.392	0.034	0.359	0.785	8.370	510	8.003	16.883	153	216	147	152

CSD: Cardiff Sanitary Division

RSF CSD: Ranch Santa Fe Community Service District

SB: Solana Beach

EDU: Equivalent Dwelling Unit

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

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

EDU Numbers Revised by Dudek for March and April 2013

Figure 3 (below) presents the 5-year historical average daily flows per month for each Member Agency. This is to provide a historical overview of the average treated flow by each agency. As shown in the figure, the average treated flow has been approximately 2.7 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's 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 months of June and July.

	June (mgd)
Escondido (Average flow rate)	7.88
Escondido (Peak flow rate)	17.6

	July (mgd)
Escondido (Average flow rate)	7.83
Escondido (Peak flow rate)	18.0

#### Connected Equivalent Dwelling Units

The number of EDUs connected for each of the Member Agencies for the months of June and July is as follows:

	June (EDU)
Cardiff Sanitary Division	8,369
Rancho Santa Fe SID	506
City of Solana Beach	7,641
San Diego (to Solana Beach)	336
Total EDUs to System	16,852

	July (EDU)
Cardiff Sanitary Division	8,370
Rancho Santa Fe SID	510
City of Solana Beach	7,667
San Diego (to Solana Beach)	336
Total EDUs to System	16,883

The City of Solana Beach updates the number of connected EDUs once per year in July.

Respectfully submitted,

16-6-

Michael T. Thornton, P.E. General Manager

#### AGENDA ITEM NO. 10

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

TO: Board of Directors San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: SAN ELIJO WATER RECLAMATION PROGRAM – MONTHLY REPORT

#### RECOMMENDATION

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

#### DISCUSSION

#### Recycled Water Production

For the month of June 2015, recycled water demand was 174.38 acre-feet (AF), which was met using 173.26 AF of recycled water and 1.12 AF of supplementation with potable water. For the month of July 2015, recycled water demand was 152.07 acre-feet (AF), which was met using 150.86 AF of recycled water and 1.21 AF of supplementation with potable water.

Figure 1 (attached) provides monthly demands for recycled water since deliveries began in September 2000. Figure 2 (attached) provides a graphical view of annual recycled water demand spanning the last fifteen (15) fiscal years. Figure 3 (attached) shows the monthly recycled water demand for each June since the program began. Figure 4 (attached) shows the monthly recycled water demand for each July since the program began.

Respectfully submitted,

Michael T. Thornton, P.E. General Manager









#### AGENDA ITEM NO. 11

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: General Manager
- SUBJECT: SCADA UPGRADES PROJECT UPDATE

#### RECOMMENDATION

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- 1. Approve the emergency purchase of critical SCADA system upgrades in the amount of \$30,545;
- 2. Authorize the General Manager to complete short- and mid-term critical items as identified in the SCADA System Assessment Report up to an additional \$100,000 during FY 2015-2016; and
- 3. Discuss and take other action as appropriate.

#### BACKGROUND

San Elijo Joint Powers Authority (SEJPA) uses Supervisory Control and Data Acquisition (SCADA) system to monitor, treat, and distribute water. It is comprised of computers and software, which communicate via fiber optics or wireless radio link to the SEJPA control room. The system allows operators to monitor plant operations and process performance in real-time either onsite or remotely. Operators rely on SCADA to adjust pump speeds, open and close valves, track flows, tank levels, pump discharge pressures, and observe water quality measurements 24 hours a day.

SEJPA's 2015 Facility Plan identifies SCADA's aging hardware in the main control room as a risk to the system. Both the City of Encinitas IT staff and third party consultants have recommended short and long-term improvements to the system and its security. In March 2015 the SEJPA contracted with Tesco Controls for \$23,345 to perform a SCADA System Assessment and provide recommendations for system improvements and security enhancements.

#### DISCUSSION

The SCADA System Assessment and Recommendation report noted critically needed upgrades. System vulnerabilities, if exploited, could create threats to public safety,

health, and the environment. The recommended upgrades were acted upon immediately through the General Manager signing authority for emergency work. This included the purchase of software, hardware, and associated labor for installation. There are also other recommended SCADA upgrades that will further enhance the system, making SEJPA less vulnerable to threats, improving reliability, and maintaining existing levels of service to the public and customers. With the approval of additional funding, short- and mid-term improvements will be implemented.

#### FINANCIAL IMPACT

Addressing the critical upgrades resulted in the emergency expenditure of \$30,545 bringing the total funding committed to date to \$53,890. It is estimated that staff will need an additional \$100,000 in SCADA improvements during FY 2015-16. The need for this upgrade was identified in the 2015 Facility Plan. The SCADA system serves the Wastewater, Recycled Water, and Ocean Outfall programs and will be cost shared proportionally. Funds are available in the Capital Programs.

It is therefore recommended that the Board of Directors:

- 1. Approve the emergency purchase of critical SCADA system upgrades in the amount of \$30,545;
- Authorize the General Manager to complete short- and mid-term critical items as identified in the SCADA System Assessment Report up to an additional \$100,000 during FY 2015-2016; and
- 3. Discuss and take other action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E. General Manager

#### AGENDA ITEM NO. 12

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

TO: Board of Directors San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: VILLAGE PARK RECYCLED WATER PROJECT UPDATE

#### RECOMMENDATION

- 1. Increase the budget for the Village Park Recycled Water Project to \$1,396,588 and authorize the General Manager to issue change orders to the contract; and
- 2. Discuss and take other action as appropriate.

#### BACKGROUND

The Village Park Recycled Water Project is a partnership between the Olivenhain Municipal Water District and the San Elijo Joint Powers Authority (SEJPA). When completed, the project will provide recycled water service to the eastern portion of the City of Encinitas. The project,

which commenced construction 2015. includes in January installing approximately 7 miles recycled water pipelines, of converting an existing potable water reservoir to recycled water storage, and building a water pressure boosting station. The project will provide recycled water for irrigating greenbelts, streetscape, and playing fields at several schools (Figure 1). The recycled water for this project will be produced at the San Elijo Water Reclamation Facility. It is anticipated that the project will ultimately conserve 90 million gallons of potable water per year by converting existing irrigation systems to recycled water.



#### DISCUSSION

Construction of the Village Park Recycled Water Project commenced in January 2015 and the SEJPA's portion of the project is on schedule to be completed in November 2015. At the July 2015 Board meeting, the General Manager provided a project update on construction progress, expenditures, and contract change orders. At that time, the project was forecast to be completed with approximately \$12,500 remaining in contingency funding.

In August 2015, additional construction conflicts were encountered, which resulted in the contractor performing work beyond the original construction contract. The primary issue was buried utilities that required field changes to the pipeline installation. The contractor has submitted a request for reimbursement of costs associated with the additional work. Staff has reviewed the request and concurs with its payment. However, the project has nearly exhausted its budget and Staff is requesting Board approval for additional funding.

The submitted contract change orders for August will exceed the project budget by \$38,410. As of September 7, 2015, approximately 95% of the work funded by the SEJPA has been completed. Staff is requesting additional funding of \$80,000 to fund the submitted change orders and to provide approximately \$40,000 as contingency funding for other unforeseen expenditures.

#### FINANCIAL IMPACT

The original SEJPA budget for the Village Park project, including engineering, permitting, and construction, was \$1,316,588. The project budget included a 10% construction contingency of \$106,225, which has been fully utilized.

Staff is requesting additional funding of \$80,000, which will increase the overall project budget to \$1,396,588. Funding for this request is available in the Recycled Water Fund Balance.

It is therefore recommended that the Board of Directors:

- 1. Increase the budget for the Village Park Recycled Water Project to \$1,396,588 and authorize the General Manager to issue change orders to the contract; and
- 2. Discuss and take other action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E. General Manager

#### AGENDA ITEM NO. 13

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

TO: Board of Directors San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: AS-NEEDED PAINTING AND COATING CONTRACT AUTHORIZATION

#### RECOMMENDATION

- 1. Authorize the General Manager to execute an amendment to the as-needed painting contract with Parada Painting for a not-to-exceed contract value of \$25,000; and
- 2. Discuss and take other action as appropriate.

#### BACKGROUND

The water and wastewater industry often uses specialty engineered paints and coating system (enamels, polyurethane, epoxy, etc.) to protect equipment, concrete, and other assets from exposure to harsh working environments and to provide durability against chemical exposure, abrasion, and impact. Industry experience has shown that proper painting and coating of equipment, piping, concrete, and steel increases the useful life and helps maintain the facilities in good operating condition. Proper material selection and coats is an important aspect of San Elijo Joint Powers Authority's (SEJPA) asset management program.

#### DISCUSSION

The SEJPA generally outsources painting and coating services. In September 2014, the SEJPA solicited as-needed painting bids from qualified painting and coating contractors to paint process piping at the San Elijo Water Reclamation Facility. Three bids were received, and Parada Painting was the low bidder. After the original scope of work was completed, a time and material change order was issued to paint and coat the Olivenhain, Eden Gardens, Cardiff, and Moonlight Beach Pump Stations, in addition to pumps and piping at the Reclamation Facility. The workmanship and finish product was of high quality.

The current contract with Parada Painting expires on December 31, 2015, with the option for a one year extension to December 31, 2016. However, funding for the original effort has been exhausted. It is Staff's recommendation to provide a contract amendment to fund additional needed work.

#### **CARDIFF PUMP STATION**



**Before Painting and Coating** 

After Painting and Coating

#### FINANCIAL IMPACT

Staff recommends a contract amendment of \$25,000 for as-need painting and coating contract services with Parada Painting. Funding for this contract amendment is available in the Wastewater Operating budget under "Services – Contractors." The budgeted value for the contracted painting services in FY 2015-16 is \$75,000.

It is therefore recommended that the Board of Directors:

- 1. Authorize the General Manager to execute an amendment to the as-needed painting contract with Parada Painting for a not-to-exceed contract value of \$25,000; and
- 2. Discuss and take other action as appropriate.

Respectfully submitted,

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Michael T. Thornton, P.E. General Manager

#### AGENDA ITEM NO. 15

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

TO: Board of Directors San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: BUILDING IMPROVEMENT PROGRAM

#### RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Review the draft Building Improvement Program Report and provide guidance and comments to Staff; and
- 2. Discuss and take action as appropriate.

#### BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) 2015 Facility Plan prepared by Carollo Engineers was presented and accepted by the Board at the April 13, 2015 meeting. The purpose of the Plan is to provide the SEJPA with a planning document that identifies and prioritizes necessary capital improvements. Projects have been identified based on a condition assessment of agency infrastructure, a review of regulatory issues, and potential process enhancements that advance the agency's mission and vision. The recommended projects were reviewed with respect to need, urgency, and cost, and then prioritized according to the goals and standards set by the SEJPA.

As part of the condition assessment, Carollo's architect examined the existing buildings at the San Elijo Water Reclamation Facility (SEWRF). The Facility (Figure 1) is comprised of 14 buildings used for various functions including administration, laboratory, storage, electrical, and treatment processes. The SEJPA primarily utilizes two buildings for employee workspace (Figure 2). A portable trailer building was placed onsite in 2000 for Administration staff. This building serves as the public interface and site access control point for the SEWRF and provides workspace for six employees. A single-story block building, built in 1965, is utilized as the Operations Building. It provides workspace for approximately 16 operations, laboratory, and maintenance personnel. Based on Carollo's assessment, and confirmed by peer review, the Administration and Operations Buildings do not meet all current code, accessibility, safety, and operational requirements. The 2015 Facility Plan identified significant building deficiencies including FLS (fire, life, and safety), Americans with Disabilities Act (ADA) accessibility, and seismic code issues. The report identified Building and Seismic Upgrades as the 2<sup>nd</sup> ranked capital improvement project.

In response to the findings of the Facility Plan, staff began development of a Building Improvement Program. The first step in the process, the Building Needs Assessment, included an evaluation of existing facilities and identified workspace and organizational needs. Next, a Building Alternatives Analysis was performed to identify and examine potential building alternatives to meet these needs. In order to further refine building alternatives, a draft of the Building Improvement Program report was prepared for Board review.



Figure 1. SEWRF Buildings



Figure 2. SEJPA Administration and Operations Buildings

#### DISCUSSION

The 2015 Facility Plan establishes a clear need to address the safety, security, operational, and code deficiencies associated with the Administration and Operations Buildings. Creating a safe and secure work place that provides both open and, as necessary, restricted public access is paramount to managing risk and liability. A summary of the deficiencies identified by Carollo is listed below:

Deficiencies associated with the Administration Building (i.e., portable trailer) include the following:

- Installed as a temporary facility 15 years ago (permitting)
- Unsound foundation/improper trailer anchorage to foundation (safety, risk, and liability)
- Located below high voltage power electrical lines (safety, risk, and liability)
- Location provides inadequate site security to restricted areas (safety, security and risk)
- Lacks proper wheel-chair ramp (safety and ADA)
- Lacks restrooms and adequate work space (CA Building Code CBC)
- Lacks fire suppression system and fire resistance rating (CBC and safety)
- Lacks compliance with energy efficiency standards (CA Energy Code CEC)
- Lacks maneuvering clearances within the trailer for ADA compliance (ADA)

Deficiencies associated with the Operations Building include the following:

- Lacks proper wheel-chair ramp (safety and ADA)
- Building entrance approach exceeds ADA requirements; slip hazard (safety and ADA)
- The wall-to-roof connections do not meet current seismic code (safety, CBC, liability)
- Lacks adequate work space and occupancy space requirements (CBC)
- Lacks compliance with energy efficiency standards (CEC)
- Lacks proper turning radius, restroom design, locker room design for ADA compliance
- Lacks proper egress design (CBC and safety)
- Some deficiencies with fire suppression system

The Building Improvement Program report refines the options identified in the 2015 Facility Plan to address current deficiencies through the use of a Needs Assessment and Building Alternatives Analysis. The objective of the Alternatives Analysis was to identify building options that mitigate current deficiencies, improve site security, increase operational efficiency, are cost effective, and provide adaptability for future demands. These objectives may be met through refurbishment of existing buildings, construction of new buildings, or a combination of the two. Three feasible alternatives were identified that merit consideration:

#### Alternative 1: One Building

Construct a 14,200 square foot (sf) building near the SEWRF site entrance to allow all staff to work within a single building.

- Improve site security by siting building near plant entrance
- Reduce risks associated with unauthorized plant entries
- Eliminate health and safety risks associated with overhead power lines
- Provide better public access and community outreach opportunities
- Increase operational efficiency with all staff on-site within close proximity
- Provide flexibility and adaptability for future processes and staffing needs
- Anticipated higher up front cost; lower long term cost
- Estimated cost: \$7.9 Million

#### Alternative 2: Two Buildings

Construct a new 7,800 sf building near the SEWRF site entrance and renovate existing 6,550 sf Operations building.

- Improve site security by siting building near plant entrance
- Reduce risks associated with unauthorized plant entries
- Reduce health and safety risks associated with overhead power lines
- Provide better public access and community outreach opportunities
- Lacks working proximity for all staff
- Challenges associated with renovation; less flexible; cost for temporary staff building
- Anticipated lower up front cost, higher long term cost
- Estimated cost: \$7.6 Million

#### Alternative 3: Two Buildings - Encina Merge

Provides consideration for SEJPA and Encina merger. This alternative includes the construction of 7,800 sf building near SEWRF site entrance and construction of 5,000 sf of office space at Encina.

- Improve site security by siting building near plant entrance
- Reduce risks associated with unauthorized plant entries
- Reduce health and safety risks associated with overhead power lines
- Provide better public access and community outreach opportunities
- Lacks working proximity for all staff
- Redundant space requirements for remote facility
- Encina indicated that space is fully allocated, requiring new construction
- Estimated cost: \$7.9 Million

All three alternatives address the fire, life, and safety concerns and code deficiencies identified in the Facility Plan. In addition, all alternatives include the construction of an onsite building located near the plant entrance to improve site access, limit public traffic through the facility, and prevent unauthorized entries (Figure 3).



Figure 3. Conceptual site access and security improvements

The Building Improvement Program is anticipated to include the following steps:



The expected project duration is approximately 40 months, which would result in a project completion date of January 2019.

Staff has identified three alternatives that would meet our building plan objectives. At this time, Staff requests Board guidance on the proposed alternatives.

#### FINANCIAL IMPACT

There are no financial impacts associated with the Staff recommendation. Based on current conceptual budgets, the estimated cost of the proposed Building Improvement Program is 7.6 - 7.9 Million.

It is recommended that the Board of Directors:

- 1. Review the draft Building Improvement Program Report and provide guidance and comments to Staff; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E. General Manager

Attachment 1: Building Improvement Program

ATTACHMENT 1



## **BUILDING IMPROVEMENT PROGRAM**



September, 2015

Prepared by:



ROESLING NAKAMURA ARCHITECTS, INC. 363 Fifth Avenue, Suite 202 San Diego, CA 92101 (619) 233-1023
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## 1.0 INTRODUCTION

The San Elijo Joint Powers Authority (SEJPA) was created in 1963 to serve the communities of Cardiff by the Sea and Solana Beach in response to the need for water pollution control. At that time, untreated or partially treated wastewater was being discharged into the San Elijo Lagoon, creating environmental problems and public health concerns. The SEJPA's first treatment facility was then built in 1965, known as the San Elijo Water Pollution Control Facility. The facility provided Primary treatment only and was the first step in the evolution of wastewater processing, and ultimately water reclamation that is occurring today.

Over the years, the San Elijo facility has evolved to meet the demands of rapidly growing community in concert with implementation of ever increasing environmental regulations. Plant capacity has increased from its initial capacity of approximately 1.0 million gallons per day (MGD), to its current capacity of 5.25 MGD. Along the way, it has implemented Federal Clean Water Act standards for secondary treatment, as well as being active in water recycling. Today SEJPA's tertiary treatment facilities have the capacity to recycle 3.02 MGD, with 18 miles of system distribution and three water storage reservoirs. The SEJPA is well positioned to expand local water development including the possibility of potable reuse and brackish water reclamation.

Recognizing the importance of staying ahead of future needs, SEJPA has recently completed the 2015 Facility Plan. This report assessed existing agency assets, and identified recommended improvements to maintain, upgrade, or replace facilities. One of the items noted in the report as significantly deficient are the buildings that staff utilize for operating, maintaining, and managing the SEJPA's facilities.

The SEPJA recognizes the need to bring their operational facilities into Code compliance, while also creating facilities that will support the Agency's Mission:

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

and Vision:

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

To that end, SEJPA has hired Roesling Nakamura Terada Architects to assist in assessing the operational facilities for the Plant. This report is intended to provide a useable tool to help guide future design efforts. The report includes:

- Strategic goals for the facility.
- General assessment of existing facilities.
- Inventory of existing facilities.
- Programming: Inventory of space needs, including future program elements.
- Review of site organization for operational efficiency.
- Review of site security.
- Conceptual solutions that position SEJPA to meet the future challenges in water purification.

## 2.0 STRATEGIC GOALS

As part of facilities assessment, SEJPA has identified the following strategic goals to help guide the decision-making process.

- Provide Code compliant facilities, recognizing water treatment plants are "Essential Facilities".
- Improve site security.
- Improve operational efficiency.
- Develop facilities that complement SEJPA's Mission and Vision.
- Develop facilities that can accommodate future needs.

### 3.0 ASSUMPTIONS

- SEJPA Mission and Vision remains the same.
- Top priority placed on water purification processes.
- SEJPA is positioned to respond to the changing dynamics in wastewater treatment, water recycling and water purification.

### 4.0 HISTORY

Before getting into the assessment of the existing facilities, it is important to understand how SEJPA developed into its current condition. SEJPA began in 1960's to provide wastewater treatment and disposal services for the communities of Solana Beach and Cardiff by the Sea. Since the inception of the SEJPA, the agency has grown, evolved, and adapted to meet the needs of the communities and the environmental protection requirements of State and Federal regulations. The following is a timeline of the past improvement and government policies that affected the growth and development of the facility:

- 1963 San Elijo Joint Powers Authority is formed.
- 1965 San Elijo Water Pollution Control Facility is built in Cardiff. Operated by the County of San Diego. Facility provides Primary treatment only. Ocean outfall constructed to 4000 feet offshore.
- 1969 California enacts the Porter Cologne Water Quality Act; establishing wastewater treatment standards.
- 1972 The Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act) is enacted. -The 1972 act includes the National Pollutant Discharge Elimination System (NPDES) -Introduces technology-based standards for point source discharges -Provides allowances for permitting agencies to add water guality-based limitations
- 1974 Escondido joins the San Elijo ocean outfall. Outfall extended to 8000 feet offshore.
- 1982 Rancho Santa Fe Community Services District begins leasing treatment from SEJPA.
- 1982 Cardiff Sanitation District passes Pop M. Mandates implementing a recycled water facility. Sewer connection fee of \$1000 is accessed to new building permits.
- 1987 Encinitas and Solana Beach become cities. Ownership of the facility from the sanitation districts to the respective cities. City Council members become SEJPA Board Members.
- 1991-92 Facility undergoes major expansion to 5.25 MGD, and adds Secondary Treatment facilities to comply with the Clean Water Act.
- 2000 Recycled water utility becomes operational, 2.48 MGD capacity. SEJPA adds staff and management. Recycled service commences to San Dieguito Water District, Santa Fe Irrigation District and Del Mar.
- 2012-13 Advanced water treatment added. Recycled water capacity increased to 3.02 MGD. Recycled service commences to Olivenhain Municipal Water District.

## 5.0 EXISTING CONDITIONS - SITE

The San Elijo Water Reclamation Facility (which includes wastewater and recycled water treatment) is located in Cardiff-by-the-Sea, in a finger canyon just north of the San Elijo Lagoon. The facility is accessed off Manchester Avenue, and is just west of Interstate 5. The site has a long, narrow configuration following the canyon bottom in a north-south orientation (**See Exhibit A**). When the original facility was built, the mindset for wastewater treatment plants was "Out of sight, out of mind". As such, the facility was positioned fairly far up the canyon. The operations facilities, in turn were placed at rear of the site. Meanwhile the site's secure, gated entry is positioned just off the entry from Manchester Avenue.

Security: The fact that the site's entry point is very remote from operations and administrative functions is problematic. While this configuration may have worked when the facility received few visitors and security requirements were less, today's increased public interface now presents a liability. Visitors that enter the site must traverse the entire treatment plant to reach site personnel. This is a major security issue in the realm of Homeland Security, as water treatment plants are essential public facilities. Additionally, this is also a public safety issue, as treatment facilities only provide minimal public safety (I.E. fall protection) as they are intended only to be accessed by maintenance personnel (See Photo 1). Thus, while guardrails around the equipment and open water tanks meet fall protection requirements for maintenance personnel, they do not meet the more stringent requirements required for the general public.



Photo 1 Maintenance-Rated Guardrails at Treatment Facilities

Overhead Power Line Conflict: The existing Portable Trailer Building is currently located directly under overhead high-voltage power lines. A portion of the Main Building also borders the power lines and is within the power line easement (See Photo 2). This condition poses an immediate safety concern, in addition to violating the utility easement setback requirements.



<u>Exhibit A</u> Existing Site

### 6.0 EXISTING CONDITIONS – OPERATIONS BUILDINGS

The SEJPA operational facilities consist of two buildings housed at the north end of the site. The main building is a single story 6,550 square feet concrete masonry structure. The building is an assemblage of multiple additions, resulting in a piece-meal and poorly organized spatial layout. The second building is a 1,440 portable trailer structure, consisting of the light-frame building on a temporary foundation. As noted in the **Facility Plan Update**, numerous Code and ADA access issues occur throughout both buildings. Additionally, there is a severe lack of space to adequately house staff and serve the operational needs of the facility. A brief synopsis of each building is as follows:

#### Main Building

- 1965 Original Operations building constructed. 1,670 square feet, concrete masonry with wood-frame roof.
- 1981 SEJPA adds 2,340 square foot to building. Expansion adds laboratory function. Building is adjoined, but is seismically separated, creating double masonry walls where the new addition meets the existing building. Total building area is 4,010 square feet.
- 1991 SEJPA adds another 2,135 square feet to the building. Addition was part of the overall Plant expansion.

2000 SEJPA adds another 405 square feet as part of Recycled Water Facility Upgrade.

Deficiencies:

- Disabled Access (ADA): ADA deficiencies occur throughout the facility, including the building entry, restrooms and egress maneuvering clearances.
- Fire Life Safety: Deficiencies include egress access, occupant loading and outdated fire alarm and fire sprinkler systems.
- Structural: Original construction predates Code adoption of 1976 seismic safety standards. Deficiencies include inadequate roof diaphragm to wall connections.
- Energy Efficiency: Building built before adoption of Energy Codes. Building envelop contain insulated windows and lacks proper roof and wall insulation. Building lacks energy efficient HVAC and water heating equipment
- Overhead Power Lines: Portions of building are within high-voltage power line footprint & easement.
- Repurposed Spaces: Former Boiler room serves as office space, former Electrical Room serves as Control Room, with poor working efficiency.
- Piecemealed Additions: Building contains numerous double masonry walls making remodel difficult and impractical (See Exhibit B).
- Laboratory: Facility ventilation is deficient. Laboratory facilities are at end of their useful life.
- Space: Facility lacks adequate space for staff and operational functions.

#### Portable Trailer Building

2000 SEJPA adds 1,440 square feet portable trailer building adjacent to the Main Building. This facility was originally installed as temporary office space for SEJPA staff added for the Reclaimed Water system. Fifteen years later, this facility is still in use.

Deficiencies:

• Overhead Power Lines: Building is sited underneath high-voltage power lines (See Photo 2). This condition poses an immediate safety concern.

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- Disabled Access (ADA): Building's elevated stair entry lacks access ramp (See Photo 3).
- Fire Life Safety: Building lacks fire sprinkler and fire alarm systems.
- Structural: Building lacks a permanent foundation, with inadequate anchorage to grade.
- Plumbing: Building lack restroom facilities. Staff must traverse uncovered site area to the Main Building restrooms. This situation is both inefficient and problematic in inclement weather.



Photo 2 Buildings Under Power Lines



Photo 3 Non-Accessible Portable Trailer Building Entry



Legend Indicates Concrete Masonry Walls

<u>Exhibit B</u> Main Building – Diagram of Building Additions

#### 7.0 PROGRAMMING

The first step in developing the operational facilities assessment for SEJPA consisted of developing a detailed inventory of administration and operational spatial needs. Through a series of meetings and workshops with agency's staff, space needs for all the operations components were reviewed and evaluated. Evaluations were based on the appropriate size and relationship of facilities for optimal operational efficiency and future adaptability. The evaluations included projections for future program elements to build in long term flexibility. The inventory categories are as follows:

- Administration: Includes administrative staff offices and auxiliary spaces including Board facilities, reception, conference, staff work areas, storage, and appurtenances.
- **Operations**: Includes staff office space and auxiliary program areas including locker rooms, training, technical work areas and appurtenances.
- Laboratory: Includes laboratory, office area and auxiliary spaces.
- **Support:** Includes technology support, custodial, and equipment rooms.

Room Designation	Existing Square Footage	Proposed/Future Square Footage
Administration		
Reception	80	120
Waiting/Lobby	150	350
General Manager	190	250
Director of Finance/Administration	110	180
H.R. / Safety Administrator	110	150
Administrative Assistant	125	120
Accounting Technician	110	120
Administrative Conference Room		250
Flexible Office Space		120
Workroom/Files	600	300
Break Room	345	350
Board Room	320	1200
Board Room Storage		150
Auxiliary Board Room		225
Men's Restroom		180
Women's Restroom		200
Subtotal		4265

Room Designation	Existing Square Footage	Proposed/Future Square Footage	
Operations			
Director of Operations	170	180	
Associate Engineer	105	150	
Water Reclamation Specialist	200	120	
Chief Plant Operator	105	120	
Lead Operator 1	90	80	
Lead Operator 2	90	80	
Lead Operator 3 (future)		80	
Operator 1	50	60	
Operator 2	50	60	
Operator 3	50	60	
Operator 4	50	60	
Intern		60	
Mechanical Systems Supervisor	140	120	
Mechanic 1	50	80	
Mechanic 2	50	80	
Mechanic 3	50	80	
Intern		80	
Tech Library		150	
Plan Room	70	150	
Conference/Training Room		500	
Break Room		400	
Men's Restroom	100	150	
Women's Restroom	70	150	
Men's Lockers	280	350	
Women's Lockers	60	150	
Workshop	1000	1400	
Subtotal		4950	

Room Designation	Existing Square Footage	Proposed/Future Square Footage
Laboratory		
Senior Lab Analyst	100	120
Lab Analyst 1	80	80
Lab Analyst 2		80
Lab Analyst 3		80
Laboratory	1500	1500
Chemical Storage	160	100
Subtotal		1960

Room Designation	Existing Square Footage	Proposed/Future Square Footage
Support		
Systems Integration Supervisor		150
Systems Integrator		120
Systems Integrator (future)		120
SCADA	16	120
IT/Data Rooms		120
Electrical Rooms		160
Custodial Rooms		100
Subtotal		890

Overall Program Summary					
Administration	4265				
Operations	4950				
Laboratory	1960				
Support	890				
Subtotal	12,065				
Circulation Net/Gross (18%)	2135				
Total	14,200				

## 8.0 PROGRAM ANALYSIS - SITE

Working with SEJPA staff, site issues were discussed and prioritized. Site security was identified as the number one priority for site programming. The priorities for site program are:

- Security Controlled Access: Enable the public to meet with staff without having to enter the secured perimeter of the Plant.
- Security Visibility: Provide higher visibility to the secured Facility entrance gate.
- Safety: Remove Operations buildings from underneath of existing SDG&E overhead power lines.
- Circulation: Widen access driveways throughout the site to meet Fire Department width requirement for improved vehicular movement and safety.
- Parking Public: Develop additional parking at the front of the site, on the public side of the secured entrance for SEJPA and potentially as overflow parking for the San Elijo Nature Center.
- Parking Staff: Develop in-Plant parking for staff in close proximity to Operations Building(s)
- Path of Travel: Improve path of travel throughout site for both staff circulation and Code requirements for Accessibility.

#### 9.0 PROGRAM ANALYSIS - BUILDINGS

Working through multiple programming meetings with the SEJPA staff, building program issues were discussed and prioritized. The priorities for the buildings are:

- Security: Enable staff to meet with public without having to enter the secured perimeter of the Plant. Enable Board meetings to occur on the public side of the facility.
- Safety: Provide facilities that meet Code requirements for essential facilities.
- Accessibility: Provide facilities that comply with California Title 24 Disabled Access and ADA requirements, incorporating appropriate principles of Universal Design.
- Working Spaces: Provide adequate working area for all program elements.
- Working Proximity: Provide close working proximity for all staff.
- Flexibility: Design facilities to provide flexibility and adaptability to future program needs.
- Energy Efficiency: Provide facilities that meet or exceed current California Energy Standards.

### **10.0 ALTERNATE ANALYSIS SITE DIAGRAMS**

Based on the established strategic goals and priorities, SEJPA staff and the design team developed multiple options for organizing the operations facilities on the site. To capture a broad approach, options also included venturing offsite, possibly renting office space as well as co-locating facilities at the Encina Wastewater Authority facility in the event of an agency merger. Additionally, the team looked at the possibility of building leasable commercial space as part a new a building. A synopsis of the options developed are:



#### Option A

- Demolish Portable Trailer building
- Construct new Administration directly adjacent to Main Operations building.
- Renovate Main Operations Building.



#### Option B

- Construct a single Administration/Operations building at front entry.
- Repurpose former Main Building to Workshop & Storage.



#### Option C

- Construct new Administration building at front entry.
- Demolish Portable Trailer building.
- Renovate Main Operations building.

San Elijo Joint Powers Authority Draft



#### Option D

- Construct new combination Administration Building/Commercial at front entry.
- Demolish Portable Trailer building.
- Renovate Main Operations building.

Possible SEJPA Administration Building Location (Lease Approx. 7800 SF)



#### Option E

- Lease Administration space offsite.
- Renovate Main Operations Building.

San Elijo Joint Powers Authority Draft



#### Option F

- Co-locate Administration facilities at the Encina site.
- Construct new Operations building at front entry of the SEJPA site.

SEJPA Alternative Analysis – Pro/Con Matrix		ions				
Pros	А	В	С	D	E	F
SEJPA owns the land	Х	Х	Х	Х		
Locates all staff on SEJPA site	Х	Х	Х	Х		
Provides closer working proximity for staff	Х	Х				
Increases parking for Nature Center overflow	Х	Х	Х			х
Improves site security	х	х	Х			х
Improves traffic calming with secondary gate	х	х	Х	х	х	х
Reduces risk from overhead power lines	Х	х	Х	х	х	х
Eliminates risk from overhead power lines		х	Х	х		
Improves site security with visual control of gate		Х	Х	Х		х
Improves site security by allowing public interface without entering the site		х	х	x		x
Provides Public presence at site entrance		Х	Х	Х		Х
Provides collaborative opportunities with Nature Center		Х	Х			х
Provides most flexibility and adaptability for future needs		Х	Х			Х
Provides revenue stream with tenant				Х		
Totals	7	13	12	9	2	9
				•	•	•
Cons	А	В	С	D	E	F
Inadequate site control. Public must enter Plant to access Administration	x				x	
Building site limitations may impact cost	Х	Х				
Existing Operations Building not conducive to remodel due	x		x	x	x	
Lacks Public presence	X		~	~	x	
Construction impacts operations and requires Interim						
Housing during construction	x					x
Cost premium due to phasing & extended construction						
duration and multiple moves	х		х	х	х	х
Requires large building footprint at front of campus		Х		Х		
Requires Discretionary Permitting through the City				Х		
Requires management of tenant				Х		
Requires significant construction at two sites						Х
Totals	6	2	2	5	4	3
Overall Ranking (Highest Score =Highest Ranked)	1	11	10	4	-2	6

For all the options developed, pros and cons were established. Viability for each option was discussed and considered, and a Pro/Con matrix for all the options was developed. Overall ranking was determined by subtracting Cons from Pros scoring.

## **11.0 SITE DIAGRAM RECOMMENDATIONS**

After weighing all the factors based on the SEJPA's operational and strategic goals, Options B, C and F were considered for further study. These options have been re-catalogued as Alternative 1, 2 and 3 respectively. All three options will address and resolve security, Code and life-safety issues. To help the evaluation process, the main advantages and drawbacks for each alternative are discussed in more detail.

#### Alternative 1:

This alternative consists of constructing a new 14,200 square foot Administration and Operations building near the site entrance (See Exhibit F). The existing Main Operations building would be repurposed to a workshop and storage functions. The advantages of this option are:

- Security: Enables SEJPA staff to meet with vendors, consultants and other members of the public without entering the secured perimeter of the plant.
- Work Efficiency: Houses all SEJPA staff in single location, improving work efficiency, collaboration and morale.
- Flexibility: Allows for greater adaptability to respond for future processes and staff functional needs, as area at former Operations building is available for future facilities.
- Public Presence: Location at the front of the facility allows for more public interface and possible collaboration with the adjacent Nature Center.
- Best Long Term Value: While having a higher initial cost, this option has the best long term value based on excepted life of a new facility.

The drawbacks to Alternative 1 are:

• This option has a higher initial cost than Alternative 2.

The Preliminary Project Budget for Alternative 1 is approximately \$7.93 Million (See Exhibit C).

#### Alternative 2:

This alternative consists of constructing a new 7,800 square foot Administration building near the site entrance, and renovating the existing Main Operations Building (See Exhibit G). The advantages of this option are

- Security: Enables SEJPA staff to meet with vendors, consultants and other members of the public without entering the secured perimeter of the plant.
- Flexibility: Although not as adaptable to future needs as Alternative 1, this option is adaptable to a possible future Agency merger.
- Public Presence: Location at the front of the facility allows for more public interface and possible collaboration with the adjacent Nature Center.
- Initial Cost: This option is likely to have the lowest initial cost.

The drawbacks to Alternative 2 are:

- Work Efficiency: Lacks working proximity of all staff in one location.
- Long Term Value: Renovation of problematic, dated building has a lower long term value.

The Preliminary Project Budget for Alternative 2 is approximately \$7.63 Million (See Exhibit D).

#### Alternative 3:

This alternative explores the possibility of an agency merger between SEJPA and the Encina Wastewater Authority. It assumes that some facilities at Encina could be used, thus requiring less overall built area. This alternative requires constructing new facilities at both Encina and SEJPA. It includes an approximately 6550 square foot Operations building near the site entrance of SEJPA (similar to Alternative 2), as well as an approximately 5000 square foot Administration facility at the Encina Plant (See Exhibit H). As buildable area at Encina is limited, the construction at Encina would most likely entail a second story addition to existing structure. The advantages of this option are:

- Security: Similar to Alternatives 1 and 2, building at the front entrance enables SEJPA staff to meet with vendors, consultants and other members of the public without entering the secured perimeter of the plant.
- Flexibility: By locating Administration facilities at Encina, the SEJPA site area at former Operations building is available for future facilities.
- Public Presence: Location at the front of the facility provides more public visibility. However, with Administration facilities remote from the SEJPA site, public interface is more limited that Alternatives 1 and 2.
- Long Term Value: This option has good long term value based on excepted life span of the new facilities at each site.

The drawbacks to Alternative 3 are:

- Work Efficiency: Lacks working proximity of all staff in one location.
- Redundant Facilities: Adds redundant space requirements due to having remote facilities.
- Cost: Although not the highest cost of the three options, it is the highest relative cost based on added square footage. Construction at Encina will displace existing staff and require interim housing. Construction at two sites also increases management and overhead costs.
- Agency Approvals: Constructing facilities at two sites significantly lengthens the Discretionary Review and Building permitting processes, as individual applications will be required for each site.

The Preliminary Project Budget for Alternative 1 is approximately \$7.87 Million (See Exhibit E).

## Exhibit C

# SEJPA Alternative 1 - Conceptual Project

Budget

New Stand Alone Administration Bldg near Site Entrance To House Entire Staff

	Area	Unit	Unit Cost	Total
Construct 2-Story Admin Bldg	14,200	SF	\$350	4,970,000
Sitework at Front Entry	1	LS	\$500,000	500,000
				5,470,000
Contingency (20%)				1,094,000
Total				6,564,000
Soft Costs - Design				
A/E Design (7%)				459,480
Discretionary Permitting/Environmental				75,000
Plan Review & Building Permit				100,000
CM - Predesign (Constructability + Cost Est) (2.5%)				136,750
				771,230
Soft Costs - Construction				
A/E Construction Administration (2%)				131,280
CM (4%)				262,560
Testing & Inspection (3%)				196,920
				590,760
Grand Total				7,925,990

# Exhibit D

# SEJPA Alternative 2 - Conceptual Project

Budget

*New Stand Alone Administration Bldg near Site Entrance & Remodel Operations Building* 

	Area	Unit	Unit Cost	Total
Construct 2-Story Admin Bldg	7800	SF	\$350	2,730,000
Renovate Existing Operations Bldg	6500	SF	\$250	1,625,000
Sitework at Operations Area	1	LS	\$250,000	250,000
Sitework at Front Entry	1	LS	\$500,000	500,000
Subtotal				5,105,000
Premium for extended construction duration			3%	153,150
				5,258,150
Contingency (20%)				1,051,630
Total				6,309,780
Soft Costs - Design				
A/E Design (7%)				441,685
Discretionary Permitting/Environmental				75,000
Plan Review & Building Permit				100,000
CM - Predesign (Constructability + Cost Est) (2.5%)				131,454
				748,138
Soft Costs - Construction				
A/E Construction Administration (2%)				126,196
CM (4%)				252,391
Testing & Inspection (3%)				189,293
				567,880
Grand Total				7,625,799

# Exhibit E

# SEJPA Alternative 3 Conceptual Project

Budget

*New Stand Alone Operations Bldg near Site Entrance & Add Administration Bldg at Encina* 

	Area	Unit	Unit Cost	Total
Construct 2-Story Operations Bldg	6550	SF	\$350	2,292,500
Construct Building at Encina	5000	SF	\$350	1,750,000
Sitework at Front Entry	1	LS	\$500 <i>,</i> 000	500,000
Sitework at Encina	1	LS	\$350,000	350,000
Subtotal				4,892,500
Premium for extended construction duration			3%	146,775
				5,039,275
Contingency (20%)				1,007,855
Total				6,047,130
Soft Costs - Design				
A/E Design (8%)				483,770
Discretionary Permitting/Environmental				150,000
Plan Review & Building Permit				200,000
CM - Predesign (Constructability + Cost Est) (3.5%)				176,375
				1,010,145
Soft Costs - Construction				
A/E Construction Administration (3%)				181,414
CM (5%)				302,357
Testing & Inspection (3%)				181,414
Interim Housing at Encina				150,000
				815,184
Grand Total				7,872,459

## 12.0 Conclusion

Review of the SEJPA facilities lead to the conclusion that existing operations buildings are obsolete and action needs to be taken. As SEJPA plans for upcoming facility improvements, there is a great opportunity to fix chronic problems and position the agency to respond to the future needs and opportunities. After an extensive and thoughtful programming effort with the SEJPA staff, three alternatives have been brought forward for further consideration.

All three alternatives locate a new building at the front entry of the SEJPA plant to resolve site security issues. The frontal building position also gives SEJPA more opportunities for public interface, improved site control and security, and collaboration with the adjacent Nature Center.

Alternative 1 consists of a single, standalone two-story building at the front of the SEJPA plant. This option has the advantages of housing all the staff in one location, good long term life cycle cost value and a high level of flexibility and adaptability for future needs.

Alternative 2 consists of a providing two facilities, with a new building at the front of the SEJPA plant, and remodeling the existing Main Operations Building. This option is the least expensive initial cost, but not the best life cycle value since it involves renovation on an older building. It also has the disadvantage of housing staff in two separate locations.

Alternative 3 explores an agency merger scenario with Encina Wastewater Authority. This includes adding a new building at the front of the SEJPA plant for onsite operations, and adding facilities at Encina for Administration. This alternative is part of a bigger question for SEJPA with regards to considering an agency merger. While the potential operational advantages or disadvantages of a merger are not part of this report, it does address the conceptual facilities requirements. This option would require constructing new facilities at both the SEJPA and Encina sites. It does have the advantage of building less square footage, as some of Encina facilities (Board room, Lab) could be used for SEJPA purposes. However, the relative cost for building these facilities is high due the work involved at two occupied sites. It also has the disadvantage of having staff located at two locations; however, it is assumed that the merger scenario provides other more significant advantages.

It is recommended that additional study of these alternatives be analyzed by SEJPA to decide the best option for future building improvements.

#### AGENDA ITEM NO. 16

#### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: Director of Finance and Administration
- SUBJECT: AWARD OF CONTRACT FOR STATE REVOLVING FUND (SRF) LOAN SUPPORT AND CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PLUS DOCUMENTATION

#### RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Approve Professional Service Agreement with Dudek for SRF and CEQA plus Support for an amount not to exceed \$123,340; and
- 2. Discuss and take action as appropriate.

#### BACKGROUND

At the July 2015 Board meeting, the Board authorized the General Manager to request proposals from underwriters to pursue municipal bond financing. Staff has evaluated alternative financing for the SEJPA's Capital Program that may be more beneficial to the agency.

#### DISCUSSION

The California State Water Resources Control Board administers the Clean Water State Revolving Fund (SRF) Program. Eligible projects include the construction of publicly-owned treatment facilities that provide wastewater treatment and recycled water production and distribution. The SEJPA is currently seeking financing for both the wastewater treatment and recycled water projects.

The Recycled Water utility was originally financed in 1998 by an SRF loan in the amount of \$12.6 million. The SRF loan requirements can be more stringent than the requirements for Municipal Bonds and Private Placement Bonds. In addition, the financing costs associated with obtaining an SRF loan are paid as-you-go, whereas the municipal and private placement bond costs are paid only if funding is successful. SRF bonds are attractive due to the low interest rates which are one-half the most recent General Obligation (GO) Bond Rate at time of funding approval. As of March 2015, the SRF interest rate was 1.6%.

Staff invited four qualified firms to provide submissions to prepare the SRF loan applications and supporting documents. Three firms submitted proposals and, after review, one of the firms was invited to interview with staff to discuss their proposal in more detail. The proposal that provided the best combination of qualifications, project understanding, and value based approach was submitted by Dudek.

The proposal from Dudek listed experience with preparing, submitting, and overall project management of the SRF loan application process; including in-house California Environmental Quality Act (CEQA) plus documentation, which is a requirement for the SRF loans. This team also was able to provide an excellent value in their proposed project approach to efficiently complete this effort.

The proposed agreement will include planning, meetings, creating Financial Assistance Application Submittal Tool (FAAST) SRF accounts, preparing loan application packages, environmental documentation (CEQA Plus), and managing the preparation of other supporting documents.

#### FINANCIAL IMPACT

The SEJPA is seeking financing of approximately \$22.4 million and \$4.8 million for the Wastewater and Recycled Water facilities, respectively. The SRF loan support will assist the SEJPA in obtaining SRF funding for the SEWRF and Recycled Water projects presented at the July 2015 Board Meeting. Table 1 below shows the payment differences and interest savings between 4.0% and 2.5% bond interest:

Loan Amount	Bond Yearly Payment	SRF Yearly Payment	Yearly Difference	Bond Total Interest	SRF Total Interest (1)	Financing Difference
	4.0%	2.5%	1.5%	4.0%	2.5%	1.5%
\$22.4 mil	\$1,289k	\$1,066k	\$223k	\$16.3 mil	\$9.6 mil	\$6.7 mil
\$ 4.8 mil	\$276k	\$228k	\$48k	\$3.5 mil	\$2.1 mil	\$1.4 mil

#### Table 1 - Differences in Yearly Payments and Total Interest Paid over 30 Years

(1) 2.5% SRF and 4% Bond interest rate are used for illustration purposes, *interest rate is determined at the time of funding.* 

(2) 30 year financing term for both SRF and Bonds.

The proposed agreement to support the SRF loan application and CEQA plus environmental documentation is \$123,340. The SRF loan is for wastewater, recycled water, and ocean outfall capital projects. The distribution of capital projects is approximately 62% wastewater, 18% recycled water, and 20% ocean outfall. Accordingly, funding for the proposal agreement will be provided proportionally by the capital funding pursued by each program. The approximate funding by program is as follows:

Wastewater	\$76,471
<b>Recycled Water</b>	22,201
Ocean Outfall	24,668
Total	\$123,340

Funds are available in the Capital Programs.

It is therefore recommended that the Board of Directors:

- 1. Approve Professional Service Agreement with Dudek for SRF and CEQA plus Support for an amount not to exceed \$123,340; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Paul F. Kinkel Director of Finance and Administration

Attachment 1: Dudek Scope of Work and Fee Schedule

ATTACHMENT 1

# DUDEK

# STATE REVOLVING FUND LOAN SUPPORT

PREPARED FOR San Elijo Joint Powers Authority



PREPARED BY

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

September 3, 2015



605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 800.450.1818 F 760.632.0164

September 3, 2015

Paul Kinkel Director of Finance and Administration San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff by the Sea, CA 92007

#### Subject: Proposal for State Revolving Loan Fund Support

Robert, Christopher, Crysten, Eva, Barbara, Martin, Ahmad...I am on a first name basis with many of the State Revolving Fund (SRF) staff in Sacramento, CA. On several occasions I have been referred to as their "favorite SRF consultant". I am excited to bring Dudek's and my SRF and environmental compliance expertise and creativity to San Elijo Joint Powers Authority (SEJPA). We truly appreciate the opportunity to propose on the State Revolving Loan (SRF) Fund Support project. The enclosed proposal provides our approach to the project, scope of work, and team experience directly related to securing SRF loans for our clients' infrastructure projects.

We understand SEJPA is motivated to rehabilitate and expand its water reclamation facility and recycled water infrastructure and wishes to secure a low-interest SRF loan to fund the estimated \$22.4 million in wastewater improvements and \$4.8 million in recycled water improvements. Navigating the SRF process can be daunting and time consuming, and if not approached correctly, can significantly delay a project. Dudek's integrated engineering and environmental team are very familiar with the application process and State Department of Financial Assistance's requirements and will help SEJPA obtain a funding commitment in a timely manner.

The Dudek team assembled for this project brings unparalleled experience in submitting projects under the SRF program. Our project management team, which consists of Steve Jepsen and Amanda Combs, with Steve Deering providing technical assistance, has assisted many Southern California cities and agencies in obtaining SRF loans. Most recently, Mr. Steve Jepsen secured four SRF loans in excess of \$30 million for the City of Vista's multi-year sewer improvement program and a \$10 million two phase loan for the City of South Pasadena. SEJPA will also benefit from Dudek's industry leading CEQA capabilities lead by Carey Fernandes and Shawn Shamlou, CEQA consultants, with extensive experience with Southern California infrastructure projects.

Thank you again for the opportunity to propose and we look forward to working with the SEJPA. If you have any questions or wish to discuss our proposal, please contact Steve Jepsen at 760.479.4112 or sjepsen@dudek.com.

Sincerely

Steve Jepsen Program Manager

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#### **APPENDICES**

Resumes

# 1 Identification of Proposer

Dudek provides engineering and environmental services to assist public and private clients plan, design, permit, build and manage projects in California involving infrastructure development and natural resources management. A diversified, multi-discipline firm, Dudek has more than 300 professionals and support staff working in offices throughout California. The following **Table 1** provides the requested name, address, legal form of company, parent companies, and contact person for this proposal

Legal Name and Address of Company	Dudek, 605 Third Street, Encinitas, CA 92024		
Legal Form of Company	California Corporation		
Identify Parent Companies	N/A		
Addresses of office(s) in San Diego County	605 Third Street, Encinitas, CA 92024		
Name, Title, Address, and Telephone Number of Person to Contact	Steve Jepsen 605 Third Street, Encinitas, CA 92024 (T) 760.479.4112 (C) 760.415.4332 (E) sjepsen@dudek.com		

#### TABLE 1. IDENTIFICATION OF RESPONDER

# 2 Experience and Technical Competence

For over 35 years, Southern California municipal agency/public-sector clients have relied on Dudek to deliver complete, practical, and cost effective solutions for infrastructure. Dudek has direct experience with assisting in obtaining funding for sewer infrastructure repairs through the State Revolving Fund (SRF) program. We have assembled a team of experience professionals who have directly worked on obtaining SRF loans for several Southern California agencies. We are confident that our demonstrated experience in this section will provide San Elijo Joint Powers Authority (SEJPA) with adequate information about our capabilities. We have selected the below projects for reference as they offer the following similarities SEJPA's project in SRF loan facilitation and FAAST application, close coordination with client staff, and environmental permitting using CEQA Plus.

Please contact our references with each project to learn more about capabilities and performance.

Project Name, Client Reference, Dates & Key Personnel	Project Description	SRF Loan Amount
Sewer Program Management City of Vista, Elmer Alex, 760.726.1340 2009 – June 2015 Steve Jepsen, Shawn Shamlou	Dudek contracted with the City in 2009 to serve in an extension of staff role as the Sewer Program Manager managing over \$100M in sewer improvement projects. Under this contract, Dudek successfully prepared, secured, and managed four SRF loans including CEQA Plus documents.	\$30M
SRF Assistance for Sewer Rehabilitation Program City of South Pasadena, Shin Furukawa, 626.403.7240 2012 – 2013 Steve Jepsen, Amanda Combs	Dudek provided the City with assistance in securing and managing a SRF Loan for various sewer infrastructure facilities throughout the City. Key tasks included coordination and project management, CEQA Plus documentation, financial assistance application, and assistance during bidding and construction. Dudek secured one loan for the 2-phase project.	\$10M

#### TABLE 2. PROJECT EXPERIENCE & REFERENCES

## PROJECT ORGANIZATION AND KEY PERSONNEL

Project Name, Client Reference, Dates & Key Personnel	Project Description	SRF Loan Amount
Wastewater System Expansion, Program Management, and Funding City of Coachella, Jerry Jimenez, 760.391.5008 2006 - 2010 Steve Jepsen	The City upgraded its wastewater collection and treatment system from 3 mgd to 4.5 mgd. Dudek provided SRF funding coordination, planning, design, and construction management services for the City's phased \$40 million program. Dudek was responsible for the preparation of application materials for SRF, U.S. Department of Agriculture grant, and loan packages. CEQA documentation was prepared including compliance with CEQA Plus.	\$25M
San Elijo Water Reclamation Facility SEJPA, Michael Thornton, 760.753.6203 2009 - 2010 Carey Fernandes	Dudek prepared CEQA Plus documentation for a recycled water expansion project.	\$2M
Yucaipa Valley Regional Brineline Yucaipa Valley Water District, Joe Zoba, 909.797.5117 2007 – 2012 Mike Metts, Steve Jepsen	Dudek secured a SRF loan for the 15-mile brineline extension. The project was phased to accommodate project funding as well as construction efforts. Dudek also prepared CEQA documentation in accordance with CEQA Plus.	\$15M
Santa Ynez Well Design and Santa Ynez River Water Conservation District, Eric Tambini, 805.688.6015 2014 - present Amanda Combs	Dudek assisted in the SRF loan preparation for the project. Dudek prepared planning, design, plans and specifications and, cost estimates for new water wells, pumps, motors and well head facilities. Dudek also assisted the District with planning treatment facilities to address the new drinking water maximum contaminant level for hexavalent chromium.	\$2.5M
Woods Valley Rach Water Reclamation Facility & Charlan Road Seasonal Storage Facility Valley Center Municipal Water District, Fernando Carrillo, 760.479.1600 2013 – 2014 Amanda Combs	Dudek provided design and construction assistance as well as SRF loan condition compliance for these SRF funded projects.	\$15M
Corona WRF2 Tertiary Filtration Project and Headwork Rehabilitation Project City of Corona, Vernon Weisman, 951.739.4912 2011 – 2013	Dudek provided design and construction assistance as well as SRF loan condition compliance for these SRF funded projects.	\$10M
Encina Wastewater Treatment Plant Expansion CEQA+ Documentation Encina Wastewater Authority, Kevin Hardy, 760.438.3941 2003 – 2004 Shawn Shamlou	Dudek prepared a CEQA document that met state revolving funds loan application requirements for CEQA+, which included analysis for the expansion of wastewater treatment capacity. Improvements/upgrades required implementing the phase V expansion included modifications to the existing preliminary treatment facilities, primary/secondary treatment facilities, and effluent pumping facilities.	
	Total Amount of SRF Loans	\$110 M

# 3 Project Organization and Key Personnel

Dudek has assembled a local team with extensive expertise in funding infrastructure and planning projects throughout Southern California. Our experienced funding team can guide SEJPA through the necessary steps to ensure SRF funding for the sewer and recycled water improvements are obtained in a timely fashion.

Serving as our Project Manager, Mr. Steve Jepsen has over 33 years of experience in civil engineering and has been involved in many public infrastructure projects. He is thoroughly familiar with permitting requirements, as well as obtaining and managing government grants and low-interest loans. Mr. Jepsen managed four SRF loans for a total of \$30 million for the City of Vista sewer improvement program.

Steve Deering will be available to assist Steve Jepsen with the plant upgrades benefit descriptions required in the Technical Application. He is experienced in the SRF Ioan application process through his work on the City of Coachella Treatment and Sewer System Expansion, Yucaipa Valley Water District Regional Brine Line, Woods Valley Water Reclamation Facility Expansion, and City of Corona WRF2 Tertiary upgrades.

Ms. Amanda Combs will serve as the Project Engineer providing application assistance as needed. Ms. Combs has over 13 years of experience in providing design services for SRF funded sewer pipeline rehabilitation programs. With assistance from Mr. Jepsen, she recently secured a \$10 million SRF loan for the City of Pasadena sewer rehabilitation program. Amanda worked closely with Mr. Jepsen on the City of Vista SRF funded sewer improvement program.

Carey Fernandes and Shawn Shamlou complete the Dudek team for the CEQA Plus documents. Mr. Shamlou was the Project Manager for the City of Vista Sewer Improvement Program EIR.

Dudek's personnel organizational chart for this project is illustrated in **Figure 1**. A short biography for key team members (**Table 3**) follows the organizational chart. Resumes, including education, detailed project experience, and licensing and certification information, are located in **Appendix A**.



#### FIGURE 1. PROJECT ORGANIZATION CHART

#### TABLE 3. KEY PERSONNEL ROLES & EXPERIENCE

Team Member & Role		Relevant Experience
	Steve Jepsen Project Manager 33 Years of Experience Encinitas office 75% Commitment	<ul> <li>Recently completed six-year term as Program Manager for City of Vista's \$100 million sewer program. Secured four-SRF loans totaling over \$30 million</li> <li>Task Lead for securing a \$10 million two phase SRF loan for City of South Pasadena Sewer Rehabilitation Program</li> <li>Team member for securing a \$25 million SRF loan for City of Coachella's Wastewater System Expansion</li> <li>Extensive experience with government assisted funding and environmental compliance for wastewater, recycled water and potable water projects</li> </ul>
	Steve Deering, PE Plant Upgrades Benefit Descriptions 40 Years of Experience Encinitas office 13% Commitment	<ul> <li>Principal for City of Coachella's \$25 million SRF funded Wastewater System Expansion</li> <li>Principal for Woods Valley Ranch Water Reclamation Facility &amp; Charlan Road Seasonal Storage Facility (SRF funded projects)</li> <li>Principal for City of Corona WRF2 Tertiary Treatment Upgrades and Headworks Rehabilitation (SRF funded projects)</li> </ul>
	Amanda Combs, PE SRF Loan Application Process 13 Years of Experience Encinitas office 13% Commitment	<ul> <li>Project Manager for securing a \$10 million SRF loan and design for City of South Pasadena Sewer Rehabilitation Program</li> <li>Project manager for the City of Vista's Cured-in-Place-Pipe Sewer Rehabilitation Project where she was responsible for coordination and compliance for the SRF funded sewer rehabilitation project</li> <li>SRF funding compliance assistance for Valley Center, Santa Ynez and City of Corona SRF funded projects</li> </ul>
	Carey Fernandes, AICP CEQA Plus 18 Years of Experience Encinitas office 2% Commitment	<ul> <li>Project Manager for the preparation of an MND and CEQA Plus documentation for SEJPA Recycled Water Project</li> <li>Project Manager for environmental documentation for City of Brawley Water and Wastewaster Master Plans</li> <li>Project Manager for the preparation of a feasibility study that looked at potential environmental issues for a 32.5 acre site for Valley Center MWD</li> <li>Project Manager for EIR that analyzed the development of Garden Del Mar, mixed use development</li> </ul>
	Shawn Shamlou, AICP CEQA Plus 20 Years of Experience Encinitas office 7% Commitment	<ul> <li>Project Manager for the City of Vista/Buena Sanitation District Sewer Improvement Program EIR</li> <li>Project Manager for the CEQA documentation in compliance with SRF and CEQA Plus for Encina Water Pollution Control Facility Expansion</li> <li>Environmental Task Lead for CEQA documentation for City of Encinitas Coast Hwy 101 Pump Station and Forcemain</li> <li>Environmental analyst for MND for Water Recycling Facility for Padre Dam Municipal Water District</li> <li>Project manager for MND for JB Latham Treatment Plant Expansion for SOCWA</li> </ul>

# 4 Project Approach

SEJPA is interested in clearly identifying eligibility, terms and conditions of SRF funding for projects identified in the 2015 Facilities Plan and Recycled Water expansion program for comparison with other funding alternatives such as bonds.

Priority projects from the 2015 Facilities Plan and recycled water projects were presented to the Board on July 13, 2015 for financing alternative investigations. Wastewater treatment projects include land outfall improvements, building improvements, preliminary treatment upgrades and other treatment upgrades totaling \$22.4 million. Recycled water projects include expansion, storage and relocations driven by I-5 widening totaling \$4.8 million. The SRF loan program is an excellent source for low interest loans. Interest rates are generally half of the prime rate. Current interest rates for clean water projects are less than two percent and recycled water projects are at one percent.

After reviewing the 2015 Facilities Plan, Dudek suggests the following grouping or phasing for the two separate SRF loans.

SRF Loan Phase	Project	Estimated Capital Cost (M)	Status	Potential CEQA/NEPA Requirement	Permits
1	Land Outfall Expansion	\$5.2	Final Design	CEQA + MND	CDP
2	Preliminary Treatment Upgrades	\$2.4	Preliminary Design	CEQA + NOE	
3	Administration & Operations Buildings & Seismic Upgrades	\$7.0	Preliminary Design	CEQA + MND	CDP, Encinitas Building & Land Use
3	Site Improvements & Security	\$0.9		CEQA + NOE	
3	SCADA	\$1.1		CEQA + NOE	
3	Electrical Upgrades	\$0.7		CEQA + NOE	
3	Solar	\$0.4		CEQA + MND*	
4	Aeration & Return Flow Upgrades	\$0.9		CEQA + NOE	
4	Dewatering Upgrades	\$1.7		CEQA + NOE	
4	DAF Upgrades & Co-Thickening	\$0.4		CEQA + NOE	
4	Digester Improvements	\$1.7		CEQA + NOE	
TOTAL CIP COST		\$22.4			

#### TABLE 4. WASTEWATER PROJECTS

\*Special study for glare recommended to avoid a non-mitigatable glare issue

#### TABLE 5. RECYCLED WATER PROJECTS

SRF Loan Phase	Project	Estimated Capital Cost (M)	Status	CEQA/NEPA	Permits
1	Recycled Water Expansion Projects		Planning and Const	CEQA + MND	
2	New System Storage		Planning	CEQA + MND	
3	1-5 Widening Relocations		Planning	CEQA + MND	Encroachment
TOTAL CIP COST		\$4.8			

Taking full advantage of Dudek's close office proximity, the Dudek team will work very closely with SEJPA staff including Paul Kinkel and Mike Konicke. Mr. Jepsen has extensive experience working side by side with public agency staff. This is important because the SRF coordination activities will span several years from initial applications through construction and reimbursement. The interaction with SRF staff will transition from planning through engineering, finance, environmental and construction representatives. Communication protocols must be set up for seamless transitions.

It is recommended that the FAAST applications be submitted from the SEJPA office with SEJPA staff since the FAAST portal will be used to transmit documents throughout the life of the project(s) user account and password should remain consistent.

Based on discussions with Dudek CEQA specialists, a potential approach is to cover all of the wastewater related projects in one CEQA Plus Mitigated Negative Declaration (MND) and all the recycled water projects in one CEQA Plus MND. Any CEQA work already completed can be folded in to the master MND document. There do not appear to be any un-mitigatable or controversial project elements that would justify a full Environmental Impact Report. This will be confirmed as the projects are discussed and better understood.

# Scope of Work

# Task 1 Project Planning and Administration

This task consists of a kick-off meeting and follow up meeting to determine and optimize project grouping. Mr. Jepsen will meet with SEJPA staff, Dudek CEQA specialists and coordinate with SRF staff to determine the most practical way to provide CEQA Plus coverage all the eligible projects with one multi-phase loan for plant improvements and one multi-phase loan for recycled water expansion. A memorandum will be drafted documenting the selected approaches. This task also includes project management and administration.

# Task 2 Meeting with SRF

Dudek's experience has shown that traveling to Sacramento for a face-to-face meeting the key SRF loan staff shows a commitment to the process that will generate improved responsiveness and a better understanding of the project and funding nuances by all parties. Of particular importance for this funding program will be loan phasing and CEQA Plus approach for the phases. Mr. Jepsen has already had verbal confirmation from SRF staff that a single loan with multiple phases for wastewater projects and a single loan for recycled water projects with multiple phases will be the best approach This task includes organizing and attending a meeting with SRF staff in Sacramento and preparing an agenda and minutes.

# Task 3 Complete SRF FAAST Applications with District Staff

Based on the results of Task 2, online FAAST accounts will be created for wastewater and recycled water applications. FAAST will be accessible for SEJPA and Dudek personnel with appropriate clearance and will be used to upload loan documents throughout the process. The online FAAST applications will be prepared and submitted with the intention of receiving written confirmation of eligibility and getting the projects listed on the SRF Intended Use Plan.

# Task 4 Prepare SRF Loan Application Packages

The SRF finance agreement application consists of "General", "Technical", "Environmental" and "Financial Security" packages. The application packages will be prepared together with SEJPA staff. A key component of

the SRF loan application and probably the most time consuming individual task is the preparation of the Facilities Engineering Report portion of the "Technical" package. It is anticipated information from the 2015 Facilities Plan of the existing recycled water project descriptions can be used as a basis for the Facilities Engineering Report.

## Task 5Manage Environmental Documentation (CEQA Plus)

CEQA Plus is required for SRF due to Federal funding sources such as US EPA. Under this task, assistance will be provided in the form of guiding and supporting environmental clearance elements for each project. This is a very important project element since the environmental review is by far the longest lead task associated with loan approval. The selected approach will be informally reviewed with Ahmad Kashkoli in Sacramento prior to implementation.

## Task 6Manage Preparation of SRF Application Support Documents

Services under this task include identification and assistance with preparation of loan support documents that will need to be finalized by SEJPA staff such as resolutions, letters of commitment and letters of legal authority.

# Task 7CEQA Plus for Recycled Water Improvements and WastewaterImprovements (Optional)

This task provides a scope of work and cost estimate for compliance with the California Environmental Quality Act (CEQA) Capital Improvement Programs (CIP) in support for State Water Resources Control Board SRF Loans and project approvals for both the Recycled Water and Wastewater Improvement Program. We understand that SEJPA is applying for separate low interest loans that would help to fund a series of improvements both at the treatment plant and within the SEJPA recycled water service area. Further, each loan will need its own application, and relatedly, its own CEQA Plus documentation. We proposed a joint MND/CEQA Plus document for each project. For ease, we have separated out each scope of services by loan.

**Recycled Water Improvements:** It is our understanding that SEJPA is proposing a series of recycled improvements including a number of phased pipeline improvements located in existing rights of way within the service area. Based on our meeting, we believe the improvements are all located in previously disturbed areas such as existing trails, recreation areas and roadways. It is understood that improvements would be limited to new 6"-8" PVC recycled water pipe, as well as associated possible booster pump station as shown on project plans. In addition, as part of this program, the project application intends to solicit SRF funding for the relocated improvements that result from the North Coast Corridor Project that was recently approved Although we believe that the Caltrans EIR has addressed the potential relocation in its environmental document, the details of timing and funding are not known. (http://www.dot.ca.gov/dist11/Env docs/1-5NCC/Final/i-5 part2 chp2.pdf). This proposal assumes that Dudek will summarize the work proposed in the Caltrans project, describe the recycled water line relocations however, the relocation analysis will be incorporated by reference but no new CEQA analysis would be necessary.

**Wastewater Improvements:** The wastewater improvement program would include improvements to the wastewater treatment plant equipment/processes and administration building located at the JPA's main facility at 2695 Manchester Avenue in Encinitas. Solar panels would likely be installed on the proposed administration building and possibly on top of the other treatment plant equipment. In addition to the administration building, a number of upgrades and minor improvements would be constructed to replace and upgrade plant operations, however, this would not increase plant capacity. In addition, the wastewater improvement program
will include a land outfall replacement project, which will consist of horizontal directional drilling to replace the existing old and potentially failing 30-inch ACP pipe installed in 1964 under the San Elijo Lagoon. We understand that this project is already under design and permitting process conducted by others. Dudek will use the environmental analysis that is being prepared for this project (CEQA MND), and incorporate the analysis into the MND/CEQA Plus document for submittal as part of the SRF loan process.

Based on our meeting and review of the recycled water project sites and nature of the work, we believe the program will require the preparation of a Mitigated Negative Declaration/CEQA Plus document. Although we do not anticipate any significant or unmitigated impacts, this will ensure that any programmatic project design features and mitigation measures can be captured and demonstrate to the State that the project avoids and/or mitigates all impacts. This assumes that the CEQA done for the North Coast Corridor project is sufficient for the I-5 Widening impacts, and no new CEQA analysis is necessary.

Based on our meeting and review of the onsite plant upgrades as well as incorporation of the Land outfall CEQA analysis, we believe this program also can fall under a Mitigated Negative Declaration/CEQA Plus document. As we discussed, individually, many of these upgrades might be Categorical Exemptions, however, as a consolidated package with several different components, plus the unknown nature of the impacts/mitigation for the outfall, we believe this is the prudent course. Should the outfall CEQA document identify significant impacts, impacts to endangered species or cumulative impacts, Dudek will provide an additional scope of work to convert the MND into an EIR/CEQA Plus.

## Preparation of MNDs and CEQA-Plus Documentation for Both Projects

Based on this project understanding and SEJPA's desire for an aggressive schedule, our approach will be to prepare two simultaneous MNDs with CEQA-Plus documentation—one MND for the Recycled Water Projects, and a second MND for the Wastewater Projects. Dudek has ample staff available to prepare two simultaneous MNDs to meet SEJPA's desired schedule.

The following approach elaborates on our plan for meeting ETWD's needs for the two MNDs.

## Tasks 7.1 and 2: Preparation of Initial Studies and MNDs

Dudek will prepare two initial studies/MNDs in accordance with Appendix G, Environmental Checklist Form, to determine potential impacts that might arise out of development of the proposed facility and pipeline improvements. As the sites have all been previously disturbed and/or will occur within existing roadways and developed areas, it is not anticipated that significant operational impacts will occur. Construction-related impacts, such as air quality and GHG emissions, noise, and temporary traffic impacts, may occur and will be fully discussed in the documents. As appropriate, mitigation measures will be included to reduce such impacts to a less-than-significant level.

In addition, in each relevant impact section, Dudek will include a subsection titled "CEQA-Plus Requirements," which will address topics as required by SWRCB. These will likely be as follows: Cultural Resources (Section 106), Air Quality (Clean Air Act), Coastal Zone Management Act and Biological Resources (endangered species, Migratory Bird Treaty Act (MBTA)). The other required considerations are not applicable but will be discussed, Farmland Protection Policy Act, Floodplain Management, and Wild and Scenic Rivers Act and other Federal Cross Cutters. We will also include the form that is provided by SWRCB.

Dudek will submit a screencheck version of the MND documents to SEJPA. We will submit up to five copies of each MND and CEQA-Plus form. The following briefly describes our approach to important environmental issues to be addressed in the MNDs.

## **Technical Analyses**

Dudek proposes the technical analyses described below. To meet the accelerated schedule and to reduce costs, most analyses will not be prepared in separate standalone technical reports, but will be prepared as part of each MND. For CEQA-Plus requirements however, standalone reports will be needed for biological resources, cultural resources, and hydrology. Dudek will conduct all of these analyses in house, and we assume one round of review will be required for each.

**Air Quality and GHGs.** Dudek will prepare an assessment of the air quality and GHG impacts of the proposed project utilizing the significance thresholds in Appendix G of the CEQA Guidelines and emissions-based thresholds as the basis. Dudek will estimate the emissions associated with the construction and operation of the project. Construction emissions estimates will be based on information provided by the Dudek engineering staff. We will then evaluate the significance of the emissions based on appropriate significance criteria developed by San Diego Air Pollution Control District for construction impacts. Where required, Dudek will evaluate mitigation measures to reduce potential impacts associated with construction. This assessment will address criteria pollutant impacts. Evaluation of operational air emissions will include assessing emissions from vehicles associated with project operations, as well as stationary source emissions, including emissions from support systems required for the project, and toxic air contaminant emissions associated with operation of the treatment facilities, including odor compounds and organics.

In addition, the annual construction and operational emissions of nonattainment pollutants and their precursors will be estimated and compared to the federal "de minimis" thresholds for general conformity to satisfy CEQA-Plus requirements. SDAPCD also recommends that a project's construction emissions be assessed with respect to SDAPCD's "localized significance thresholds" (LSTs). The LSTs are intended to assess whether development of a project—primarily the carbon monoxide, oxides of nitrogen, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions generated during construction—would cause or contribute to exceedances of ambient air quality standards at sensitive receptors near the project site.

The GHG section of the initial study will include an assessment of the GHG emissions associated with construction and operation of the project. The estimated emissions will include the associated equipment and motor vehicles used during construction along with motor vehicles, treatment processes, natural gas consumption, and generation of electricity to operate the project. Dudek will assess the significance of the project with respect to the Appendix G thresholds. It is anticipated that neither the proposed upgrade nor expansion of the recycled water distribution system would increase GHG emissions associated with the treatment processes or natural gas consumption. Furthermore, given that the purpose of the project is to expand the use of recycled water, resulting in a reduction in potable water imports, we expect to show a benefit due to its implementation.

**Biological Resources Letter Reports.** Dudek's in-house biology staff is intimately familiar with local biology and has all of the necessary resources (including in-house and public databases) easily accessible for efficient research of potential biological resource impacts. Consistent with Dudek's experience with CEQA-Plus and projects with limited potential biological resource impacts, SWRCB indicated that sufficient documentation needs to be provided to adequately support the conclusions made in the document. An initial list of potential special-status species will be generated, habitat within the project area will be evaluated for potential to support

these species, and the two CEQA documents must contain a sufficient description of the methodology and results of this evaluation, potentially including maps of habitat and species records in the area.

Given that there are potential indirect impacts to resources that may be present in habitat adjacent to some distribution pipelines (such as trees providing migratory bird habitat), a records search and reconnaissance-level evaluation of potential habitat within approximately 500 feet of the project areas/alignments will be conducted. This information will be presented in two separate letter reports that include a description of the research and habitat evaluation methodology, a description of the potential effects of the proposed projects, and evaluation of these effects in the context of CEQA significance thresholds and CEQA-Plus evaluation criteria.

Based on the limited resources in the project vicinity, we do not believe that conducting vegetation mapping, a jurisdictional wetlands delineation, or special-status species surveys will be required to make the necessary determinations regarding the significance impacts under CEQA. The records search and reconnaissance evaluation of resources in the project vicinity is expected to be adequate to detail biological resources present or with potential to occur on site. Vegetation communities that occur in the project vicinity will be described in terms of constituent species, general location, and condition in terms of habitat for native species. A table listing the special-status species that may occur in the project vicinity will be included with the evaluation of specific potential for these species to occur within the project area.

The proposed projects will be evaluated in terms of potential short- and long-term direct and indirect impacts. Dudek will recommend specific avoidance, minimization, and mitigation measures for impacts identified that reduce impacts to a level below significance, if possible. In general, it is expected that direct and indirect impacts associated with these projects will be limited to potential disturbance of nesting wildlife and can be avoided through pre-construction surveys and/or avoidance of the bird-breeding season. Proposed mitigation requirements for potential impacts to sensitive or special-status resources will be discussed in terms of regional planning and city, state, and federal laws and guidelines to comply with all existing biological resource laws, regulations, and court precedent, including NEPA, CEQA, and MBTA. Graphics will be prepared to illustrate the location of the site and existing biological resource data (regional vegetation mapping and species locations). All plant and wildlife species encountered and identified will be recorded to include as an appendix to the letter reports.

**Cultural Resources Technical Reports.** Dudek Registered Professional Archaeologists will prepare two archaeological survey reports (ASRs) to provide compliance with National Historic Preservation Act Section 106. The ASRs will provide the needed technical detail to address existing data for the two MNDs, and will also provide project impact assessments. All work will comply with SWRCB guidelines for cultural resources reports. The ASRs will assemble existing information regarding all previous cultural resources investigations within the project area and immediate vicinity. This work will include:

- Conduct an archaeological resources records search of the habitat recovery plan area at the South Coastal Information Center, San Diego State University. The records search will identify the location of any recorded cultural resources (including prehistoric and historic archaeological sites) and previously completed archaeological surveys within and immediately adjacent to the project site.
- As available, obtain existing facilities as-built plans from SEJPA to demonstrate extent of previous ground disturbances within areas of proposed development. As needed, this will be supplemented by review of historic aerial photos.

Dudek will then conduct a pedestrian survey of all proposed project improvements. The entire proposed recycled water line will be inspected, with intensive survey of any adjacent road shoulders or landscaping strips

that provide ground surface visibility. A component of the ASR is conducting correspondence with Native American tribes and individuals in the project vicinity. This follows:

- Request a search of the Native American Heritage Commission (NAHC) Sacred Land File, and obtain a list of contemporary Native American contacts, including tribes and individuals with potential knowledge of heritage resources in the project area.
- Notify all Native American contacts provided by the NAHC with a short memo including the project site area map and project description, and requesting identification of any traditional tribal properties (TTPs). Follow up with any individuals who identify TTPs to determine any project concerns and identify recommended measures to minimize adverse consequences of project implementation. Consider, if available, any responses resulting from Native American consultation in developing impact assessment on ethnic concerns.

Dudek will then prepare an ASR report for each project, which will provide the following discussion:

- Prepare Area of Potential Effect map indicating permanent and temporary Area of direct impacts. This will include sub-surface disturbances and summarize background research and results of field survey relative to the presence/absence of prehistoric and historic archaeological resources. Include summary of Native American correspondence.
- Include project effect conclusions from one of the four "findings" listed in NHPA Section 106. Based on the developed nature of the project sites, we assume that no historic properties would be affected.

**Noise.** Dudek will prepare an acoustical analysis evaluating the potential noise impacts associated with the projects. The analysis will establish the ambient noise level at the project site, evaluate potential construction noise impacts, review conceptual plans, calculate noise levels for proposed equipment, and calculate the noise levels at the property lines and to the nearest noise-sensitive receivers. Preliminary noise mitigation measures will also be identified, as necessary, to meet the city's noise ordinance criteria.

## **Other Key CEQA Topics**

**Aesthetics.** For the topic of aesthetics, no significant effects are anticipated, based on several facts: The proposed building would be less than 35 feet high and would be located on the existing developed plant site; few residential sensitive receptors have direct views of the site; and existing and new trees may shield views. Also, the distribution system would result only in short-term construction effects. As such, we do not assume that visual simulations need to be prepared, but Dudek can provide this service if desired by SEJPA.

**Traffic.** Construction, as well as operational traffic associated with each project, will be quantified and potential traffic impacts evaluated. If necessary, mitigation measures will be identified as applicable.

**Growth Inducement.** Potential growth inducement effects are required to be analyzed in CEQA documents, and whenever an infrastructure project involves pipeline extensions, the potential for growth to occur is increased. The project would not be anticipated to result in any growth impacts, which we will detail in the MNDs.

**Other Environmental Effects.** Explanations will be provided to support findings about the absence of significant effects related to other environmental issues (i.e., land use and planning, mineral resources, utilities and service systems, public services, and recreation). Cumulative effects will also be analyzed in this section in both MNDs.

# Task 7.3Complete and Distribute Draft MNDs and CEQA-Plus Evaluations and<br/>Documentation for Public Review

Based on comments from SWRCB and SEJPA, Dudek will revise and prepare necessary copies of the MNDs and CEQA-Plus forms. The CEQA-Plus forms do not necessarily need to be circulated for public review. If desired by SEJPA, however, Dudek can include the CEQA-Plus information within the body of the CEQA documents and, therefore, the information will be circulated for a 30-day public review period. For the public review draft MNDs, up to 20 copies will be provided to SEJPA for distribution. The CEQA-Plus process also requires submittal of eight copies of the MND and Mitigation, Monitoring, and Reporting Program to SWRCB.

## Task 7.4 Compile and Evaluate Public Review Comments

At the end of the period, Dudek will work with SEJPA to address any comments on the document. We assume that up to 30 public comments will require responses. Up to five copies will be submitted to SEJPA.

## Task 7.5 Prepare Notices of Determination

Sections V and VI of the RFP adequately describe the noticing services that Dudek will provide for each MND.

## Task 7.6 Project Management

Ms. Fernandes and Mr. Jepsen are experienced, nimble project managers who understand SEJPA needs and procedures. Working as a team, they will keep the project on schedule and on budget. They will communicate project status, issues, and concerns with other members of the consultant team and SEJPA project manager.

- Kickoff Meeting. Ms. Fernandes and Mr. Jepsen, SEJPA project manager and engineer, the selected engineering firm(s), and other invitees.
- Master Deliverables List. Dudek will prepare a master deliverables list that will include key document development milestones, such as deliverable dates for draft materials for SEJPA review, review periods, and possible meeting dates with SEJPA to resolve comments, if needed. Dudek will manage the master deliverables list, updating it as tasks are completed, and make it available to all team members so that accurate status information is communicated to the team. Using this tool, Dudek will provide the SEJPA project manager with up-to-date monthly status reports or more frequently, as requested.
- **Monthly Progress Report.** Ms. Fernandes will email a monthly progress report and invoice to the SEJPA project manager. This report will include a list of completed tasks during the past month, anticipated tasks during the coming month, an update on the schedule, a summary of the project schedule, and any outstanding scope of work or information request issues.

## Task 7.7 Project Meetings

The Dudek project manager will attend all meetings with SEJPA staff and others necessary to prepare and process the MNDs. Our proposed scope of work and budget includes the presence of the project manager at up to four meetings, including a kickoff meeting at SEJPA offices or at the project site(s), and a meeting to present the final MND to the SEJPA Board of Directors. Two other Dudek staff will attend one meeting each. We have also included travel to Sacramento to meet with SWRCB if needed as an optional task.

The following key assumptions were used when generating the above cost estimates:

- Visual simulations of future facilities (and potential solar panels) would be provided by the JPA or architect. Costs for Dudek to prepare estimated \$15,000.
- One trip to Sacramento to be billed pursuant to Dudek direct charges and Rate Sheet
- This assumes the concurrence on process by the SRF staff. Additional specific analysis or scope items will require additional budget.
- Filing, posting and noticing fees are not included and will be billed to SEJPA.

## **Flow Chart**

Dudek has prepared the following flow chart (Figure 2) to illustrate the SRF loan application and construction implementation process with an approximate timeline of tasks.

## FIGURE 2. TYPICAL SRF LOAN APPLICATION & CONSTRUCTION IMPLEMENTATION PROCESS



## 5 Fee Estimate

Included below, **Table 6**, we have provided our fee estimate for SRF loan assistance. We have prepared this proposal in accordance with the requirements of the project RFP. The fee is presented on a task-by-task basis broken down by personnel classification, consistent with the proposed scope of work and schedule. The hourly rate for Steve Jepsen, Program Manager has been discounted from \$205/hour to \$195/hour. The following **Tables 7-8** include Optional Task 7 for CEQA Plus for both the recycled water improvements and wastewater improvements

			Labor Hours								
	Project Team Role:	Project Manager	SRF Loan Application	SRF Loan Application	Admin						
	Team Member:	S. Jepsen	S. Deering	A. Combs	P.Bristow						
		¢405	¢040	¢005	<b>*</b> 00	TOTAL	DUI	DEK LABOR	OTHER DIRECT		
Tack	1 - Project Planning and Administration	\$195	\$210	\$225	\$0U	HOUKS	_	0051	00315	-	
Task	Kickoff Meeting Project Planning & Project Management	6		1		0	¢	1 605		¢	1 605
	Subtotal Task 1	6		1		0	φ ¢	1,005	¢ _	ф с	1,005
Tack	2 - Meeting with SPE	0				0	φ	1,005	φ -	φ	1,005
Tush	Meeting with SRF	12				12	\$	2 340	\$ 800	\$	3 140
	Subtotal Task 2	12				12	¢	2 340	\$ 800	¢	3 140
Task	3 - Complete SRF FAAST Application	12				12	Ψ.	2,040	φ 000	Ŷ	3,140
	Complete SRF FAAST Application with District Staff	16				16	\$	3.120		\$	3.120
	Subtotal Task 3	16				16	\$	3,120	\$ -	\$	3.120
Task	4 - Prepare SRF Loan Application Packages						Ť	0,	•	-	0,120
	Prepare SRF Loan Application Packages	24	7	8	3	42	\$	8.190		\$	8.190
	Subtotal Task 4	24	7	8	3	42	\$	8,190	\$ -	\$	8.190
Task	5 - Manage Environmental Documentation (CEQA+)									-	
	Manage Environmental Documentation (CEQA+)	23				23	\$	4,485		\$	4,485
	Subtotal Task 5	23				23	\$	4,485	\$ -	\$	4,485
Task	6 - Manage Preparation of SRF Application Support Documents										
	Manage Preparation fo SRF Application Support Documents	24				24	\$	4,680		\$	4,680
	Subtotal Task 6	24		8	•	32	\$	6,480	\$ -	\$	6,480
	Total Non-Optional Hours and Fee	105	7	17	3	141	\$	28,020	\$ 800	\$	28,820
	Percent of Hours:	74%	5%	12%	2%	100%					

## TABLE 6. DUDEK FEE ESTIMATE – SRF LOAN ASSISTANCE

Opt	Optional Task												
Task	7 - CEQA Plus Documentation												
	Recycled Water Improvements (see attached spreadsheet for breakdown)						\$-		\$	52,960			
	Wastewater Improvements (see attached spreadsheet for breakdown)						\$-		\$	41,560			
	Total Optional Task 7								\$	94,520			

Total Non-Optional and Optional Tasks				\$	123,340

				Labor Hours	and Rates				-			
	Project Team Role:	CEQA Principal, Archeo Principal	Eng. Project Mgr	Enviro Specialist Planner	Enviro Specialist, Archeo IV	Enviro Specialist, GIS Specialist	Planning Assistant, Pubs Assistant					
	Team Member:	C. Fernandes, M. Hale	S. Jepsen	T. Wotipka, M. Green	J. Reed, D. Duverge	D. Mullen, R. Deodat	V. Currie, Mueller	TOTAL	DUDEK	other Direct		
	Billable Rate :	\$235	\$195	\$190	\$160	\$120	\$80	HOURS	LABOR COST	COSTS	тс	TAL FEE
Task 7.	1&2 - Initial Study/MND											
	Initial Study/MND	26	4	24	36	34	54	178	\$ 25,610		\$	25,610
	Subtotal Task 7.1&2	26	4	24	36	34	54	178	\$ 25,610	\$ -	\$	25,610
Task 7.	3 - Public Review											
	Public Review	6					8	14	\$ 2,050		\$	2,050
	Subtotal Task 7.3	6	0	0	0	0	8	14	\$ 2,050	\$ -	\$	2,050
Task 7.4	4 - Public Review Comments											
	Public Review Comments	4				16	28	48	\$ 5,100		\$	5,100
	Subtotal Task 7.4	4	0	0	0	16	28	48	\$ 5,100	\$ -	\$	5,100
Task 7.	5 - Notices											
	Notices	4					8	12	\$ 1,580		\$	1,580
	Subtotal Task 7.5	4	0	0	0	0	8	12	\$ 1,580	\$ -	\$	1,580
Task 7.	6 - Project Management											
	Project Management	8	6				8	22	\$ 3,690		\$	3,690
	Subtotal Task 7.6	8	6	0	0	0	8	22	\$ 3,690	\$-	\$	3,690
Task 7.	7 - Meetings											
	Meetings	8	6				6	20	\$ 3,530		\$	3,530
	Subtotal Task 7.7	8	6	0	0	0	6	20	\$ 3,530	\$ -	\$	3,530
	Total Non-Optional Hours and Fee	56	16	24	36	50	112	294	\$ 41,560	\$ -	\$	41,560

## TABLE 7. DUDEK FEE ESTIMATE – CEQA PLUS FOR WASTEWATER IMPROVEMENTS

				Labor Hour	s and Rates								
	Project Team Role:		CEQA Principal, Eng. Enviro Envir Archeo Project Specialist Specia Project Team Role: Principal Mgr Planner Arche		Enviro Specialist, Archeo IV	Enviro Planning Specialist, Assistant, GIS Pubs Specialist Ass <u>istant</u>							
	Team Member:	C. Fernandes,	S. Jepsen	T. Wotipka,	J. Reed, D.	D. Mullen, R.	V. Currie,	TOTAL					
		M. Hale	\$105	M. Green	Duverge	Deodat \$120	Mueller \$80	HOURS	LA	BOR COST	COSTS	-	TOTAL FEE
Task 7.	1&2 - Initial Study/MND	<u> </u>	\$13 <u>3</u>	\$130	φ100	φ120	<b>400</b>						
	Initial Study/MND	26	4	30	48	50	66	224	\$	31,550		\$	31,550
	Subtotal Task 7.1&2	26	4	30	48	50	66	224	\$	31,550	s -	\$	31,550
Task 7.	3 - Public Review								Ť	.,	-	, in the second	,
	Public Review	8					16	24	\$	3,160		\$	3,160
	Subtotal Task 7.3	8	0	0	0	0	16	24	\$	3,160	\$-	\$	3,160
Task 7.	4 - Public Review Comments												
	Public Review Comments	4				20	44	68	\$	6,860		\$	6,860
	Subtotal Task 7.4	4	0	0	0	20	44	68	\$	6,860	\$-	\$	6,860
Task 7.	5 - Notices												
	Notices	4					12	16	\$	1,900		\$	1,900
	Subtotal Task 7.5	4	0	0	0	0	12	16	\$	1,900	\$-	\$	1,900
Task 7.	6 - Project Management												
	Project Management	12	6				8	26	\$	4,630		\$	4,630
	Subtotal Task 7.6	12	6	0	0	0	8	26	\$	4,630	\$-	\$	4,630
Task 7.	7 - Meetings												
	Meetings	12	8				6	26	\$	4,860		\$	4,860
	Subtotal Task 7.7	12	8	0	0	0	6	26	\$	4,860	\$-	\$	4,860
	Total Non-Optional Hours and Fee	66	18	30	48	70	152	384	\$	52,960	\$ -	\$	52,960

## TABLE 8. DUDEK FEE ESTIMATE – CEQA PLUS FOR RECYCLED WATER IMPROVEMENTS

# **APPENDIX A**

Resumes

## Steve Jepsen

## Senior Project Manager

Steve Jepsen has over 33 years' experience in civil engineering in Southern California. He has extensive experience in managing projects from engineering proposal to construction. He has been involved with many public works projects in environmentally sensitive areas and is familiar with the permitting requirements of regulatory agencies. This experience allows Mr. Jepsen to manage projects with foresight, preventing costly delays or engineering revisions while acquiring approval from permitting agencies. As a contract capital project manager, Mr. Jepsen regularly manages CEQA coverage, environmental permitting and land acquisition. Clients trust him to represent their projects at public hearings, in board/council presentations and public outreach programs. Mr. Jepsen also has extensive experience with obtaining and managing government grants and low-interest loans for public works projects including State Revolving Fund (SRF) loans.

## **Project Experience**

**Sewer Program Management, City of Vista, California.** Mr. Jepsen recently completed a 6-year contract as Sewer Program Manager for the City of Vista and Buena Sanitation District. The sewer improvement program has a combined value of over \$100 million in construction. He was responsible for prioritization of project schedule for completing master plan identified sewer improvement projects including open trench replacement, tunneling and Cured-in-Place-Pipe (CIPP) rehabilitation. He prepared and managed multiple SRF loans in excess of \$30 million for sewer rehabilitation projects throughout the City. He managed

## EDUCATION

Mesa College AS, Engineering Technician and Surveying, 1986

## PROFESSIONAL AFFILIATIONS

California Water Environment Association – CWEA, Past President

Southern California Alliance of Publically Owned Treatment Works - SCAP

National Association of Sewer Service Companies - NASSCO

National Association of Corrosion Engineers

## AWARDS

ASCE – 2008 Award of Excellence – Solana Beach Pump Station Force Main Replacement

CWEA Engineering Achievement Award 2007 – City of Solana Beach Pump Station Force Main Replacement

CWEA Engineering Achievement Award 2003 – La Costa Greens Trunk Sewer

CWEA Engineering Achievement Award 2001 – Saxony Avenue Pump Station Rehabilitation

## SPECIAL TRAINING

Confined Space Entry & Rescue Certification Hazardous Gas Safety Analysis Hazardous Material Sampling and Transportation

contract advertisement, bidding and award activities ensuring that construction bids meet procurement requirements, SRF loan requirements and the Public Contract Code. In addition, Mr. Jepsen designed the CEQA coverage approach and managed project constraints such as environmental permitting and right of way.

**Sewer Lining & Repair, City of South Pasadena, Pasadena, California.** Mr. Jepsen assisted the City with securing a \$10 million State Revolving Fund Loan which was divided into two phases to support a multi-phase sewer rehabilitation and replacement program. The two phase project included reviewing CCTV inspection videos for over 400 sewer segments to determine the recommended rehabilitation or repair strategy for each pipe. The resulting improvements included CIPP lining of approximately 100,000 lf of pipe ranging in diameter from 6-inch to 18-inch, open trench replacement of approximately 8,000 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.

**Capital Program Management, Rainbow Municipal Water District, Rainbow, California.** As contract capital improvement program manager, Mr. Jepsen was responsible for prioritizing and implementing water and sewer capital improvement programs including environmental permitting and CEQA coverage. This involved maintaining the master plan schedule and preparing the annual and long-term budget for the capital improvement program. He also oversaw engineering design projects for water pipelines, pressure-reducing stations, and reservoirs. He was routinely involved with resolving issues related to right-of-way, operations, construction and design of the water facilities. Mr. Jepsen supervised encroachment, traffic control and excavation permits with the County of San Diego and Caltrans for all the projects constructed during his three year tenure.

Capital Improvement Program Management, Leucadia Wastewater District Leucadia, California. As contract program manager, Mr. Jepsen identified, prioritized, and implemented capital improvement projects for the District during a four year period. He prepared and maintained the master plan capital project schedule and prepared annual and long-term capital improvement program budgets. In addition to these tasks, Mr. Jepsen prepared requests for proposals and bids, reviewed construction bids and provided board recommendations for contractor selection. Projects included new administration building, campus improvements, pipeline replacement, Cured-in-Place-Pipe (CIPP) rehabilitation and pump station rehabilitation projects. Project management duties included managing construction oversight activities and approving contractor/consultant invoices. Mr. Jepsen also managed CEQA, environmental and coastal permitting activities and secured a Bureau of Reclamation grant for the District's recycled water program.

**Solana Beach Pump Station Forcemain Replacement Project**. Mr. Jepsen provided permitting assistance, public outreach program management, construction management and grant funding assistance services for approximately 5,000 lin. ft. of new 12- to 16-inch OD force main. The force main was installed using a combination of in-situ expanded in-place PVC slip lining, conventional cut and cover, and Horizontal Directional Drilling to avoid impacts to the ecologically sensitive San Elijo Lagoon and traffic along Pacific Coast Highway. Mr. Jepsen managed easement acquisition, a coastal development permit and construction compliance with the CEQA Mitigation Monitoring Reporting Program (MMRP). A comprehensive public outreach program was designed and implemented by Mr. Jepsen and Dudek public outreach staff.

La Costa Greens Trunk Sewer Replacement, Carlsbad, California. Mr. Jepsen served as project manager for the preliminary design report, final design, and permitting phases of this new sewer pipe along the La Costa golf course. This new sewer replaced portions of an existing line and realigned the sewer to locations that do not disrupt sensitive golf course features, such as putting greens and tee boxes. New sewer easements were granted to Leucadia Wastewater District, and, in return, unused easements were quitclaimed back to the golf course owner. For the construction phase of the project Mr. Jepsen negotiated temporary license agreements with the La Costa Resort and Spa and a Joint Use Agreement with SDG&E for a shared easement.

**North Green Valley Interceptor Upgrade, Carlsbad, California.** Mr. Jepsen was the project manager for the North Green Valley Interceptor Upgrade project. He was responsible for writing the preliminary design report, final design, and managing the environmental permitting. Mr. Jepsen acquired a Coastal Development Permit and completed land use permitting for site access with the City of Carlsbad including public hearing presentations. The design included diverting flow from an old pipeline to a new pipeline that had excess capacity. In addition, the project called for CIPP lining of cracked and leaking sewer pipelines, rehabilitation of existing manholes, and pipe jacking of a section of pipeline to be replaced under a storm drain culvert. A CCTV inspection was conducted to verify operable condition of the existing pipeline and manholes.

## Amanda Combs, PE

## SRF Loan Application

Amanda Combs is a project manager with over 12 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.

## **Project Experience**

**State Revolving Loan Fund Assistance, City of South Pasadena, Pasadena, California.** Project manager responsible for securing and managing an \$11 Million SRF Loan

## EDUCATION

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.

CA No. 67287

for rehabilitation and replacement of the City's aging sewer collection system. Planned improvements include trenchless CIPP rehabilitation of approximately 28 miles of pipe and open trench replacement of approximately 2.7 miles of pipe. Responsibilities included coordination with the City and preparation of the financial assistance application including all required attachments and CEQA-Plus environmental documentation.

**FY 12/13 Sewer Lining & Repair, City of South Pasadena, Pasadena, California.** Project manager for the design of the first phase of the City's sewer rehabilitation and replacement program. The project included reviewing CCTV inspection videos for 221 sewer segments to determine the recommended rehabilitation or repair strategy for each pipe. The resulting improvements included CIPP lining of approximately 58,000 lf of pipe ranging in diameter from 6-inch to 18-inch, open trench replacement of approximately 4,000 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.

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 consists of approximately 115,000 linear feet of 8-inch to 12-inch diameter CIPP lining and rehabilitation of over 600 manholes on residential and collector streets, and within easements. As Project Manager, her responsibilities including coordination and correspondence with the City for compliance in regards to SRF funds.

Santa Ynez Well Design & Hezavalent Chromium Evaluation, Santa Ynez River Water Conservation District, Santa Ynez, California. Assisted in preparing the application for a \$2.5M SRF loan. Dudek prepared planning, design, plans and specifications and, cost estimates for new water wells, pumps, motors and well head facilities. Dudek also assisted the District with planning treatment facilities to address the new drinking water maximum contaminant level (MCL) for hexavalent chromium.

**Otay II Pipeline Improvements – North Encanto Replacement, City of San Diego Water Department, 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 65<sup>th</sup> & Herrick booster pump station.

**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.

**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.

**30 Inch Effluent Transmission Main Replacement at San Juan Creek, Moulton Niguel Water District, Laguna Niguel, California.** Project engineer for the design of a pipe under San Juan Creek to replace the existing exposed crossing pipe. Work includes an analysis of trenchless construction methods and creek scour and preparation of plans and specifications for the selected microtunneling alternative. A design depth of 45 feet was preliminarily selected for the approximately 300-foot long tunnel.

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.

## Steve Deering, PE

## SRF Loan Application – Plant Upgrade Benefit Description

Steve Deering has been a principal engineer of Dudek for 29 years. He has over 40 years' experience with planning, designing, and managing water, wastewater, and reclaimed water facilities. With Dudek in the mid-1980s, he was an early advocate of the local benefits of recycled water facilities. Mr. Deering is also an advocate for the use of trenchless technologies for pipeline rehabilitation and for new pipeline installation, when appropriate. Because of Mr. Deering's outstanding technical knowledge, he is routinely called upon to participate on design review and value engineering teams.

## **Project Experience**

San Elijo Joint Powers Authority Reclaimed Water Facilities. Project officer and manager for the feasibility study, facilities plan, State Revolving Funds coordination, and final

## EDUCATION

University of California, Berkeley MS, Sanitary Engineering, 1977 Tufts University BS, Civil Engineering, 1972

#### LICENSES AND CERTIFICATIONS

Professional Civil Engineer CA No. 26514 NASSCO PACP & MACP

#### **PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers (ASCE) American Water Works Association (AWWA) California Water Environment Association (CWEA) Water Environment Federation (WEF)

design of the SEJPA reclaimed water facilities. Design included 84,000 feet of distribution piping, two reservoirs, two booster pump stations, and a 2.48 mgd tertiary upgrade to the SEJPA Water Reclamation Facility. As project manager, Mr. Deering coordinated with major reclaimed water customers. Mr. Deering was also involved in successful lobbying and application for Title 16 Bureau of Reclamation grants for several north San Diego County agencies. On-site recycled water retrofit evaluations were made for the Del Mar Fairgrounds and San Dieguito County Park. Recycled water is used for dust control on the Del Mar Race Track.

Valley Center Municipal Water District, Woods Valley Ranch WRF Phase 2 & Charlan Road Seasonal Storage, Valley Center, California. Mr. Deering served as the Principal-In-Charge to support this project for the phased development of the South Village Wastewater Service Area within the District. The WRF expansion will triple the capacity of the existing facilities to 0.275 million gallons per day (MGD) and will be an integral part of its ultimate expansion estimated to be 0.475 MGD. The Phase 2 Expansion also introduced a new wastewater treatment process (Aero-Mod and Cloth Disk Filters) as well as adding 48-acre feet (AF) of seasonal storage for recycled water. The Project had an abbreviated schedule for completion to comply with California Clean Water State Revolving Fund (SRF) loan funding stipulations.

**Water Reclamation Facility 2 – Tertiary Filtration Upgrades, City of Corona, California.** Mr. Deering is the Principal Engineer for the 4 mgd tertiary treatment project utilizing dual-media gravity filters with concurrent air scour backwash. Filter pretreatment facilities include coagulation and pre-chlorination. The process flow scheme would not accommodate secondary effluent storage so the filter feed pump station consisting of dual, variable-speed, vertical turbine pumps is designed to automatically match pumping rate to secondary effluent production. Backwash wastewater is equalized in a 100,000 gallon equalization tank from which it is pumped to an existing submerged microfiltration system which is being repurposed to treat the backwash wastewater to Title 22 recycled water quality. By optimizing granular media filter design to maximize run times and treating backwash wastewater through microfiltration, the combined filtration process boasts a 97% recovery rate. Disinfection facilities were upgraded to the full 4 mgd tertiary treatment capacity by adding sodium hypochlorite storage and feed systems and a control scheme that incorporates

filter pre-treatment and online chlorine residual monitoring for automated chlorine disinfection. The project was funded by SRF loan.

**Coachella Wastewater Treatment Plant Expansion, Coachella, California.** Mr. Deering was the Principal Engineer for the secondary treatment plant design project. Dudek provided engineering services for the 3 mgd expansion, which included process selection and design of a new 13 mgd influent pump station and headworks, 3 mgd oxidation ditches/clarifiers, sludge pumping stations, sludge drying beds, and chlorine disinfection facilities. The project also included 1.5 miles of influent trunk sewer ranging in size from 42-inch to 54-inch diameter and a 3,000-square-foot administration and control building. Dudek also helped secure a \$25M SRF loan to help fund the project.

**Horsethief Canyon Water Reclamation Facility (HCWRF) Re-Rate Report, Elsinore Valley, California.** Mr. Deering managed the preparation of a re-rate report to increase capacity at the HCWRF from 0.5 mgd to 0.6 mgd. The report included the estimated increase in flow to the plant and evaluated each unit's operation with regard to performance under the proposed increase in wastewater flow. Different options were evaluated for expansion, and cost estimates were presented to implement a capacity expansion. Additional consideration was given to operational problems that the plant was experiencing.

Alberhill Water Reclamation Facility, Elsinore Valley Municipal Water District, Lake Elsinore, California. Mr. Deering served as Principal-In-Charge for a treatment plant alternative and cost analysis study. Dudek provided a concise technical memorandum that incorporated a review of previous studies in the context of either an upgrade and expansion of the existing 500,000 gpd Horsethief Canyon Ranch WRF to 600,000 gpd versus construction of a new 100,000 gallons per day (gpd) wastewater treatment plant specifically for Richland Communities at the nearby Alberhill parcel owned by the District. Richland Communities is in need of service for approximately 354 new residential connections. The goal of the technical memorandum was to facilitate implementation of immediate and long-term wastewater system capacity and treatment.

**Heber Wastewater Treatment Plant, Heber, California.** As project manager, Mr. Deering assisted the Heber Public Utilities Commission in obtaining funds for the expansion of their wastewater treatment plant from 400,000 gpd to 800,000 gpd. After successfully obtaining the funds, Mr. Deering served as project manager for design of the new facilities. New facilities included pipelines (8 inch to 18 inch), pump stations (250 gpm and 600 gpm), oxidation ditch, sludge beds, chlorine contact chamber, office buildings, electrical power, instrumentation, and controls.

**Leucadia Wastewater District, Carlsbad, California.** Mr. Deering provided sewer system plan checking from 1973 to 1985. From 1986 to 1996 he was an elected Director of the LWD Board of Directors with appointment as Vice-President. Following a one-year hiatus from the Board position, he was competitively selected as District Engineer and has served in that role since. As District Engineer, Mr. Deering is responsible for attendance at Board and Engineering Committee meetings, preparation of standard specifications, sewer and recycled water master planning, review of interagency and developer agreements, and engineering oversight of the design and construction of a \$5 million annual capital improvement program.

**Ramona Municipal Water District, Ramona, California.** As Project Engineer, Mr. Deering assisted in the design of Lake Ramona in the early 1980s. He was also the Interim District Engineer from June 1992 to June 1993, providing developer plan checking/approval and capital improvement program coordination. Currently, he supports other Dudek personnel in a similar ongoing contract with the District.

## Carey Fernandes, AICP CEQA Plus

Carey Fernandes is a senior project manager with more than 18 years' professional planning-related experience specializing in the planning, environmental, and development industries. Her diverse background of education and experience includes permit processing with local jurisdictions, coordination with public agency staff, preparation of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents, project management, due diligence, and feasibility analysis.

As a senior project manager, she has worked on a number of planning documents, such as specific plans, comprehensive

#### EDUCATION

San Diego State University MA, Public Administration, 1998 University of California, Santa Barbara BA, English, 1993

#### CERTIFICATION

American Institute of Certified Planners, Certificate No. 016067

#### **PROFESSIONAL AFFILIATIONS**

American Planning Association, Board of Directors, 2000–2002, 2005–Present Association of Environmental Professionals

plans, and general plan updates. In addition, she has served as on-call planning staff for several public agencies. She has also served as project manager and primary author of many environmental review documents throughout San Diego and Imperial counties. She also works with several Native American tribes in the western United States in the preparation of tribal environmental documents. Through this experience, she has developed a broad understanding of policy, planning, and environmental issues.

## **Project Experience**

**Recycled Water MND and CEQA-Plus Documentation Project, San Elijo Joint Powers Authority, Encinitas, California.** Project manager for the preparation of an MND and CEQA-plus documentation. The project components included a recycled water feasibility study, facilities plan, environmental documentation, and a State Revolving Funds (SRF) loan application, which were completed for the treatment, distribution, and reuse of reclaimed water to replace existing potable water uses.

**Evaluation of Potential Well Sites for an Aquifer Storage and Recovery Project, City of San Diego-Water Department, San Diego, California.** Served as principal in charge on an as needed environmental services project where Dudek conducted a feasibility study of using the lower Tijuana River valley groundwater basin to seasonally store recycled water. The findings led to an analysis of potential well sites to install and conduct a pilot test program. A number of parcels were evaluated on existing site conditions, accessibility during construction and post-construction phases, and proximity to nearby wells and homes. A ranking system was employed to objectively evaluate the parcels.

**Sycuan/Otay Annexation Program EIR, Otay Water District, El Cajon, California.** Project manager working jointly for the Sycuan tribe and the Otay Water District on the preparation of an EIR to allow for the annexation of the Sycuan Original Reservation into the Otay Water District's sphere of influence. Responsible agencies include the San Diego County Water Authority, Metropolitan Water District, and the San Diego Local Agency Formation Commission. Environmental issues included growth inducement, public services, and construction-related noise and air quality.

Water/Wastewater and Stormwater Master Plan Mitigated Negative Declaration's (MNDs) and Capital Improvement Program (CIP) Projects, City El Centro, California. Served as project manager for a number of projects serving to implement the City's 5-year CIP. Projects included a series of Water/Wastewater and Storm-drain Master Plans, as well as new pump stations and replacement pipes within city rights-of-way.

**Border Environment Cooperation Commission (BECC) Water and Wastewater Master Plan EA, City of Brawley, California.** Project manager for the environmental documentation for the City of Brawley's Water and Wastewater Master Plans, in compliance with the BECC certification process. Documentation included the preparation of an EA/MND. Major issues included land use, visual quality, traffic circulation, and growth inducement.

Valley Center Feasibility Study, Valley Center Municipal Water District, Valley Center, California. Project manager for the preparation of a feasibility study that looked at potential environmental issues that may arise through the development of a 32.5-acre site in Valley Center. Conducted a preliminary review of the environmental issues and potential constraints, including aesthetics, agricultural resources, air quality, biological and cultural resources, geology, hazardous materials, hydrology, land use, mineral resources, noise, traffic, and utilities.

**Countywide Vector Control Programmatic EIR, County of San Diego – Public Works Department, California.** Served as project manager for Countywide Vector Control Program EIR to mainstream vector control grants and improvements for cities and agencies throughout the county of San Diego.

**As-Needed Environmental Services, City of San Diego-Water Department, San Diego, California.** Served as principal in charge on project for a variety of professional environmental services, including preparing CEQA/NEPA documents, construction monitoring, and preparation of conceptual plans and detailed plans and specifications for revegetation. Specific projects Dudek worked on included site assessments for two wetlands mitigation banks and preparing a weed management plan grant application for San Diego Association of Governments (SANDAG) TransNet funding. Dudek performs tasks in a timely manner, working closely with City of San Diego staff to identify an appropriate scope of work, budget, and schedule. Dudek is performing quality assurance/quality control (QA/QC) to provide high quality services throughout each task.

**Otay Ranch, Extension of Staff, City of Chula Vista, California.** Environmental planner in the preparation of a series of tiered environmental documents consisting of an amendment to an EIR for the Otay Ranch General Development Plan, as well as two specific planning area supplemental EIRs for the City of Chula Vista. Key issues include land use/community character, historic/cultural resources, traffic, and biological resources.

National City Aquatic Center Port Master Plan Amendment and Redevelopment, San Diego Unified Port District, National City, California. Project manager for the preparation of an MND for an aquatic center that will serve the Southbay YMCA. Key issues include biological resources, coastal access, visual impacts, public services, and traffic/parking. This project required close multiagency coordination with the Port of San Diego, the City of National City, the YMCA, the U.S. Fish and Wildlife Service, and the California Coastal Commission.

**El Centro As-Needed Associate Planner, City of El Centro, California.** On-call associate planner in all capacities needed for the processing of negative declarations, major use permits, and staff reports. Acts as an extension of city staff.

## Shawn Shamlou, AICP CEQA Plus

Shawn Shamlou is a principal with over 20 years' experience preparing environmental documentation for land-use planning and infrastructure projects for public and private clients. He has prepared more than 200 reports complying with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), and has served as project manager and primary author of many environmental review documents throughout San Diego County and California.

A specialist in infrastructure projects, Mr. Shamlou has overseen and managed a broad range of environmental documents for healthcare, transportation, aviation, rail, port, water, and energy

#### EDUCATION

Syracuse University MA, Geography, 1995 San Diego State University BA, Geography, 1993 **CERTIFICATIONS** American Institute of Certified Planners **PROFESSIONAL AFFILIATIONS** Association of Environmental Professionals Encinitas 101 Mainstreet Association -Vice President

infrastructure projects. He understands the environmental policy and regulatory process complexities that surround permitting projects through agencies like California Department of Transportation (Caltrans), Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), and the California Coastal Commission (CCC) and expertly guides clients through the environmental approval process. He is also adept at managing private development projects for residential, mixed use, redevelopment, and office projects. Shawn has established himself as an effective project manager with robust interpersonal skills and a solid foundation in implementation of solutions for complex environmental issues. He is a results-oriented planning professional who is highly motivated with an ability to combine creative ideas and analytical decision-making. He has a strong presence with excellent written and presentation skills.

## **Project Experience**

Encina Water Pollution Control Facility Phase V Expansion, Encina Wastewater Authority, Carlsbad, California. Responsible for the preparation of environmental documentation in compliance with CEQA and State Revolving Funds for the Phase V expansion project. Major issues addressed included marine biology, oceanography, air quality, and growth inducement.

Pacific Coast Highway 101 Sewer Pump Station and Sewer Force Main Improvements MND, City of Encinitas, California. Served as project manager for the preparation of CEQA documentation, and permits for the rehabilitation of the pump station and replacement and paralleling of the forcemain. To facilitate regulatory and permitting approvals of the project, Dudek proposed rehabilitation of the pump station rather than replacement. Dudek also proposed use of Horizontal Directional Drilling (HDD) for installation of the forcemain on a more direct alignment under Coast Highway 101, the San Elijo Lagoon inlet/outlet, and the NCTD train tracks to Dublin Drive, a lightly traveled residential street. The recommended HDD alignment avoided the alternative Coast Highway Bridge crossing with accompanying risk of seismic, vandalism, or corrosion failure in the immediate vicinity of the San Elijo Lagoon and Cardiff State Beach. Construction of the forcemain is targeted for late 2015 depending on permit acquisition.

San Juan Creek Ocean Outfall Junction MND, South Orange County Water Authority (SOCWA), Dana Point, California. Project manager for preparation of archaeology and biology technical studies for project at located at the Doheny State Beach. Permits from the CCC, ACOE, and RWQCB are being pursued and Dudek is providing peer reviewing. An MND is in preparation by the SOCWA staff.

**Cañada Gobernadora Multipurpose Basin Project, Santa Margarita Water District, Unincorporated area of Orange County, California.** Served as project manager for the Cañada Gobernadora Multipurpose Basin MND Project. The IS/MND addressed the biological and hydrological impacts associated with creating the multi-purpose basin.

Water Recycling Facility (WRF) MND, Padre Dam Municipal Water District, Santee, California. Environmental analyst for an MND addressing the proposed expansion of an existing water recycling facility. The existing water recycling facility converts wastewater generated in the service area into recycled water that can be used for customers within the Padre Dam Municipal Water District service area. The water recycling facility expansion is proposed to accommodate projected wastewater flows in the Padre Dam service area and provide additional recycled water supply to customers within the service area. Wastewater treated at the WRF is currently limited to the wastewater generated within the Padre Dam western service area. The additional flows that are not treated at the WRF are conveyed to the City of San Diego Metropolitan Wastewater Department's wastewater treatment facilities. Key issues included hazardous materials, noise, aesthetics, hydrology and water quality, and air quality.

J.B. Latham (JBL) Treatment Plant Expansion, SOCWA, Dana Point, California. Project manager overseeing preparation and processing of an MND addressing treatment plant expansion project. In order to enhance water supply reliability to its member agencies in accordance with existing agreements, SOCWA proposed to construct a 9-million-gallon-per-day (gpd) advanced wastewater treatment facility at the JBL Treatment Plant. With construction of the proposed advanced water treatment (AWT) facility, tertiary treatment would be made available to SOCWA's member agencies, providing a source for recycled water. Key issues included odor, noise, aesthetics, coastal issues, land use, and cumulative impacts. Also prepared the Coastal Development Permit application for review by the City of Dana Point.

Wastewater Treatment Plant Expansion Project, Lee Lake Water District (LLWD), Riverside County, California. Responsible for preparing CEQA documentation MND for this 1.35 million gallon per day (mgd) expansion of the existing Lee Lake Wastewater Treatment Plant.

Wild Rose Business Park Regional Drainage Facility Project, County of Riverside Economic Development Agency, Corona, California. Project manager for an MND for a private applicant addressing the construction and operation of a proposed drainage facility in the Corona area of Riverside County. The CEQA lead agency was the County of Riverside Economic Development Agency, and Dudek also prepared and processed wetlands permit applications for CDFW Section 1601 requirements and RWQCB Section 401 requirements. The project would drain an approximate area of 1,100-acres. Key issues addressed in the MND included biological resources, wetlands, drainage, and cultural resources. Also oversaw construction monitoring and surveys for burrowing owl as part of the contract.

**Carlsbad Power and Desalination Plant EIR Project, City of Carlsbad, California.** Environmental analyst for preparation of an EIR for the proposed Carlsbad Seawater Desalination Plant. The facility is planned for an approximately 50-million-gpd capacity. Prepared EIR sections for geology and soils and cultural resources, including paleontological resources, for approximately 16 miles of water conveyance pipelines proposed within the City of Carlsbad and City of Oceanside. Several significant archaeological sites were located in the project vicinity near Batiquitos Lagoon. Coordinated with the City team and cultural resource subconsultant, Gallegos & Associates, to avoid or minimize impacts to these resources.

#### **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

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## AGENDA ITEM NO. 17

## SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

- TO: Board of Directors San Elijo Joint Powers Authority
- FROM: Director of Finance and Administration
- SUBJECT: AWARD OF CONTRACT FOR THE 2016 RECYCLED WATER COST OF SERVICE RATE STUDY

## RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Approve the Agreement with Raftelis Financial Consultants for the San Elijo Joint Powers Authority Recycled Water Cost of Service Study for an amount not to exceed \$16,817; and
- 2. Discuss and take action as appropriate.

## BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) supplies recycled water to Santa Fe Irrigation District (SFID), San Dieguito Water District (SDWD), the City of Del Mar, Olivenhain Municipal Water District (OMWD), and the Encinitas Ranch Golf Association (ERGA). The SEJPA has individual agreements with each entity that describes the terms and conditions for the delivery and purchase of the recycled water. All of the agreements with the exception of ERGA, will require price setting for July 2016 and beyond. ERGA's contract is an interruptible supply agreement with its price set through June 30, 2017, and with an option to extend an additional six years.

The agreements with SFID, SDWD, OMWD, and Del Mar state that future recycled water rates shall be developed using a cost-of-service methodology. This means that the SEJPA needs to determine the amount of money needed to operate and maintain the recycled water utility, and to cover capital expenses and reserves. Based on these money projections, and expected water sales, the agency can calculate future water rates needed for full cost recovery.

## DISCUSSION

Staff invited four qualified firms to provide proposals for preparing the 2016 Recycled Water Cost of Service Study. Two firms submitted proposals and, after review, one of the firms was

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contacted to discuss their proposal in more detail. The proposal that provided the best combination of qualifications, project understanding, and value based approach was submitted by Raftelis Financial Consultants (Raftelis).

The proposal from Raftelis listed strong experience with preparing water, wastewater, and recycled water rate studies. Raftelis staff members have authored and co-authored many industry standard books regarding utility rate setting. The project manager proposed for this effort has experience working with the SEJPA, SFID, SDWD, and OMWD. Overall, the Raftelis proposal provided a direct and streamlined approach, led by competent staff, to efficiently complete the requested cost-of-service effort.

The proposal includes project initiation, data collection, financial plan development, cost-ofservice analysis, and draft and final reports. These deliverables will support a four-year rate recommendation for adoption consideration by the SEJPA Board. Included with the deliverables is a rate model to be used for forecasting and modeling financial metrics including, cash balance, reserves targets, debt service coverage, capital funding, and operating revenues and expenses.

#### FINANCIAL IMPACT

The proposed agreement to support the Recycled Water rates is \$16,817 which will be funded from the Recycled Water Services-Professional, which has a budget of \$30,200.

It is therefore recommended that the Board of Directors:

- 1. Approve the Agreement with Raftelis Financial Consultants for the San Elijo Joint Powers Authority Recycled Water Cost of Service Study for an amount not to exceed \$16,817; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Paul F. Kinkel Director of Finance and Administration

Attachment 1: Raftelis Scope of Work and Fee Schedule



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www.raftelis.com

## ATTACHMENT 1

Mr. Paul Kinkel Director of Finance & Administration San Elijo Joint Powers Authority 2695 Manchester Avenue Cardiff by the Sea, California 92007-7077

## Subject: Recycled Water Cost of Service Rate Study

Dear Mr. Kinkel:

Raftelis Financial Consultants, Inc. (RFC) is pleased to submit this proposal to conduct a recycled water cost of service and rate design study for San Elijo Joint Powers Authority (Authority). We believe that our unique combination of qualifications, resources, experience, and knowledge will ensure a value-added project that will benefit the Authority and its customers.

## **FIRM OVERVIEW**

In 1993, Raftelis Financial Consultants, Inc. (RFC) was founded to provide services that help utilities function as sustainable organizations while providing the public with clean water at an affordable price. With this goal in mind, RFC has grown to become the largest and one of the most respected utility financial and management consulting practices in the nation.

## WHAT MAKES RFC UNIQUE DEPTH OF RESOURCES

RFC has the largest and one of the most experienced water industry financial and rate consulting practice in California and the nation. Our depth of resources will allow us to sufficiently staff this project with the qualified personnel necessary to efficiently and expeditiously meet the objectives of the Authority.

## LOCAL & NATIONAL EXPERIENCE

RFC staff have assisted more than 500 water and/or wastewater utilities across the country on financial, rate, and management consulting engagements. These utilities include some of the largest and most complex utilities in the country. In addition, we have worked with numerous utilities throughout the State of California on hundreds of studies, including financial plans, cost of service, and pricing. Our extensive national and local experience will allow us to provide innovative and insightful recommendations to the Authority, and will provide validation for the proposed methodology ensuring that industry best practices are incorporated.

## INDUSTRY LEADERSHIP

Our senior staff is involved in shaping industry standards by chairing various committees within the AWWA and WEF. RFC's staff members have authored and co-authored many industry standard books regarding utility rate setting, and RFC publishes the national *Water and Wastewater Rate Survey*, which is co-published with AWWA, and the *CA-NV Water Rate Survey*, which is co-published with the CA-NV AWWA. Being so actively involved in the industry will allow us to keep the Authority informed of emerging trends and issues, and to be confident that our recommendations are insightful and founded on sound industry principles.

## FOCUS

RFC's services are solely focused on providing financial, pricing, and management consulting services to water-industry utilities. This focus allows RFC professionals to develop and maintain knowledge and skills which are extremely specialized to the services that we provide, and will allow us to provide the Authority with independent and objective advice.

## EXPERTS ON CALIFORNIA REGULATORY REQUIREMENTS

The regulatory environment in California has become more stringent due to Proposition 218 and Government Code Section 54999. RFC staff are very knowledgable about these regulations and have made presentations on this subject for the Association of California Water Agencies (ACWA), California Society of Municipal Finance Officers

August 21, 2015

(CSMFO), and CA-NV AWWA. In addition, we are frequently called on to be expert witnesses regarding these regulatory matters. This expertise will allow the Authority to be confident that our recommendations take into account all of these regulatory requirements.

## MODELING EXPERTISE

RFC has developed some of the most sophisticated yet userfriendly financial/rate models available in the industry. Our models are custom-built on a client-by-client basis, ensuring that the model fits the specific needs and objectives of the client. Our models are tools that allow us to examine different policy options and cost allocations and their financial/ customer impacts in real time. Our models are non-proprietary and are developed with the expectation that they will be used by the client as financial planning tools long after the project is complete.

## RATE ADOPTION EXPERTISE

RFC has assisted numerous agencies with getting proposed rates successfully adopted. Our experience has allowed us to develop an approach that effectively communicates with elected officials about the financial consequences and rationale behind recommended rates to ensure stakeholder buy-in and successful rate adoption. This includes developing a "message" regarding the changes in the proposed utility rates that is politically acceptable, and conveying that message in an easy-to-understand manner.

# **IDENTIFCATION OF RESPONDER**

Company Name: Raftelis Financial Consultants, Inc.

Company Adress: 201 S. Lake Avenue, Suite 301, Pasadena, CA 91101

Legal Form of Company: S-Corporation

Parent Company: None

Offices in San Diego County: None

Primary Contact: Sudhir Pardiwala, Executive Vice President / P: 626.583.1894 / F: 626.583.1411

## EXPERIENCE AND TECHNICAL COMPETENCE

RFC has focused on financial and management consulting for water, wastewater, and stormwater utilities since the firm's founding in 1993, and our staff consists of some of the most experienced consultants in the industry. RFC staff have provided financial, rate, management, and/or operational consulting services to more than 500 utilities across the country. In the past year alone, RFC worked on more than 300 financial, rate, management, and operational consulting projects for over 200 water, wastewater, and/or stormwater utilities in 30 states, the District of Columbia, Canada, and Puerto Rico.

On the following page, we have provided detailed descriptions of several projects that we have worked on that are similar in scope to the Authority's project. We also selected these projects because many of our proposed Project Team members worked in similar roles on them. We have included references for each of these clients and urge you to contact them to better understand our capabilities and the quality of service that we provide.



RFC has provided financial and/or management assistance to utilities serving more than 25% of the U.S. population. This map shows some of the clients where RFC has provided financial/ management consulting.

## SAN DIEGUITO WATER DISTRICT (CA)

**REFERENCE:** Bill O'Donnell, Assistant General Manager - 760.633.2849 / bodonnell@ci.encinitas.ca.us

**TEAM MEMBERS' ROLES:** S. Pardiwala - Project Director; H. Phan - Lead Consultant

## DATE INITIATED: 2013 DATE COMPLETED: 2014

Faced with regional drought conditions and mandatory water cutbacks, the San Dieguito Water District (District) engaged RFC to conduct a water rate study. The elements of the rate study included developing a long-term financial plan, rates that can be implemented under existing conditions, and five-stage drought plan including rates that can be implemented for any stage over the next three years.

In order to develop drought rates, a thorough understanding of normal water consumption was necessary. We examined several years worth of data to identify potential areas for conservation. Our usage analysis allowed us to adjust the existing tiered rate structures to ensure that revenue requirements were met regardless of the consumption levels that would occur during each of the five stages. Additionally, because the drought stages would result in significant reductions in usage that aren't always easy to forecast, RFC recommended increasing the percentage of revenue derived from fixed rates to increase revenue stability.

## OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)

**REFERENCE:** Rainy Selamat, Finance Manager - 760.632.4218 / rselamat@olivenhain.com

**TEAM MEMBERS' ROLES:** S. Pardiwala - Project Director; H. Phan - Project Manager/Lead Consultant

## DATE INITIATED: 2014 DATE COMPLETED: 2015

The Olivenhain Municipal Water District (OMWD) retained RFC to conduct a recycled water financial plan and rate study (Study) to determine recycled water rates for future years that would sufficiently recover the costs of providing recycled water service while maintaining the lowest possible rates. The District's recycled water system is separated into two distinct service areas: the Northwest Quadrant and the Southeast Quadrant. Northwest Quadrant customers get recycled water from Vallecitos Water District, and Southeast Quadrant customers receive recycled water from several sources, including the 4S Recycled Water Treatment Plant, City of San Diego, Rancho Santa Fe Community Services District, and a raw water connection from the San Diego County Water Authority. The 4S agreement required the District to reimburse 4S Kelwood for fees and expenses related to the regional recycled water system when certain conditions are met. RFC analyzed the impacts of multiple options including reimbursement and financing of the 4S investments, significant increase in recycled water purchase costs from San Diego, economics of serving customers in outside-District areas, and the resultant customer impacts.

RFC has assisted the District with the development of a water financial plan and model, and wastewater rates and model. Additionally, RFC has provided the District with consulting services related to SDCWA policy and rate issues.

## SANTA FE IRRIGATION DISTRICT (CA)

**REFERENCE:** Jeanne Deaver, Administrative Manager - 858.756.5970 / bodonnell@ci.encinitas.ca.us

**TEAM MEMBERS' ROLES:** S. Pardiwala - Project Director; H. Phan - Lead Consultant

## DATE INITIATED: 2015 DATE COMPLETED: Ongoing

The Santa Fe Irrigation District (District) is an affluent area in northern San Diego County whose users consume significant quantities of water. The District's local water supply — Lake Hodges — is a volatile supply of water due to frequent drought and hydrological conditions. During years in which the District's draw from the Lake is limited, the District must increase costly water purchases from the San Diego County Water Authority. Recent unfavorable conditions in the Lake caused the District to fail in meeting its revenue requirements through rates and resulted in the use of reserves to fund operations for two consecutive years. RFC implemented a tiered rate structure to encourage conservation among the District's heaviest users of water and developed a plan to ensure revenue sufficiency.

CALIFORNIA EXPERIENCE												
IN PAST 5 YEARS	S III	F		<u>v</u>								
This table lists the California utilities that RFC has assisted over the past five years on financial, rate, and/or management consulting projects.	LITY ANALYSI DEVELOPME	NCE SUPPOR	SOLUTION	AND CAPITAL NTS PLANNI	SUPPORT	z	S	RVICE	INT / IMPACT	בת טדונודץ גד	ONAL	TEWATER UATION
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Alameda County Water District		٠		•		•	•	•				
Arcadia, City of				•		•		•				
Arroyo Grande, City of				•		•	•	•				
Bakersfield, City of		•		•		•		٠				
Banning, City of		•		•		•		•	•			
Beverly Hills, City of		•		•		•	•	•	•		•	
Borrego Water District				•		•						
Brea, City of				•		•		•				
CAL FIRE/San Luis Obispo			1					•				
Calleguas Municipal Water District		•		•		•	•	•				
Camarillo, City of		•		•		•		•	•			
Carlsbad Municipal Water District		•		•		•	•	•				
Carpinteria Sanitary District				•		•	•	•				
Castaic Lake Water Agency			•	•		•	•	•	•			
Chowchilla, City of				•		•	•	•				
Corona, City of						•			•			
County of San Diego				•				•		•		
Cucamonga Valley Water District				•								
Delta Diablo Sanitation District											•	
East Bay Municipal Utilities District				•				•				
East Orange County Water District				•		•		•				
Eastern Municipal Water District				•								
El Toro Water District				•		•		•				
Elk Grove Water District	•			•		•	•	•	•			
Elsinore Valley Municipal Water District				•		•			•			
Escondido, City of		•		•			•	•	•			
Glendora, City of						•						
Goleta West Sanitary District			•	•		•	•	•	•			
Hollister, City of				•		•		•	•			
Holtville, City of				•				•				
Huntington Beach, City of			1	•		•	•	•				
Inland Empire Utilities Agency												
Jurupa Community Services District				•		•	•	•				
Kern County Water Agency					•							
La Canada Irrigation District				•		•		•				
La Habra Heights County Water District				•		•	•	•	•			
Laguna Beach, City of				•								
Lake Valley Fire Protection District				•			•	•				
Las Virgenes Municipal Water District				•		•		•				
Mammoth Community Water District				•		•		٠				
Merced, City of				•		•		•	•			
Mesa Water District				•								
Metropolitan Water District of Southern California			•									
Mojave Water Company				•		•	•					
Monterey, City of		٠		•		•	•					
Napa Sanitation District				•		•		•				
Newhall County Water District						•						

	ABILITY ANALYSIS (AM DEVELOPMENT	UANCE SUPPORT	RESOLUTION	AL AND CAPITAL EMENTS PLANNING	SE SUPPORT	SIGN	ALYSIS	SERVICE	MENT / IMPACT	ATER UTILITY AENT	ZATIONAL ATION	VASTEWATER VALUATION
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Olivenhain Municipal Water District				•		•	•					
Ontario Municipal Utilities Company								•				
Palmdale Water District				•		•	•	•				
Palo Alto, City of				•		•	•	•				
Phelan Pinon Hills Community Services District	•			•		•		•	•			
Pleasant Hill Recreation & Park District				•				•				
Ramona Municipal Water District				•		•		•				
Rancho California Water District						•	•	•	•			
Redlands, City of				•		•	•					
Riverside Public Utilities				•		•	•	٠	•			
Roseville, City of									٠			
Sacramento Regional County Sanitation District						•						
Sacramento, City of				•		•		٠				
Salton Community Services District				•				٠				
San Bernardino Valley Municipal Water District						•						
San Bernardino, County of				•		•		٠	٠			
San Clemente, City of				•		•	•	٠				
San Diego, City of				•		•						•
San Diego County Water Authority												•
San Dieguito Water District		•										
San Elijo Joint Powers Authority				•	•	•	•	•	•			
San Gabriel, City of				•		•		٠				
San Juan Capistrano, City of				•		•	٠	٠	٠			
Santa Barbara, City of				•		•	•	٠	•			
Santa Clara Valley Water District			•	•	•							
Santa Cruz, City of				•		•	٠	٠				
Santa Fe Irrigation District				•		•	•	•	•			
Santa Fe Springs, City of				•		•		٠				
Santa Margarita Water District				•		•	•	•				
Sierra Madre, City of	•			•		•		٠				
Signal Hill, City of				•		•		•				
Simi Valley, City of				•		•	•	٠	•			
South Coast Water District						•						
South Mesa Water Company				•		•	٠	٠				
South Pasadena, City of				•		•		•				
Sunnyslope County Water District				•		•	٠	٠	•			
Thousand Oaks, City of				•		•	•	•	•			
Torrance, City of				•		•		٠				
Triunfo Sanitation District				•		•		•				
Union Sanitary District				•		•	٠	٠	٠			
Ventura Regional Sanitation District				•		•		•				
Ventura, City of	•	•	٠	٠	٠	•	•	٠	٠			
Vista, City of				•					•			
Walnut Valley Water District				•		•		•				
Western Municipal Water District				•		•		•	•			
Yorba Linda Water District				٠		•		٠				

# PROJECT ORGANIZATION AND KEY PERSONNEL

For this project, we have included some of our most senior-level personnel to provide experienced leadership for the project, with support from talented consultant staff. In Appendix A of this proposal, we have included more detailed resumes.

## SUDHIR PARDIWALA, PE

**PROJECT MANAGER** 

Executive Vice President - Pasadena Office

#### **EXPERIENCE:** 37 years

#### **CAREER HIGHLIGHTS**

- » Co-author of WEF's MOP No. 27, Financing and Charges for Wastewater Systems; and Water and Wastewater Finance and Pricing
- » Conducted over 300 water, wastewater, and recycled water studies
- » Financial/rate consulting experience with Palo Alto, Escondido, San Diego, Goleta West Sanitary District, Santa Barbara, & Ventura

#### **EDUCATION**

- » MBA University of California, Los Angeles
- » MS Arizona State University
- » BS Indian Institute of Technology, Bombay

## **ROLE:**

Mr. Pardiwala will manage the day-today aspects of the poroject and ensure it is within budget, stays on schedule, and effectively meets the Authority's objectives. He will also lead the consulting staff in conducting analyses and preparing deliverables for the project.

## **PROFILE:**

Mr. Pardiwala has 37 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, storm water, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the Manual of Practice, Financing and Charges for Wastewater Systems, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, Water and Wastewater Finance and Pricing: The Changing Landscape. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

## HANNAH PHAN

## **TECHNICAL REVIEWER**

Senior Consultant - works remotely in Kirkland, WA

#### **EXPERIENCE:** 8 years

**CAREER HIGHLIGHTS:** Financial/rate consulting experience with East Bay Municipal Utility District, San Diego, Ventura, Palo Alto, & Beverly Hills

#### **EDUCATION**

- » MBA California State University, Los Angeles
- » BS California State University, Los Angeles

## **ROLE:**

Ms. Phan will provide oversight for the project ensuring it is completed in a timely manner and meets both RFC and industry standards.

## **PROFILE:**

Ms. Phan has served as a consultant and/or lead consultant on numerous water, wastewater, and recycled water rate studies, cost of service studies, connection fee studies, and valuation studies. Her specific experience includes projects for the Cities of San Diego, Ventura, Palo Alto, Santa Barbara, Santa Monica, Anaheim, Ontario, Escondido, Redlands, and Banning, Napa Sanitary District, Central Contra Costa Sanitary District, East Bay Municipal Utility District, Goleta West Sanitary District, and Carpinteria Sanitary District, and the City of North Las Vegas, Nevada and Tacoma Environmental Services Department in Washington. Ms. Phan has an MBA and is an experienced modeler with strong analytical skills.

## **KEVIN** KOSTIUK

**STAFF CONSULTANT** Consultant - Los Angeles Office

#### **EXPERIENCE:** 7 years

**CAREER HIGHLIGHTS:** Financial/rate consulting experience with Riverside, East Valley Water District, Goleta Water District, Redlands, & Simi Valley

#### **EDUCATION**

- » MEM Duke University
- » BA University of California, Santa Barbara

## **ROLE:**

Mr. Kostiuk will work at the direction of Mr. Pardiwala to conduct analyses and prepare deliverables for the project.

## **PROFILE:**

Mr. Kostiuk has a background in economics and accounting and possesses extensive analytical skills. His expertise lies in financial accounting, analysis of water supply reservoir operations and management, environmental policy, and water quality trading programs; as well as United States Army Corps of Engineers (USACE) water supply and flood control policy.

# **PROJECT APPROACH**

Raftelis Financial Consultants, Inc. (RFC) is pleased to submit this project approach to evaluate San Elijo Joint Powers Authority's (Authority or SEJPA) cost of providing recycled water service to the Authority's four retail purchasers (Purveyors). Our project approach is summarized in detail below.

## TASK 1 – KICK OFF MEETING AND DATA COLLECTION

RFC will provide Authority Staff with a data request list including documentation on the Authority's budget items, capital expenses, debt service schedules, and recycled water sales, among other necessary items. RFC will review current rates, all relevant data and documents for accuracy and relevance.

The kick-off meeting will provide a solid foundation for the project and ensure that project participants are in mutual agreement as to the project's approach, work plan, schedule, and the Authority's priorities. As part of the meeting, RFC will discuss the current rates, work with Staff to identify and prioritize pricing objectives, develop a framework for the proposed new rate structure, and evaluate the various policy options available for meeting the Authority's goals and objectives.

*Meetings/Workshops:* One (1) meeting with SEJPA Staff *Deliverables:* Data request list

## TASK 2 – DEVELOP RECYCLED WATER FINANCIAL PLAN

RFC will create a model to project the Authority's revenue requirements for the study period, which will include any updates to Authority reserve policies, new and future expenses, and other long-term considerations. The creation of the model requires an assessment of current revenues, projection of budgeted operations and maintenance (O&M) expenses, reserve contributions, capital improvement plan (CIP), and debt service, among other factors. Ultimately, the financial plan is designed to estimate future revenue requirements, the Authority's ability to meet those projected revenue requirements, and determine the level of revenue adjustments (rate increases) and/or additional financing requirements. The model will use tailored graphics to illustrate financial metrics such as cash balances, debt coverage ratios, reserve funding targets, capital funding sources, and operating revenues and expenses, among others.

Meetings/Workshops: One (1) webinar with Authority Staff to review financial plan inputs and results Deliverables: Recycled water financial plan model in Microsoft Excel 2013

## TASK 3 – COST OF SERVICE ANALYSIS AND RATE CALCULATIONS

Upon completion of the financial plan model in Task 2, RFC will prepare a cost of service analysis which incorporates Authority revenue requirements, recycled water system attributes, and purveyor consumption characteristics to determine the cost of providing service. Throughout the cost of service process, RFC will comply with the Authority's policy considerations, procedures, and guidelines applicable to charges for water service.

RFC will calculate a volumetric rate for recycled water service based upon the results of the cost of service analysis. The cost of service rate will be calculated for the next four years for adoption by the Authority. RFC will present these

proposed rates, along with the cost of service methodology, during an online meeting with Authority Staff.

Meetings/Workshops: One (1) webinar with Authority Staff to review cost of service analysis and rate results Deliverables: Recycled water rate model in Microsoft Excel 2013

## **TASK 4 – REPORT PREPARATION**

The process for developing the proposed rates will be described in a Draft Report. This Draft Report will include a summary highlighting the major issues and decisions and an overview of operations, CIP, the financial plan, and the final rates resulting from the study. The Final Report, incorporating Authority comments, will be submitted to the Authority and will include appropriate supporting data from the Model. Meetings/Workshops: None Deliverables: Draft and Final Reports

## TASK 5 – PRESENT RESULTS TO THE BOARD OF DIRECTORS (OPTIONAL)

RFC will be available to present the results of the study to the Authority's Board of Directors. This optional meeting will be at the discretion of Authority Staff. Our Project Manager, Sudhir Pardiwala, PE, has worked for most of the Authority's member agencies and has vast experience in making successful presentations to water service agencies.

*Meetings/Workshops:* One (1) meeting with Board *Deliverables:* Electronic copy of presentation materials

# CONSULTANT FEE ESTIMATE

RFC proposes to complete the scope of work outlined above on a time-and-materials basis with a not-to-exceed cost shown below, which includes the cost of travel and expenses. The optional Board meeting will be provided on a time and materials basis, if necessary. The following work plan provides a breakdown of the estimated level of effort required for completing each task described and the hourly billing rates for the personnel scheduled to complete the project. We expect the project to be completed within two months of notice to proceed.

Tack	Task Descriptions		No of	No of Web						Total Fees &
Task			Meetings	Meetings	SP	TR	FC	Admin	Total	Expenses
		HOURLY RATES			\$300	\$190	\$170	\$70		
1	PROJECT INITIATION AND DATA COLLECTION				8		20	4	32	\$6,400
2	FINANCIAL PLAN DEVELOPMEN	NT		1	2		14		16	\$3,309
3	COST OF SERVICE ANALYSIS AND RATE CALCULATION			1	2	1	14		17	\$3,509
4	REPORT PREPARATION			4	1	12		17	\$3,600	
	TOTAL ESTIMATED M	EETINGS / HOURS	1	2	16	2	60	4	82	
	PR	OFESSIONAL FEES			\$4,800	\$380	\$10,200	\$280	\$15,660	
SP - Sudhir Pardiwala, Project Manager								Тс	otal Fees	\$15,660
TR - Hann	ah Phan, Technical Reviewer						Total	Expenses	\$1,157	
FC - Kevin	Kostiuk/Victor Smith, Financial Cons					TOTAL	FEES & EX	<b>(PENSES</b>	\$16,817	
SP - Sudhi TR - Hanna FC - Kevin	PR r Pardiwala, Project Manager ah Phan, Technical Reviewer Kostiuk/Victor Smith, Financial Cons	OFESSIONAL FEES			\$4,800	\$380	\$10,200 <b>TOTAL I</b>	\$280 To Total I FEES & EX	\$15,6 \$1,1 \$16,8	

We appreciate the opportunity to propose to the Authority and look forward to assisting you. If you have any questions, please call me at (626) 583-1894. This letter may be used to form an agreement by signing and returning a copy for our records.

Respectfully submitted, *RAFTELIS FINANCIAL CONSULTANTS, INC.* 

Sudhin Dandinala

Sudhir Pardiwala Executive Vice President

Accepted by: SAN ELIJO JOINT POWERS AUTHORITY

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

Date: \_\_\_\_

# **APPENDIX A: PROJECT TEAM RESUMES**

#### **TECHNICAL SPECIALTIES**

- » Cost of service rate studies
- Conservation and drought management studies
- » Economic analyses
- » Water and wastewater utility cost accounting
- » Valuation
- » Financial and revenue planning
- » Assessment engineering
- » Reviewing/obtaining capital improvement funding
- » Computer modeling

#### **PROFESSIONAL HISTORY**

- » Raftelis Financial Consultants, Inc.: Executive Vice President (2013-present); Vice President (2004-2013)
- » Black & Veatch: Principal Consultant (1997-2004)
- » MWH: Principal Engineer (1985-1997)
- » CF Braun: Senior Engineer (1979-1985)
- » PFR Engineering Systems: Research Engineer (1977-1979)

## **EDUCATION**

- Master of Business Administration
  University of California, Los Angeles (1982)
- Master of Science in Chemical Engineering - Arizona State University (1976)
- » Bachelor of Science in Chemical Engineering - Indian Institute of Technology, Bombay (1974)

#### **PROFESSIONAL REGISTRATIONS**

 Registered Professional Engineer: CA (Chemical (1981) and Civil (1988))

#### **PROFESSIONAL MEMBERSHIPS**

- » American Water Works Association
- » Water Environment Federation
- » California Municipal Finance Officers Association

## SUDHIR PARDIWALA, PE

PROJECT MANAGER

**Executive Vice President** 

## PROFILE

Mr. Pardiwala has 37 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, stormwater, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the Manual of Practice, Financing and Charges for Wastewater Systems, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, Water and Wastewater Finance and Pricing: The Changing Landscape. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

## **RELEVANT PROJECT EXPERIENCE**

## CITY OF PALO ALTO (CA)

Mr. Pardiwala was Project Manager for a study for the City of Palo Alto (City) to determine the cost of service rates consistent with Proposition 218. The study involved review of fire service charges, booster pumping rates, strict adherence to cost of service principles. The study was conducted with the participation of a citizens' advisory committee. RFC developed an user friendly rate model, provided City staff training on use of the model. The proposed rates were implemented July 1, 2012. RFC assisted The City with an update developing conservation rates with the State mandated reductions in usage.

## **CITY OF SANTA BARBARA (CA)**

Mr. Pardiwala has been assisting the City of Santa Barbara (City) with their water, wastewater and recycled water financial plans and cost of service rates studies involving rates for different customer classes including agriculture, outside City, tiered residential, commercial etc. Wastewater rates were developed for various funding sources including grants and SRF loans. The City is facing severe water supply shortages and water rates included evaluation of multiple drought stages, the rates and impacts on customers as well as funding desalination to provide adequate supplies for the City's customers. RFC also evaluated system capacity fees for new water and wastewater customers.

## NAPA SANITATION DISTRICT (CA)

Mr. Pardiwala was Project Manager for a recycled water rate study for the Dis-

trict. The District was required to restrict summer discharge of its wastewater into the river. The District had made improvements to its treatment plant to produce recycled water and provided incentives to recycled water customers to use the water. Agreement with customers were to end within a couple of years and the District wanted to enlarge the recycled water facilities and enroll new customers into the recycled water program. The District wanted to review the economics of the improvements and determine the impacts resulting from implementing new recycled water rates. RFC developed a financial and rate model that considered the new customers and revised rates and the impact of providing discounted rates on wastewater customers. The District held meeting with the recycled water users and obtained input on issues of concern to them. RFC provided support to the District and evaluated the results of the surveys conducted to define the rates.

## CITY AND COUNTY OF SAN FRANCISCO (CA)

The City conducts water, wastewater and stormwater studies every five years to ensure that charges are consistent with cost of service and conforms with the City's Propositions. Mr. Pardiwala served as Project Manager for two cycles of rate studies for the City. The City has a combined wastewater and stormwater system and costs for stormwater are integrated with wastewater. The City was engaging in a multi-billion dollar capital improvement program that would have significant impact on rates. The City has unique microclimates and RFC analyzed the water usage characteristics of single family and multi-family users to develop a rate structure that would provide incentives for conservation. RFC evaluated incentives to encourage low impact development, reviewed stormwater practices to provide credits for best management practices to reduce stormwater generation. RFC performed an overhead cost allocation study consistent with federal requirements of OMB Circular A-87 to assign costs appropriately to different departments in order to obtain federal reimbursement for projects that are eligible for federal assistance.

## **CITY OF VENTURA (CA)**

Mr. Pardiwala served as Project Manager for a water, wastewater, and recycled water cost of service and rate study for the City of Ventura (City). The City had not updated its rate structure in 20 years. Additionally, the City was under a cease and desist order that required the City to carry out improvements estimated at more than \$55 million, and which the City wanted to start funding to mitigate impacts. The goal of the study was to develop conservation-oriented rates consistent with cost of service to recover adequate revenues to pay for necessary capital improvements, meet debt service coverage requirements, as well as maintaining sufficient reserve requirements. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. RFC developed long-range financial plans so that the water and wastewater utilities could be financially stable and save costs in the long run. We also assisted the City with developing different water and wastewater rate alternatives with various scenarios as well as calculating outside-city rates. The study was conducted with several meetings and input from stakeholders comprised of customers within the City. RFC educated the Citizen Advisory Committee on the basics of rates, cost allocations, and rate design to obtain their buy-in through the use of the dashboards in the rate models we developed for them to demonstrate the impacts of various revenue adjustments on the long-term financial stability of the enterprises. RFC also developed a schedule for funding a major wastewater program required by environmental groups. Recommended rates were implemented for two years in July 2012. RFC updated rates for the City in 2014 and provided water drought rates.

## **CITY OF SAN DIEGO (CA)**

Mr. Pardiwala conducted numerous studies for the City of San Diego (City), including a water, wastewater and reclaimed water rate study. The entire wastewater rate study was conducted with extensive stakeholder group involvement because of the changes required in the wastewater rate structure to meet regulatory requirements. In addition, Mr. Pardiwala served as project manager for the City's reclaimed water rate study, impact fee studies for both water and wastewater, and a transportation charges study for agencies contributing to the City's regional wastewater facility. Mr. Pardiwala also managed a water demand study which involved statistical analysis of historical water consumption to model projections based on weather, economic activity, population, inflation, etc. Mr. Pardiwala evaluated the feasibility of a water budget rate structure for the City. He assisted the City with the Proposition 218 noticing and public outreach.

## **CITY OF BEVERLY HILLS (CA)**

Mr. Pardiwala served as Project Manager for RFC's engagement with the City of Beverly Hills (City) water and wastewater rate studies. RFC was engaged by the City to develop a rate and financial planning model that would be used to evaluate alternative rate structures and to provide more detailed forecasts to assist in the preparation of updating rates in future years. RFC modeled numerous alternative rate structures and reviewed customer and revenue impacts before recommending that the City modify its current three tiered rate structure to include a fourth tier that targets large irrigation usage. In addition, RFC recommended that the costs of service based on flow and strength. RFC continues to provide biennial updates to the City model so that rates may be projected in future years.

## CITY OF ONTARIO (CA)

Mr. Pardiwala served as Project Manager on multiple water, wastewater and solid waste rate studies. The study included a comprehensive review of the City of Ontario's revenue requirements and allocation methodology, review of user classifications, a cost of service analysis, and rate design for City users.

RFC designed tiered water rates, recycled rates and wastewater rates considering IEUA rates. Solid waste rates were designed to recover costs. RFC provided the City with a model that is used for planning purposes by the City. The City has engaged RFC multiple times to update these rates, optimize water sources to minimize costs.

## **CITY OF REDLANDS (CA)**

Mr. Pardiwala has managed several financial projects for the City of Redlands (City) including water, wastewater and reclaimed water projects. The studies were conducted with extensive stakeholder input and multiple meetings with a Utilities Advisory Commission composed of local residents, businesses, and other interested parties. The first rate studies involved significant rate adjustments as well as rate structure adjustments to ensure financial stability, meet debt coverage and regulatory requirements. The analysis included calculation of outside-City charges and impact fees. The City received user-friendly working rate models for future updates. Mr. Pardiwala assisted the City with State Revolving Fund loans for reclaimed water and potable water. He helped them find grants for the reclaimed water project and water treatment plant upgrade. He has been assisting the City biennially with their water, wastewater and recycled water rates.

## **OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)**

Mr. Pardiwala assisted the Olivenhain Municipal Water District (District) in conducting a water financial plan study and a recycled water rate study to determine the recycled water rates charged to customers. The water financial planning model was developed to assist the District in evaluating different financing alternatives to minimize rate impacts and ensure financial stability. The water model was effectively used in Board meetings and presentations to evaluate the impacts of various scenarios. Additionally, RFC calculated drought/conservation rates for different stages of cutbacks. The recycled water rate study was conducted to determine the recycled water rates charged to customers given that the District obtains recycled water from four different sources: the City of San Diego, Vallecitos Water District, Rancho Santa Fe Community Services District, and the 4S Regional Recycled Water System. The existing agreements defined the costs of different sources of recycled water to the District. To address all of those issues and concerns, RFC developed a recycled water financial and rate model to determine the costs of providing service and the required revenue to be collected from customers. In addition, the model is built to evaluate when the District is able to take over the 4S Regional Recycled Water System, as stated in the agreement with the developer.

## **CITY OF SACRAMENTO (CA)**

Mr. Pardiwala managed a wastewater rate study to examine the charges associated with different types of residential and non-residential customers. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of City's user classification, a cost of service analysis, and rate design for City users. Sacramento is one of the few large Cities in the State that does not meter residential and a significant number of non-residential customers. The strength and flow allocation to these customers was revised. The resultant rates were fair and equitable and met the fiscal needs of the City's wastewater utility in the context of the City's overall policy objectives and were designed for simplicity of administration, cost effective implementation and ease of communication to customers.

## **GOLETA WEST SANITARY DISTRICT (CA)**

Mr. Pardiwala has been Goleta West Sanitary District's (District) financial consultant for over more than 15 years. During that time he has assisted the District with financial planning, development and financing their replacement and refurbishment program, developing a rate structure, annexation fees, connection fees, miscellaneous fees, reserves policy development, and other financial issues. The District charges customers on the tax roll. RFC developed the data to be included on the tax roll and the District now manages it.

## CLARK COUNTY WATER RECLAMATION DISTRICT (NV)

Mr. Pardiwala was Project Manager for a cost of service study for the Clark County Water Reclamation District (District) to help evaluate the current system of rates and charges to ensure that users were being charged appropriately. The District has not updated its rate structure system for many years and the current system based on fixture units is believed to need restructuring. RFC managed the sampling and wastewater flow monitoring from different types of users to determine the definition of an equivalent dwelling unit and the flows from different types of users. There are multiple outreach meetings with member agencies and interested stakeholders to educate them on the process and to obtain buy-in.

## **CITY OF HENDERSON (NV)**

Mr. Pardiwala served as Project Manager for the engagement with the City of Henderson (City). In Phase I, RFC assisted the City in conducting a water and wastewater financial assessment. RFC developed a financial vision which will ultimately shape the utilities for the next ten years. As part of our conceptual design process, RFC recommended several alternative rate philosophies to be evaluated as part of Phase II. The Model was also developed to evaluate certain rate philosophies and user charge structure modifications focused on improving the equitable recovery of costs from different user classes, legal defensibility of the rates and system development charges, revenue predictability, and conservation incentives. RFC developed an allocation or budget for different meter sizes to ensure that the tiered rates set up would fairly collect revenues from customers. RFC updated the City's financial plan by participating in the City's rate implementation process. This included presentations of final findings and recommendations to City Council and the Citizen's Advisory Committee.

## **CITY OF NORTH LAS VEGAS (NV)**

Mr. Pardiwala was the Project Manager for the water and sewer financial planning and rate study conducted for the City of North Las Vegas (City). At the time, the City had experienced rapid growth and had a significant amount of capital projects including construction of their own treatment plant. The City faced many financial challenges at a time when there were signs of a slowing economy. RFC conducted a multi-year financial plan that examined various customer growth, capital funding, and rate revenue assumptions. RFC prepared rate models for both water and wastewater and trained City staff on their use. The models provided dashboards for ease of use and decision making.

## CITY OF PORTLAND (OR)

The City of Portland (City) wanted a financial planning and rate model to determine rates for its wholesale and retail customers. Mr. Pardiwala served as Project Manager for this study. The City provided wholesale water to 19 agencies under old agreement that were expiring soon. The City was finalizing long-term agreements with explicit terms on rate setting. The City wanted to develop rates consistent with the new agreement for the wholesale agencies, review rate structure alternatives for its retail customers, review impacts and provide flexibility for planning for the next 20 years. The City's existing retail rate structure consisted of an increasing 3-tier rate structure for all customers with fixed tiers for single family customers and tiers based on the average usage in the preceding 12-month period for the remaining customers. The current retail rates applied to all classes and did not take into account peaking which factors can vary significantly from class to class. RFC developed alternative rate structure options for retail customers and explore the creation of more classes to increase equity and fairness and encourage conservation. Alternative rate structures included uniform volume rates, seasonal rates, increasing and "V" or "U" shaped block rates, and a range of individualized block rates with cutoffs based on average account usage, seasonal usage, or customer characteristics. RFC provided the City with the computer model and provided training and a manual in the user of the model.

In 2012, Mr. Pardiwala managed a bond feasibility study for the City's Bureau of Environmental Services. The City needed to issue bonds for several hundred million dollars to meet regulatory requirements related to its wastewater and stormwater systems. RFC met with City staff and reviewed the CIP, business processes, rates and rate setting procedures, and provided a certificate of parity showing that the City could meet its coverage requirements under the current rates so that the City could sell bonds with a good rating.

## **CITY OF TACOMA (WA)**

Mr. Pardiwala was Project Manager for a study to develop financial plans and rate models for the City's Environmental Services including wastewater, surface water and solid waste utilities. The study involved development of user friendly financial and rate planning models that would allow the City to update rates on an annual basis, quickly make changes, and review rates. The model also provided capability to compare the status of the CIP, and actual revenues and expenses against budgets on a month by month basis. To make this process easy, the model was integrated with the City's SAP and E Builder system. The financial plan and rates were reviewed with input from the City's Environmental Services Commission. RFC turned over the models to the City, provided training and computer manuals in the use of the models.

Mr. Pardiwala also provided financial planning models to the City's water utility, which included user-friendly features and benchmarking tools to maximize improvements in operations and management.

## **CITY OF LOS ANGELES (CA)**

Mr. Pardiwala was Project Manager on studies to develop rates and rate models for solid waste and wastewater utilities.
The City wanted to have a planning tool in-house to evaluate what if scenarios, impacts and determine rates for various customers. The model incorporated many user friendly features to assist the City update rates and prepare financial plans on an annual basis. Solid waste rates included non-residential customers based on size of containers and frequency of collection. Wastewater rates to the 27 subscribing agencies discharging to the City's wastewater treatment facilities were also determined. This involved complex calculations and allocations to wastewater loadings, conveyance distance, etc. Connection or impact fees were also included in the model. User training, model documentation, regular updates and ongoing service were also included in this project.

Mr. Pardiwala also served as Project Manager on a wheeling charges study for the Los Angeles Department of Water and Power. The City was interested in determining the appropriate charges to be levied on various customers that may wish to use the extra capacity in the City's system—from the Los Angeles Aqueduct to the distribution network—to transfer water.

## **CITY OF PASADENA (CA)**

Mr. Pardiwala was Project Manager for a study for the City of Pasadena (City) to determine roll-out charges for solid waste services provided by the City. Certain customers in the City needed assistance with rolling out their containers and replacing them again. Mr. Pardiwala analyzed the costs associated with this service and set up a charge for it.

## OTHER RELEVANT PROJECT EXPERIENCE

- » City of Anaheim (CA) Water Rate Study
- » City of Atwater (CA) Water and Wastewater Rate Study
- » City of Banning (CA) Recycled Water Revenue Program
- » Beaumont Cherry Valley Water District (CA) Water Rate and Connection Fee Study
- » Carpinteria Sanitary District Wastewater Rate Study
- » Casitas Municipal Water District Water Rate Study
- » Castroville Water District (CA) Water and Wastewater Rate Study
- » City of Brea (CA) Water Rate Study, Connection Fees and Related Fees and Charges Study
- » City of Buenaventura (CA) Water and Wastewater Rate Study
- » City of Burbank (CA) Bond Feasibility Study, Reclaimed Water Study, and Water and Wastewater Rate Study
- » City of Carlsbad (CA) Asset Replacement Study and Water, Wastewater and Reclaimed Water Revenue Program

- » City of Chino (CA) Valuation Study and Water Rate Study
- » City of Chowchilla (CA) Water and Wastewater Rates Study
- » Clark County Water Reclamation District (NV) Cost of Service Study
- » City of Cloverdale (CA) Water and Wastewater Connection Fees and Rate Study
- » City of Corona (CA) Water and Wastewater Rate Study
- » El Toro Water District (CA) Water Budget and Wastewater Rate Studies and Connection Fees
- » City of Encinitas (CA) Water and Wastewater Rate Study
- » City of Escondido (CA) Valuation Study, Water and Wastewater Rate Study
- » City of Glendora (CA) Water and Wastewater Financial Planning and Rate Study
- » City of Livingston (CA) Water, Wastewater and Solid Waste Rates Study and Litigation Support
- » Los Angeles Department of Water and Power (CA) Water Rate Study and Wheeling Charge Review
- » City of Madera (CA) Water and Wastewater Rate Study
- » Mammoth Community Water District (CA) Water and Wastewater Rate Study
- Metropolitan Wastewater Joint Powers Authority (CA)
  Wastewater Valuation Study and Capacity Valuation Study
- » Napa Valley Sanitation District (CA) State Revolving Fund Loan Assistance
- » Palmdale Water District (CA) Water Budget Rate Study
- » City of Poway (CA) Wastewater Rate Structure Analysis
- » Ramona Municipal Water District (CA) Water Rate Study
- » City of Rialto (CA) SRF Funding and Water and Wastewater Rate Study
- » County of San Bernardino (CA) Water and Wastewater Rate Study and Connection fees
- » San Diego County Water Authority (CA) Capacity Valuation, Rate Analysis, Valuation Study, and Wheeling Charge Study
- » City of San Fernando (CA) Water and Wastewater Rates Study
- » City of San Francisco (CA) Water, Wastewater Rate Study and Stormwater Incentives for Low Impact Development
- » San Gorgonio Pass Water Agency (CA) Financing Plan
- » City of San Jose (CA) Sewer Service Related Fees and Charges
- » City of San Luis Obispo (CA) Stormwater Financial Feasibility Study

- » City of Santa Fe springs Water Rate Study
- » Santa Fe Irrigation District (CA) Wastewater Treatment Plant Cost Evaluation, Water Connection Fees Study, and Water Rate Study and Update
- » City of Santa Monica (CA) Wastewater Rate Study
- » City of Scottsdale (AZ) Impact Fee Study
- » City of South Pasadena (CA) Water and Wastewater Rate Study
- » City of Springfield (OR) Wastewater Rates Model
- » Ojai Valley Sanitary District Wastewater Rate Study
- » Tacoma Public Utilities (WA) 2008 Business Planning Assistance and Financial Model
- » City of Upland (CA) Valuation Study
- » Town of Windsor (CA) Impact Fee Review, State Revolving Fund Loan Application Assistance, Water and Wastewater Connection Fees and Rates Study, and Water and Water Reclamation Rate Studies

#### **TECHNICAL SPECIALTIES**

- » Utility cost of service and rate structure studies
- » Financial planning studies
- » State revolving fund assistance

#### **PROFESSIONAL HISTORY**

- » Raftelis Financial Consultants, Inc.: Senior Consultant (2009-present); Staff Consultant (2007-2009)
- Merati Economic Group: Economics Analyst (2006-2007)

#### **EDUCATION**

- Master of Business
  Administration California
  State University, Los Angeles
  (2007)
- » Bachelor of Science, Business Administration – California State University, Los Angeles (2006)

## **HANNAH PHAN**

## TECHNICAL REVIEWER

Senior Consultant

## PROFILE

Ms. Phan has served as a consultant and/or lead consultant on numerous water, wastewater, and recycled water rate studies, cost of service studies, connection fee studies, and valuation studies. Her specific experience includes projects for the Cities of San Diego, Ventura, Palo Alto, Santa Barbara, Santa Monica, Anaheim, Ontario, Escondido, Redlands, and Banning, the Goleta West Sanitary District and Carpinteria Sanitary District, and the City of North Las Vegas, Nevada and Tacoma Environmental Services Department in Washington. Ms. Phan has an MBA and is an experienced modeler with strong analytical skills.

## **RELEVANT PROJECT EXPERIENCE**

## **CITY OF PALO ALTO (CA)**

The City of Palo Alto (City) engaged RFC to conduct a water cost of service and rate study. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. The study also included a review of the peaking characteristics of different customer classes, an analysis of the master-metered MFR customers, and a review of separate charge for higher elevations customers. RFC conducted the study with input from the Utilities Advisory Commission made up of City residents. Ms. Phan assisted in conducting the cost of service analysis and customer impacts.

## EAST BAY MUNICIPAL UTILITY DISTRICT (CA)

Ms.Phan is currently serving as Lead Consultant for a comprehensive wastewater cost of service study for East Bay Municipal Utility District (District). The last comprehensive cost of service study was done in 2000 for the wastewater treatment charges. As part of the study, RFC thoroughly examined the District's cost structure, analyzed wastewater flow and customers data, and evaluated alternative rate structures to develop an equitable rate structure that meets Proposition 218 requirements and the District's goals and objectives. While the proposed treatment rates retain the current rate structure, which includes a fixed monthly service and strength charge and a variable flow charge with a cap at 10 hundred cubic feet (hcf) per dwelling unit per month for residential customers, and a fixed monthly service charge and a variable flow charge per hcf based on customer classification for apartment buildings and non-residential customers, the individual rates are realigned to reflect the cost of service. The District's current rate structure also includes a fixed annual charge per dwelling units (up to five dwelling units) for single- and multi-family customers and per parcel for non-residential customers for wet weather facilities. This rate structure was developed in late 1980s. RFC and District staff evaluated various alternatives for the wet weather facilities charge to ensure equity amongst customer classes. The proposed wet weather facilities charge will be based on the average parcel size for each customer class, which has a stronger cost of service basis than the current rate structure.

## NAPA SANITATION DISTRICT (CA)

Ms. Phan served as lead analyst for a recycled water rate study for the Napa Sanitation District (District). The District was required to restrict summer discharge of its wastewater into the river. The District made improvements to its treatment plant to produce recycled water and then provided incentives to customers to use the recycled water. The agreement with customers was ending in two years, but the District wanted to enlarge the recycled water facilities and enroll new customers into the recycled water program. The District also wanted to review the improvements and determine the impact of the new recycled water rates. RFC developed a financial and rate model that considered the new customers and revised rates and the impact of providing discounted rates on wastewater customers. The District held a meeting with the recycled water users and obtained input on issues of concern to them. RFC provided support to the District and evaluated the results of the conducted surveys to define the rates.

## **CITY OF VENTURA (CA)**

RFC recently completed a water, wastewater, and recycled water cost of service and rate study for the City of Ventura (City). The City had not updated its rate structure in 20 years. Additionally, the City was under a cease and desist order that required the City to carry out improvements estimated at more than \$55 million, and which the City wanted to start funding to mitigate impacts. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. RFC developed long-range fi¬nancial plans so that the water and wastewater utilities could be financially stable and save costs in the long run. We also assisted the City with developing different water and wastewater rate alternatives with various scenarios as well as calculating outside-city rates. Ms. Phan served as the lead consultant for this project, responsible for building the rate models, preparing the scenarios and conducting economic analyses of the alternative scenarios.

## **CITY OF ANAHEIM (CA)**

The City of Anaheim (City) engaged RFC to conduct a water cost of service rate study. To address the financial objectives of the City and identify a water rate structure that is fair and equitable while sufficiently recover the costs of providing water service, RFC developed a water rate and financial planning model to calculate and forecast cost justified water rates appropriate to recover the operating and capital costs of the wastewater enterprise over a 20-year planning period.

## **CITY OF BEVERLY HILLS (CA)**

The City of Beverly Hills (City) engaged RFC to develop a rate and financial planning model that would be used to review customer classes, evaluate alternative rate structures and to provide more detailed forecasts to assist in the preparation of updating rates in future years.

The City's water rate structure consisted of a three-tiered increasing block water rate structure with no differentiation among customer types. RFC modeled numerous alternative rate structures and reviewed customer and revenue impacts before recommending that the City modify its current three tiered rate structure to include a fourth tier that targets large irrigation usage. The City's wastewater rates were restructured to more equitably recover the costs of servicing the different customer classes to conform to EPA regulations. RFC continues to provide updates to the City so that the enterprise funds can continue to be financially stable. Ms. Phan assisted in conducting the pricing objectives to determine the objectives most important to the City's stakeholders and developed the water and wastewater rate models to determine the appropriate rates and rate structure for the City's utility services.

## **CITY OF SAN DIEGO (CA)**

RFC assisted the City of San Diego (City) in conducting a water, wastewater, and recycled water rate study to evaluate the costs of providing utility services and the rates to charge customers. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, an analysis of costof-service and rate design for City users. The rate structure was modified to provide a more equitable sharing of costs consistent with regulatory requirements. The recycled water rate study involved evaluation of various scenarios involving capital projects with increased sales, cost sharing between water and wastewater, phasing in rates, repayment of past costs incurred by water to fund the recycled water program. Ms. Phan assisted in building the rate models, preparing the scenarios and conducting economic analyses of the alternative scenarios.

## CASTAIC LAKE WATER AGENCY (CA)

Ms. Phan served as lead analyst for a financial plan wholesale water rate study for the Agency. As part of the project, RFC developed a comprehensive financial plan that evaluated various financial alternatives to minimize financial risks to the Agency. The Agency received a significant portion of its revenue stream from property tax, which it used to fund capital improvement projects and costs related to its Buena Vista/ Rosedale Rio Bravo (BV/RRB) water supply. The current wholesale water rate only recovered operating costs of the system. The Agency was concerned that property tax revenue would significantly decrease in the future, which would severely impact its operations and require significant rate increases. Thus, RFC analyzed several alternatives to gradually fund more of the BV/RRB costs from the wholesale water rate so that it wouldn't be as dependent on property tax revenues. RFC also reviewed and evaluated numerous alternative wholesale water rate structures to enhance revenue stability and promote conjunctive water use in the Santa Clarita Valley among the four purveyors within the system. Since the current wholesale water rate was 100% variable, one of the objectives of the Agency was to enhance revenue stability by incorporating a fixed charge in its wholesale rate structure to ensure recovery of a portion of its fixed costs. RFC presented four rate structure alternatives to the Board, and the Agency implemented a fixed and variable rate structure in which the fixed costs were recovered based on each purveyor's previous three-year average of total water demand.

## **CITY OF SOUTH PASADENA (CA)**

Ms. Phan assisted the City in conducting a financial plan and rate study for its water and wastewater enterprises as the lead analyst. The City had expressed some concerns about financial stability and anticipated significant capital expenses associated with water and sewer line replacement in the upcoming years, as well as necessary improvements to meet state regulations. As a part of the financial plan development process, RFC evaluated the City's existing accounts and consumption patterns as well as its existing rate structure to evaluate and project revenues. These revenues were compared to existing and projected revenue requirements, including operating and capital expenses as well as existing debt service obligations. The results of the study included a financial plan dashboard which allowed the City to evaluate various financial plan scenarios, including the necessary levels of revenue adjustments required and capital funding options available in order to meet its required coverage ratios and target reserve balances.

## TACOMA ENVIRONMENTAL SERVICES (WA)

RFC is currently conducting a comprehensive wastewater, surface water, and solid waste financial plan and cost of service study for Tacoma Environmental Services (Tacoma). A key objective of the project is to provide Tacoma with a financial model that can be linked with the SAP system so that future annual updates can be automatic. The model also has ability to conduct sensitivity analyses on several different issues, such as debt refinancing, varying levels of increases in assessments costs, etc. The study also included a long-range financial plan to ensure financial stability for all three utilities. Ms. Phan served as the lead consultant on this project, responsible for building the rate models, preparing presentations and conducting sensitivity analyses.

## **OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)**

Ms. Phan assisted the Olivenhain Municipal Water District (District) in conducting a water financial plan study and a recycled water rate study to determine the recycled water rates charged to customers. The water financial planning model was developed to assist the District in evaluating different financing alternatives to minimize rate impacts and ensure financial stability. The water model was effectively used in Board meetings and presentations to evaluate the impacts of various scenarios. The recycled water rate study was conducted to determine the recycled water rates charged to customers given that the District obtains recycled water from four different sources: the City of San Diego, Vallecitos Water District, Rancho Santa Fe Community Services District, and the 4S Regional Recycled Water System. The existing agreements defined the costs of different sources of recycled water to the District. To address all of those issues and concerns, RFC developed a recycled water financial and rate model to determine the costs of providing service and the required revenue to be collected from customers. In addition, the model is built to evaluate when the District is able to take over the 4S Regional Recycled Water System, as stated in the agreement with the developer.

## **GOLETA WEST SANITARY DISTRICT (CA)**

The Goleta West Sanitary District (District) was evaluating several alternatives regarding constructing their own wastewater treatment plant and expanding the current facility at Goleta Sanitary District, where the District has been sending their wastewater for treatment. RFC built a financial planning model for the District to find the most economically effective option. Furthermore, the District engaged RFC in conducting a miscellaneous fee study to evaluate the current fee structures to better represent the cost of service. Ms. Phan assisted in conducting economic analyses of the alternatives and developing the miscellaneous fee model for the District.

## OTHER RELEVANT PROJECT EXPERIENCE

- » City of Banning (CA) Water, Wastewater, and Recycled Water Rate and Connection Fees Study
- » Beaumont-Cherry Valley Water District (CA) Water Rate Study
- » Carpinteria Sanitary District (CA) Wastewater Rate Study
- » Clark County Water Reclamation District (NV) Sewer Cost of Service Study

- » City of Escondido (CA) Water and Wastewater Rate and Fees and Connection Fees Study, and Water Budget Study
- » Jurupa Community Services District (CA) Water and Wastewater Rate Study
- » City of North Las Vegas (NV) Water and Wastewater Rate Studies
- » Olivenhain Municipal Water District (CA) Recycled Water Rate Study
- » City of Ontario (CA) Water, Wastewater, and Solid Waste Rate Studies
- » City of Redlands (CA) Water, Wastewater and Connection Fees Cost of Service Study
- » City of Santa Barbara (CA) Water and Wastewater Rate Study
- » City of Santa Monica (CA) Wastewater Cost of Service Study
- » Tacoma Water Department (WA) Water Financial Plan Study

#### **TECHNICAL SPECIALTIES**

- » Data analysis
- » Environmental Policy Analysis
- » Strategic Planning

#### **PROFESSIONAL HISTORY**

- » Raftelis Financial Consultants, Inc.: Consultant (2014-present)
- Turner New Zealand, Inc.: Director of Operations (2009-2012); Accounting Manager (2007-2009)
- » Lesley, Thomas, Schwarz & Postma, Inc.: Staff Accountant (2007)

#### **EDUCATION**

- Master of Environmental Management – Duke University (2014)
- Bachelor of Arts in Business-Economics; History – University of California, Santa Barbara (2006)

# **KEVIN KOSTIUK**

## STAFF CONSULTANT

Consultant

## PROFILE

Mr. Kostiuk has a background in economics and accounting and possesses extensive analytical skills. His expertise lies in financial accounting, analysis of water supply reservoir operations and management, environmental policy, and water quality trading programs; as well as United States Army Corps of Engineers (USACE) water supply and flood control policy.

## **RELEVANT PROJECT EXPERIENCE**

## **CRESCENTA VALLEY WATER DISTRICT (CA)**

Mr. Kostiuk performed an economic analysis for the Crescenta Valley Water District (District) to determine the feasibility of offsetting imported water supply with the production of local groundwater. Mr. Kostiuk created a customized model for the District to use under different scenarios of capital requirements, lease options, and contract lengths. As part of the study, he reviewed the District's prior consultant's work, determined internal rate of returns, calculated the net present value of district savings, and determined the cost at which the District should lease water rights for groundwater production.

## **CITY OF RIVERSIDE (CA)**

Mr. Kostiuk completed a study for the City of Riverside (City) to determine the value of an elevation fee credit for present and future customers in a special district. The project required calculation of asset replacement values for infrastructure serving the special district, specific to booster capacity, and within the context of a historical assessment. The findings from the study will be used to defend the City's move to assess its elevation fee schedule.

### EAST VALLEY WATER DISTRICT (CA)

Mr. Kostiuk assisted the District with design and implementation of budgetbased water rates for their 23,000 accounts including residential, commercial and irrigation customers. The study included creation of a long-term financial plan and full cost of service study for the water enterprise.

Mr. Kostiuk worked closely with the District's finance, IT, and, billing departments in the early stages to analyze customer account level data including monthly use, irrigable landscape area, customer class, assessor parcel number (APN), etc. for construction of indoor and outdoor allocations, or budgets. The rate structure that the Board adopted allows for the most precise, scientific and equitable design of rate structures, tailored specifically to an individual account.

#### **GOLETA WATER DISTRICT (CA)**

Mr. Kostiuk completed a full water cost of service study for the District which included design of inclining tiered rates for their single-family residential class, as well as agricultural rates for two classes. Complexities in customer classes' access to District water supplies, interruptibility during times of drought, and benefit (or lack thereof) from treatment made the analysis unique and challenging. The study included development of a long term financial plan model, rate model and corresponding bill impacts.

To achieve the District's demand reduction targets as outlined in their Drought Management Plan, the District wished to explore drought rates/drought surcharges to curb demand. Ultimately, Mr. Kostiuk developed three options of revenue neutral drought surcharges for the Board's consideration. These various options ranged from targeted surcharges on an inter and intra-class basis, to a surcharge applied to non-drought commodity rates, to a uniform co modity surcharge irrespective of customer class or use. The proposed rates and drought surcharges were adopted and implemented July 1, 2015.

## **CITY OF REDLANDS (CA)**

Mr. Kostiuk updated prior financial plans developed by RFC for the City for their water and sewer enterprises. The update included building in more flexibility to the model for ease of use and for future updates, as well as, making the model dashboards more user friendly.

Additional work included updating the City's Storm Drain Impact Fee and miscellaneous fee for NPDES inspections as part of the MS4 permit requirement. The storm drain fee had not been reevaluated in 20 years. Additionally, the City had recently completed a Storm drain Master Plan which called for \$83 million in improvements to system deficiencies. Mr. Kostiuk developed a methodology to retain the existing impact fee structure while updating the fee paid by different land use classes.

The state-wide drought in California has entered its fourth year and the Governor's office has called for a mandatory 25% reduction for all water service agencies in the state. The City's target is to reduce residential consumption by 35%. Mr. Kostiuk is currently assisting the City in design and implementation of drought penalties to achieve 35% reduction and to recover lost revenue from reduced water sales.

## **CITY OF SIMI VALLEY (CA)**

The City had last raised sewer rates in fiscal year 2008-2009 and was facing a backlog of sewer system improvements and repair and replacement. Mr. Kostiuk updated the existing sewer financial plan with recent data, as well as, updated the cost of service analysis. As part of the study, tier definitions were changed for non-residential customers to reduce the base charge on small users without impacting revenue recovery. Working with City staff, and with presentations to City management, RFC assisted in getting Council authorization for proposition 218 notices of a rate increase to the City's customers. The increases are anticipated to be adopted and implemented July 1, 2015, and the revenue increase will allow the City to commence the public works department's capital improvement schedule while maintaining reserve funds at target levels.

## **CITY OF HENDERSON (NV)**

Mr. Kostiuk developed a financial plan for the City's sewer enterprise and conducted a cost of service analysis. The project created a combined model for the water and sewer enterprises which incorporated finance department reporting tools. The combined model allows the utility (water and sewer) to be viewed as a one, with impacts and reporting available to the user.

## CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT-AMERICAN RIVERS (NC)

Mr. Kostiuk served as project leader for a study of alternatives to meet Raleigh's long term water supply shortfall. The project examined four options in extending the life of the existing federal reservoir, thereby postponing capital expenditures on a new raw water supply. Results were delivered to city staff, their consultants and USACE in June, 2014.

## LOWER CAPE FEAR WATER QUALITY TRADING PROGRAM – THE NATURE CONSERVANCY (NC)

To reduce nutrient loading and decrease utility costs, the Nature Conservancy proposed a WaterFund to improve water quality through improved agricultural practices on private landholdings in the watershed. Mr. Kostiuk was in charge of researching comparable programs and providing options for a financial mechanism and governance approach between various stakeholders in the region including utilities, agriculture, environmental organizations and community groups.

## AGENDA ITEM NO. 18

## SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

September 14, 2015

TO: Board of Directors San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: CLASSIFICATION AND COMPENSATION STUDY

## RECOMMENDATION

It is recommended that the Board of Directors:

- 1. Provide guidance to the General Manager for the completion of a Classification and Compensation Study; and
- 2. Discuss and take action as appropriate.

## BACKGROUND

San Elijo Joint Powers Authority (SEJPA) employees are currently operating under a 4-year labor agreement (Resolution No. 2012-06), which is scheduled to expire June 30, 2016. As part of the resolution, the Competitiveness Assessment Decision section states, "The SEJPA will perform a Classification and Compensation Study and present recommendations to the SEJPA Board of Directors prior to the end of this contract."

## DISCUSSION

In most instances, employers utilize a systematic way to assess and compensate employees. Classification and compensation structures are developed partly in response to state labor laws and also to attract and retain qualified staff. Job classifications define job duties, responsibilities, and the parameters by which duties are to be performed. Ideally, pay assigned to each classification is based on comparisons with the labor market and the value of the job with respect to other positions within the agency.

A study of the current labor market can provide information to determine whether the agency's pay structure is appropriate or if adjustments should be considered.

Staff recommends surveying cities and agencies within reasonable proximity that share similar characteristics. The proposed agencies are listed below in Table 1:

## Table 1 - Public sector agencies proposed for Classification and Compensation Study

- Encina Wastewater Agency
- Olivenhain Municipal Water District
- Ramona Municipal Water District
- Santa Fe Irrigation District
- City of Encinitas
- City of Oceanside
- City of Solana Beach

- Leucadia Wastewater District
- Padre Dam Municipal Water District
- Rincon Del Diablo Municipal Water District
- Vallecitos Water District
- City of Escondido
- San Dieguito Water District

The SEJPA has the option of completing the Classification and Compensation studies in-house or through the use of a consultant. The cost to have a consultant prepare a Classification and Compensation study is estimated to be between \$12,000 and \$32,000. There is no external cost to having the study completed in-house, and this effort could be executed under the direction of the General Manager.

It is therefore recommended that the Board of Directors:

- 1. Provide guidance to the General Manager for the completion of a Classification and Compensation Study; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

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Michael T. Thornton, P.E. General Manager