

AGENDA
SAN ELIJO JOINT POWERS AUTHORITY
MONDAY MAY 12, 2014 AT 9:00 AM
SAN ELIJO WATER RECLAMATION FACILITY – CONFERENCE ROOM
2695 MANCHESTER AVENUE
CARDIFF BY THE SEA, CALIFORNIA

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. ORAL COMMUNICATIONS (NON-ACTION ITEM)
5. PRESENTATION OF AWARDS

None
6. * **CONSENT CALENDAR**
7. * APPROVAL OF MINUTES FOR THE APRIL 14, 2014 MEETING AND APRIL 21, 2014 SPECIAL MEETING
8. * APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS
9. * SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS – MONTHLY REPORT
10. * SAN ELIJO JOINT POWERS AUTHORITY RECYCLED WATER PROGRAM MONTHLY REPORT
11. * ITEMS REMOVED FROM CONSENT CALENDAR

Items on the Consent Calendar are routine matters and there will be no discussion unless an item is removed from the Consent Calendar. Items removed by a "Request to Speak" form from the public will be handled immediately following adoption of the Consent Calendar. Items removed by a Board Member will be handled as directed by the Board.

REGULAR AGENDA

12. **SAN ELIJO JOINT POWERS AUTHORITY FISCAL YEAR 2014-2015
RECOMMENDED BUDGET UPDATE**

1. Discuss and take action as appropriate.

Staff Reference: Director of Finance/Administration

13. **CONSIDERATION OF PROVIDING WASTEWATER TREATMENT SERVICE TO THE
CITY OF DEL MAR**

1. Authorize the General Manager to enter into an agreement with the City of Del Mar for the provision of wastewater treatment services; and
2. Discuss and take action as appropriate.

Staff Reference: General Manager

14. **GENERAL MANAGER'S REPORT**

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

15. **GENERAL COUNSEL'S REPORT**

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

16. **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.

17. **CLOSED SESSION**

A closed session will be held per Government Code Section 54956.8: Real Property Negotiations, with Negotiator Michael Thornton for the San Elijo Joint Powers Authority, and the City of Del Mar.

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

18. **ADJOURNMENT**

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Monday, June 9, 2014 at 9:00 a.m.

NOTICE:

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

The agenda package and materials related to an agenda item submitted after the packet's distribution to the Board is available for public review in the lobby of the SEJPA Administrative Office during normal business hours. Agendas and minutes are available at www.sejpa.org. 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: May 7, 2014



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

SAN ELIJO JOINT POWERS AUTHORITY
MINUTES OF THE BOARD MEETING
HELD ON APRIL 14, 2014
AT THE
SAN ELIJO WATER RECLAMATION FACILITY

Mark Muir, Chair

David Zito, Vice Chair

A meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, April 14, 2014, 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

Vice Chair Zito called the meeting to order at 9:00 a.m.

2. ROLL CALL

Directors Present:

Teresa Barth
David Zito
David Ott, Solana Beach Alternate

Directors Absent:

Mark Muir
Thomas M. Campbell

Others Present:

General Manager
Director of Operations
Director of Finance & Administration
Administrative Assistant

Michael Thornton
Christopher Trees
Paul Kinkel
Jennifer Basco

SEJPA Counsel:

Procopio, Cory, Hargreaves & Savitch

Greg Moser

City of Encinitas:

Director of Engineering and Public Works
Public Works Management Analyst

Glenn Pruum
Bill Wilson

City of Solana Beach:

City Manager
Director of Engineering/Public Works

David Ott
Mohammad "Mo" Sammak

3. PLEDGE OF ALLEGIANCE

General Manager Thornton led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

None

5. PRESENTATION OF AWARDS

None

6. CONSENT CALENDAR

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

Motion carried with the following vote of approval:

AYES: Barth, Ott, Zito
NOES: None
ABSENT: Campbell, Muir
ABSTAIN: None

Consent Calendar:

Agenda Item No. 7	Approval of Minutes for the March 10, 2014 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

11. ITEMS REMOVED FROM CONSENT CALENDAR

None

12. PRESENTATION OF THE SAN ELIJO JOINT POWERS AUTHORITY FISCAL YEAR 2014-2015 RECOMMENDED BUDGET

Paul F. Kinkel, Director of Finance/Administration, provided a PowerPoint presentation on the Fiscal Year (FY) 2014-2015 Recommended Budget and answered questions from the Board of Directors. The budget estimates all expenditures necessary to provide wastewater treatment, waste disposal, water reclamation, laboratory, ocean outfall, and pump station services. The total recommended FY 2014-2015 budget for the Wastewater Treatment Fund is \$5,688,907. The total recommended FY 2014-2015 operating budget for the Water Reclamation Fund is \$2,111,282. The recommended FY 2014-2015 appropriation for the Capital Project Fund is \$1,257,000.

Mr. Kinkel reported that the total cost to the Member Agencies of the FY 2014-2015 recommended budget for all programs funded including capital improvements and debt service will increase from a year ago. The City of Encinitas' portion, which includes the Cardiff Sanitation Division, parts of the Encinitas Sanitation Division, and other miscellaneous programs within the City will see an increase in cost of 3.4 percent, while the City of Solana Beach's portion, which includes the Solana Beach Sanitation District and other miscellaneous programs within the City will see an increase of 2.0 percent.

It was recommended that the Board of Directors take the Recommended Budget to their respective Councils for further discussion and support. The budget will then be discussed at the next scheduled Board meeting.

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

13. ACCEPTANCE OF COMPLETION – FLOW EQUALIZATION BASINS FLOATING COVERS PROJECT FOR THE SAN ELIJO WATER RECLAMATION FACILITY

Christopher Trees, Director of Operations, informed the Board of Directors that the Flow Equalization Basins Floating Covers Project was completed below budget and 30 days ahead of schedule. There were no injuries during construction and no filed claims against the SEJPA. The work by MPC Containments International was of good quality.

Moved by Board Member Barth and seconded by Vice Chair Zito to:

1. Authorize the General Manager to accept the Flow Equalization Basins Floating Covers Project and sign and record a Notice of Completion for the project.

Motion carried with the following vote of approval:

AYES: Barth, Ott, Zito
NOES: None
ABSENT: Campbell, Muir
ABSTAIN: None

14. EXPANDING RECYCLED WATER SERVICE

With the San Diego region currently in Drought Level 1, General Manager Thornton identified what actions the SEJPA is taking with local water districts to address the State of Emergency. For the San Dieguito Water District (SDWD), the new Encinitas Community Park will use recycled water beginning later this year. Also, an industrial cooling tower at the newly remodeled Scripps Hospital will use recycled water instead of potable water. The City of Del Mar has two recycled water projects underway at the Del Mar Fairgrounds, including a cooling tower project and expansion of the turf track and decorative water ponds. The Santa Fe Irrigation District is examining the feasibility of providing recycled water to several estate properties and to the City of Solana Beach's coastal corridor.

Next, Mr. Thornton stated that the Olivenhain Municipal Water District (OMWD) is proposing the expansion of recycled water service to the Village Park community of Encinitas, which has many schools, greenbelts, and HOA-maintained areas. If the

project is approved, OMWD will construct approximately 7.6 miles of recycled water pipeline, and a water pressure boosting pump station. As part of this proposed project, the SEJPA will construct a one-half mile pipeline from the Wiegand Reservoir to the SEJPA's Oakcrest Reservoir. The project with OMWD may ultimately serve 350 AFY and nearly double the SEJPA's recycled water system storage. Additional reservoir storage increases water delivery reliability and operational flexibility; allows more customers to be served; and may be adequate to meet "fire flow" requirements for the SEJPA. The budgetary cost for the SEJPA's element of the Village Park Project is estimated at \$1.1 million, which can be partially funded by grant monies and a low-interest loan. The water sales from the Village Park Project will provide adequate revenue for repayment of the loan.

Moved by Board Member Barth and seconded by Vice Chair Zito to:

1. Authorize the General Manager to reimburse the Olivenhain Municipal Water District up to \$100,000 for engineering, environmental, and other professional services associated with pipeline design to connect the Oak Crest and Wiegand Reservoirs.

Motion carried with the following vote of approval:

AYES: Barth, Ott, Zito
NOES: None
ABSENT: Campbell, Muir
ABSTAIN: None

15. GENERAL MANAGER'S REPORT

General Manager Thornton informed the Board Members that the SEJPA is in discussions with Caltrans regarding efforts to widen Interstate 5. Some of the SEJPA's recycled water pipelines are in Caltrans' easements and may require relocation. Mr. Thornton will keep the Board of Directors aware of any developments.

16. GENERAL COUNSEL'S REPORT

Greg Moser reported that the California Appellate Court ruled that private communications sent on personal devices that are not stored on a public agency's servers are not subject to the California Public Records Act. (*City of San Jose v. Superior Court* (March 27, 2014, Case No. H039498).)

17. BOARD MEMBER COMMENTS

Board Member Barth stated that she attended the SANDAG Tribal Summit, where she learned that the Barona Indian Reservation operates and maintains an on-site water reclamation plant.

18. CLOSED SESSION

None

19. ADJOURNMENT

The meeting adjourned at 10:04 a.m. The next Board of Directors meeting will be held on May 12, 2014.

Respectfully submitted,

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

Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY
MINUTES OF THE SPECIAL BOARD MEETING
HELD ON APRIL 21, 2014
AT THE
SAN ELIJO WATER RECLAMATION FACILITY

Mark Muir, Chair

David Zito, Vice Chair

A special meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, April 21, 2014, at 4:00 p.m., at the San Elijo Water Reclamation Facility at 2695 Manchester Avenue, Cardiff by the Sea, California.

1. CALL TO ORDER

Chair Muir called the meeting to order at 4:00 p.m.

2. ROLL CALL

Directors Present:

Teresa Barth
Thomas M. Campbell
Mark Muir
David Zito

Directors Absent:

None

Others Present:

General Manager	Michael Thornton
Director of Operations	Christopher Trees
Director of Finance & Administration	Paul Kinkel

SEJPA Counsel:

Procopio, Cory, Hargreaves & Savitch	Greg Moser
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City of Encinitas:

Director of Engineering and Public Works	Glenn Pruim
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City of Solana Beach:

City Manager	David Ott
Director of Engineering/Public Works	Mohammad "Mo" Sammak

3. PLEDGE OF ALLEGIANCE

General Manager Thornton led the Pledge of Allegiance.

4. CLOSED SESSION

The Board of Directors adjourned to closed session at 4:01 p.m., with SEJPA Lead Negotiator Michael Thornton for the City of Del Mar agreement, per Government Code Section 54956.8 – Real Property Negotiations.

The Board of Directors came out of closed session at 4:55 p.m. with no reportable action.

5. ADJOURNMENT

The meeting adjourned at 4:55 p.m.

Respectfully submitted,

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

Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY**PAYMENT OF WARRANTS****14-05****For the Month of April-2014**

Check #	Vendor Name	Description	Amount	
30063	Alliant Insurance Services, Inc	Insurance - Liability	Commerical crime policy - 04/01/14 - 07/01/14	136.00
30064	Allied 100, LLC	Supplies - Safety	Defibrillation supplies	85.71
30065	Allied Electronics Inc.	Repair Parts Expense	Electrical supplies	128.92
30066	American Rigging & Supply Co.	Minor Equip - Shop & Field	Web slings and swivel hoist ring	554.64
30067	Applied Industrial Tech.	Repair Parts Expense	Ball bearings	12.41
30068	Arrowhead	Supplies - Lab	Kitchen and lab supplies	308.10
30069	AT & T - 9777	Utilities - Telephone	Phone service - 02/13/14 - 03/12/14	400.37
30070	AT&T	Services - Maintenance	Repair utility pedestal	933.99
30071	AT&T	Utilities - Telephone	DSL - 02/20/14 - 03/19/14	79.11
30072	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	2,754.88
30073	Automation Direct	Repair Parts Expense	Electrical supplies	600.00
30074	American Water Works Assoc.	Dues & Memberships	Membership	244.00
30075	Barracuda Networks, Inc	Utilities - Internet	Network back-up	100.00
30076	Bay City Electric Works	Repair Parts Expense	Monitor relay	140.40
30077	Brenntag Pacific, Inc	Supplies - Chemicals	Sodium tripolyphosphate and citric acid	1,140.11
30078	The Brickman Group LTD	Services - Landscape	Landscape service - April	385.00
30079	Complete Office	Supplies - Office	Office supplies	864.63
30080	Cortech Engineering, Inc.	Repair Parts Expense	Cast iron side and discharge cable	381.98
30081	CS-Amsco	Repair Parts Expense	Plug valve	1,659.12
30082	EDCO Waste & Recycling Service	Utilities - Trash	Trash service - March	202.41
30083	Emed Co. Inc.	Supplies - Safety	Aluminum signs	704.25
30084	Gierlich Mitchell, Inc.	Repair Parts Expense	Stainless steel bracket	613.58
30085	Guardian	Dental/Vision	Dental - 04/01/14 - 04/30/14	1,802.73
30086	Hach Company	Repair Parts Expense	Conductivity sensor	5,258.58
30087	Hardy Diagnostics	Supplies - Lab	Supplies for testing	427.41
30088	Health and Human Resource	Employee Assistance Program	April	317.68
30089	Hoch Consulting, APC	Services - Engineering	Project engineering services	2,977.50
30090	Home Depot Credit Services	Supplies - Shop & Field	Repair parts, tools, and field supplies	544.06
30091	Hub Construction Specialties	Supplies - Shop & Field	Pail, mixing paddle, self leveler, and grout	219.39
30092	Jani-King of CA, Inc. - SEO	Services - Janitorial	Janitorial service - April	882.64
30093	Jennifer Basco	Subsistence - Travel/Rm & Bd	Mileage	78.20
30094	Kennedy/Jenks Consultants	Services - Engineering	Recycled water demineralization	3,715.00
30095	The Lawton Group	Services - Temp	03/07/14 - 03/23/14 temp help	3,273.10
30096	McMaster-Carr Supply Co.	Repair Parts Expense	Plumbing services, coveralls, lever load binder	607.46
30097	Napa Auto Parts	Vehicle Maintenance	Auto parts	11.58
30098	Olivenhain Municipal Water Dis	Services - Lobbying	Water reliability coalition sponsorship	100.00
30099	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 03/15/14 - 03/28/14	15,127.92
30100	Ponton Industries, Inc.	Supplies - Safety	Dessicant, retrieval hook, and pole	317.10
30101	Preferred Benefit Insurance	Dental/Vision	Vision insurance - 04/01/14 - 04/30/14	333.00
30102	Sigma-Aldrich RTC	Supplies - Lab	E. coli, streptococcus, simple nutrients	338.72
30103	San Dieguito Water	Utilities - Water	Recycled water usage	6,132.26
30104	Sun Life Financial	Life Insurance/Disability	Life and disability insurance - April	1,327.64
30105	Terminix Processing Center	Services - Maintenance	Pest control	100.00
30106	Michael Thornton	Subsistence - Travel/Rm & Bd	WaterReuse Conference	714.85
30107	Trussell Technologies, Inc	Services - Engineering	Process engineering and evaluation	1,436.00
30108	Unifirst Corporation	Services - Uniforms	Uniform service	230.56
30109	UPS	Postage/Shipping	Mailing parts and receiving supplies	148.68
30110	USA Bluebook	Supplies - Lab	Wipes, wicks, detergent, bottles, filters	859.71
30111	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	5,833.58
30112	Vantagepoint Transfer Agents	ICMA Retirement	ICMA-401a	2,666.77
30113	WageWorks	Payroll Processing Fees	FSA admin and compliance fees	97.25
30114	Watson Bros. Inc	Services - Maintenance	Calibration and preventative maintenance	495.00
30115	Western Water Works Support	Repair Parts Expense	Air valve	1,040.05
30116	WEX Bank	Fuel	Fuel-March	894.55
30117	Accurate Air Engineering, Inc.	Repair Parts Expense	Glass for compressor blower	31.41
30118	Aflac	Prepaid - Other	Medical and supplement life insurance	811.08
30119	American Backflow	Dues & Memberships	Membership	80.00
30120	Arizona Instrument	Services - Maintenance	Calibration and battery	823.87
30121	AT & T	Utilities - Telephone	Alarm service	392.82
30122	Atlas Pumping Service Inc.	Services - Grease & Scum	Grease and scum pumping	1,297.23
30123	Automation Direct	Repair Parts Expense	Electrical supplies	564.00

SAN ELIJO JOINT POWERS AUTHORITY**PAYMENT OF WARRANTS****14-05****For the Month of April-2014**

Check #	Vendor Name	Description	Amount	
30124	BankCard Center	Seminars/Education	Seminars, meetings, and repairs	345.60
30125	Boot World, Inc.	Uniforms - Boots	Safety boots	150.00
30126	Brenntag Pacific, Inc	Supplies - Chem - Odor	Sodium Hydroxide	3,210.78
30127	Marisa Buckles	Subsistence - Travel/Rm & Bd	Calpers training and mileage	46.93
30128	Calscience Environmental Lab	Services - Laboratory	Testing water samples	715.00
30129	City National Bank	Interest Expense - AWT Note	Loan payment	74,076.57
30130	Coast Waste Management, Inc.	Utilities - Trash	03/01/14 - 03/31/14	177.39
30131	Complete Office	Supplies - Office	Office supplies	145.44
30132	Corodata	Rent	Record storage - March	76.20
30133	Del Mar Blue Print	Printing	Blue prints	102.50
30134	DMV	Services - Other	Safety records - 03/01/14 - 03/31/14	2.00
30135	Dudek & Associates	Services - Engineering	Del Mar flow analysis	1,812.50
30136	eMaint Enterprises, LLC	Services - Maintenance	eMaint software renewal	480.00
30137	City of Encinitas	Services - Professional	Admin network	4,000.00
30138	Fastenal Company	Vehicle Maintenance	Wiper blades and stepping stool	62.02
30139	Ferguson Waterworks #1082	Repair Parts Expense	Vitaulic fittings for heat exchangers	285.12
30140	Fisher Scientific	Supplies - Chemicals	Sodium Dodecylbenzenesul	235.58
30141	Grainger, Inc.	Repair Parts Expense	Label cartridge and electrical supplies	430.37
30142	Hach Company	Repair Parts Expense	Sensor cap and probe	1,370.37
30143	Hub Construction Specialties,	Supplies - Safety	Spray adhesive, epoxy nozzle, and gloves	271.21
30144	IPMA-HR	Dues & Memberships	Membership	55.00
30145	IPTelSupport	Services - Professional	Data network implemation	875.00
30146	Jani-King of CA, Inc. - SEO	Supplies - Janitorial	Janitorial supplies	515.62
30147	Paul Kinkel	Subsistence - Travel/Rm & Bd	Meeting and mileage	69.46
30148	Konica Minolta	Services - Maintenance	Monthly copier maintenance	144.84
30149	The Lawton Group	Services - Temp	Weeks worked - 03/24/14 - 04/06/14	3,932.50
30150	Marine Taxonomic Services, LTD	Subcontractors	Nearshore, offshore, and intensive monitoring	1,250.00
30151	McMaster-Carr Supply Co.	Supplies - Safety	Plumbing supplies	831.10
30152	Oceanside Driveline	Services - Maintenance	Balance chopper pump	160.00
30153	Olin Corp - Chlor Alkali	Supplies - Chem - Sodium Hypo	Sodium Hypochlorite	2,738.34
30154	Olivenhain Municipal Water Dis	Rent	OMWD pipeline rental payment	3,366.00
30155	Pacific Safety Center	Training - Safety	Forklift operator and CPR/FA/AED trainings	845.00
30156	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 03/29/14 - 04/11/14 - Calpers	14,982.37
30157	Cashier - Jennifer Basco	Repair Parts Expense	Replenish petty cash	181.38
30158	ProBuild	Vehicle Maintenance	Repairs, shop, and field supplies	438.55
30159	Procopio Cory Hargreaves	Services - Legal	General - March	3,028.50
30160	QA Lubricants, Inc.	Supplies - Chemicals	55 gallon summit sublime	1,876.64
30161	Safe-Entry	Services - Maintenance	Gas detector calibration	329.00
30162	San Dieguito Water	Utilities - Water	Recycled water meters	2,193.58
30163	Santa Fe Irrigation District	Utilities - Water (Suppl.)	Lomas Santa Fe Dr. - 01/20/14 - 03/19/14	875.81
30164	Santa Fe Irrigation District	Utilities - Water	Valley - 02/25/14 - 03/27/14	122.77
30165	Santa Fe Irrigation District	SFID Distribution Pipeline	Pipeline purchase payment - March	1,090.91
30166	Sign Line	Supplies - Safety	Aluminum signs	510.30
30167	State Board of Equalization	Various	Sales tax - 1st quarter 2014	1,104.00
30168	Terminix Processing Center	Services - Maintenance	Pest control	40.00
30169	Unifirst Corporation	Services - Uniforms	Uniform service	230.56
30170	UPS	Postage/Shipping	Mailing compliance reports	107.37
30171	Underground Service Alert/SC	Services - Alarm	Dig alert - March	73.50
30172	Valley Chain & Gear, Inc.	Repair Parts Expense	Silicone lubricant	122.30
30173	Vantagepoint Transfer Agents	EE Deduction Benefits	ICMA - 457	6,610.43
30174	Vantagepoint Transfer Agents	ICMA Retirement	ICMA -401a	2,637.98
30175	WorkPartners Occupational	Services - Medical	Medical services	170.00
	San Elijo Payroll Account	Payroll	Payroll - 04/04/14 (Less Retirement Plans)	57,370.05
	San Elijo Payroll Account	Payroll	Payroll - 04/18/14 (Less Retirement Plans)	60,640.62
	Wire Fee			12.00
				<u>\$ 332,266.05</u>

SAN ELIJO JOINT POWERS AUTHORITY

PAYMENT OF WARRANTS SUMMARY

For the Month of April-2014

As of April 28, 2014

PAYMENT OF WARRANTS		\$ 332,266.05
Reference Number	14-05	

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 April 28, 2014

FUNDS ON DEPOSIT WITH	AMOUNT
LOCAL AGENCY INVESTMENT FUND <i>(JANUARY 2014 YIELD 0.26%)</i>	
RESTRICTED SRF RESERVE	\$ 630,000.00
UNRESTRICTED DEPOSITS	\$ 5,125,270.36
CALIFORNIA BANK AND TRUST <i>(JANUARY 2014 YIELD 0.01%)</i>	
REGULAR CHECKING	\$ 177,662.05
PAYROLL CHECKING	\$ 5,000.00
 TOTAL RESOURCES	 \$ 5,937,932.41

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

May 12, 2014

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

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

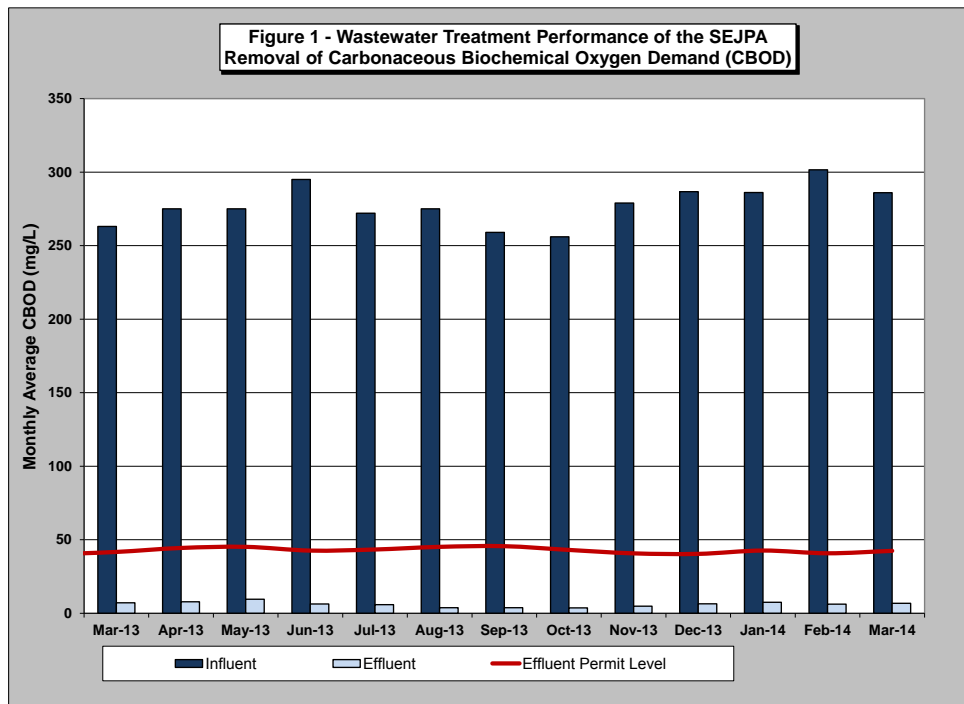
RECOMMENDATION

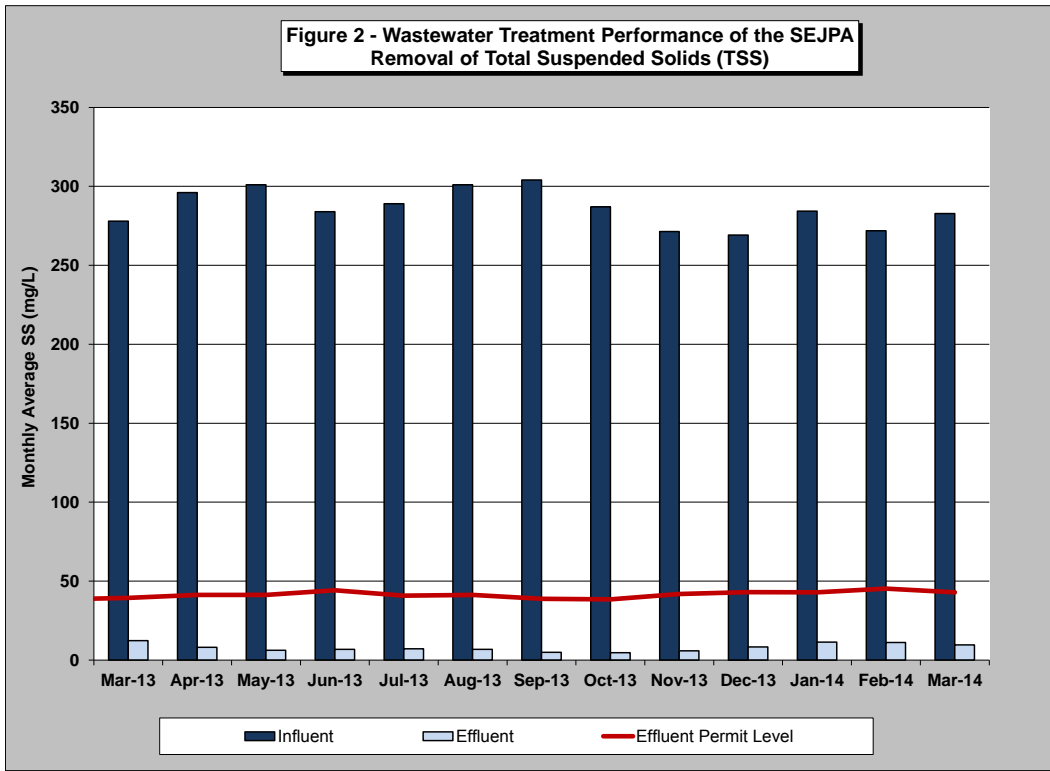
No action required. This memorandum is submitted for information only.

DISCUSSION

Monthly Treatment Plant Performance and Evaluation

Wastewater treatment for the San Elijo Joint Powers Authority (SEJPA) met all NPDES ocean effluent limitation requirements for the month of March 2014. 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 97.6 and 96.6 percent removal, respectively, in the period (as shown in Figure 1 and Figure 2).





Member Agency Flows

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

	March	
	<u>Influent (mgd)</u>	<u>Effluent (mgd)*</u>
Cardiff Sanitary Division	1.339	0.858
City of Solana Beach	1.185	0.760
Rancho Santa Fe SID	0.134	0.086
Total San Elijo WRF Flow	2.658	1.704

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

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

MONTH	AVERAGE DAILY INFLUENT FLOW RATE (MGD)				AVERAGE DAILY EFFLUENT FLOW RATE (MGD)				CONNECTED EDUs				AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDU/DAY)			
	CSD	RSF CSD	SB	TOTAL PLANT	CSD	RSF CSD	SB	TOTAL PLANT	CSD EDUS	RSF CSD EDUS	SB EDUS	TOTAL EDUS	CSD	RSF	SB	TOTAL PLANT
Mar-09	1.510	0.124	1.307	2.941	1.030	0.085	0.892	2.007	8,180	463	7,728	16,371	185	268	169	180
Apr-09	1.463	0.116	1.262	2.841	0.731	0.058	0.630	1.419	8,183	463	7,728	16,374	179	251	163	174
May-09	1.465	0.117	1.247	2.829	0.712	0.057	0.606	1.375	8,185	464	7,728	16,377	179	252	161	173
Jun-09	1.479	0.115	1.319	2.913	0.712	0.056	0.635	1.403	8,185	465	7,728	16,378	181	248	171	178
Jul-09	1.437	0.109	1.376	2.922	0.599	0.045	0.573	1.217	8,186	467	7,728	16,381	176	234	178	178
Aug-09	1.431	0.113	1.419	2.963	0.603	0.047	0.598	1.248	8,186	467	7,728	16,381	175	242	184	181
Sep-09	1.404	0.108	1.346	2.858	0.690	0.053	0.661	1.404	8,187	468	7,728	16,383	171	231	174	174
Oct-09	1.375	0.108	1.332	2.815	0.744	0.058	0.721	1.523	8,187	468	7,728	16,383	168	231	172	172
Nov-09	1.366	0.111	1.323	2.800	0.843	0.069	0.816	1.728	8,189	469	7,728	16,386	167	237	171	171
Dec-09	1.401	0.127	1.322	2.850	1.149	0.104	1.084	2.337	8,193	469	7,728	16,390	171	271	171	174
Jan-10	1.532	0.155	1.372	3.059	1.271	0.128	1.138	2.537	8,196	472	7,728	16,396	187	329	178	187
Feb-10	1.487	0.148	1.382	3.017	1.371	0.136	1.274	2.781	8,197	474	7,728	16,399	181	313	179	184
Mar-10	1.455	0.145	1.398	2.998	1.108	0.110	1.064	2.282	8,198	474	7,728	16,400	177	306	181	183
Apr-10	1.451	0.137	1.391	2.979	1.058	0.100	1.014	2.172	8,198	474	7,728	16,400	177	289	180	182
May-10	1.379	0.128	1.385	2.892	0.672	0.063	0.675	1.410	8,201	474	7,728	16,403	168	270	179	176
Jun-10	1.437	0.122	1.453	3.012	0.650	0.055	0.657	1.362	8,202	474	7,728	16,404	175	258	188	184
Jul-10	1.375	0.119	1.466	2.960	0.694	0.061	0.740	1.495	8,204	475	7,728	16,407	168	251	190	180
Aug-10	1.366	0.125	1.451	2.942	0.585	0.053	0.621	1.259	8,205	475	7,728	16,408	166	263	188	179
Sep-10	1.346	0.114	1.342	2.802	0.627	0.053	0.626	1.306	8,207	475	7,728	16,410	164	240	174	171
Oct-10	1.413	0.123	1.311	2.847	1.177	0.102	1.092	2.371	8,207	477	7,728	16,412	172	258	170	173
Nov-10	1.399	0.117	1.297	2.813	1.090	0.091	1.011	2.192	8,209	478	7,728	16,415	170	245	168	171
Dec-10	1.605	0.215	1.375	3.195	1.417	0.189	1.214	2.820	8,212	478	7,728	16,418	195	450	178	195
Jan-11	1.452	0.158	1.338	2.948	1.272	0.139	1.172	2.583	8,227	478	7,728	16,433	176	331	173	179
Feb-11	1.413	0.156	1.339	2.908	1.176	0.130	1.114	2.420	8,228	480	7,728	16,436	172	325	173	177
Mar-11	1.387	0.208	1.343	2.938	1.186	0.178	1.148	2.512	8,229	480	7,728	16,437	169	434	174	179
Apr-11	1.320	0.181	1.323	2.824	0.867	0.118	0.869	1.854	8,248	482	7,728	16,458	160	376	171	172
May-11	1.327	0.162	1.320	2.809	0.564	0.069	0.561	1.194	8,248	483	7,728	16,459	161	336	171	171
Jun-11	1.343	0.156	1.390	2.889	0.545	0.063	0.564	1.172	8,249	483	7,728	16,460	163	323	180	176
Jul-11	1.293	0.151	1.430	2.874	0.425	0.050	0.470	0.945	8,250	484	7,728	16,462	157	312	185	175
Aug-11	1.292	0.150	1.405	2.847	0.479	0.056	0.521	1.056	8,252	485	7,728	16,465	157	310	182	173
Sep-11	1.262	0.146	1.333	2.741	0.564	0.066	0.596	1.226	8,254	486	7,728	16,468	153	301	172	166
Oct-11	1.260	0.142	1.303	2.705	0.730	0.082	0.755	1.567	8,260	486	7,728	16,474	153	292	169	164
Nov-11	1.338	0.167	1.307	2.812	1.099	0.137	1.074	2.310	8,261	486	7,728	16,475	162	344	169	171
Dec-11	1.299	0.164	1.305	2.768	1.103	0.139	1.108	2.350	8,264	487	7,728	16,479	157	337	169	168
Jan-12	1.291	0.145	1.303	2.739	1.032	0.116	1.042	2.190	8,266	488	7,728	16,482	160	232	169	166
Feb-12	1.259	0.137	1.283	2.679	1.006	0.109	1.025	2.140	8,268	488	7,728	16,484	152	281	166	163
Mar-12	1.313	0.153	1.255	2.721	0.968	0.113	0.925	2.006	8,269	488	7,728	16,485	159	314	162	165
Apr-12	1.348	0.145	1.209	2.702	0.906	0.097	0.813	1.816	8,278	488	7,728	16,494	163	297	156	164
May-12	1.333	0.150	1.211	2.694	0.577	0.065	0.525	1.167	8,280	488	7,728	16,496	161	308	157	163
Jun-12	1.365	0.143	1.237	2.745	0.547	0.057	0.496	1.100	8,284	489	7,728	16,501	165	293	160	166
Jul-12	1.372	0.126	1.296	2.794	0.457	0.042	0.431	0.930	8,289	489	7,728	16,506	166	258	168	169
Aug-12	1.383	0.128	1.291	2.802	0.473	0.044	0.441	0.958	8,290	490	7,728	16,508	167	261	167	170
Sep-12	1.349	0.142	1.220	2.711	0.544	0.058	0.492	1.094	8,291	490	7,728	16,509	163	290	158	164
Oct-12	1.327	0.123	1.203	2.653	0.678	0.063	0.615	1.356	8,294	490	7,728	16,512	160	251	156	161
Nov-12	1.343	0.128	1.181	2.652	0.862	0.082	0.758	1.702	8,299	490	7,728	16,517	162	261	153	161
Dec-12	1.383	0.141	1.197	2.721	1.261	0.129	1.091	2.481	8,300	490	7,728	16,518	167	288	155	165
Jan-13	1.357	0.145	1.215	2.717	1.155	0.124	1.034	2.313	8,300	490	7,728	16,518	163	296	157	164
Feb-13	1.349	0.138	1.201	2.688	1.048	0.108	0.933	2.089	8,301	490	7,728	16,519	163	282	155	163
Mar-13	1.402	0.154	1.235	2.791	0.905	0.100	0.797	1.802	8,302	493	7,728	16,521	169	314	160	169
Apr-13	1.297	0.124	1.237	2.658	0.531	0.051	0.506	1.088	8,304	493	7,728	16,523	156	253	160	161
May-13	1.339	0.126	1.185	2.650	0.376	0.036	0.333	0.745	8,304	493	7,728	16,525	161	256	153	160
Jun-13	1.341	0.126	1.190	2.657	0.269	0.025	0.239	0.533	8,307	493	7,728	16,528	161	256	154	161
Jul-13	1.366	0.144	1.269	2.779	0.482	0.050	0.448	0.980	8,309	493	7,728	16,530	164	292	164	168
Aug-13	1.342	0.168	1.258	2.768	0.380	0.048	0.356	0.784	8,311	494	7,728	16,533	161	340	163	167
Sep-13	1.343	0.117	1.193	2.653	0.403	0.036	0.358	0.797	8,311	494	7,728	16,533	162	237	154	160
Oct-13	1.319	0.132	1.184	2.635	0.629	0.063	0.565	1.257	8,314	494	7,728	16,536	159	267	153	159
Nov-13	1.348	0.133	1.194	2.675	0.932	0.092	0.826	1.850	8,315	494	7,728	16,537	162	270	155	162
Dec-13	1.341	0.134	1.191	2.666	1.030	0.103	0.915	2.048	8,316	494	7,728	16,538	161	272	154	161
Jan-14	1.322	0.135	1.194	2.651	0.851	0.087	0.768	1.706	8,318	495	7,728	16,541	159	273	155	160
Feb-14	1.314	0.127	1.172	2.613	0.954	0.093	0.851	1.898	8,323	495	7,728	16,546	158	257	152	158
Mar-14	1.339	0.134	1.185	2.658	0.858	0.086	0.760	1.704	8,324	496	7,728	16,548	161	270	153	161

CSD: Cardiff Sanitary Division

RSF CSD: Ranch Santa Fe Community Service District

SB: Solana Beach

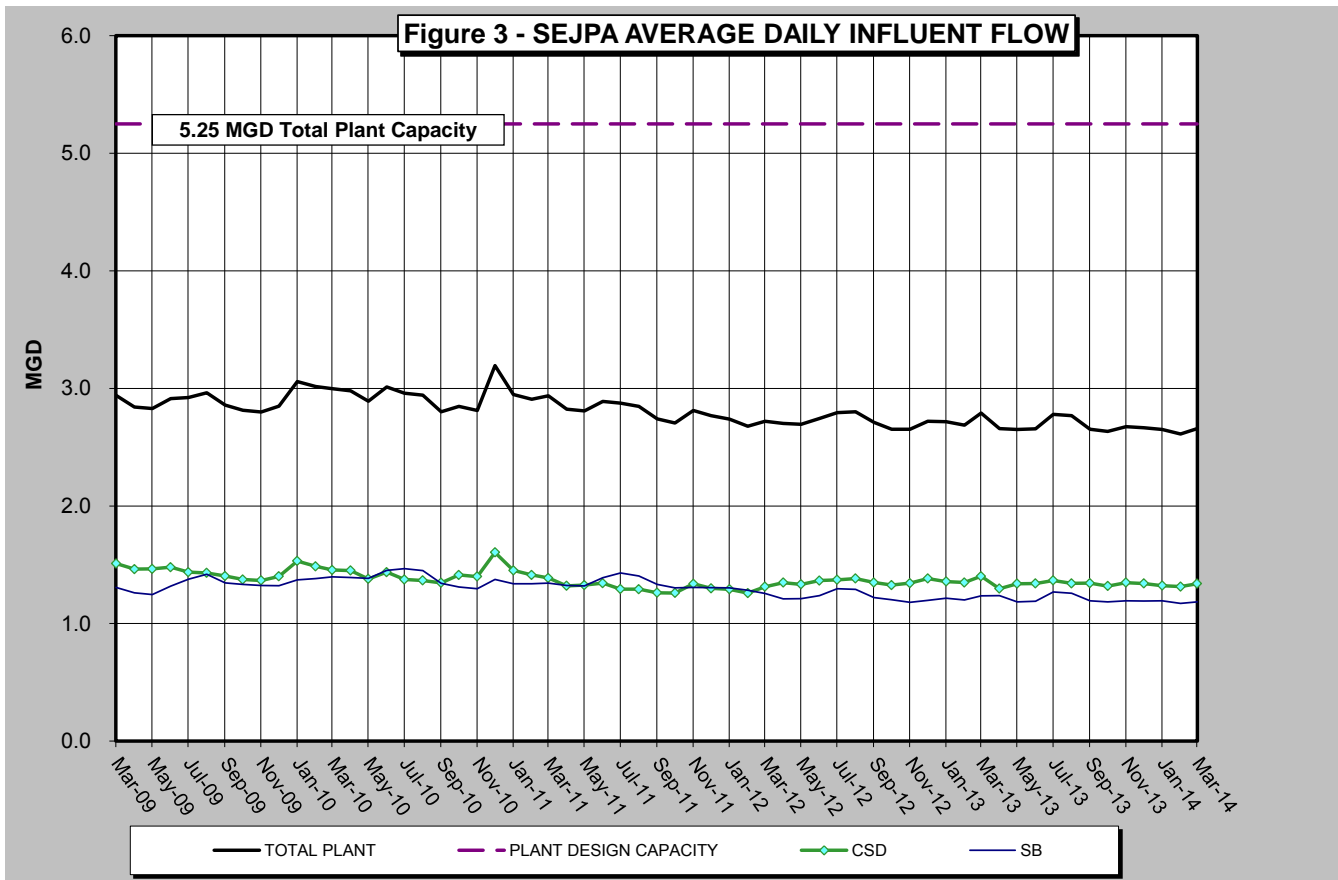
EDU: Equivalent Dwelling Unit

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), down from 3.0 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 has the right to 0.25 mgd.



City of Escondido Flows

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

	Flow (mgd)
Escondido (Average flow rate)	11.3
Escondido (Peak flow rate)	19.0

Connected Equivalent Dwelling Units

The number of EDUs connected for each of the Member Agencies for the month of March is as follows:

	Connected (EDU)
Cardiff Sanitary Division	8,324
Rancho Santa Fe SID	496
City of Solana Beach	7,428
San Diego (to Solana Beach)	300
Total EDUs to System	16,548

Respectfully submitted,



Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

May 12, 2014

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 March 2014, recycled water demand was 86.03 acre-feet (AF), which was met using 86.03 AF of recycled water and 0.00 AF of supplementation with potable water.

Following the sand filter maintenance in February, staff operated with microfiltration and reverse osmosis treatment only until March 11, 2014 and then, re-started the sand filters.

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

Respectfully submitted,



Michael T. Thornton, P.E.
General Manager

Figure 1 - MONTHLY RECYCLED WATER DEMAND

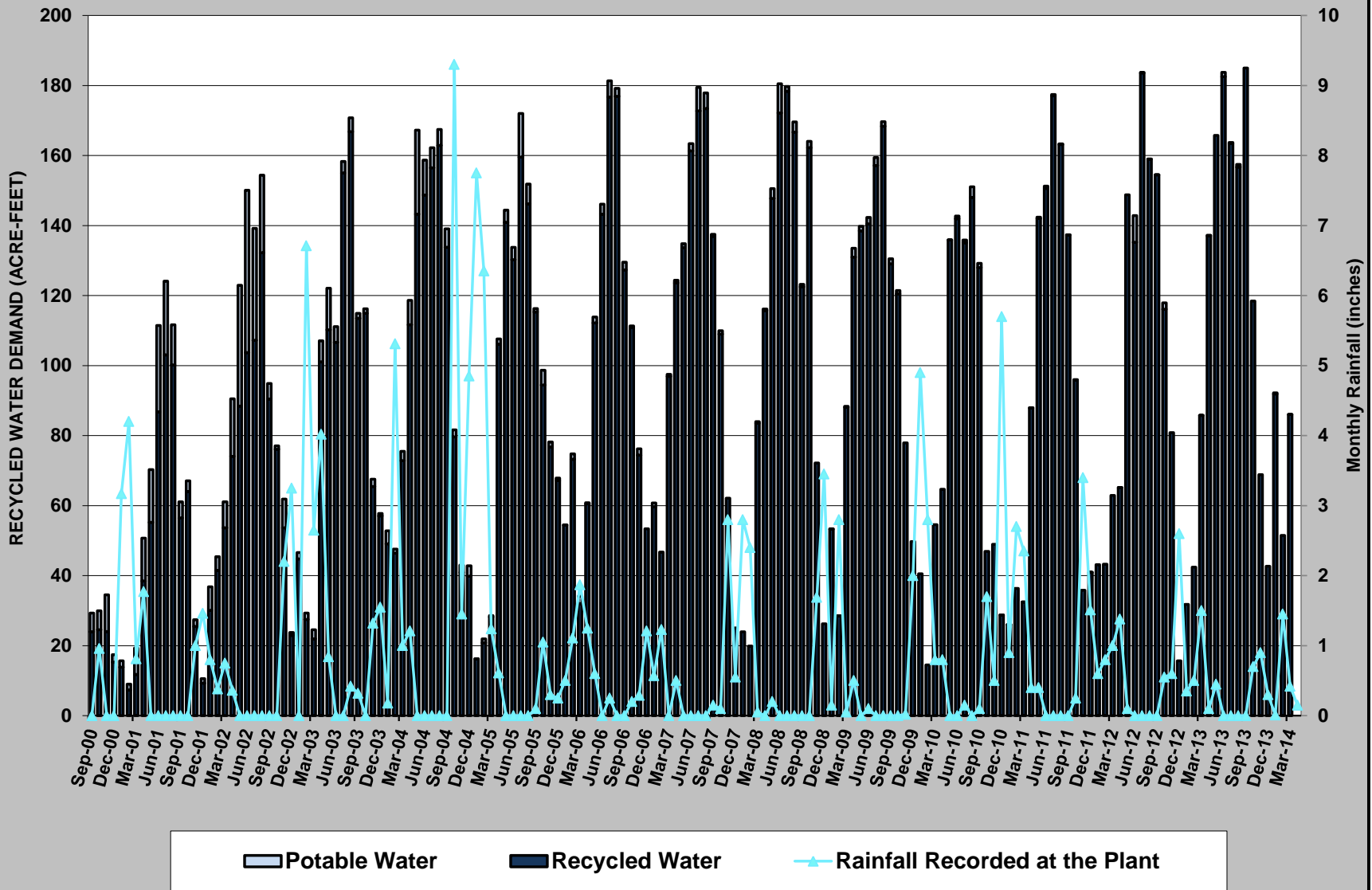


Figure 2 - RECYCLED WATER DEMAND by FISCAL YEAR

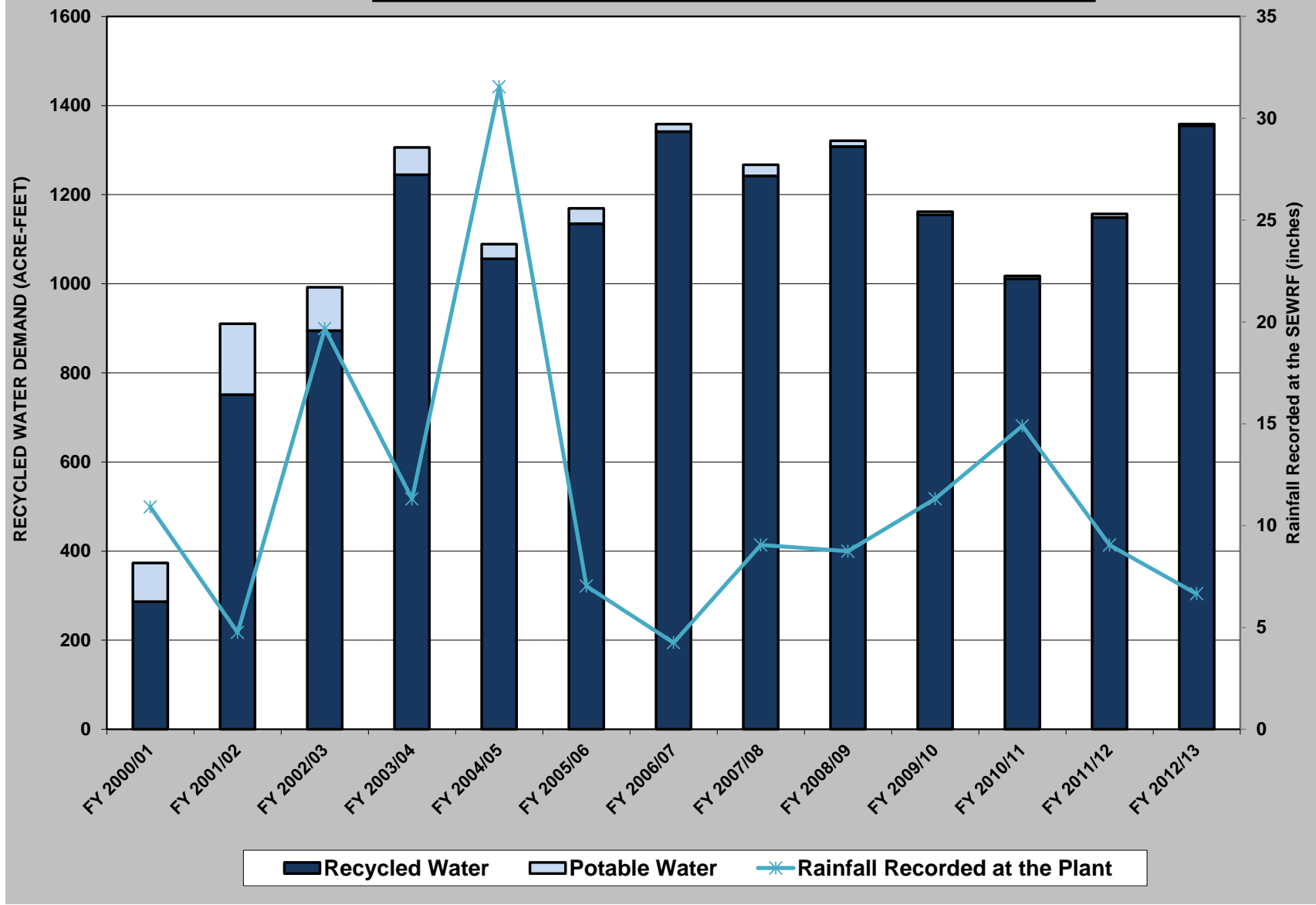
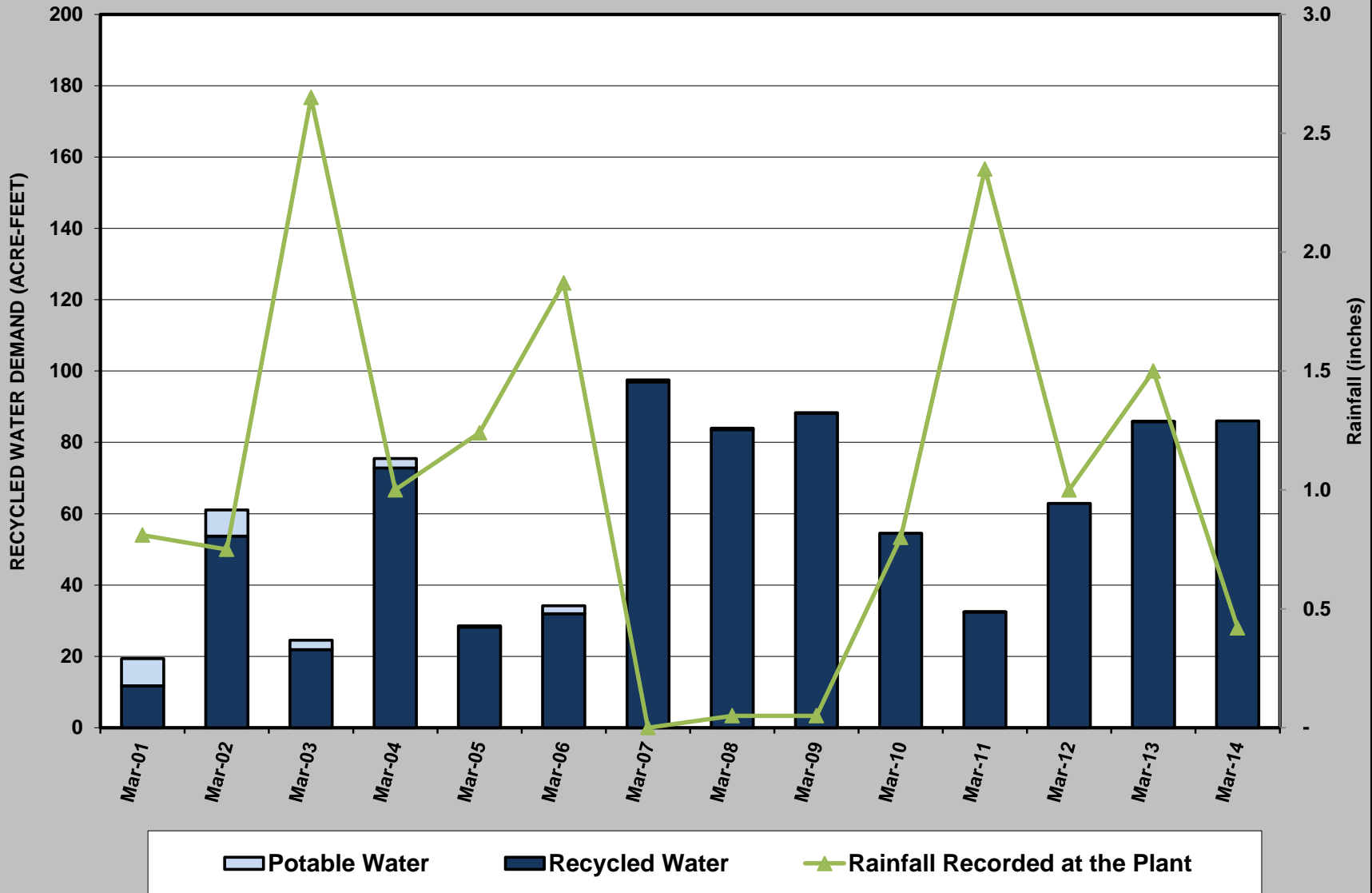


Figure 3 - MARCH RECYCLED WATER DEMAND



SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

May 12, 2014

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Director of Finance/Administration

SUBJECT: SAN ELIJO JOINT POWERS AUTHORITY FISCAL YEAR 2014-2015
RECOMMENDED BUDGET UPDATE

RECOMMENDATION

It is recommended that the Board of Directors:

1. Discuss and take action as appropriate.

DISCUSSION

In April 2014, SEJPA staff presented the FY 2014-2015 Recommended Budget to the Board of Directors for their review and comment. During the past month, SEJPA staff has had discussions with staff members from both Member Agencies to receive comments and/or suggested changes.

There have been no recommendations or changes by the Member Agencies, no comments from the participating Government Agencies, and no comments from the public.

The budget will be presented to the Board of Directors for adoption at the June meeting along with the investment policy and appointment of SEJPA Treasurer. Any action from this meeting will be incorporated into the budget before the June meeting.

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

1. Discuss and take action as appropriate.

Respectfully submitted,



Paul F. Kinkel
Director of Finance/Administration

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

May 12, 2014

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: CONSIDERATION OF PROVIDING WASTEWATER TREATMENT SERVICE
TO THE CITY OF DEL MAR

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to enter into an agreement with the City of Del Mar for the provision of wastewater treatment services; and
2. Discuss and take action as appropriate.

BACKGROUND

Over the last 20 years, the San Elijo Joint Powers Authority (SEJPA) and the cities of Del Mar, Solana Beach, and Encinitas have periodically evaluated the possibility of providing wastewater treatment service to Del Mar. Currently, Del Mar pumps wastewater to the Point Loma wastewater treatment plant; however, treatment and reclamation could be provided by the San Elijo Water Reclamation Facility (WRF). The driving reason for considering this proposal is economics and for expanding local water supplies. Treating more wastewater at the San Elijo WRF will improve the cost effectiveness of the facility through improved economies of scale in the treatment and increased utilization of fixed assets. The additional wastewater can also be recycled and reused locally. Recycled water is becoming an important part of the region's water portfolio, and the SEJPA has the facilities in place to receive and recycle this additional flow from Del Mar. The SEJPA currently provides recycled water to Del Mar, San Dieguito Water District, Santa Fe Irrigation District, and Olivenhain Municipal Water District, and all are forecasting the need for more recycled water in the future.

Furthermore, the San Elijo WRF has unused and idle wastewater treatment capacity. When the facility was upgraded in 1992, the wastewater flow projection for the service area by 2020 was 5 million gallons per day (MGD). However, these flow projections did not materialize. In 2013, the facility received an average daily flow of approximately 2.8 MGD. This is slightly less than the actual flow received in 1990, which was approximately 3.0 MGD. The reasons for the deviation in the actual flow vs. the flow projections appear to be: (1) low-flow shower heads, toilets, washing machines, and other conservation efforts have reduced the amount of indoor water use; (2) that the member agencies of the SEJPA have actively pursued the

reduction of rainwater inflow and infiltration into the sewer system; and (3) that the number of new homes and businesses being connected to the sewer system each year are relatively few. The net result is that water conservation efforts and sewer system maintenance have offset the increase of flows from new homes and businesses over the last twenty years. This is a significant accomplishment and the unused capacity creates an opportunity.

DISCUSSION

Del Mar has approached the SEJPA to discuss the possibility of leasing wastewater treatment at the San Elijo WRF. The City's proposal was to send part of its wastewater flow, approximately 0.5 MGD, to the San Elijo WRF. The wastewater would be sent through the sewer system of Solana Beach to reach the San Elijo WRF. This would produce conveyance system cost savings for Solana Beach and Del Mar, and maximize the use of existing sewage conveyance infrastructure. The proposal also included safe guards for not overloading the existing facilities by having the allowance for sending peak flows from Del Mar to the San Diego Metro Wastewater Joint Powers Authority (Metro JPA), which is Del Mar's current wastewater service provider.

To examine this proposal in more detail, the SEJPA, Solana Beach, and Del Mar partnered in the development of a feasibility study prepared by an independent third party. The feasibility study evaluated costs, benefits, and significant issues associated with the proposal. The engineering firm Dudek conducted the analysis and prepared a feasibility report dated November 2013 (Attachment 1). The report concluded the following: "As outlined in this report, there are no fatal flaws identified in the proposal to accept 0.5 mgd of wastewater flow from Del Mar, to be conveyed through the Solana Beach sanitary sewer system for treatment at the San Elijo Water Reclamation Facility (SEWRF). Furthermore, there are no restrictions identified in permits, regulations, or ordinances that would preclude this service strategy from being implemented. The SEWRF has ample capacity to treat Del Mar's wastewater flows, which would either be recycled or discharged to the San Elijo Ocean Outfall. Operational impacts to the SEWRF appear to be minimal and within the operational flexibility of the treatment facility." The report also indicated that cost savings would be achieved by the SEJPA through providing wastewater treatment services to Del Mar. "Economic benefits to the SEJPA's member agencies, Solana Beach and Encinitas, are on the order of \$195,000 and \$176,000 annually to each city, respectively. Similarly, cost savings are also projected for Rancho Santa Fe and the City of Escondido, \$15,000 and \$7,000 per year, respectively." It is important to note that the financial benefits presented in the feasibility study are only best estimates and some of the financial savings may be required to fund the connecting infrastructure between Del Mar and Solana Beach. Probably the most substantial conclusion of the feasibility report is that there is strong potential for creating a financially beneficial service agreement with Del Mar for unused treatment capacity at the San Elijo WRF.

FINANCIAL IMPACT

There is no cost impact associated with the recommended Board action of providing authority to the General Manager to enter into an agreement with the City of Del Mar for wastewater services. The proposed agreement with Del Mar does not require an up-front financial commitment by the SEJPA. Cost savings to the SEJPA's Member Agencies created by this agreement are projected to be on the order of \$300,000 per year after funding a capital incentive credit to Del Mar for the construction of the necessary connecting infrastructure, which is estimated at \$60,000 per year. The proposed term of the agreement is 30 years.

It is recommended that the Board of Directors:

1. Authorize the General Manager to enter into an agreement with the City of Del Mar for the provision of wastewater treatment services; and
2. Discuss and take action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.
General Manager

Attachment 1: Project Feasibility Report Wastewater Service Analysis by Dudek

Technical Memorandum 1

Project Feasibility Report

Wastewater Service Analysis

Prepared for

City of Del Mar

City of Solana Beach

San Elijo Joint Powers Authority

Prepared By

DUDEK

November 2013

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I EXECUTIVE SUMMARY

Dudek was retained by the City of Del Mar, City of Solana Beach, and the San Elijo Joint Powers Authority (SEJPA) to evaluate the feasibility of providing wastewater services by the SEJPA through the sanitary sewer system of Solana Beach. The feasibility analysis included treatment capacity, conveyance capacity, and financial impacts. The effort also included discussions with staff from Del Mar, Solana Beach, and SEJPA (and a review of waste discharge permits) to identify governance and regulatory constraints that would restrict or prohibit the proposed service strategy.

It is noted that the service concept has been considered in the past. However, the current service strategy differs in several key areas, leading to a less complex service scenario and more favorable results. The most significant difference is that the current strategy provides wastewater service (conveyance and treatment) for approximately 0.5 million gallons per day (mgd) of the estimated 0.6 mgd wastewater flow from Del Mar. The remaining portion, as well as wet weather peak flows, will be conveyed to the San Diego Metro Wastewater Joint Powers Authority. The allowance of conveying peak flows to the San Diego system, significantly simplifies hydraulic loading of both the conveyance and treatment systems. Furthermore, providing 0.5 mgd of treatment capacity is within the unused capacity of Solana Beach or could be provided equally by Solana Beach and Encinitas, through unused capacity at the SEJPA. Therefore, wastewater service could be provided to Del Mar through a direct agreement with Solana Beach or through agreement with the SEJPA. For the purpose of this report, the assumed service agreement includes leased capacity similar to that provided by the SEJPA to the Rancho Santa Fe Community Service Districts.

As outlined in this report, there are no fatal flaws identified in the proposal to accept 0.5 mgd of wastewater flow from Del Mar, to be conveyed through the Solana Beach sanitary sewer system for treatment at the San Elijo Water Reclamation Facility (SEWRF). Furthermore, there are no restrictions identified in permits, regulations, or ordinances that would preclude this service strategy from being implemented. The SEWRF has ample capacity to treat Del Mar's wastewater flows, which would either be recycled or discharged to the San Elijo Ocean Outfall. Operational impacts to the SEWRF appear to be minimal and within the operational flexibility of the treatment facility.

The Solana Beach sanitary sewer system also has adequate capacity to handle 0.5 mgd flow from Del Mar in both the wet and dry seasons. The most cost-effective connection point between the Del Mar and Solana Beach sanitary sewer systems appears to be Solana Beach's Cedros trunk sewer. The distance between the Del Mar 21st Street pump station and the Cedros trunk sewer is approximately 6,200 linear feet or approximately 1.2 miles. The budgetary cost estimated for the connecting pipeline is approximately \$1,200,000.

The economic analysis of this proposal predicts financial benefit for all parties. Del Mar is projected to save approximately \$105,000 annually, as compared to its current wastewater service cost. Economic benefits to the SEJPA's member agencies, Solana Beach and Encinitas, are on the order of \$195,000 and \$176,000 annually to each city, respectively. Similarly, cost savings are also projected for Rancho Santa Fe and the City of Escondido, \$15,000 and \$7,000

per year, respectively. The total annual savings to all parties are projected to exceed \$450,000 annually, excluding the capital cost to connect the sewer systems.

Wastewater service to Del Mar was evaluated at a service level of 0.5 mgd to the SEWRF (0.47 mgd assuming 20 wet weather day diversions per year), with peak flows being diverted to the San Diego system. It is likely that adequate capacity in both conveyance and treatment is available beyond the 0.5 mgd assumed in this report. However, as a conservative evaluation, the report assumes flows greater than 0.5 mgd are diverted to San Diego system. Both the Solana Beach conveyance system and the SEWRF have the ability to be expanded for providing wastewater service to Del Mar beyond 0.5 mgd, including peak flow events, if such service were desired in the future.

The proposal also increases the local water supply for the cities of Del Mar, Encinitas, and Solana Beach, as SEJPA produces recycled water that currently serves these areas.

2 PROJECT BACKGROUND

2.1 Project Background

The San Elijo Joint Powers Authority (SEJPA) owns and operates the San Elijo Water Reclamation Facility (SEWRF), located in Cardiff by the Sea, California. The SEWRF, with a permitted capacity of 5.25 million gallons per day (mgd), receives slightly less than 3.0 mgd of wastewater from the cities/communities of Encinitas, Solana Beach, and a portion of Rancho Santa Fe. The SEWRF produces approximately 1,300 acre-feet per year of Title 22 Recycled Water from its 3.0 mgd tertiary treatment facility. Recycled water is conveyed to the San Dieguito Water District, Santa Fe Irrigation District, Olivenhain Municipal Water District, and City of Del Mar (Del Mar). Secondary treated wastewater not recycled is discharged to the San Elijo Ocean Outfall.

The City of Del Mar currently conveys its wastewater to the San Diego Metro Wastewater Joint Powers Authority (San Diego system) for treatment and disposal. Conveyance to the San Diego system requires a substantial conveyance system, including pipeline and pump station facilities, to reach the 240-mgd Point Loma Wastewater Treatment Plant. The Point Loma plant treats the wastewater to advanced primary standards and discharges through an ocean outfall. Del Mar currently sends 0.6 mgd from the 21st Street pump station to the San Diego system at an estimated cost of \$977,600 per year.

In contrast, the SEJPA water reclamation facility is physically closer to Del Mar and requires fewer facilities to reach required treatment and disposal. Del Mar would be required to lift its wastewater into the Solana Beach collection system, as it currently does for the San Diego system. It is proposed that Del Mar divert 0.5 mgd of its wastewater from the 21st Street pump station to the SEWRF for treatment and discharge. No peak flows from Del Mar are proposed to be conveyed to the Solana Beach collection system or SEWRF. Del Mar flow would be completely redirected to San Diego during peak wet weather conditions.

Analyses herein describe the requirements for conveying 0.5 mgd of Del Mar wastewater through the Solana Beach collection system and the impact of additional flow on SEWRF

operation. A comparison of the overall cost to the City of Del Mar for treatment of its flows by the San Diego system versus SEJPA is considered, in addition to potential savings for current SEJPA member agencies. Analyses evaluate annual operation and maintenance, service charges, and other associated costs for each option.

3 PUMPING AND CONVEYANCE

3.1 Proposed City of Del Mar Force Main

To convey its wastewater to the SEWRF, the City of Del Mar would first construct a force main from the 21st Street pump station to the Solana Beach collection system. The nearest connection point in the Solana Beach collection system is the Cedros trunk sewer. A proposed force main alignment is shown in Figure I. The alignment is approximately 6,200 ft in length. It begins at Del Mar's 21st Street pump station, runs north along Camino del Mar, east on Via de la Valle, and north on S. Cedros Ave. before connecting to Solana Beach's Cedros trunk sewer at Cedros Ave. and Cofair Ave. There are bridge crossings on Camino del Mar at the San Dieguito River and on Via de la Valle at the railroad crossing. An assumed cost of \$20 per inch pipe diameter per linear foot for 8-inch HDPE force main with an added 20% contingency cost results in an estimated piping and construction cost of \$1,190,400; financed over 20 years at a 4% rate results in an annual payment of approximately \$88,000.

Figure I. Proposed Del Mar force main alignment.



3.2 Capacity Considerations in Solana Beach Conveyance System

After conveyance to the Solana Beach collection system via the proposed force main, Del Mar wastewater would flow by gravity through the Cedros trunk sewer and be pumped through the Solana Beach pump station force main before entering the SEWRF. It is proposed that Del Mar send a maximum of 0.5 mgd through the Solana Beach collection system. Flows in excess of 0.5 mgd shall be completely diverted to the San Diego system. If there are an assumed 20 days per year during which flow exceeds 0.5 mgd and must be diverted away from the Solana Beach

collection system, then the annual average flow contribution from Del Mar would be 0.473 mgd. The Cedros trunk sewer is rated to have 5.8 mgd capacity. Currently, only 1.35 mgd of that capacity is used, which leaves 4.45 mgd of available capacity during average dry weather days. This provides ample capacity within the trunk sewer to accommodate the 0.5 mgd maximum of wastewater from Del Mar.

In examining future conditions, it appears reasonable to consider that there is adequate capacity within the trunk sewer for Del Mar's wastewater flows, however the Solana Beach Pump Station may require upgrades to convey estimated future peak flows from both Solana Beach and Del Mar. Future peak wet weather flow at the termination point of the Cedros trunk sewer (connection to the Solana Beach pump station) was predicted to be 4.47 mgd, which would leave an excess capacity of 1.66 mgd at this point in the collection system.¹ The Solana Beach pump station and force main are rated to have 3.31 mgd of capacity with 1.35 mgd of that capacity used during average dry weather flow, which leaves 1.96 mgd of available capacity.² Adding a maximum of 0.5 mgd from Del Mar to the currently used capacity (1.35 mgd) and applying a peaking factor of 1.5 results in a peak day flow of 2.775 mgd with 0.535 mgd in spare capacity. Peak wet weather flows entering the Solana Beach pump station may need to be diverted. Under these conditions, there appears to be two options (1) divert Del Mar's flow to the San Diego system, or (2) upgrade the Solana Beach Pump Station to increase its pumping capacity.

3.3 Costs Associated with Use of Solana Beach Conveyance System

It is projected that the added Del Mar flow in the Solana Beach conveyance system will increase O&M and pumping costs. These costs are tabulated below. Solana Beach's 2012 annual conveyance system cleaning budget was \$250,000 (provided by Solana Beach). An O&M cost for Del Mar was estimated by dividing the Solana Beach's annual cleaning cost by the total length of pipe in the Solana Beach conveyance system (255,000 ft), which resulted in an O&M fee of \$0.98/ft-cleaned/yr. Del Mar's O&M cost would be based on the lengths of the Cedros trunk sewer (TS) (8,312 ft) and Solana Beach pump station force main (SBPS FM) (5,007 ft), and the percent contribution of 0.5 mgd of Del Mar flow in each pipe (26%). The resulting annual cost to Del Mar is about \$4,000, which includes a 20% contingency but does not include any capital improvement or replacement costs. Del Mar's annual O&M cost is subtracted from Solana Beach's annual cleaning budget, resulting in an annual O&M cost to Solana Beach of \$246,000.

Pumping an additional 0.5 mgd of Del Mar wastewater through the Solana Beach pump station will increase pumping costs. The added flow and pressure (~8 psi) will increase energy requirements (13.2 kW). The annual increase in pumping cost is approximately \$22,000 using a pump efficiency of 60%, an electricity price of \$0.16/kWh, and an added 20% contingency. The shared pumping costs are calculated based on the additional energy cost and divided by the percent contribution of flow through the force main. Solana Beach's adjusted annual pump station O&M cost is approximately \$103,000, while that of Del Mar is approximately \$36,000.

¹ Dudek, "City of Solana Beach Sewer Capacity Review for City of Del Mar", Sept. 30, 2011.

² Dudek, "City of Solana Beach, Solana Beach Pump Station Upgrade – Preliminary Design Report", March 2011.

This cost represents an increase in electricity costs and pump station O&M but does not include capital improvement or replacement costs.

Sharing of capital improvement projects and equipment replacement costs between Solana Beach and Del Mar will be determined based on agency contributions to flow in the Solana Beach conveyance system. It is proposed that Del Mar will contribute 26% of the flow in the Cedros trunk sewer, Solana Beach force main pump station, and Solana Beach force main. It is proposed that Del Mar contribute 26% to future capital improvements and equipment upgrades related to its use of the Solana Beach conveyance system as they occur. Examples of similar agreements between SEJPA member agencies are provided in the Appendix.

Table 1. Conveyance and pumping costs in Solana Beach conveyance system.

Agency	Cedros TS and SBPS FM		Solana Beach Pump Station	
	no Del Mar	with Del Mar	no Del Mar	with Del Mar
	Cost (\$/yr)	Cost (\$/yr)	Cost (\$/yr)	Cost (\$/yr)
Solana Beach	\$250,000	\$246,000	\$116,000	\$103,000
Del Mar		\$4,000		\$36,000
Total	\$250,000	\$250,000	\$116,000	\$139,000

4 TREATMENT

4.1 Treatment Costs

It is proposed that Del Mar send a maximum of 0.5 mgd to SEWRF for treatment during the wet season as this is when hydraulic capacity can be a limiting factor at the Solana Beach Pump Station. Under this scenario, wet weather peak flows from Del Mar would be conveyed to the San Diego system through existing sewer pipes. To calculate treatment costs at the SEJPA, one first must calculate the average annual daily flow to the SEJPA minus the flow directed to the San Diego system. If there are an assumed 20 wet weather days per year during which Del Mar redirects its 21st Street pump station flow to the San Diego system, then this flow is reduced to an annual average of 0.473 mgd. The added 0.473 mgd Del Mar flow represents a 17% increase in influent flow to the SEWRF. Annual average SEWRF influent flow values and percentages are given in Table 2, showing both exclusive and inclusive consideration of Del Mar flow. Adding Del Mar influent flow reduces the relative flow contributions to the SEWRF by Encinitas, Solana Beach, and Rancho Santa Fe.

Table 2. SEWRF influent flow percentages by SEJPA member agency.

Agency	Excluding Del Mar flow		Including Del Mar flow	
	Inf. Flow (mgd)	% of Inf.	Inf. Flow (mgd)	% of Inf.
Encinitas	1.332	46.9%	1.332	40.2%
Solana Beach	1.345	47.4%	1.345	40.6%
Rancho Santa Fe	0.162	5.7%	0.162	4.9%
Del Mar			0.473	14.3%
Total	2.839	100%	3.312	100%

Based on an itemized SEWRF budget for 2012-2013 provided by SEJPA, SEWRF plant O&M was included in this analysis. Several plant O&M budget items are projected to be impacted by increased SEWRF flows. Impacted items include solids handling, chemical use, and gas and electricity, which represent about 20% of the total treatment budget. It is assumed that the costs for these items increase linearly with SEWRF flow and that other treatment costs remain fixed. Each impacted budget item is projected to increase 17% commensurate to the added Del Mar flow. The projected SEWRF O&M budget incorporates the adjusted impacted items, and includes a 20% contingency to impacted items, which results in a 4% O&M budget increase. The projected SEWRF treatment budget is allocated by member agency percentage of influent flow. Treatment costs and savings for each agency are shown in Table 3. Current SEJPA members are projected to save on treatment costs by accepting additional Del Mar flow.

Table 3. SEJPA member agency treatment costs and projected savings.

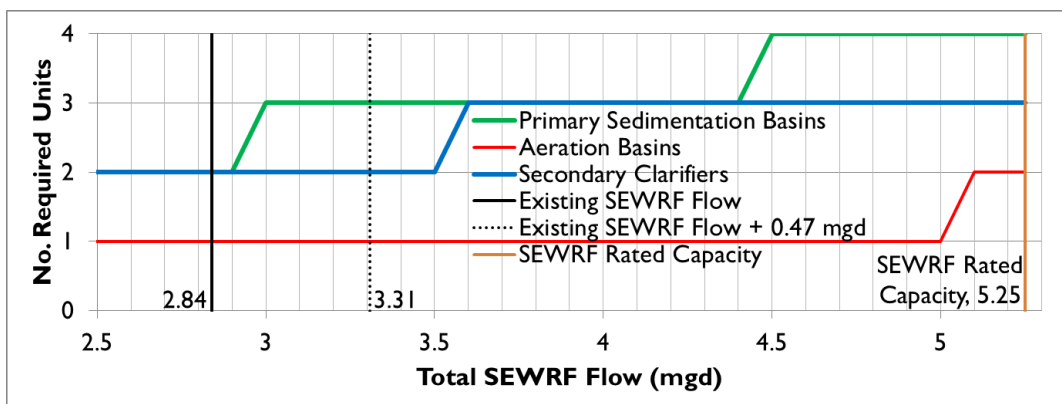
Agency	no Del Mar	with Del Mar	
	Cost (\$/yr)	Cost (\$/yr)	Savings (\$/yr)
Encinitas	\$1,122,000	\$1,003,000	\$119,000
Solana Beach	\$1,133,000	\$1,013,000	\$120,000
Rancho Santa Fe	\$136,000	\$122,000	\$14,000
Del Mar		\$356,000	
Total	\$2,391,000	\$2,494,000	\$253,000

4.2 Projected Effects of Added Del Mar Flow on SEWRF Operation

An analysis was conducted to determine potential impacts on SEWRF operation resulting from additional flow contributed by Del Mar. This analysis is based on plant operation data and guidelines given in a January 2013 Trussell Technologies SEWRF operating plan.³ It is assumed that Del Mar wastewater quality will not significantly differ from that currently being treated at SWERF. Current annual average SEWRF flow of 2.839 mgd requires operation of two primary sedimentation basins, one aeration basin, and two secondary clarifiers. This condition is shown as a solid black line in Figure 2. Projected SEWRF flow, including Del Mar flow, is shown with a dotted black line. The addition of 0.47 mgd requires use of a third primary sedimentation basin and some adjustment of the raw wasting pump schedule. A third secondary clarifier is required when SEWRF flow exceeds 3.5 mgd. An additional aeration basin is not needed until SEWRF flow exceeds 5 mgd, based on a required minimum aeration basin hydraulic residence time of 2.0 hours.

³ Trussell Technologies Inc., San Elijo Water Reclamation Facility Operational Plan (Version 2), Jan. 2013.

Figure 2. Number of required units based on SEWRF influent flow



5 JOINT POWERS LABORATORY COSTS

Accepting additional flow from Del Mar is not expected to increase SEJPA laboratory costs. No identifiable budget items will be affected. For this reason, a contingency of only 10% has been added to each agency’s cost. The cost sharing of the laboratory budget will be based on SEJPA member influent percentage (Table 2). Laboratory costs and projected savings for each agency are tabulated below. Current SEJPA members are projected to save on treatment costs by accepting Del Mar flow.

Table 4. SEJPA member agency laboratory costs and projected savings.

Agency	no Del Mar	with Del Mar	
	Cost (\$/yr)	Cost (\$/yr)	Savings (\$/yr)
Encinitas	\$167,000	\$158,000	\$9,000
Solana Beach	\$169,000	\$159,000	\$10,000
Rancho Santa Fe	\$20,000	\$19,000	\$1,000
Del Mar		\$56,000	
Total	\$356,000	\$392,000	\$20,000

6 SAN ELIJO OCEAN OUTFALL COSTS

Approximately 37% of Del Mar wastewater entering the SEWRF is assumed to be recycled. The remaining 63% of Del Mar flow is assumed to be discharged to the ocean through the San Elijo Ocean Outfall (SEOO), which constitutes a 2.4% increase in total outfall flow. SEJPA member agency SEOO flow values and percentages, exclusive and inclusive of Del Mar flow, are given in Table 5. Total SEWRF outflow, including flow from Del Mar, is 2.06 mgd, which is less than half of the SEWRF designated 5.4 mgd outfall flow.⁴

⁴ San Elijo Ocean Outfall Report. City of Escondido Hale Avenue Resource Recovery Facility and San Elijo Water Reclamation Facility, December 2009

Table 5. SEWRF effluent flow percentages by SEJPA member agency.

Agency	Excluding Del Mar flow		Including Del Mar flow	
	Eff. Flow (mgd)	% of Eff.	Eff. Flow (mgd)	% of Eff.
Encinitas	0.834	6.6%	0.834	6.5%
Solana Beach	0.829	6.6%	0.829	6.4%
Rancho Santa Fe	0.102	0.8%	0.102	0.8%
Escondido	10.792	85.9%	10.792	84.0%
Del Mar			0.298	2.3%
Total	12.557	100%	12.855	100%

Gas and electric was the only identified outfall budget item projected to be affected by added Del Mar outfall flow. It is assumed that the cost for this item increases linearly with SEOO flow. The impacted budget item cost is projected to increase 2.4%, commensurate to the added Del Mar flow. The projected SEOO budget incorporates the increased impacted item plus a 20% contingency, which results in less than a 1% outfall budget increase. The projected SEOO budget is then divided based on each agency's contributing flow percentage. SEOO costs and savings for each agency are shown in Table 6. Escondido is projected to save on outfall costs by accepting additional Del Mar flow. Projected savings by Encinitas, Solana Beach, and Rancho Santa Fe are negligible.

Table 6. SEJPA member agency outfall costs and projected savings.

Agency	no Del Mar	with Del Mar	
	Cost (\$/yr)	Cost (\$/yr)	Savings (\$/yr)
Encinitas	\$27,000	\$27,000	\$0
Solana Beach	\$27,000	\$27,000	\$0
Rancho Santa Fe	\$3,000	\$3,000	\$0
Escondido	\$354,000	\$347,000	\$7,000
Del Mar		\$10,000	
Total	\$411,000	\$414,000	\$7,000

7 CAPITAL IMPROVEMENT COSTS

7.1 SEWRF CIP Costs

Costs for the SEWRF capital improvement program (CIP) are shared based on plant capacity ownership percentages. Current capacity ownership (no Del Mar flow) in the SEWRF is given in the table below. Adding Del Mar flow alters these shares as shown in the table below. In this arrangement, Del Mar would use equal parts of Encinitas' and Solana Beach's capacities (similar to Rancho Santa Fe). Rancho Santa Fe's capacity leased percentage does not change because it is not sharing its leased capacity.

Table 7. SEWRF capacity ownership and leased percentages by customer.

Agency	% SEWRF Share	
	no Del Mar	with Del Mar
Encinitas	47.6%	42.9%
Solana Beach	47.6%	42.9%
Rancho Santa Fe	4.8%	4.8%
Del Mar		9.5%
Total	100%	100%

The 5-year average (2013-2018, provided by SEJPA) SEWRF CIP cost is \$966,000/yr. This cost is assumed to remain constant despite increased flow from additional Del Mar flow. Payment of the CIP cost is based on agency percent capacity ownership. Encinitas and Solana Beach are projected to save on SEWRF CIP costs by accepting additional Del Mar flow as shown below. An additional contingency of 20% has been added to Del Mar's cost.

Table 8. SEJPA member agency SEWRF CIP costs and projected savings.

Agency	no Del Mar	with Del Mar	
	Cost (\$/yr)	Cost (\$/yr)	Savings (\$/yr)
Encinitas	\$460,000	\$414,000	\$46,000
Solana Beach	\$460,000	\$414,000	\$46,000
Rancho Santa Fe	\$46,000	\$46,000	\$0
Del Mar		\$110,000	
Total	\$966,000	\$984,000	\$92,000

7.2 SEOO CIP Costs

Current capacity ownership and leases in the SEOO are given in the table below. Costs for SEOO CIP are shared based on these ownership and leased percentages. Additional Del Mar flow alters these shares, which is shown in the table below. In this arrangement, Del Mar would use equal parts of Encinitas' and Solana Beach's capacity. Rancho Santa Fe's leased capacity and Escondido's capacity ownership percentages do not change because they are not sharing capacity with Del Mar.

Table 9. SEOO capacity ownership and leased percentages by agency.

Agency	% Outfall Share	
	no Del Mar	with Del Mar
Escondido	79%	79%
Encinitas	10%	9%
Solana Beach	10%	9%
Rancho Santa Fe	1%	1%
Del Mar		2%
Total	100%	100%

The 5-year average (2013-2018) SEOO CIP cost is \$200,000 per year (provided by SEJPA). This cost is assumed to remain constant despite increased flow due to addition of Del Mar flow. CIP costs are shared based on agency percent capacity ownership. Encinitas and Solana Beach are projected to save on SEWRF CIP costs by accepting additional Del Mar flow as shown below. An additional contingency of 20% has been added to Del Mar’s cost.

Table 10. Agency SEOO CIP costs and projected savings.

Agency	no Del Mar	with Del Mar	
	Cost (\$/yr)	Cost (\$/yr)	Savings (\$/yr)
Escondido	\$158,000	\$158,000	\$0
Encinitas	\$20,000	\$18,000	\$2,000
Solana Beach	\$20,000	\$18,000	\$2,000
Rancho Santa Fe	\$2,000	\$2,000	\$0
Del Mar		\$4,000	
Total	\$42,000	\$42,000	\$4,000

8 PROJECTED ANNUAL COSTS AND SAVINGS

Table 11 summarizes the projected conveyance and pumping, treatment, laboratory, outfall, and CIP costs for each agency for two scenarios:

1. Del Mar sends 0.5 mgd to the San Diego system for treatment and is excluded from the SEWRF.
2. Del Mar sends 0.5 mgd through a to-be-built force main and the Solana Beach collection system to the SEWRF and out the SEOO. Del Mar redirects wet weather flows, at the discretion of Solana Beach and the SEJPA, to the San Diego system .

Del Mar’s current annual conveyance cost to the San Diego system is \$145,600. Current treatment, lab, outfall, and CIP lumped annual costs paid to the San Diego system are \$832,000. These costs are reduced in the table below by the proposed fraction to be sent to the SEWRF (0.473 mgd/0.6 mgd).

Table 11. Projected costs for each agency inclusive and exclusive of Del Mar flow.

Agency	1. Excluding Del Mar flow (\$/yr)						2. Including Del Mar flow (\$/yr)					
	Convey.	Treatment	Lab	Outfall	CIP	Total	Convey.	Treatment	Lab	Outfall	CIP	Total
Del Mar (0.5 mgd)	\$115,000					\$770,000	\$128,000	\$356,000	\$56,000	\$10,000	\$115,000	\$665,000
Encinitas		\$1,122,000	\$167,000	\$27,000	\$480,000	\$1,796,000		\$1,003,000	\$158,000	\$27,000	\$432,000	\$1,620,000
Solana Beach	\$366,000	\$1,133,000	\$169,000	\$27,000	\$480,000	\$2,175,000	\$349,000	\$1,013,000	\$159,000	\$27,000	\$432,000	\$1,980,000
Rancho Santa Fe		\$136,000	\$20,000	\$3,000	\$48,000	\$207,000		\$122,000	\$19,000	\$3,000	\$48,000	\$192,000
Escondido				\$354,000	\$158,000	\$512,000				\$347,000	\$158,000	\$505,000

The difference in totals for scenarios 1 and 2 yields the projected annual savings for each member agency, which are tabulated in Table 12. Member agencies are projected to save money by SEJPA accepting 0.5 mgd of Del Mar flow.

Table 12. Agency projected savings by inclusion of Del Mar flow in SEWRF.

Agency	Savings (\$/yr)
Del Mar	\$105,000
Encinitas	\$176,000
Solana Beach	\$195,000
Rancho Santa Fe	\$15,000
Escondido	\$7,000

9 CONCLUSIONS

- There are no fatal flaws identified in the proposal to accept 0.5 mgd of wastewater flow from Del Mar to be conveyed through the Solana Beach collection system for treatment at the SEWRF.
- There are no restrictions identified in permits, regulations, or ordinances that would preclude this proposal from being implemented.
- The SEWRF has ample capacity to treat Del Mar’s wastewater flows as described in this report. Operational impacts at the SEWRF appear to be minimal and within the operational flexibility of the treatment facility. Adding 0.5 mgd of wastewater flow from Del Mar to the existing 2.8 mgd SEWRF influent will likely require the operation of a third primary sedimentation basin and increasing raw wasting, all of which can be readily accommodated. It is also expected that electrical and chemical use will increase commensurate with the increase in wastewater flows. However, the overall economy of scale in treatment will be improved resulting in expected savings in unit treatment costs.
- The Solana Beach collection system has adequate capacity to handle 0.5 mgd flow from Del Mar in both the wet and dry seasons.
- The most cost-effective connection point for the Del Mar and Solana Beach sanitary sewer systems appears to be the Solana Beach’s Cedros trunk sewer. The distance between the Del Mar 21st Street pump station and the Cedros trunk sewer is approximately 6,200 linear feet or approximately 1.2 miles. The budgetary cost estimated for the connecting pipeline is approximately \$1,200,000.
- The economic analysis of this proposal predicts financial benefits to all parties. Del Mar is projected to save approximately \$105,000 annually by sending 0.5 mgd of its flow to the SEWRF. Economic benefits to the SEJPA’s member agencies, Solana Beach and Encinitas, are on the order of \$195,000 and \$176,000 annually, respectively, through improvements in the economy of scale in treatment and shared fixed costs. Similarly, cost savings are also projected for Rancho Santa Fe and the City of Escondido, \$15,000 and \$7,000 per year, respectively, if SEJPA accepts Del Mar flows.
- Wastewater service to Del Mar was evaluated at a service level of 0.5 mgd to the SEWRF (0.47 mgd assuming 20 wet weather day diversions per year), with peak flows being diverted to the San Diego system. It is likely that adequate capacity in both

conveyance and treatment is available beyond the 0.5 mgd assumed in this report. However, as a conservative evaluation, the report assumes flows greater than 0.5 mgd are diverted to San Diego system.

- Both the Solana Beach conveyance system and the SEWRF have the ability to be expanded for providing wastewater service to Del Mar beyond 0.5 mgd, including peak flow events, if such service is desired in the future.
- The proposal increases the local water supply for the cities of Del Mar, Encinitas, and Solana Beach, as SEJPA produces recycled water that currently serves these areas.

APPENDIX



SAN ELIJO JOINT POWERS AUTHORITY

City of Del Mar

Wastewater Lease Agreement



City of Del Mar

Currently, SEJPA provides Del Mar the following:

- ✓ As-Needed Laboratory Services
- ✓ Recycled Water Services

Del Mar is interested in expanding the services provided by the SEJPA to include wastewater treatment



Why Expand Wastewater Services to Del Mar?

- What are the Benefits?
- What are the Risks?



Benefits:

- Immediate financial savings to Member Agencies
- Increases operational efficiencies
- Utilizes idle capacity at the Treatment Plant
- Expands SEJPA's ability to produce more recycled water
 - ✓ Increases locally produced, drought resistant water for both
 - ✓ Encinitas & Solana Beach
- Improves regional sustainability (capture/treat/recycle as close as possible to the source community)



Risks:

- High Peak Flows from Del Mar

Mitigation:

- Real time monitoring of incoming wastewater flows
- Ability to redirect peak flows to San Diego Metro JPA

- Financial Insolvency

Mitigation:

- Del Mar is AAA rated for GO Bonds
- The City has never defaulted on debt or a service contract
- Del Mar has a good history of service payment with the SEJPA



Risks:

- **Difficult Partnership with Del Mar**

Mitigation:

- Agreement provides lease capacity only; no Board membership.
- Partnership with Del Mar on RW has been positive.

- **Limiting Future Capacity for Member Agencies**

Mitigation:

- Member Agencies own capacity more capacity than they require
- Facility can be re-rated to provide additional capacity

Risks: Legal Conflict with San Diego



City of Del Mar



March 5, 2014

Halla Razak
Director of Public Utilities
Public Utilities Department
City of San Diego
9192 Topaz Way
San Diego, CA 92123-1119

Dear Ms. Razak:

The City of Del Mar, a Participating Agency in the City of San Diego Metropolitan Wastewater System, is exploring the possibility of constructing a wastewater pipeline to connect to and divert a portion of the City of Del Mar's wastewater flow to the San Elijo Water Reclamation Facility, located in Encinitas.

The San Elijo Water Reclamation Facility produces tertiary-treated Title 22 recycled water for the City of Del Mar, the San Dieguito Water District, and the Santa Fe Irrigation District. Connecting to the San Elijo Water Reclamation Facility and routing a portion of the City of Del Mar's flow (approximately 0.5 MGD) to that facility, will enable the San Elijo Joint-Powers Authority to produce additional volumes of recycled water, particularly during the summer months when Del Mar's flow increases and demand for recycled water is high.

This proposal is consistent with the Regional Wastewater Disposal Agreement and the region's long-term goal to reduce the amount of flow to the Point Loma Wastewater Treatment Plant. By enabling the San Elijo Water Reclamation Facility to produce additional recycled water, this project is also an investment in regional water supply diversification.

The City of Del Mar is moving ahead to the design phase to build this pipeline to San Elijo. We want to know within 30 days if you have any concerns about our reduction of wastewater flows to the Metro system. If you do, please reach me at shuth@delmar.ca.us or (858) 755-9313 x132. Thank you!

Sincerely,

Scott W. Huth
City Manager

Risks: Legal Conflict with San Diego



THE CITY OF SAN DIEGO

April 8, 2014

Mr. Scott W. Huth, City Manager
City of Del Mar
1020 Camino Del Mar
Del Mar, CA 92014-2698

Dear Mr. Huth:

The City of San Diego is in receipt of your letter dated March 11, 2014, regarding the City of Del Mar's desire to construct a wastewater pipeline to connect to and divert approximately 0.5 MGD of the City of Del Mar's wastewater flow from the City of San Diego's wastewater system to the San Elijo Water Reclamation Facility.

Del Mar's proposal to divert flow to the San Elijo Water Reclamation Facility appears to be consistent with the Regional Wastewater Disposal Agreement and the Penasquitos Sewer District Sewage Disposal Agreement. In January, the City of Del Mar submitted a projected flow and population report to the City of San Diego anticipating the diversion by reflecting anticipated reduced flows. The reduced flow has been incorporated into the January Metro estimate of system costs for Fiscal Year 2015.

Del Mar's proposal, however, raises several questions we need to discuss:

- 1) whether continued connection to the Metro System is necessary as a fail-safe measure with regards to sending flow to San Elijo;
- 2) Del Mar's plan for use of their Existing Metro Contract Capacity;
- 3) whether the flow diversion will be permanent or seasonal;
- 4) a request for a high level drawing showing the diversion location(s);
- 5) Del Mar's proportionate share of past CIP for Pump Station 65;
- 6) whether an amendment to the Penasquitos Sewer District Sewage Disposal Agreement is necessary to memorialize the diversion of flow to San Elijo; and
- 7) the diversion impact to San Diego's two house count areas (135 EDU's).

At your convenience, please contact Edgar Patino at (858) 292-6321 to discuss the pending items listed above.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann Sasaki".

Ann Sasaki
Assistant Public Utilities Director



PUBLIC UTILITIES DEPARTMENT
9192 Topaz Way • San Diego, CA 92123
(858) 292-6401

Figure 3 - SEJPA AVERAGE DAILY INFLUENT FLOW

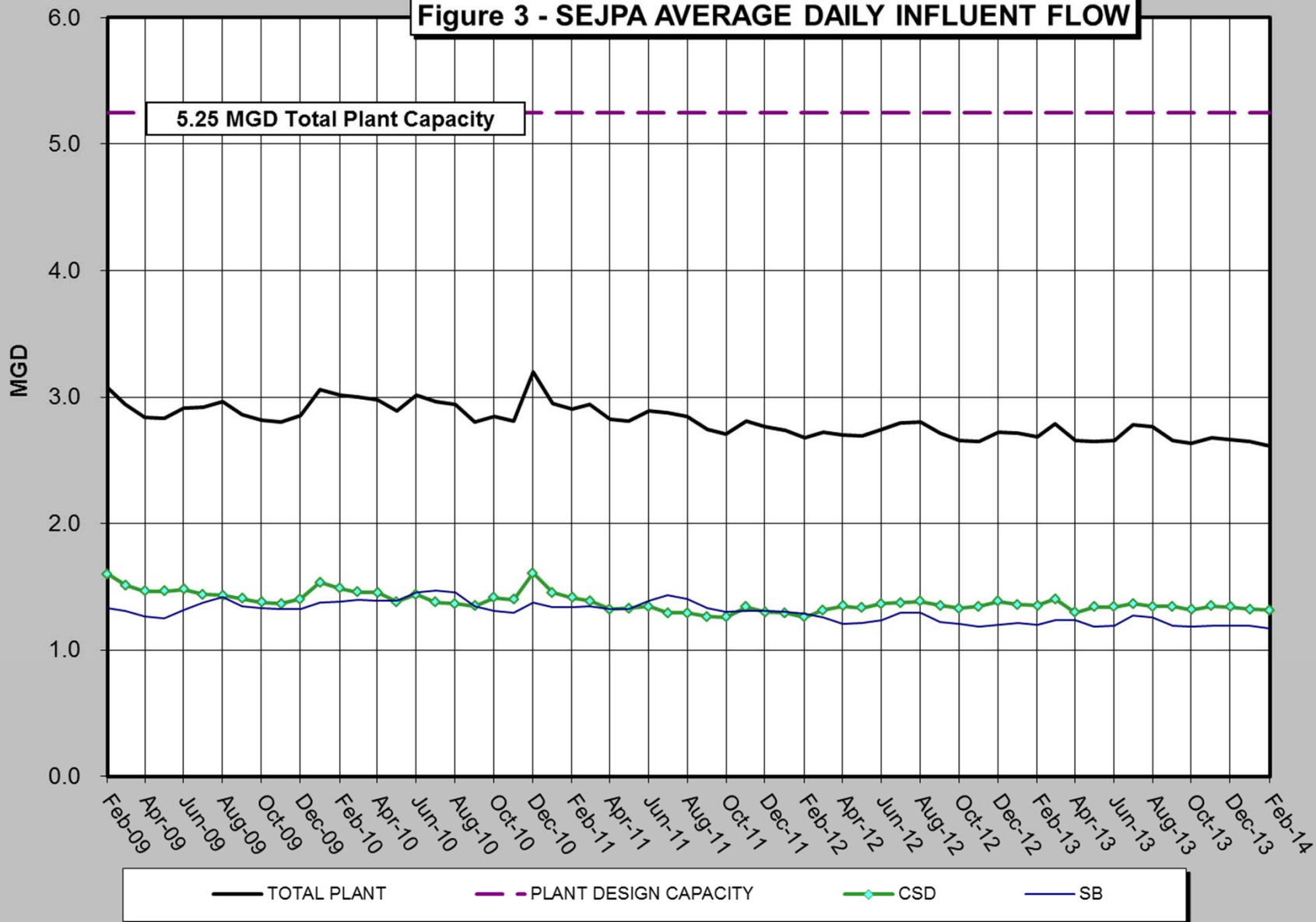


Figure 3 - SEJPA AVERAGE DAILY INFLUENT FLOW

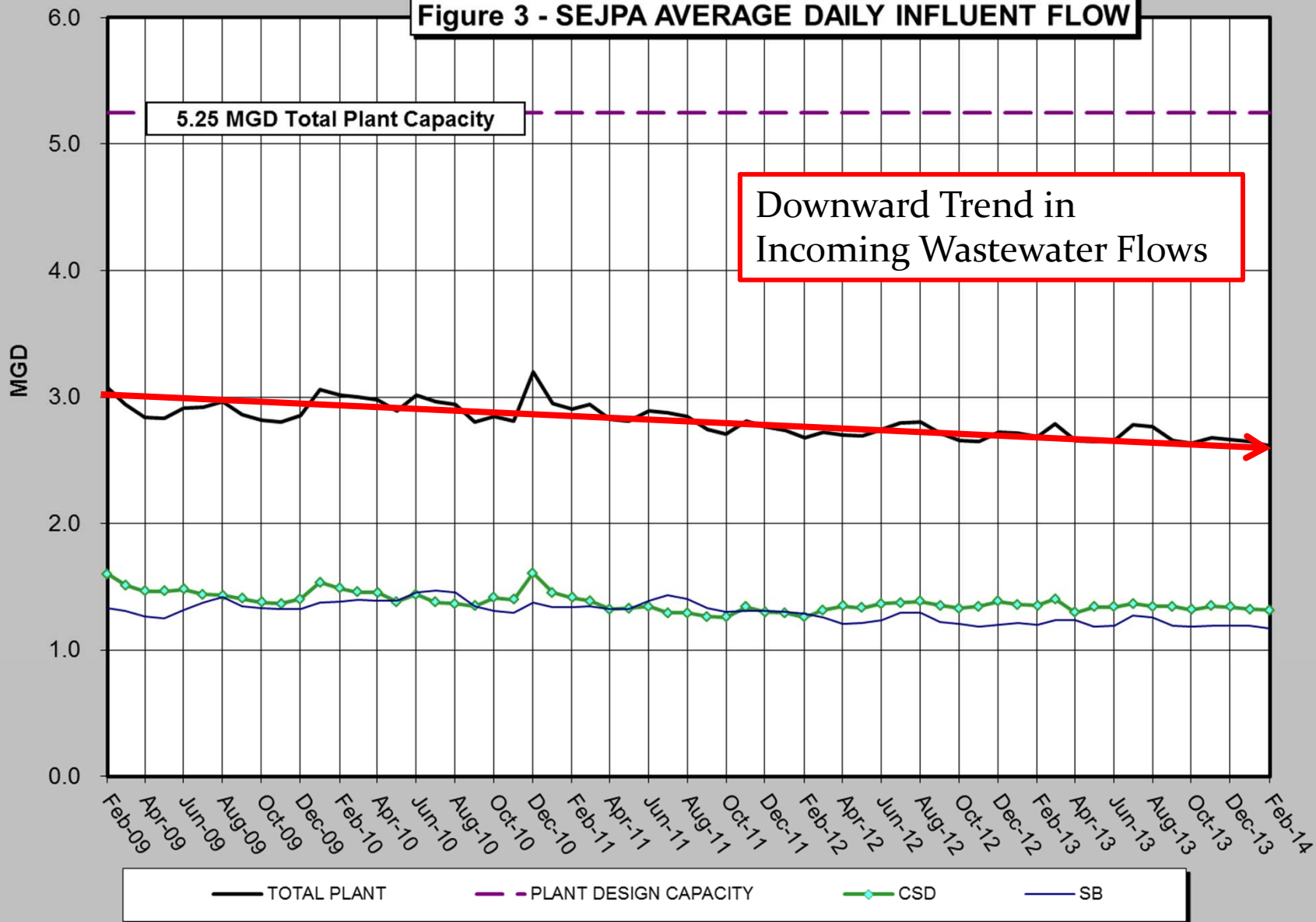
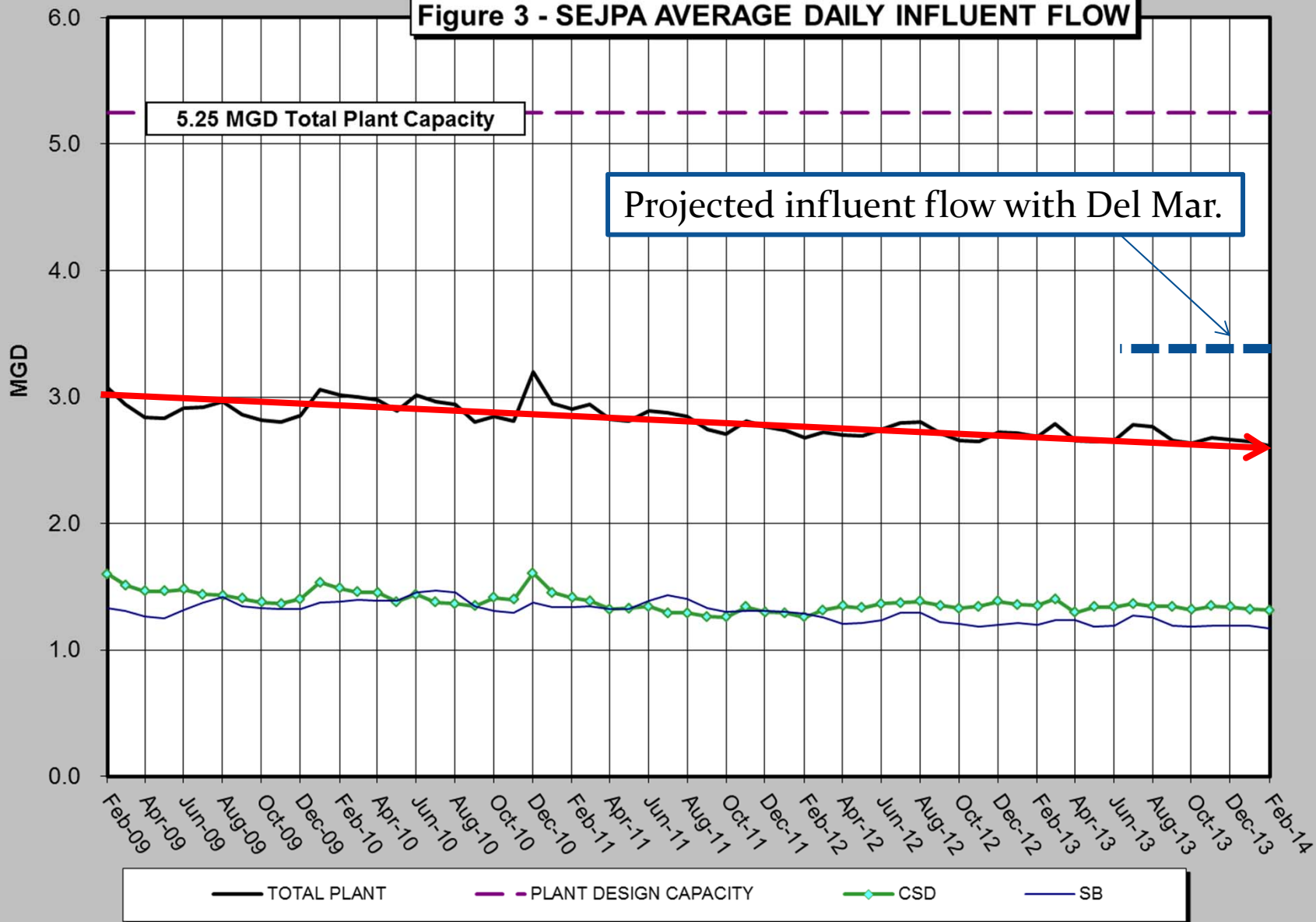


Figure 3 - SEJPA AVERAGE DAILY INFLUENT FLOW





Immediate Financial Benefits –

- Consultant Study indicates a net annual saving of more than \$300,000 from this proposal.
 - ✓ Includes conveyance, treatment, capital cost savings
 - ✓ Include the proposed connection incentive costs (\$60K per year)
 - ✓ Majority of these saving are received by the City of Solana Beach and City of Encinitas
 - ✓ Minor savings to City of Escondido and RSF Community Service Districts



Immediate Financial Benefits –

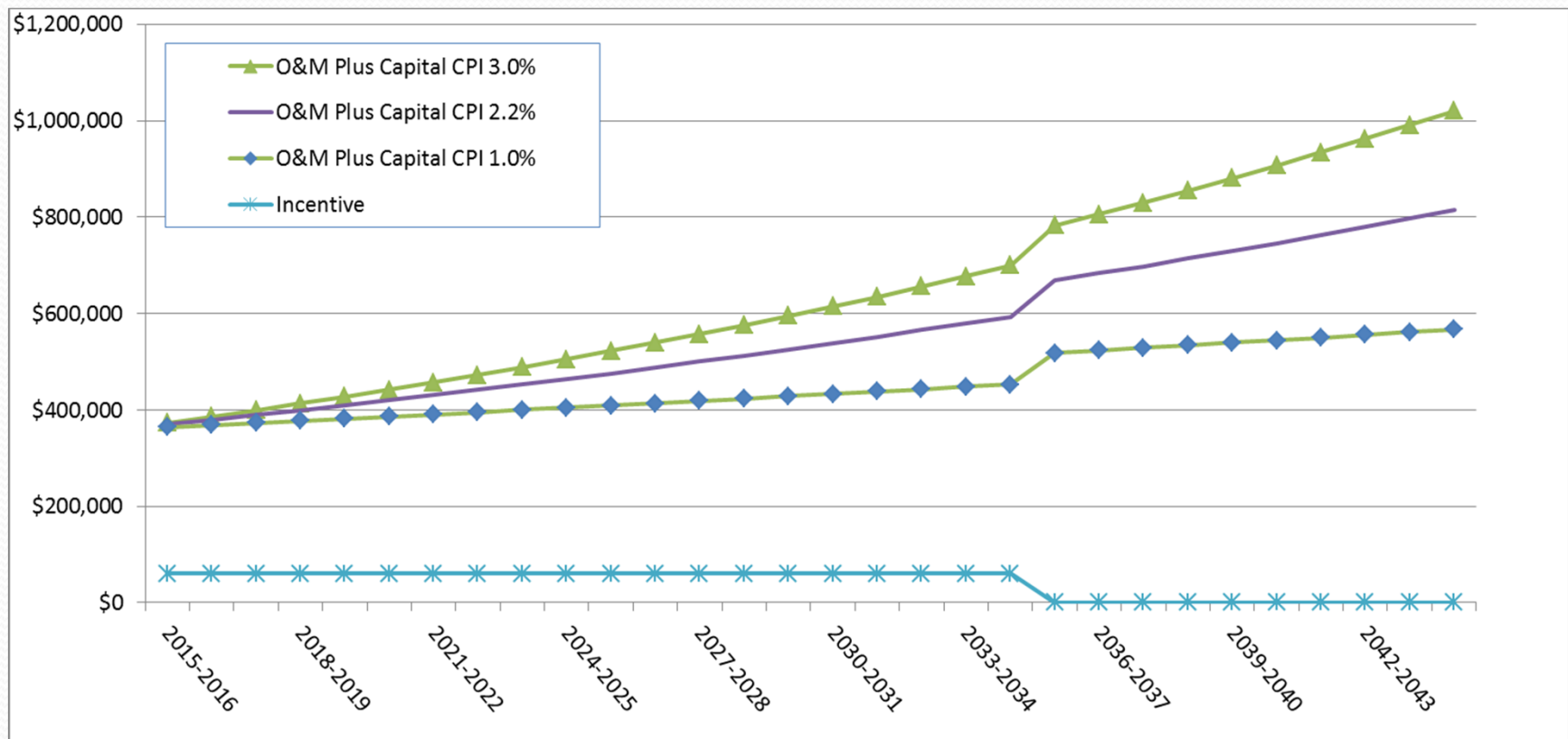
Staff has reviewed the Consultant's work and agrees that it is reasonable to expect annual savings of \$140,000 to \$180,000 by each member agency.

Final savings are impacted by flow volume, future inflation, and future capital requirements.

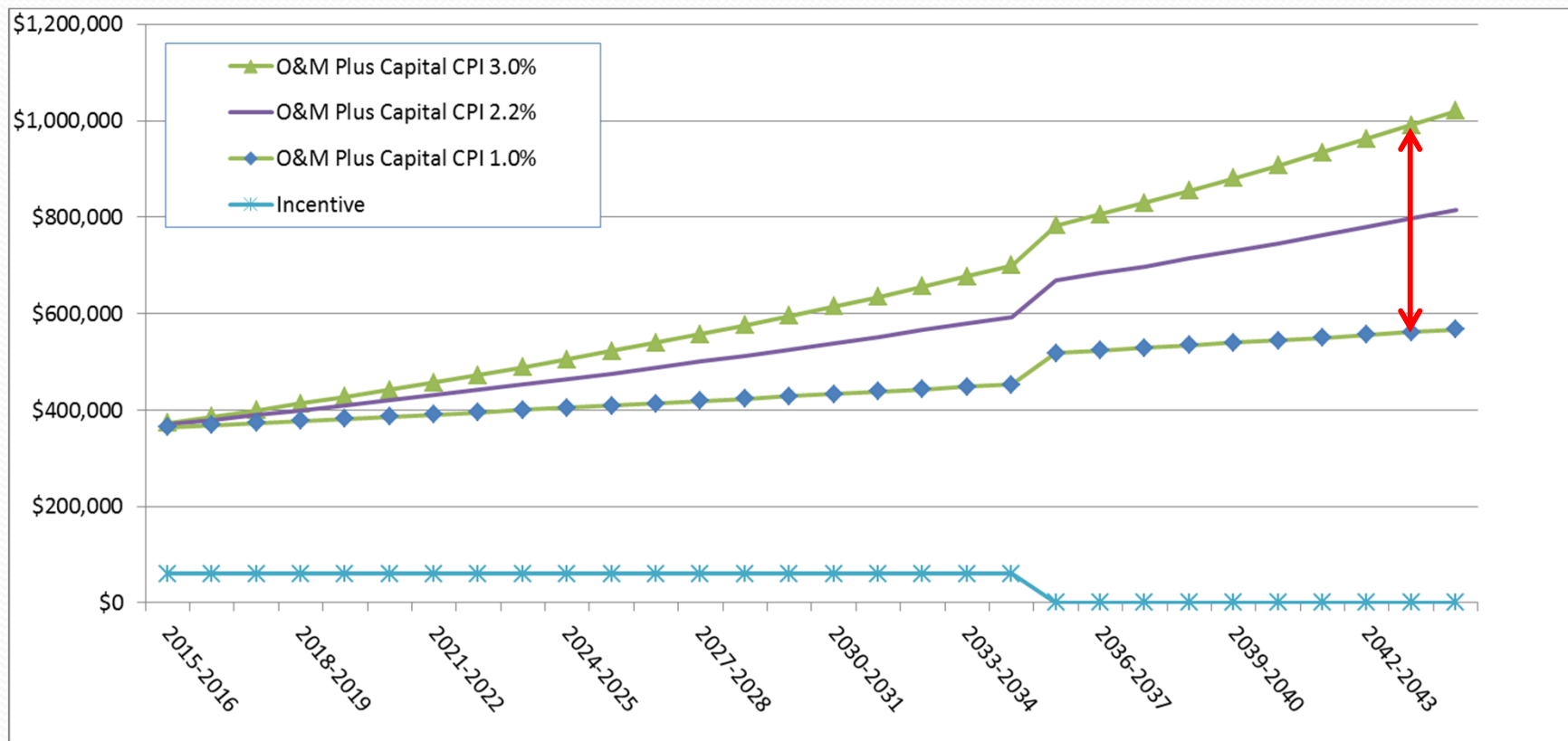
These saving projections include cost incentives provided by the SEJPA to Del Mar for connecting infrastructure.

These savings will be immediate. There is NO payback period!

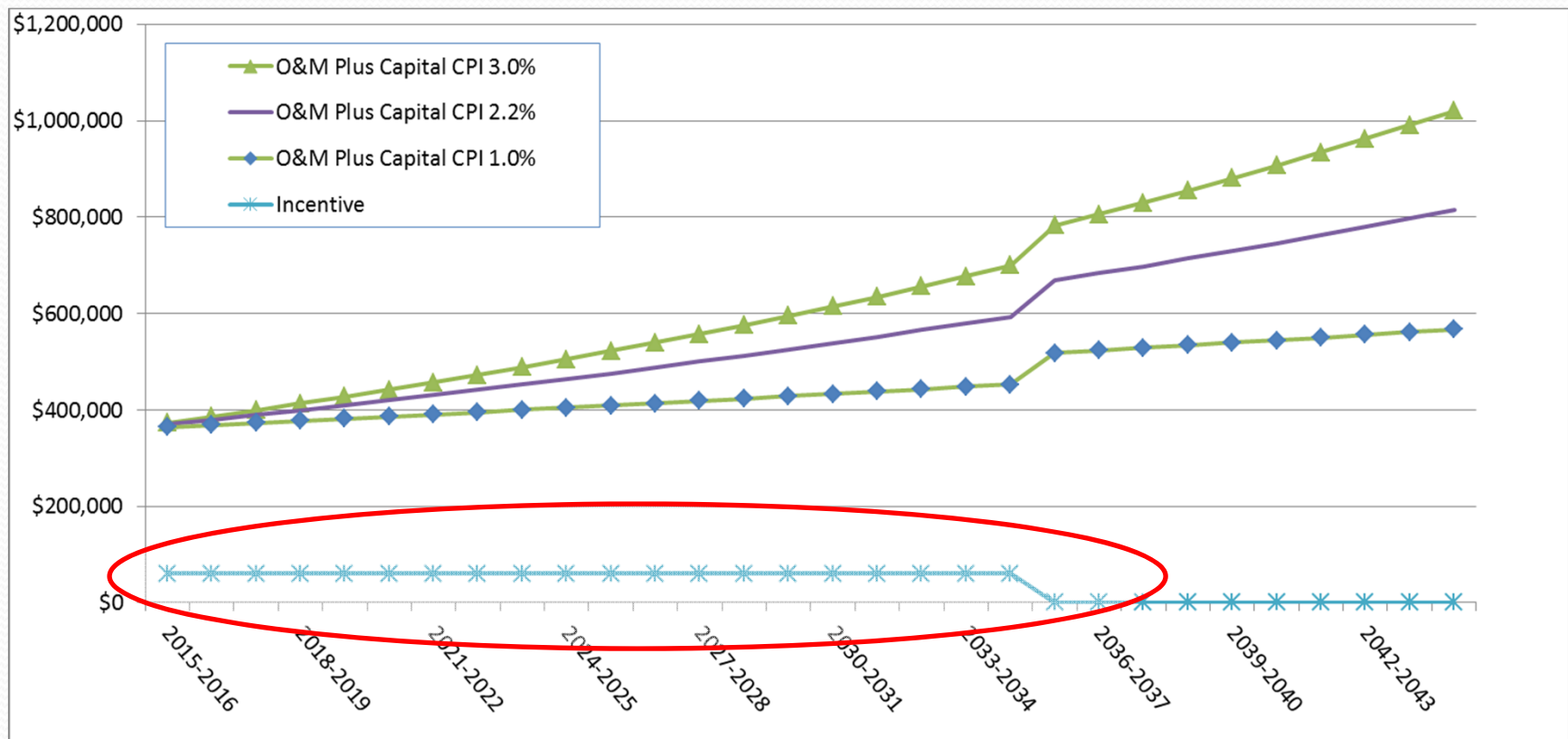
30-Year Cost Saving Projection



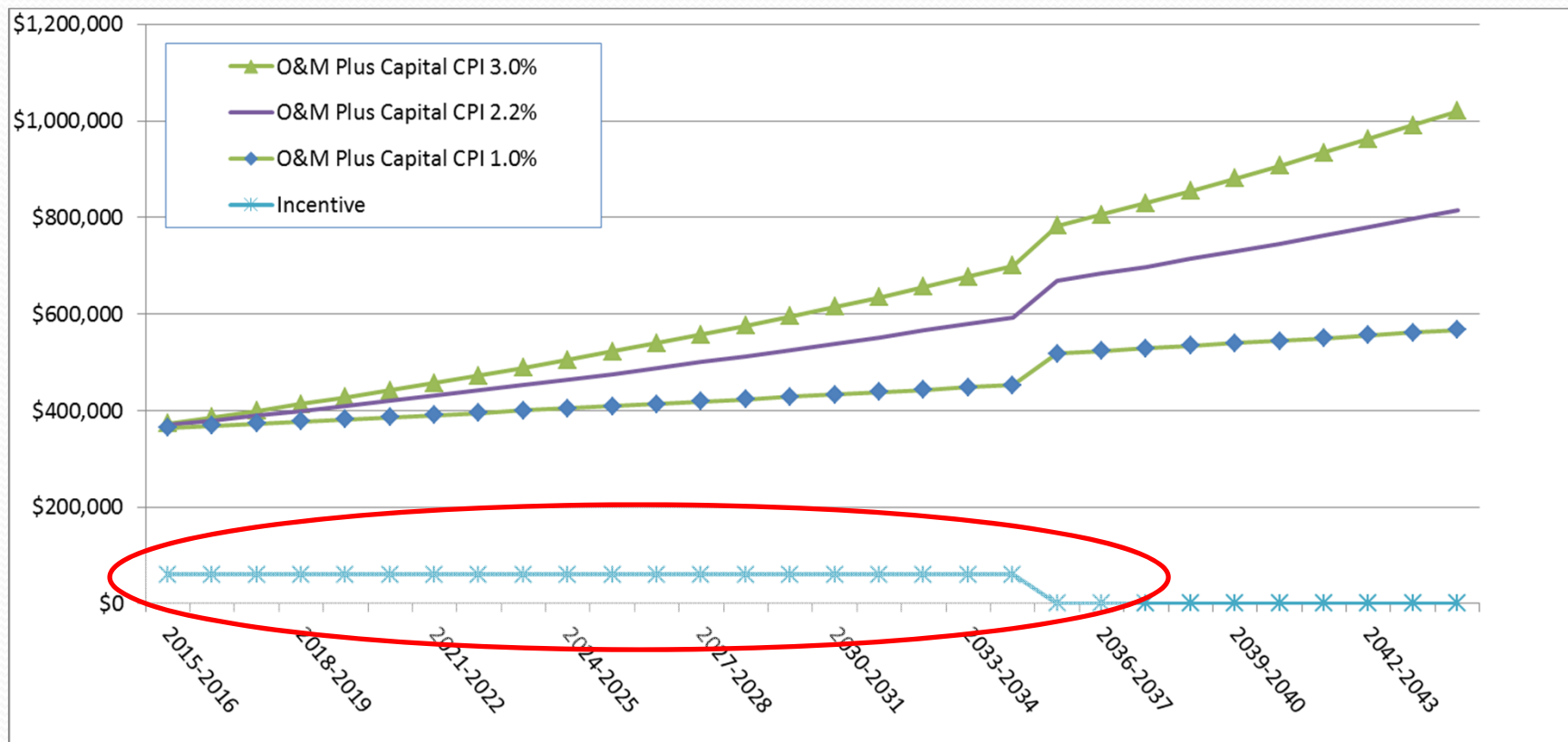
30-Year Cost Saving Projection



30-Year Cost Saving Projection



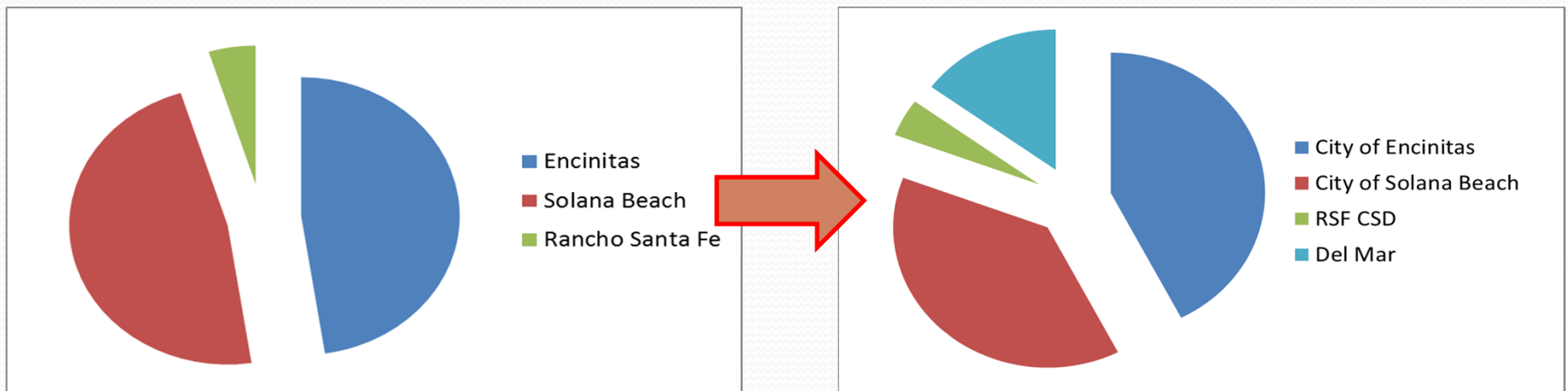
30-Year Cost Saving Projection



Connecting Infrastructure Incentive; assumed to be \$60,000 annually until 66% of the connecting cost is recovered – debt carried by Del Mar.

Total Value WW Lease Agreement 30-Year Forecast

- Net present value of savings approx. \$11.7 million
(assuming 3% time value of money)



**New Cost Sharing Distribution:
Del Mar contributes 15% to operational O&M.**



Value of Del Mar Wastewater -Recycled Water

- 0.5 MGD is approximately equivalent to 560 Acre-Feet
- As irrigation water, 50% reuse is reasonable
- 280 AFY @ \$1,300/AF equates to \$360,000 per year



Lease Terms

- Providing wastewater services to the City of Del Mar
 - ✓ 30-year lease agreement
 - ✓ Similar to the existing lease w/Rancho Santa Fe
 - ✓ Non-voting leasee
 - ✓ Connecting infrastructure is Del Mar's responsibility
 - ✓ Funding for connecting infrastructure uses Pay-Go methodology (No up front funding required by SEJPA)



Lease Terms

- Wastewater service to the City of Del Mar
 - ✓ Peak flows can be diverted to the San Diego Metro JPA (SEJPA is not required to treat peak flows)
 - ✓ Wastewater becomes part of the SEJPA's RW program
 - ✓ Del Mar's capital component of SEJPA's future capital projects is approximately 10%



Conclusion

- Impacts to the SEWRF appear to be positive and within the operational ability of the treatment facility
- No restrictions in permits, regulations, or ordinances that would preclude this proposal from being implemented
- Financially beneficial to SEJPA Member Agencies
- Benefits outweigh risks
- Increases SEJPA's recycled water output capacity
- Del Mar has expressed interest in executing a lease agreement now, begin construction this fall, and being sending flow next spring



Recommendation

- Authorize General Manager to enter into an agreement with the City of Del Mar for the provision of wastewater services

Feasibility Report

- O&M costs are shared based on actual flows
- Economy of scale is achieved through more flow

Agency	Excluding Del Mar flow		Including Del Mar flow	
	Inf. Flow (mgd)	% of Inf.	Inf. Flow (mgd)	% of Inf.
Encinitas	1.332	46.9%	1.332	40.2%
Solana Beach	1.345	47.4%	1.345	40.6%
Rancho Santa Fe	0.162	5.7%	0.162	4.9%
Del Mar			0.473	14.3%
Total	2.839	100%	3.312	100%

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Feasibility Report

- Capital costs are shared on Owned or Leased capacity

Agency	% SEWRF Share	
	no Del Mar	with Del Mar
Encinitas	47.6%	42.9%
Solana Beach	47.6%	42.9%
Rancho Santa Fe	4.8%	4.8%
Del Mar		9.5%
Total	100%	100%

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Utilizes Idle Treatment Capacity—





