### **AGENDA**

### SAN ELIJO JOINT POWERS AUTHORITY MONDAY NOVEMBER 9, 2009 AT 9:00 AM SAN ELIJO WATER RECLAMATION FACILITY – CONFERENCE ROOM 2695 MANCHESTER AVENUE CARDIFF BY THE SEA, CALIFORNIA

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

SCOTT CARR - 10 YEARS OF SERVICE SDG&E PRESENTATION OF ENERGY SAVINGS INCENTIVE GRANT

- 6. \* CONSENT CALENDAR
- 7. \* APPROVAL OF MINUTES FOR THE OCTOBER 12, 2009 MEETING
- 8. \* APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS
- 9. \* <u>SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS MONTHLY REPORT</u>
- 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. <u>APPOINTMENT TO EMPLOYEE COMPENSATION AND BENEFIT AD-HOC</u> COMMITTEE

It is recommended that the Board of Directors:

- Appoint an Employee Compensation and Benefit Ad-Hoc Committee; and
- Discuss and take action as appropriate.

Staff Reference: General Manager Michael Thornton

### 13. SAN ELIJO RECYCLED WATER PROGRAM-2009 FINANCIAL ASSESSMENT

It is recommended that the Board of Directors:

- Accept and file the 2009 Updated Financial Assessment for the Recycled Water Program; and
- Discuss and take action as appropriate.

Staff Reference: General Manager Michael Thornton

### 14. <u>MEMBER AGENCY CONTRIBUTIONS TO THE SAN ELIJO JOINT POWERS</u> AUTHORITY'S RECYCLED WATER PROGRAM

It is recommended that the Board of Directors:

1. Discuss and take action as appropriate.

Staff Reference: Director of Finance/Administration Gregory Lewis

### 15. CALIFORNIA STATE REVOLVING FUND (SRF) LOAN APPLICATION AUTHORIZATION FOR RECYCLED WATER ADVANCED TREATMENT PROJECT

It is recommended that the Board of Directors:

- Adopt Resolution No. 2010-01, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Authorizing Entering into a Financial Assistance Agreement with the State Resources Control Board and Designating a Representative to Sign the Financial Assistance Agreement;
- 2. Adopt Resolution No. 2010-02, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Dedicating the Source of Revenue for the Recycled Water Advanced Treatment Project;
- 3. Adopt Resolution No. 2010-03, Resolution of the Board of Directors of the San Elijo Joint Powers Authority of Intent to Reimburse Expenditures Related to Construction or Reconstruction of Certain Public Facilities; and
- 4. Discuss and take action as appropriate.

Staff Reference: General Manager Michael Thornton

### 16. ODOR SCRUBBER PERMIT VIOLATION

It is recommended that the Board of Directors:

Discuss and take action as appropriate.

Staff Reference: General Manager Michael Thornton

### GENERAL MANAGER'S REPORT

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

### 18. GENERAL COUNSEL'S REPORT

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

### 19. 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.

### 20. CLOSED SESSION

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".

### 21. ADJOURNMENT

The next regular scheduled San Elijo Joint Powers Authority Board Meeting will be December 14, 2009 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 <a href="https://www.sejpa.org">www.sejpa.org</a>. 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: November 4, 2009

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

### SAN ELIJO JOINT POWERS AUTHORITY MINUTES OF THE BOARD MEETING HELD ON OCTOBER 12, 2009 AT THE

SAN ELIJO WATER RECLAMATION FACILITY

Dave Roberts, Chair

Maggie Houlihan, Vice Chair

A Meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, October 12, 2009, 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 Roberts called the meeting to order at 9:00 a.m.

### 2. ROLL CALL

Directors Present: Teresa Barth

Maggie Houlihan Dave Roberts

Directors Absent: Thomas Campbell

Others Present:

General Manager Michael Thornton

Director of Finance/Administration Greg Lewis
Administrative Assistant Monica Blake
Accounting Tech Carrie Cook
Associate Engineer Adam Hoch
HR/Safety Administrator Marisa Buckles

SEJPA Counsel:

Procopio, Cory, Hargreaves & Savitch A. Aiko Osugi

City of Encinitas,

Director of Public Works Larry Watt

City of Encinitas,

Public Works Management Analyst Bill Wilson

City of Solana Beach,

City Manager David Ott

City of Solana Beach,

Director of Engineering/Public Works Mohammad "Mo" Sammak

SDG&E Representative Chris Brown

Leaf & Cole, L.L.P. Michael Zizzi

Trussell Technologies, Inc. R. Shane Trussell

### 3. PLEDGE OF ALLEGIANCE

Chris Brown led the Pledge of Allegiance.

### 4. ORAL COMMUNICATIONS

None

### 5. PRESENTATION OF AWARDS

Mr. Chris Brown stated the SDG&E energy savings incentive grant for \$70,000 is scheduled to be presented at the November Board meeting. He stated their department of Emerging Technologies is available to assist with new ideas for energy savings. Also, the Public Utilities Commission is emphasizing whole building green process as opposed to "incentives" used in the past.

### 6. CONSENT CALENDAR

Moved by Vice Chair Houlihan and seconded by Board Member Barth to approve the Consent Calendar with the following vote of approval:

AYES:

Barth, Houlihan and Roberts

NOES:

None

ABSENT:

Campbell

ABSTAIN:

None

### Consent Calendar:

Agenda Item No. 7 Approval of Minutes for the September 14, 2009 meetings

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. SAN ELIJO JOINT POWERS AUTHORITY ANNUAL AUDIT

General Manager Michael Thornton introduced the principle auditor for the SEJPA, Michael Zizzi from Leaf & Cole, L.L.P. Mr. Zizzi presented a summary of the 2008-09 Fiscal Year Audit Management Letter and the Statements of Cash Flows and answered questions from the Board of Directors.

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

1. Accept and file the 2008-09 Fiscal Year Audit for the San Elijo Joint Powers Authority.

Motion carried with the following vote of approval:

AYES: Barth, Houlihan and Roberts

NOES: None
ABSENT: Campbell
ABSTAIN: None

### 13. PROJECT HIGHLIGHTS OF TREATMENT SYSTEM IMPROVEMENTS

The General Manager made a PowerPoint presentation on the project highlights and performance results of this four-year effort to reduce energy usage and improve water quality. While continuing to follow strict permit guidelines, the Performance Optimization of the Activated Sludge System Project was completed with the very successful result of a reduction in energy and chemical use for wastewater treatment and significant improvements in treated water quality.

The General Manager introduced Dr. R. Shane Trussell with Trussell Technologies, a partner in this project. Dr. Trussell explained the biological portion of the project and the research involved in improving and lowering the septicity of the water.

The energy and chemical savings are estimated at \$120,000 per year and the project qualified for \$70,000 in grant funding. In addition, this project expanded the treatment capacity for future growth. These findings will be written up for industry publications so that other agencies can benefit from this project.

Informational report by the General Manager does not require Board action.

### 14. GENERAL MANAGER'S REPORT

The General Manager Michael Thornton reported the first year results of participating in the SDG&E program of Critical Peak Pricing (CPP). The SEJPA saved more than \$25,000 as a result of this participation.

The General Manager, along with other key stakeholders, participated in the City of Encinitas' Climate Action Plan Workshop that addresses climate change protection. Additional workshops are planned for the future.

### 15. GENERAL COUNSEL'S REPORT

General Counsel A. Aiko Osugi stated a memo was prepared by request of the Board of Directors, on a summary of AB 1366: Regulating Water Softeners to Protect Water Quality for Recycling. AB 1366 awaits the Governor's signature.

### 16. BOARD MEMBER COMMENTS

Board Member Barth stated she was glad General Manager Michael Thornton was included on the Marine Life Protection Act (MLPA) letter regarding ocean and lagoon reserves. Board Member Barth also stated the City of Encinitas is having public outreach forums on the General Plan and the General Manager may be asked to speak at one of these meetings. The City of Solana Beach is holding similar educational meetings.

Vice Chair Houlihan thanked the SEJPA staff for all their efforts in energy reduction and water quality improvements.

### 17. CLOSED SESSION

None

### 18. <u>ADJOURNMENT</u>

The Board of Directors adjourned at 10:20 a.m. The next Board of Directors meeting will be held on November 9, 2009.

Respectfully submitted,

Michael T. Thornton, P.E.

General Manager

### PAYMENT OF WARRANTS 10-11 30-Oct-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
10-11 WARRANTS		
Ababa Bolt	U-drive, anti-sieze aerosol, and drill - plant	\$210.75
Aire Filter Products	Air handling unit air filters - Moonlight Beach Pump Station	\$138.94
Airgas West	Equipment rental - lab	\$194.16
Alliant Insurance Service, Inc.	Life and disability insurance - November	\$1,841.13
Arrowhead	Kitchen and lab supplies	\$199.16
AT&T	Alarm service - October	\$380.84
Atlas Pumping Service	Grease and scum pumping - September	\$554.88
Atlas Pumping Service	Grease and scum pumping - October	\$554.88
Atlas Pumping Service	Grit and screening - plant - September/October	\$1,484.70
Atlas Pumping Service	Storrmdrain debris	\$742.35
BHA, Inc.	Advanced water treatment - water reclamation	\$4,621.38
Blake, Monica	Expense report - mileage	\$52.28
Boot World, Inc.	Safety boots - E. Hurtado	\$150.00
Brown and Caldwell	Job advertisement	\$100.00
CWEA	Job advertisement	\$275.00
CWEA	Membership renewal - S. Arredondo	\$132.00
California Water Technologies	Ferric chloride - plant	\$5,576.43
City of Solana Beach	Encinitas maintenance facility lease payment	\$13,802.50
Coast Waste Management	Grit and screening stormdrain - Encinitas and Solana P. S.	\$459.67
Complete Office	Office supplies - September	\$92.92
Complete Office	Office supplies - October	\$159.64
Conocophillips Fleet	Vehicle fuel - September	\$1,046.86
Cor-o-van Records Mgmt., Inc.	Record storage - September	\$59.11
County Burner Machinery Corp.	Preventive maintenance on digesters hot water boiler - plant	\$203.00
Covad	T-1 service - October	\$359.00
Creative Printing	Chain of custody forms - lab	\$191.19
CS - Amsco	Part - suction valve - Cardiff P. S.	\$1,359.72
DC Frost Associates, Inc.	Magazine bags for heliclean - plant	\$406.71
DMV	Safety records	\$23.00
Door Service and Repair	Repair rollup door - plant	\$196.00
Edco Waste and Recycling Service	Trash and recycling service - September	\$184.01
ELAP	Permit - environmental lab accreditation - lab	\$2,811.00
Electric Motor Specialists	Rewind stator, new themostats, and bearings - Cardiff P. S.	\$1,867.56
Encinitas Ford	Brake service - pump run vehicle	\$641.93
Feguson Waterworks	Piping for WAS flow meter - plant	\$304.42
Ferreligas	Propane for forklift - plant	\$47.77
Filter Belts	Belt press - replacement belts	\$1,946.63
Flo-Systems, Inc.	Impeller, wear ring, and fronthead - Eden Garden P. S.	\$8,988.08
Golden State Overnight	Mailing monthly reports - compliance reports	\$28.82
Golden State Overnight	Mailing monthly reports - compliance reports	\$53.23
GobioSupplies, LLC	Kitchen supplies	\$207.11
Grainger	Repair epoxy - plant	\$147.56
Grainger	4 inch pressure recorder - water reclamation	\$877.46
Grainger	Containers - plant	\$251.71
Grainger	California state flag - plant	\$39.93
Grainger	Repair epoxy - plant	\$295.10
H-B Instrument	Certify thermometer - lab	\$331.97
Hach	Phosphate standard and phosver 3 reagent - wtr rec.	\$144.66
Hach	Rotomold sampler - plant	\$5,957.72
Harbor Freight Tools	Welding cart and helmet	\$114.72

### PAYMENT OF WARRANTS 10-11 30-Oct-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
Harbor Freight Tools	Pump, ratchet extendable, j/b stik, and socket set - plant	\$91.26
Hardy Diagnostics	Brilliant green bile, lauryl tryptose, and azide broth - outfall	\$475.38
Hardy Diagnostics	E. faecalis, e. coli, and s. aureus - outfall	\$397.29
Henke, Michael	Expense report - mro stop vfd, keypad cable, flush mount	\$944.87
Hoch, Adam	Expense report - mileage and seminar	\$41.13
Horizon Health	Employee Assistance Program - October	\$351.12
Ingersoll Rand	Compressor inspection - water reclamation	\$460.00
Jani-King	Janitorial service - October	\$882.64
Kennedy / Jenks Consultants	Advanced water treatment project	\$30,094.42
Konica	Monthly copier maintenance	\$92.55
Larsen, Casey	Expense report - VFD line reactor - Olivenhain P. S.	\$3,535.00
Leaf & Cole, LLP	Audit - progress billing	\$8,425.00
Lewis, Greg	Expense report - meeting	\$54.95
Mike Roth	Website design and restructure - invoice number 1	\$5,600.00
Mike Roth	Website design and restructure - invoice number 2	\$5,600.00
O.M.W.D.	Manchester - 08/10 - 09/09	\$32.30
Olin	Sodium hypochlorite - water reclamation	\$3,953.98
OneSource Distributors, LLC	AB 1761 - netaic advance interface - water reclamation	\$225.22
OneSource Distributors, LLC	Service blower #6 - plant	\$1,601.25
PERS - Retirement	Retirement premium - 10/09/09	\$12,206.46
PERS - Retirement	Retirement premium - 10/23/09	\$11,818.27
Preferred Benefit	Dental and vision insurance - October	\$1,731.69
Probuild	Repairs, shop and field supplies - September	\$260.16
Procopio	Legal services - general - September	\$5,640.83
RSF Security Systems	Upgrade for alarm system - Cardiff P. S.	\$695.00
RSF Security Systems	Upgrade for alarm system - Olivenhain P. S.	\$695.00
Rohan & Sons, Inc.	Repair two leaks at the outer coil - water reclamation, lab	\$332.50
Rohan & Sons, Inc.	90 days maintenance service - September - plant	\$343.93
SHRM	Membership renewal - G. Lewis	\$160.00
SWRBC	Operator certification renewal - M. Dietrich	\$170.00
San Diego Gas and Electric	Cardiff P. S 09.08.09 - 10.07.09	\$1,440.65
San Dieguito Water District	Manchester - 07/27 - 09/21	\$164.43
San Dieguito Water District	Manchester - 07/27 - 09/21	\$211.74
San Dieguito Water District	Manchester - 07/27 - 09/21	\$138.96
San Dieguito Water District	Manchester - 08/27 - 09/29	\$2,214.39
San Dieguito Water District	Manchester - 08/27 - 09/29	\$180.20
San Dieguito Water District	Manchester - 08/27 - 09/29	\$502.44
San Dieguito Water District	Manchester - 08/27 - 09/29	\$231.08
San Dieguito Water District	Manchester - 08/27 - 09/29	\$648.72
San Dieguito Water District	S. Coast Highway 101 - 07/27 - 09/21	\$38.80
San Elijo Payroll Account	Payroll - 10/09/09	\$73,838.26
San Elijo Payroll Account	Payroll - 10/23/09	\$67,555.78
Santa Fe Irrigation District	Water service - Lomas Santa Fe Dr 07/15 - 09/16	\$1,116.40
Santa Fe Irrigation District	Water service - Valley - 08/31 - 09/30	\$33.59
Saturn Electric	Cardiff P. S. generator and electrical improvements	\$6,648.31
Siemens Water Technologies Corp.		\$693.72
•	Hydrogen peroxide - Olivenhain and Cardiff P. S.	\$2,898.79
	9" x 6 " signs - water reclamation	
Sign Line Smart & Final	Kitchen supplies	\$592.69 \$91.57
	Vehicle maintenance	\$81.57 \$40.27
Sound Billing		\$40.27 \$657.63
Sprint Stituboroo	Cellular phone service	\$657.63
Stitcheree	Employee shirts and aprons	\$178.42

### PAYMENT OF WARRANTS 10-11 30-Oct-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
Terminix	Pest control - October 2009 - October 2010	\$942.84
Terra Renewal / Fleet	Biosolids hauling - September	\$12,124.14
Test America	Lab testing - September	\$465.00
Test America	Lab testing - October	\$594.00
The SoCo Group Inc.	Pump and electric motors - water reclamation	\$574.57
Thornton, Michael	Expense report - meetings	\$69.69
Trussell Technologies, Inc.	Treatment process analysis - August	\$3,290.00
UPS	Shipping - parts and lab supplies	\$28.06
USA Bluebook	Stenner pump for ferric - plant	\$397.86
Underground Service Alert	Dig alert - September	\$126.00
Unifirst Corporation	Uniform service - September	\$149.00
Unifirst Corporation	Uniform service - October	\$164.71
Union-Tribune	Legal notice for biddings	\$416.00
VWR International, Inc.	Lab supplies - Pipet filler red - lab, outfall, and wtr rec.	\$76.21
VWR International, Inc.	Lab supplies - Tubes, filters - lab, outfall, and wtr rec.	\$621.09
VWR International, Inc.	Lab supplies - TB norprene A60G - lab, outfall, and wtr rec.	\$53.17
	Total 10-11 Warrants:	\$337,920.97

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

30-Oct-09

PAYMENT OF WARRANTS Reference Number

11-10

\$337,920.97

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.

Greggry Lewis

Director of Finance/Administration

Treasurer

### STATEMENT OF FUNDS AVAILABLE FOR PAYMENT OF WARRANTS AND INVESTMENT INFORMATION AS OF

### 30-Oct-09

FUNDS ON DEPOSIT WITH		AMOUNT
LOCAL AGENCY INVESTMENT FUND (SEPTEMBER 2009 YIELD 0.90%)		
SELF INSURANCE RESERVE RESTRICTED SRF RESERVE UNRESTRICTED DEPOSITS	\$ \$	630,000.00
CALIFORNIA BANK AND TRUST (SEPTEMBER 2009 YIELD 0.10%)		
REGULAR CHECKING PAYROLL CHECKING	\$ \$	676.16 5,000.00
TOTAL RESOURCES	\$	6,910,715.77

### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

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 September 2009. The primary indicators of treatment performance include the removal of Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Suspended Solids (TSS). Treatment levels for CBOD and TSS exceeded monthly percent removal requirements (as shown in Figure 1 and Figure 2).

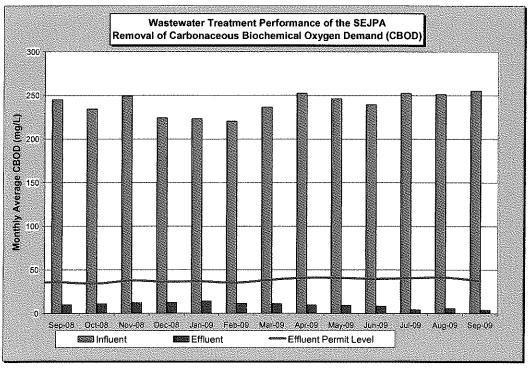


FIGURE 1

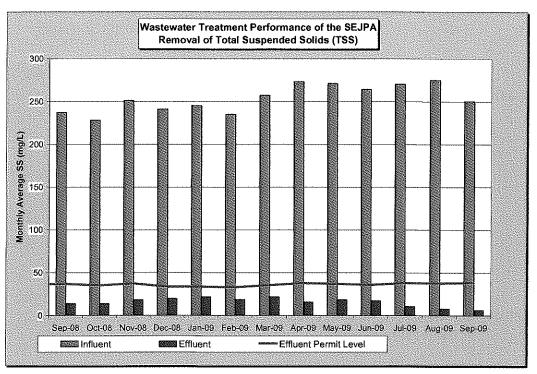


FIGURE 2

### Member Agency Flows

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

	Septe	ember
	Influent (mgd)	Effluent (mgd)*
Cardiff Sanitary Division	1.404	0.690
City of Solana Beach	1.346	0.661
Rancho Santa Fe SID	<u>0.108</u>	<u>0.053</u>
Total San Elijo WRF Flow	2.858	1.404

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

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

The attached figure presents the 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 typically ranges between 2.9 and 3.1 million gallons per day (mgd). Also shown on the figure, 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.

<sup>\*</sup> Effluent is calculated by subtracting the recycled water production from the influent wastewater.

### 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 flows are reported by the City of Escondido for the month of September:

	September (mgd)
Escondido (Average flow rate)	9.4
Escondido (Peak flow rate)	18.6

### Connected Equivalent Dwelling Units

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

	September (EDU)
Cardiff Sanitary Division	8,187
Rancho Santa Fe SID	468
City of Solana Beach	7,428
San Diego (to Solana Beach)	300
Total EDUs to System	16,383

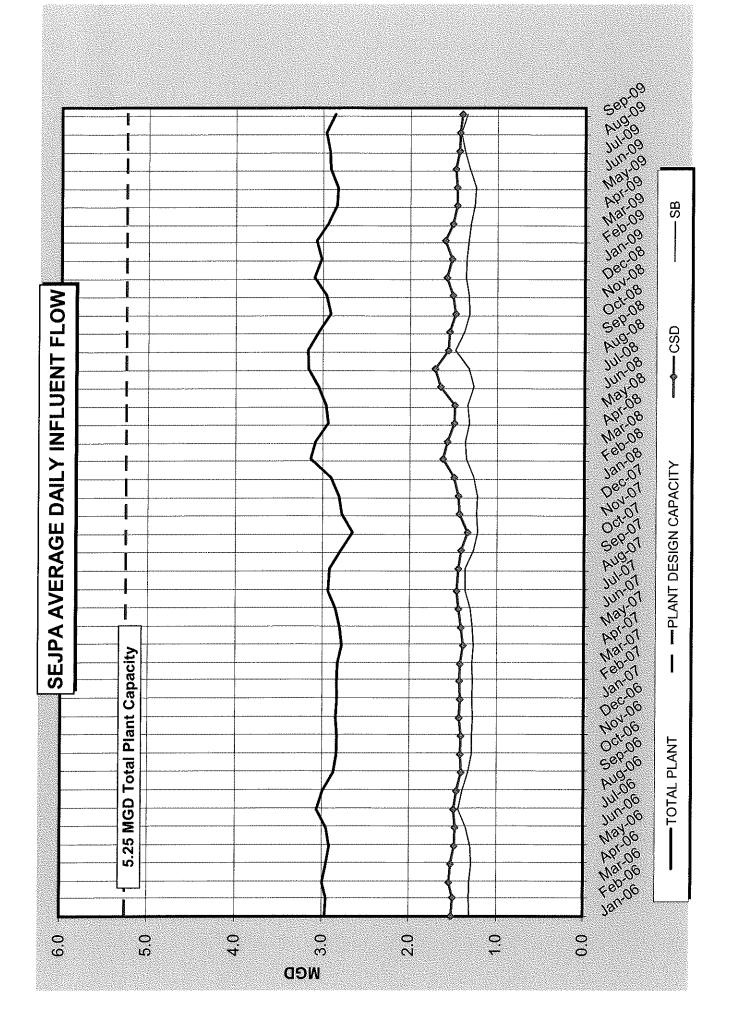
Respectfully submitted,

Michael T. Thornton, P.E.

General Manager

Attachments: Table: SEWRF Monthly Report – Flows and EDUs

Figure: Average Daily Flow



# SAN ELIJO WATER RECLAMATION FACILITY MONTHLY REPORT - FLOWS AND EDUS

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  | 155<br>165   | 166   | 164   | 166   
   
   
   
   
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   | 164            | 192  | 178  | 171  | 172  | 176    | 175  | 777  
   | 163  | 161  | 171  | 178  | 184   
  | 174  |  |                    |  |
| GAL/EDU                      | RSF                                    | 329   | 329  | 328   | 312   
   
   
   
   
   
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  | 313  | 333<br>319  | 300   | 311   | 317   
  | 290  | 266   | 273   | 237   
   
   
   
   
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   | 356  | 326  | 274  | 299  
   | 288            | 274  | 264  | 242  | 256  | 338    | 306  | 368  
   | 251  | 252  | 248  | 234  | 242   
  | 231  | ad   | San Diego          |  |
| VERAGE U                     | SSD                                    | 188   | 192  | 189   | 183   
   
   
   
   
   
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  | 184  | 180<br>173  | 175   | 174   | 176   
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  | 177  | 180   | 8/1/8   | 164   | 176   
   | 177   
   
   
  | 183  
   | 199  | 192  | 183  | 182  
   | 202            | 191  | 189  | 181  | 185  | 193    | 186<br>190   | 186<br>185   
   | 179  | 179  | 181  | 176  | 175   
  | 171  | is flow of .131 m  | Is for the City of |  |
|                              |  | 3,126   | 127  | 3,196   | 3,223   
   
   
   
   
   
   | 3,238   
   
   
   
   
   
  | 5,246  | 3,248   | 3,252   | 3,256   | 3,263   
  | 277  | 3.284   | 3,290   |   
   
   
   
   
  | 3,294  | 3,297   | 303   | 303   |   
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  | 3,327  
   | 3,334  | 3,335  | 3335   | 3,337  
   | 345            | 3.350  | 3,354  | 3,358  | 3,361  | 3,362  | 3,367  | 377  
   | 3.374  | 3,377  | 3,378  | 3,381  | 3,381   
  | 383  | les San Elijo Hill   | ncludes 300 EDL    | 1  |
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| CONNE                        | EDUS                                   | 42  | 4 4<br>7 5   | 42  | 42  
   
   
   
   
   
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  | £4.  | 24<br>2, 6, 4,  | 43  | 43  | 43  
  | <del>1</del> 4   | 4   | 44  | 4   
   
   
   
   
  | 44   | 4.<br>10. i   | Q 4<br>C 7,4  | 45  | 45  
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   | ¢4.<br>₹4.     | 5 5  | 45   | 46   | 46   | 46.    | 04.0   | 46.  
   | 46   | 46   | 46   | 46   | 46  
  | 46   | ASSUMPTION   |                    |  |
| CSD                          | EDUS                                   | 8,044   | 8.044  | 8,044   | 8,066   
   
   
   
   
   
   | 8,080   
   
   
   
   
   
  | χ'Ω\$'<br>0  | 8,092   | 8,092   | 8,094   | 8,099   
  | 8,106  | 8,112   | 8,115   | 8,116   
   
   
   
   
  | 8,117  | 8,119   | 8,120   | 8,124   | 8,138   
   | 8,144   
   
   
  | 8,146  
   | 8,150  | 8,151  | 8,151  | 8,153  
   | 8,101<br>8,163 | 8,165  | 8,167  | 8,170  | 8,171  | 8,172  | 0,177  | 8.180  
   | 8,183  | 8,185  | 8,185  | 8,186  | 8,186   
  | 8,187  |  |                    |  |
| TOTAL                        | PLANT                                  | 2.758   | 2.864  | 2.712   | 1.927   
   
   
   
   
   
   | 1.529   
   
   
   
   
   
  | 1.477  | 1,520   | 1.888   | 2.208   | 2.578   
  | 2,550  | 2.016   | 1.738   | 1.514   
   
   
   
   
  | 1.380  | 1.319   | 1 179   | 1.545   | 2.179   
   | 2.688   
   
   
  | 2.898  
   | 2.903  | 2.477  | 2.270  | 1.504  
   | 1.335          | 1.233  | 1.601  | 1.321  | 2.114  | 2.835  | 2.489  | 2.007  
   | 1.419  | 1.375  | 1.403  | 1.217  | 1.248   
  | 1.404  |  |                    |  |
| )<br>()                      | SB                                     | 1.219   | 1.252  | 1.184   | 0.859   
   
   
   
   
   
   | 0.699   
   
   
   
   
   
  | 0.083  | 0.704   | 0.857   | 1.003   | 1.156   
  | 1.150  | 0.917   | 0.794   | 0.693   
   
   
   
   
  | 0.632  | 0.613   | 0.537   | 0.712   | 0.969   
   | 1.171   
   
   
  | 1.266  
   | 1.254  | 1.097  | 1.019  | 0.680  
   | 0.490          | 0.577  | 0.724  | 0.599  | 0.950  | 1.246  | 1.117  | 0.892  
   | 0.630  | 909.0  | 0.635  | 0.573  | 0.598   
  | 0.661  |  |                    |  |
|                              | (SF CSD                                | 0.129   | 0.137  | 0.128   | 0.089   
   
   
   
   
   
   | 0.068   
   
   
   
   
   
  | 0.000  | 0.072   | 0.088   |   | ~ ~   
  | 0.109  | 0.085   | 920.0   | 0.058   
   
   
   
   
  |  | 0.049   | 0.044   | 0.056   | 0.088   
   | 0.137   
   
   
  | 0.144  
   | 0.150  | 0.119  | 0.097  | 0.069  
   | 0.032          | 0.048  | 0.064  | 0.051  | 0.084  | 0.143  | 0.1.0  | 0.085  
   | 0.058  | 0.057  | 0.056  | 0.045  | 0.047   
  | 0.053  |  |                    |  |
|                              |  | 1.410<br>1.268  | 1.475  | 1.400   | 0.979   
   
   
   
   
   
   | 0.762   
   
   
   
   
   
  | 0.7.5<br>0.7.48  | 0.744   | 0.943   | 1.100   | 1.296<br>1.205  
  | 1.284  | 1.014   | 0.868   | 0.763   
   
   
   
   
  | 0.697  | 0.657   | 0.596   | 0.777   | 1.122   
   | 1.380   
   
   
  | 1.488  
   | 1.499  | 1.261  | 1.154  | 0.755  
   | 0.047          | 0.608  | 0.813  | 0.671  | 1.080  | 1.446  | 1.200  | 1.030  
   | 0.731  | 0.712  | 0.712  | 0.599  | 0.603   
  | 0.690  |  |                    |  |
| and the first of the section | PLANT                                  | 2.964   | 2.995  | 2.950   | 2.913   
   
   
   
   
   
   | 2.951   
   
   
   
   
   
  | 0000   | 2.868   | 2.832   | 2.827   | 2.842   
  | 2.831  | 2.824   | 2.775   | 2.798   
   
   
   
   
  | 2.846  | 2.934   | 2 787   | 2.653   | 2.778   
   | 2.811   
   
   
  | 2.903  
   | 3.137  | 3.083  | 2.936  | 2.902  
   | 3.168          | 3.170  | 3.046  | 2.908  | 2.958  | 3.098  | 3.074  | 2.941  
   | 2.841  | 2.829  | 2.913  | 2.922  | 2.963   
  | 2.858  |  |                    |  |
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  | 1.268  
   | 1.355  | 1.365  | 1,318  | 1.339  
   | 1.324          | 1.483  | 1.378  | 1.319  | 1.329  | 1.362  | 1330   | 1.307  
   | 1.262  | 1.247  | 1.319  | 1.376  | 1.419   
  | 1.346  | rict   |                    |  |
| (MGD)                        |  |   |  |   |   
   
   
   
   
   
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  | # Santan   | Ranch Sant   | Beach              |  |
|                              | ±NOM.                                  | Jan-Ut  | Mar-06   | Apr-06  | May-06  
   
   
   
   
   
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   | Jul-08         | Aug-08   | Sep-08   | Oct-08   | Nov-08   | Dec-or | Feb-09   | Mar-09   
   | Apr-09   | May-09   | go-unr   | 60-Inr   | Aug-08  
  | CSD- Card  | RSF CSD: (   | SB: Solana         |  |
|                              | (MGD) TOTAL TOTAL CSD RSF CSD SR TOTAL | (MGD) TOTAL CSD RSF CSD SB PLANT EDUS EDUS EDUS EDUS EDUS | (MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF         SB         SB         TOTAL         CSD         RSF         SB         TOTAL         TOTAL | (MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         TOTAL         CSD         RSF         SB         TOTAL         TOTAL         CSD         RSF         SB         TOTAL         TOTAL         TOTAL         SB         TOTAL         TOTAL | (MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF         SB         TOTAL         SB         TOTAL         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         TOTAL         TOTAL <t< td=""><td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RSF         SB         TOTAL<td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF         CSD         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RSB         TOTAL         RSF         RSB         RSB</td><td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         CSD         RSF         CSD         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RS</td><td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CAL/EDUIDAY)           CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB           1.515         0.139         1.310         2.964         1.410         0.129         1.219         2.758         8,044         423         7,659         16,126         188         329         171           1.542         0.139         1.309         2.995         1.475         0.137         1.252         2.864         8,044         424         7,659         16,126         188         329         171           1.523         0.139         1.288         2.950         1.475         0.128         1.184         2.712         8,044         424         7,758         16,127         171           1.523         0.139         1.288         2.950         1.400         0.128         1.184         2.712         8,044         424         7,758         16,127         18           1.480         0.134         1.299         2.913         0.089         0.089         0.899&lt;</td><td>CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         RSF-CSD</td><td>(MGD)         TOTAL LOSD         RSF CSD         SB         TOTAL LOSD         CSD         RSF CSD         RSF CSD         SB         TOTAL LOSD         RSF CSD         RSF CSD</td><td>  MGD    TOTAL   CSD   RSF CSD   SB   PLANT   CSD   RSF CSD   SB   TOTAL   CSD   RSF CSD   TOTAL   TOTAL   CSD   TOTAL   TOTAL   CSD   TOTAL   TO</td><td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         RSF</td><td>(MED)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSP         TOTAL         RSP         TOTAL         T</td><td>CSD         RSFCSD         SB         TOTAL         CSD         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         RSF         TOTAL         RSF         RSF         RSF         RSF         RSF         RSF         RSF         RSF<td>  CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   R</td><td>(SD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSP CSD         TOTAL         TOTAL         CSD         RSP CSD         TOTAL         TOTAL</td><td>CSD         RSFCSD         SB         TOTAL         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         TOTAL         TOTAL</td><td>  CSD   RSF CSD   SB   TOTAL   CSD   RSF CSD   SB   CALEBOURAN   CSD   RSF CSD   SB   CSD   CSD  </td><td>(MGD)         (MGD)         (MGD)         CONNECTED E018         CO</td><td>MKGD         TOTAL         CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         SB         TOTAL           1.515         0.139         1.210         2.964         1.410         0.129         1.219         2.758         BCANT         EDUS         EDUS         EDUS         EDUS         CSD         RSF-CSD         SB         171         1.410         0.129         1.219         2.758         BOA4         4.23         7.659         16.126         171         1.411         2.788         BOA4         4.24         7.659         16.126         171         171         171         172         1.659         1.71         188         3.29         171         171         1.411         2.447         8.044         4.24         7.659         16.126         171         1.411         2.447         8.044         4.24         7.788         16.289         171         171         171         171         1.411         1.411         2.444         4.24         7.659         16.229         171         171         171         1.411         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414<td>  CALE DUNNECTED   CONNECTED   CONNECTED   CONNECTED   CALE DUNNECTED   CALE DUNNATION   CA</td><td>  MACD    CSD   RSF CSD   SB   TOTAL   CSD   TOTAL   TOTAL   CSD   TOTAL   TOTAL</td><td>  CANADA   CANADA   CASD   RSF CSD   SB   CASD   CA</td><td>  California   Cal</td><td>  Heads   130   107AL   CSD   RSF CSD   SB   PANT   EDUS   EDUS  </td><td>                                     </td><td>  Color   Colo</td><td>  CSD   RSF CSD   SB   PLANT   CSD   SSF CSD   SB   PLANT   CSD   SSF CSD   SSF CSD   SB   CSD CSD   CSD CSD   CSD CSD   CSD CSD CSD   CSD CSD CSD   CSD CSD   CSD CSD   CSD CSD   CSD CSD   CSD CSD   CSD CSD CSD   CSD CSD CSD   CSD CSD CSD CSD   CSD CSD CSD CSD   CSD CSD CSD CSD   CSD CSD CSD CSD CSD   CSD CSD CSD CSD CSD CSD CSD   CSD CSD CSD CSD CSD CSD CSD CSD CSD CSD</td><td>  CSD   RSF CSD   SSG   P-M**   CSD   RSF CSD   CSD   RSF CSD   CS</td><td>  Color   Colo</td><td>                                     </td><td>  Color   Colo</td><td>  Color   Colo</td><td>  Column   C</td><td>  Courtie   Cour</td><td>  Color   Colo</td><td>  Color   Colo</td><td>  10.00   1.00  </td><td>  Column   C</td><td>  Control   Cont</td><td>                                     </td><td>  Column   C</td></td></td></td></t<> | (MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         CSD         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RSF         SB         TOTAL <td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF         CSD         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RSB         TOTAL         RSF         RSB         RSB</td> <td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         CSD         RSF         CSD         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         SB         TOTAL         RSF         RS</td> <td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CAL/EDUIDAY)           CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB           1.515         0.139         1.310         2.964         1.410         0.129         1.219         2.758         8,044         423         7,659         16,126         188         329         171           1.542         0.139         1.309         2.995         1.475         0.137         1.252         2.864         8,044         424         7,659         16,126         188         329         171           1.523         0.139         1.288         2.950         1.475         0.128         1.184         2.712         8,044         424         7,758         16,127         171           1.523         0.139         1.288         2.950         1.400         0.128         1.184         2.712         8,044         424         7,758         16,127         18           1.480         0.134         1.299         2.913         0.089         0.089         0.899&lt;</td> <td>CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         RSF-CSD</td> <td>(MGD)         TOTAL LOSD         RSF CSD         SB         TOTAL LOSD         CSD         RSF CSD         RSF CSD         SB         TOTAL LOSD         RSF CSD         RSF CSD</td> <td>  MGD    TOTAL   CSD   RSF CSD   SB   PLANT   CSD   RSF CSD   SB   TOTAL   CSD   RSF CSD   TOTAL   TOTAL   CSD   TOTAL   TOTAL   CSD   TOTAL   TO</td> <td>(MGD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         RSF</td> <td>(MED)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSF         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSP         TOTAL         RSP         TOTAL         T</td> <td>CSD         RSFCSD         SB         TOTAL         CSD         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         TOTAL         RSF         RSF         TOTAL         RSF         RSF         RSF         RSF         RSF         RSF         RSF         RSF<td>  CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   SB   FOTAL   CSD   RSF CSD   R</td><td>(SD)         TOTAL         CSD         RSF CSD         SB         TOTAL         CSD         RSF CSD         RSP CSD         TOTAL         TOTAL         CSD         RSP CSD         TOTAL         TOTAL</td><td>CSD         RSFCSD         SB         TOTAL         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         RSFCSD         CSD         TOTAL         TOTAL</td><td>  CSD   RSF CSD   SB   TOTAL   CSD   RSF CSD   SB   CALEBOURAN   CSD   RSF CSD   SB   CSD   CSD  </td><td>(MGD)         (MGD)         (MGD)         CONNECTED E018         CO</td><td>MKGD         TOTAL         CSD         RSF-CSD         SB         TOTAL         CSD         RSF-CSD         SB         TOTAL           1.515         0.139         1.210         2.964         1.410         0.129         1.219         2.758         BCANT         EDUS         EDUS         EDUS         EDUS         CSD         RSF-CSD         SB         171         1.410         0.129         1.219         2.758         BOA4         4.23         7.659         16.126         171         1.411         2.788         BOA4         4.24         7.659         16.126         171         171         171         172         1.659         1.71         188         3.29         171         171         1.411         2.447         8.044         4.24         7.659         16.126         171         1.411         2.447         8.044         4.24         7.788         16.289         171         171         171         171         1.411         1.411         2.444         4.24         7.659         16.229         171         171         171         1.411         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414         1.414<td>  CALE DUNNECTED   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EDU: Equivalent Dwelling Unit

AGENDA ITEM NO. 10

### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

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 September 2009, recycled water demand was 130.55 acre-feet (AF), which was met using 129.03 AF of recycled water and 1.52 AF of supplementation with potable water. This equates to a blend mix for September of 98.8 percent recycled water and 1.2 percent potable water supplementation.

The attached Figure 1 provides monthly supply demands for recycled water since the inception of the program. The attached Figure 2 provides a graphical view of annual recycled water demand spanning the last nine fiscal years. Recycled water demand can fluctuate from year to year, which is typically a function of weather. For example, Fiscal Year 2003-04, an unusually dry year, resulted in increased recycled water demand; and Fiscal Year 2004-05, an unusually wet year, resulted in lower recycled water demand.

### Recycled Water Quality

The SEJPA recycled water meets all of its water quality requirements consistently, except for one, Total Dissolved Solids (TDS). TDS is a measurement of dissolved salts and minerals (e.g. calcium, magnesium, sulfate, chloride, sodium, etc.), similar to table salt with particles too small to see with the naked eye. It is typical for recycled water to have a higher TDS concentration than potable water and TDS values above 1100 mg/liter can limit the use of recycled water for landscape irrigation. The San Diego Regional Water Quality Control Board (San Diego Regional Board) has placed permit limits of 1200 mg/liter for a 12-month average and 1300 mg/liter for a daily maximum on the SEJPA's recycled water program. Over the last two years, the SEJPA has observed an increase in TDS loading in the wastewater treated by the agency. This loading is most likely a result of recent reductions in imported water (low in TDS) from northern California, an increase in local water (high

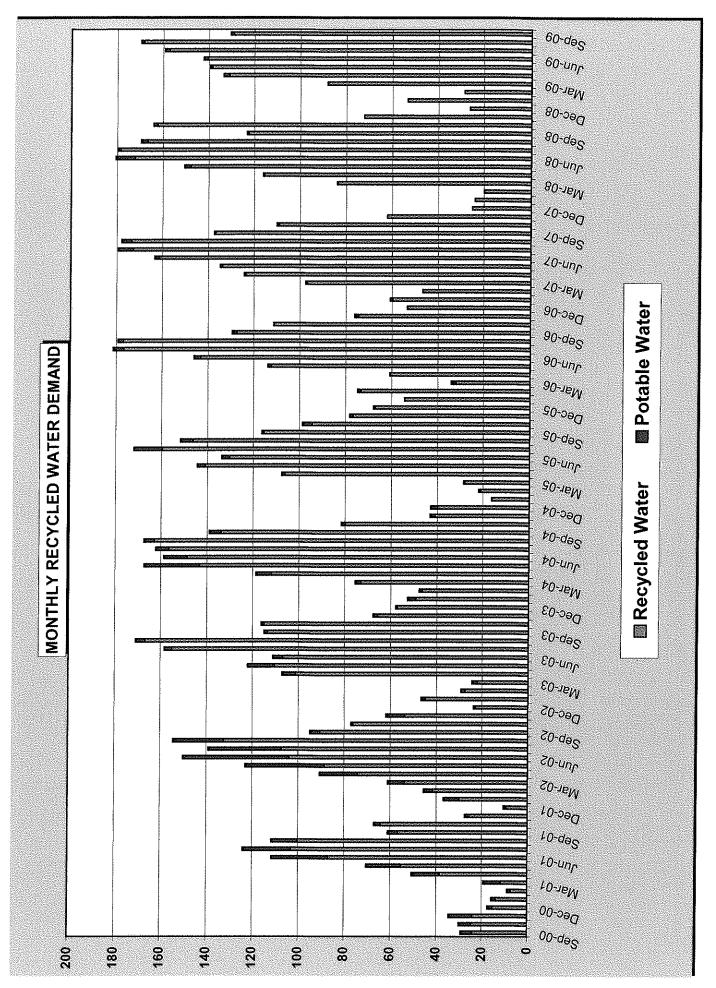
in TDS), and the use of water softeners within the service area of the SEJPA. Since 2008, the SEJPA has violated its daily maximum TDS limit on 29 occasions. In addition, for the last 12-months ending in September 2009, the SEJPA recycled water had average of 1201 mg/liter for TDS, which exceeds the permit limit of 1200 mg/liter.

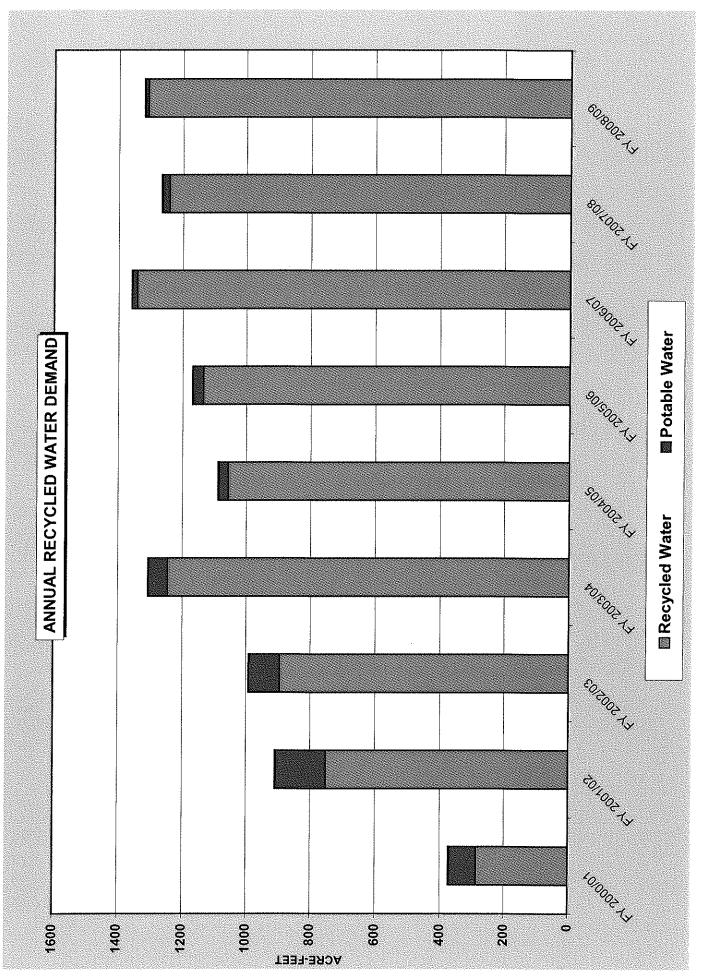
To address TDS loadings, the SEJPA is pursuing the design of a recycled water demineralization project to reduce the overall salinity level of the recycled water. Currently, the design of the treatment system is at the preliminary level with recommendations for a final design expected to be presented to the SEJPA Board of Directors in December 2009. Staff is concurrently working on financing options through the state of California's State Revolving Fund loan program. Preliminary cost estimate for the project is \$3.8 million to \$4.3 million. Staff has been corresponding with the San Diego Regional Board regarding TDS compliance concerns and to discuss the SEJPA's efforts in pursuing treatment options.

Respectfully submitted,

Michael T. Thornton, P.E.

General Manager





### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

TO:

**Board of Directors** 

San Elijo Joint Powers Authority

FROM:

General Manager

SUBJECT:

APPOINTMENT TO EMPLOYEE COMPENSATION AND BENEFIT AD-HOC

COMMITTEE

### RECOMMENDATION

It is recommended that the Board of Directors:

- Appoint an Employee Compensation and Benefit Ad-Hoc Committee; and
- 2. Discuss and take action as appropriate.

### DISCUSSION

The SEJPA Board of Directors approved Resolution No. 2008-06 in June 2008 approving a two-year salary and benefit plan for the SEJPA employees. The resolution covered Fiscal Years (FY) 2008-09 and 2009-10. It is requested that the SEJPA Board of Directors appoint an Employee Compensation and Benefit Ad-Hoc Committee to meet with management regarding a salary and benefit compensation plan for the upcoming fiscal year.

SEJPA management requests to meet with the Ad-Hoc Committee in November to begin discussions on a compensation and benefit package to be implemented in the next fiscal year(s). The goal would be to finalize negotiations by January and to present recommendations to the full Board of Directors in February 2010. This proposed schedule would allow time for these recommendations to be incorporated into the FY 2010-11 Budget to be presented to the Board of Directors at the April meeting.

It is recommended that the Board of Directors:

- Appoint an Employee Compensation and Benefit Ad-Hoc Committee; and
- 2. Discuss and take action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E.

General Manager

### SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

TO:

**Board of Directors** 

San Elijo Joint Powers Authority

FROM:

General Manager

SUBJECT:

SAN ELIJO RECYCLED WATER PROGRAM - 2009 FINANCIAL ASSESSMENT

### RECOMMENDATION

It is recommended that the Board of Directors:

- Accept and file the 2009 Updated Financial Assessment for the Recycled Water Program;
   and
- 2. Discuss and take action as appropriate.

### **BACKGROUND**

The San Elijo Joint Powers Authority (SEJPA) owns and operates a municipal recycled water utility located in the cities of Encinitas, Solana Beach, and Del Mar. The SEJPA owns the infrastructure of this utility, including the treatment, storage, and distribution facilities, and wholesales the water to the local water districts that have purvey rights to the water customers. The SEJPA currently has agreements with three retail water purveyors, the City of Del Mar, the Santa Fe Irrigation District (SFID), and the San Dieguito Water District (SDWD), for purchasing recycled water and retailing it to the end customer. The total commitment value of these contracts is 1,244 acre-feet per year (AFY) and the current actual usage is approximately 1,300 AFY.

The SEJPA recycled water program has become financially stable and the agency is now examining opportunities to reinvest into the program's infrastructure. The most pressing need of the program is additional treatment to remove total dissolved solids, sometimes referred to as salinity, from the recycled water. In recent years the total dissolved solids (TDS) concentration or loading in the water has increased. This is likely caused by changes in the local water supply due to drought and other issues that have increased the salinity of the potable water as well as the use of water softeners within the SEJPA service area, which can add salts to the wastewater. The increase in TDS loadings has at times caused the recycled water to exceeded permitted levels, as established by the San Diego Regional Water Quality Control Board. The higher TDS levels do not pose a health threat, but can have a negative impact to landscape and crops over the long term. Currently, the SEJPA is pursuing the design of a demineralization system that would reduce the TDS loading in the recycled water to levels well within permit requirements.

In addition to improving water quality, the SEJPA has identified opportunities to continue the growth of the recycled water program. Working closely with the San Dieguito Water District, Santa Fe Irrigation District, the City of Del Mar, and the 22<sup>nd</sup> District Agricultural Association, new customers and opportunities have been identified to expand the use of recycled water. The state of California is in a multi-year, state wide drought. Many of the local water districts have enacted ordinances that require mandatory conservation. Water recycling is a very effective conservation practice resulting in a 100 percent offset of potable water demands. For these reasons, improving water quality and expanding treatment capacity may be prudent investment for the SEJPA at this point in time.

### <u>DISCUSSION</u>

The SEJPA has examined options for improving and expanding its recycled water utility. A variety of infrastructure improvements have been identified to improve water quality, increase the serving capacity, and enhance system reliability. To assist the SEJPA in evaluating the recycled water program's ability to carry new infrastructure debt, the firm of Winzler & Kelly was retained to perform a financial assessment of the program. The scope of work for this assessment included:

- Conduct a third party review of the program's current financial situation and provide observations and recommendations that stem from the review,
- Perform a financial analysis of future planning scenarios in order to guide decisions around investments in proposed capital improvement activities, and
- Provide an economic justification for the proposed capital improvements.

Staff submitted the draft-final report of the financial assessment to the SEJPA Board of Directors at the July 2009 Board meeting. The Board of Directors complemented the staff for their efforts in preparing the report and requested that a discussion be added on risks that face the program.

The final report submitted today includes discussion on potential risks and risk mitigation strategies for the recycled water program. The report also provides seven modeled scenarios all of which included funding for desalinization treatment. The scenarios ranged from investing \$2.8 million to \$7.8 million in near-term capital projects. The goal was to develop a series of planning scenarios that book-end the probable financial outcome of the program given the capital investments and corresponding likely market growth being considered.

Winzler & Kelly's report (Attachment) concludes that "The recycled water program's recent history indicates that it is in a good financial position. Revenues regularly outpace costs and the available fund balance exceeds annual expenses. Because approximately one-half of the program's expenditures (debt service) are a fixed cost, inflation-based increases to water rates are likely to outpace inflation-based increases to expenditures. The program has some capacity to make careful, planned investments."

### RECOMMENDATION

It is recommended that the Board of Directors:

- Accept and file the 2009 Updated Financial Assessment for the Recycled Water Program; and
- 2. Discuss and take action as appropriate.

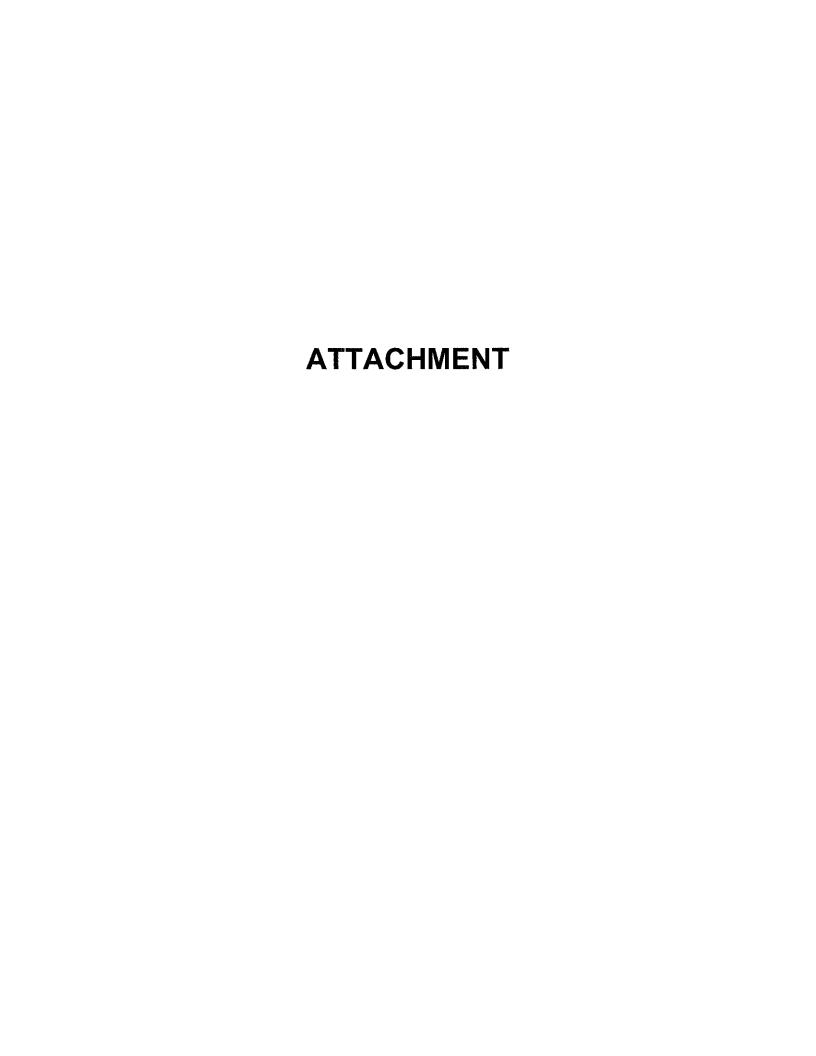
Respectfully submitted,

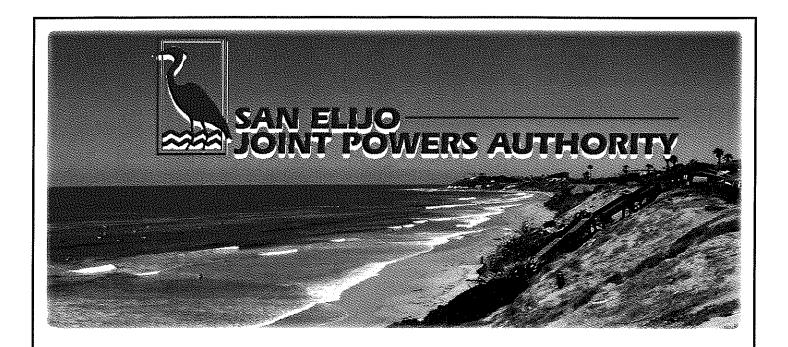
Michael T. Thornton, P.E.

General Manager

Attachment: Winzler & Kelly 2009 Updated Financial Assessment For The Recycled Water

Program





## UPDATED FINANCIAL ASSESSMENT FOR THE RECYCLED WATER PROGRAM

October 2009

Prepared by:

Winzler & Kelly 4180 Ruffin Road, San Diego, CA

# San Elijo Joint Powers Authority Updated Financial Assessment for the Recycled Water Program

October 2009

Prepared by:

Winzler & Kelly 4180 Ruffin Road, San Diego, CA

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### Appendix

- 1. Santa Fe Irrigation District Letter and San Dieguito Water District Resolution
- 2. Metropolitan Staff Report
- 3. Regional Board Correspondence

### Background

The San Elijo Joint Powers Authority (SEJPA) owns and operates a recycled water utility which wholesales recycled water to the Santa Fe Irrigation District (SFID), the San Dieguito Water District (SDWD) and the City of Del Mar. The SEJPA financed, permitted and constructed the recycled water treatment, storage and distribution system, which became operational in September 2000. The SEJPA's recycled water program (program) currently delivers approximately 1,300 acre-feet per year (afy) of recycled water to its retail partners.

Much like a business venture, the early years of the program were financially challenging. During the first six years of operations, the program's expenditures exceeded revenues. However, as water sales grew and the value of water increased, the program became financially secure. For the past three years revenues have exceeded expenditures and the program has built-up a dedicated repair-replacement reserve of \$630,000. In addition, the program has an operating fund balance of approximately \$2.3 million, which can be used to fund capital improvements and to bridge budget shortfalls, should they reappear in the future.

The program has long-term debt in the form of a State Revolving Fund (SRF) loan with an estimated balance of \$8.5 million. At the current rate of repayment, this debt is projected to be paid off in 14 years. The program has an internal debt to the SEJPA member agencies<sup>1</sup> of approximately \$4.7 million.

At the present time, the program is at a crossroads. It is financially successful at its current size, but state and regional water supply restrictions are placing pressure on the retail water suppliers and creating an environment in which it may be very attractive to expand the volume of water delivered. Additionally, while the program provides recycled water that meets Title 22 standards for unrestricted use, the program is struggling to meet Total Dissolved Solids (TDS) limits as required by the San Diego Regional Water Quality Control Board (San Diego Water Board) and by contractual requirement with the water districts that purchase the recycled water. Proactively

<sup>&</sup>lt;sup>1</sup> The member agencies are the cities of Encinitas and Solana Beach.

pursuing demineralization treatment would benefit SEJPA, its retailers and ultimately the customers. In order to better understand the program's ability to support new capital debt associated with adding demineralization treatment and other system improvements to increase recycled water production, SEJPA has requested an update to its July 2005 Financial Assessment.

### Goals and Process for the Updated Financial Assessment

SEJPA requested an updated financial assessment that:

- provides a third party review of the program's current financial situation including observations and recommendations that stem from the review; and
- includes a financial analysis of future planning scenarios in order to guide decisions around investments in proposed capital improvement activities.

The primarily goals of the updated financial assessment are to:

- provide decision makers with information on the cost of providing recycled water service relative to revenues generated from the program;
- provide decision makers with information regarding the estimated future financial condition of the program; and
- provide an economic justification for proposed improvements to the recycled water system.

In order to accomplish these goals, SEJPA worked with its consultant to develop a draft technical memorandum which was presented to the SEJPA Board of Directors in July 2009. The Board provided initial comments on the draft technical memorandum and requested that the staff coordinate with engineering and financial staff from each of the member agencies. Staff received no formal comments from the member agencies and this final Updated Financial Assessment incorporates responses to questions and comments raised by the Board of Directors.

### **Current Financial Situation**

SEJPA's program has two major sources of revenue: recycled water sales and incentive funding provided by both the Metropolitan Water District of Southern California (Metropolitan) and the San Diego County Water Authority (Authority). Recycled water is sold at 85% of the potable water rate which means the recycled water rate is slightly different in each of the three retail water service areas. The current (FY 2009-10) revenue structure for SEJPA is illustrated Table 1 below.

Table 1 FY 2009-10 Revenue Structure

	Recycled Water Rate (AFY)	Volume of Recycled Water Purchased (AF)	Total Revenue
Santa Fe Irrigation District	\$1,071	510	\$546,210
City of Del Mar	\$922	150 <sup>1</sup>	\$138,300
San Dieguito Water District	\$1,003 <sup>2</sup>	710	\$712,130
Incentives (Metropolitan & Authority)	\$450	1,300 <sup>3</sup>	\$585,000
Total Revenue			\$1,981,640

### Notes:

- 1. The City of Del Mar has a take-or-pay agreement with the SEJPA for 150 afy. The estimated Del Mar use for FY 2009-10 is 80 afy. The 22nd Agricultural District of California is responsible for paying the difference.
- 2. The San Dieguito Water District has two rates at which recycled water is sold at (\$922 afy and \$1,125 afy). Sales are roughly split 60/40 between the two rates which produces an average rate of \$1,003 afy.
- 3. Incentives are paid on actual water deliveries which are estimated to be 510 afy to SFID, 80 afy to Del Mar and 710 afy to SDWD for a total of 1,300 afy.

SEJPA has two major categories of expenditure: debt service on the SRF loan used to construct the system and operating costs. The current (FY 2009-10) budgeted expenditures for the program are outlined in Table 2.

Table 2 FY 2009-10 Operational Cost Summary

Budgeted Operating Costs	
Debt Service on SRF Loan	\$834,675
Personnel	\$420,130
Supplies & Services	\$522,090
Contingency	\$42,040
Total Expenditures	\$1,818,935

### Recent Revenue and Expenditure History

While SEJPA struggled financially with its recycled water utility in the early years, recent financial performance has been quite solid. Table 3 shows a trend of improving financial performance for the recycled water program.

Table 3 Summary of Financial Trends FY 2004-05 through 2008-09

	2004-05	2005-06	2006-07	2007-08	2008-09
Total Revenues	\$ 1,311,080	\$ 1,450,720	\$1,748,725	\$ 1,818,136	\$ 1,998,371
Total Expenditures	\$ 1,451,475	\$ 1,589,727	\$ 1,601,753	\$ 1,701,029	\$ 1,750,935
Program Cash Flow	\$ (140,395)	\$ (139,007)	\$ 146,972	\$ 117,107	\$ 247,436
Running Fund Balance <sup>1</sup>	\$ 2,802,213	\$ 2,817,739	\$ 2,630,389	\$ 2,890,694	\$ 2,960,587

<sup>1</sup> Running fund balance includes accrued interest and reserves

### Assumptions and Projections for the Status Quo

In order to understand the program's ability to support new capital investments, the current revenue and expenditure pattern was projected forward to the year 2030 using the following assumptions:

- No increase in recycled water deliveries;
- No addition of demineralization treatment, which could be required in the future;
- 5% increase in water rates annually;
- 5% increase in program operating costs annually (debt service and debt service reserve requirements remain fixed);
- SRF loan pay-off in FY 2020-21; and
- Metropolitan and Authority incentives end in FY 2025-26.

The Figure 1 illustrates the results of this modeling and illustrates that the program is financially solvent. In the out-years, as SRF debt is retired, the program is on a path to accumulate substantial fund balances. However, in the Status Quo scenario, the issue of TDS compliance is ignored. Although this is the current situation, there is a strong possibility that the San Diego Water Board could require the SEJPA to comply with the TDS limits in its permit or force the program offline. Also, the water purveyors that purchase recycled water from the SEJPA could seek to renegotiate the terms of the agreements if SEJPA does not meet the contracted water quality objectives. Therefore, it may not be realistic to assume that the SEJPA could continue the Status Quo

indefinitely. Both regulatory and customer service threats could force investments or reduce revenues, or both. It is for these reasons that it is not recommended to pursue the Status Quo or to assume that the Status Quo is a feasible option in future years. Furthermore, since the financial implications of these threats are difficult to quantify, and would only be a guess at his point, Figure 1, Projected Financial Trends – Status Quo, does not include all potential negative impacts, though several of the modeled scenarios attempt to bracket potential effects from mandated investment and no program growth..

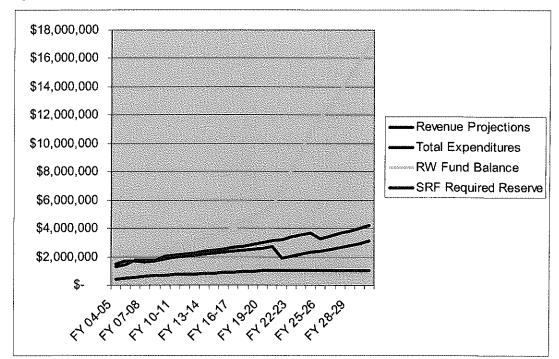


Figure 1 Projected Financial Trends - Status Quo

### Potential Risks and Risk Mitigation Strategies for the Current Program

While the recycled water program appears to be financially stable under current conditions, SEJPA actively monitors potential risks to the system and works to mitigate those risks. Potential risks and mitigation strategies are discussed below.

### Risk: Recycled water contracts with retail agencies expire and are not renewed

As noted, SEJPA has contracts with three retail agencies which purchase recycled water for use in their service areas. While these contracts are subject to regular renewals the risk of cancellation of these agreements is not large for several reasons. First, prior to committing to constructing the system, SEJPA negotiated "take-or-pay" agreements with each retailer assuring that it could sell a minimum amount of recycled water and cover its costs. As illustrated in Table 1, SEJPA currently enforces the "take-or-pay" agreement with the City of Del Mar.

In addition to the agreements, current water supply conditions are favorable to recycled water. The San Dieguito and Santa Fe Water Districts and the City of Del Mar all receive water supply from the Authority, which in turn imports water from Metropolitan. Current drought conditions declared by the Authority have caused many retail agencies to declare a Level 2 water shortage which is encouraging recycled water use. In May 2009, the Santa Fe Irrigation District delivered a letter of inquiry to SEJPA about expanded recycled water service. In September 2009, the San Dieguito Water District adopted a Demand Offset Fee Program that is premised on the development of over 140 afy of new recycled water demands. Both Santa Fe Irrigation District's letter and San Dieguito Water District's Demand Offset Fee Resolution are included in Appendix 1.

Finally, while the current hydrologic drought is receiving significant attention, Metropolitan's water supply has also been impacted by regulatory actions. In 2008, and as result of concerns about ecosystem health in the Sacramento-San Joaquin Delta, a federal court ordered the largest water supply cutback in the history of the State Water Project, which is a major source of imported water. Metropolitan estimates that this has resulted in a reduction of more than one-third of its State Water Project supply. This court action has triggered renewed interest in conservation, recycling and other local supplies in order to offset the regulatory reductions. Metropolitan expects these regulatory reductions to be long term. Appendix 2 contains a staff report from Metropolitan's January 13, 2009 Board meeting which details the water supply reductions and the cost implications of managing these reductions.

Because of the large pressures on the imported water supply, it is reasonable to conclude that the risk of water purveyors cancelling or not renewing the existing agreements is very remote. Recycled water has become an important part of their portfolio. One caveat is that the recycled water quality must be maintained or it loses its value to the purveyor.

### Risk: The drought cycle ends reducing demand for recycled water

As noted above Metropolitan is experiencing water supply curtailments as a result of regulatory decisions as well as drought. Even when climatic conditions return to normal, water supplies will still

be subject to constraints because of ecosystems concerns in the Sacramento-San Joaquin Delta. This regulatory condition favors the development of local water supplies, including recycled water supplies.

#### Risk: Water rate increases could be lower than assumed for modeling purposes

The financial model assumes water rates increasing at a rate of 5 percent per year. The same rate is assumed for inflation. SEJPA staff and consultants believe this assumption is conservative because of the larger issues affecting the wholesale water supplies for San Diego County. As noted above, wholesale water supplies to Metropolitan have been constrained. As described in detail in Appendix 2, these constraints have caused Metropolitan to incur higher costs for purchasing drought supplies and for participating in ongoing technical and environmental work focused on developing a long-term solution to the habitat and ecosystem conditions that have caused regulatory reductions of water supply. Metropolitan expects wholesale water costs to increase 25 to 35 percent over the next several years and on January 13, 2009, the Board approved a 20.7 percent rate increase for Fiscal Year 2009-10. This rate increase will impact local retailers and necessitate increases in their water rates. Because of the large impending increases in wholesale water supply costs, the water rate increases assumed for this model are likely quite conservative.

#### Risk: SEJPA costs could escalate faster than assumed for modeling purposes

While SEJPA is not subject to the same kind of cost pressures experienced by local water agencies, it is possible that future inflation rates could exceed the 5% per year included in the model. However, it is important to note that approximately 50% of SEJPA's costs are fixed debt service payments on its SRF loan and therefore not subject to inflation at all. Because such a large percentage of SEJPA's annual costs are not subject to inflation, the effects of assumptions about inflation do not have substantial impacts on the overall financial model.

## Risk: Recycled water quality could degenerate causing customer and/or regulatory compliance problems

Recycled water has an incrementally higher Total Dissolved Solids (TDS) load than potable water and TDS levels above 1100 mg/liter can limit the use of recycled water for landscape irrigation. SEJPA's agreements with its retail agencies contain limits on TDS (ranging between 1,000 and 1,100 mg/liter) and currently the recycled water can exceed this level. The TDS loading in SEJPA's recycled water is of concern and is the greatest risk identified to the viability of the program. On

numerous occasions, the TDS loadings have exceeded permit limits as set forth by the San Diego Water Board, which has given the SEJPA a notice of violation for exceeding TDS loadings. This notice is included as Appendix 3.

TDS loading in the recycled water is a major risk to the program, but one that can be managed with the addition of demineralization treatment. One of the main purposes of this financial assessment is to assess the program's ability to carry new debt to finance the construction of demineralization treatment. If this issue is not addressed, then the San Diego Water Board could require SEJPA to take corrective action and this could include violation fines and a prescribed time-schedule for compliance.

Undertaking corrective action, such as a demineralization project, with a time schedule, could limit SEJPA's ability to seek partners and obtain attractive financing.

#### **Benefits of the Current Program**

The recycled water program provides local water supply benefits and the analysis of the Status Quo illustrates that recycled water rates are currently covering the costs of recycled water service. However the recycled water program also provides some modest benefits to the sewer system rate payers. Pumping and maintenance costs associated with using the effluent outfall are avoided when water is recycled. In addition, the water recycling program provides enhanced reliability to the sewer system because there is more than one option for effluent disposal. While difficult to quantify economically, enhanced reliability helps avoid the risk of ocean outfall system overflows and accompanying fines. Finally the program provides SEJPA with benefits in the form of community relations. Environmental groups such as Surfrider Foundation, San Elijo Lagoon Conservancy and the San Diego Coastkeeper all support SEJPA's efforts to recycle water and minimize ocean disposal. San Dieguito Water District's recent ability to manage its Level 2 drought restrictions on building permits, through a creative recycled water offset program, is an example of how SEJPA's program contributes to the broader community.

#### **Summary Conclusions**

The recycled water program's recent history indicates that it is in a good financial position. Revenues outpace costs and the available fund balance exceeds annual expenses. Because approximately one-half of the program's expenditures (debt service) are a fixed cost, inflation-based increases to water

rates are likely to outpace inflation-based increases to expenditures. In addition, regional and statewide pressures on imported water supplies are combining to enhance the value of local water supplies, which strengthens the motivation of SEJPA's partner agencies to continue to include recycled water as part of their supply portfolio. This combination of facts suggests that the program has some capacity to make careful, planned investments.

#### Future Planning Scenarios, Assumptions and Results

The analysis of current conditions indicates that the recycled water program has some capacity to pursue new capital projects that can improve and expand the existing program. In order to understand the impacts of these investments, a spreadsheet based financial model was developed to study and analyze the impacts of various planning scenarios on the financial health of the program. A range of assumptions regarding size of the program, the scope of infrastructure investments, inflation rates and financing plans were developed with the SEJPA staff and modeled by the consultant. The intent of this modeling effort was to bracket a reasonable range of assumptions and assist decision makers in targeting an appropriate level of investment while maintaining an overall fiscally sound recycled water utility.

#### **Drivers for Investing in the Recycled Water Program**

There are two primary drivers for investing in the recycled water program: water quality and water supply.

#### Water Quality

As noted above, the TDS in SEJPA's recycled water is approaching or at unacceptable levels. The SEJPA is currently pursuing the design of a demineralization treatment system to maintain TDS levels well within the 1000 mg/l threshold. The preliminary design report is expected to be completed in December 2009, with the final design expected to be completed by fall 2010. If the SEJPA seeks to move the project to construction, financing may be arranged by early 2011 and the project constructed in that same year.

In addition, the State Water Resource's Control Board's newly adopted Recycled Water Policy is clear that water quality must be addressed when recycled water is part of a local water supply. Long-term use of incrementally saltier water can result in groundwater degradation. In order to balance water supply and water quality concerns, the Recycled Water Policy calls for the development of

regional salt and nutrient management plans in the next five to seven years. The Authority is beginning exploratory efforts around regional salinity management and conducted a workshop on October 6, 2009 to help scope the local effort. There are several areas in California where regional salt and nutrient management have been developed: the Santa Ana Watershed Project Authority and the Callegus watershed are notable local examples. In both of these cases, demineralization strategies are part of the long-term suite of solutions that preserve water quality.

Proactive investments in improving water quality will anticipate future regulatory requirements, allowing SEJPA to make these improvements on its own schedule rather than on a regulatory compliance schedule.

#### Water Supply

The Authority's 2005 Urban Water Management Plan (UWMP), which is consistent with Metropolitan's Integrated Resources Plan, recognizes the need for diversified local supplies in order to enhance water supply reliability and reduce the impacts of drought, climate change and regulatory uncertainties around the imported water supply. The Authority's 2005 UWMP identifies the need to develop 14,000 afy in new recycled water supplies by the year 2030 to meet dry year water needs.

Currently, the Authority has all of its member agencies under Drought Alert, which includes a requirement for 20% mandatory conservation. Water recycling is a very effective conservation practice resulting in a 100% offset of potable water demands.

Finally, in addition to the current hydrologic drought, Metropolitan's water supply is increasingly subject to legal restrictions imposed to protect fish species in the Sacramento-San Joaquin Delta, Metropolitan's primary source of supply. These restrictions have curtailed water deliveries, even when the water is hydrologically available, highlighting the fact imported water supplies within Metropolitan's service area may be restricted well into the foreseeable future.

#### **Planning Scenarios**

Five planning scenarios have been developed to model a range of future conditions that SEJPA may experience. These scenarios were designed to help SEJPA understand how future risks or opportunities could affect the program's long-term financial position. The planning scenarios are:

- Scenario 1a No growth (recycled water sales stay at 1300 afy) with demineralization
  improvements financed by a zero interest loan: this scenario involves construction of
  demineralization improvements to meet current demands and improve the quality of water
  delivered to customers. This scenario addresses current water quality concerns and models
  no growth, the low range of future probable costs and a favorable assumption about
  borrowing rates.
- Scenario 1b No growth (recycled water sales stay at 1300 afy) with demineralization
  improvements financed by a market-rate bond sale: this scenario involves construction of
  demineralization improvements to meet current demands and improve the quality of water
  delivered to customers. This scenario addresses current water quality concerns and models
  no growth, the low range of future probable costs and a conservative assumption about
  borrowing rates.
- Scenario 2a Slow growth with demineralization improvements financed by a zero interest loan: this scenario involves construction of demineralization improvements to serve a maximum system demand of 1,600 afy. It also assumes that the system will slowly build-out to capacity by Fiscal Year 2019-20. This scenario addresses current water quality concerns and also takes into account potential water supply needs. It models slow growth, a low range of future probable costs and a favorable assumption about borrowing rates.
- Scenario 2b Slow growth with demineralization improvements financed by an SRF loan: this scenario involves construction of demineralization improvements to serve a maximum system demand of 1600 afy. It also assumes that the system will slowly build-out to capacity by Fiscal Year 2019-20. This scenario addresses current water quality concerns and also takes into account potential water supply needs This scenario models slow growth, a low range of future probable costs and a moderate assumption about borrowing rates.
- Scenario 2c Slow growth with demineralization improvements financed by a market rate bond sale: this scenario involves construction of demineralization improvements to serve a maximum system demand of 1600 afy. It also assumes that the system will slowly build-out to capacity by Fiscal Year 2019-20. This scenario addresses current water quality concerns

and also takes into account potential water supply needs. This scenario models slow growth, a low range of future probable costs and a conservative assumption about borrowing rates.

- Scenario 3 Rapid near-term growth with demineralization, storage and pumping improvements financed by a zero interest loan: this scenario assumes that the current drought conditions will result in contracts for 150 afy of new recycled water use by Fiscal Year 2011-12, with slower build-out to full system capacity by Fiscal Year 2019-20. This scenario assumes investments in demineralization, storage and pumping improvements to meet these new demands. This scenario models moderate growth, driven by a demand for reliable water supply and supported by favorable borrowing rates. Achieving the conditions modeled by this scenario will require active, cooperative work between SEJPA and the retail water agencies to secure the commitments for increased recycled water use and access attractive financing.
- Scenario 4 Rapid near-term growth with demineralization, storage, pumping and distribution improvements financed by an SRF loan: this scenario assumes that the current drought conditions will result in contracts for 150 afy of new recycled water use by Fiscal Year 2011-12, with slower build-out to full system capacity by Fiscal Year 2019-20. This scenario assumes investments in demineralization, storage, pumping and distribution improvements to meet these new demands. This scenario models moderate growth, driven by a demand for reliable water supply and more conservative estimates about project costs and financing rates.

The assumptions and drivers for each scenario are illustrated in Table 4 below. Detailed discussion supporting the various assumptions follows in the next sub-section.

**Table 4 Planning Scenario Summary** 

	Scenario 1a	Scenario 1b	Scenario 2a	Scenario 2b	Scenario 2c	Scenario 3	Scenario 4	
Current Sales	1300 afy							
Future Sales	1300 afy	1300 afy	1600 afy by 2019-20	1600 afy by 2019-20	1600 afy by 2019- 20	1450 afy by 2012-13 and 1600 afy by 2019-20	1450 afy by 2012-13 and 1600 afy by 2019-20	
CIP	Treatment	Treatment	Treatment	Treatment	Treatment	Treatment Pumping Storage	Treatment Pumping Storage Distribution	
Drivers for CIP	Water Quality	Water Quality	Water Quality Water Supply	Water Quality Water Supply	Water Quality Water Supply	Water Supply Water Quality	Water Supply Water Quality	
CIP Budget	\$2.8 M	\$2.8 M	\$3.8 M	\$3.8 M	\$3.8 M	\$5.8 M	\$7.8 M	
SEJPA Contribution	\$1.0 M	\$1.0 M	\$1.0 M	\$1.0 M	\$1.0 M	\$1.0 M	\$1.0 M	
Water Rate Increases	5% per year							
Inflation	5% per year							
Interest on Fund Balance	2% per year							
Borrowing Rates and Terms	0% for 20 years	6% for 30 years	0% for 20 years	3.5% for 20 years	6% for 30 years	0% for 20 years	3.5% for 20 years	
Increase in O&M	\$60,000	\$60,000	\$75,000	\$75,000	\$75,000	\$105,000	\$135,000	

#### **Assumptions**

The following assumptions are reflected in the each of the scenarios modeled. The goal of the analysis is to assist decision makers in bracketing a reasonable range of deliveries. All cost estimates are "order of magnitude" cost estimates with expected accuracy of +30% to -15%.

#### Recycled Water Sales

SEJPA currently retails approximately 510 afy to Santa Fe Irrigation District, approximately 710 afy to San Dieguito Water District and approximately 80 afy to the City of Del Mar. However, the City of Del Mar is required to pay for 150 afy regardless of use.

A variety of assumptions about future recycled water sales have been modeled in order to understand how the assumptions related to future program growth affect the program financials. The goal is bracket a range of potential future conditions. These assumptions are described below.

- Scenario 1 assumes that there are no increases in future recycled water sales.
- Scenario 2 assumes future sales grow slowly in the Santa Fe Irrigation District and San
  Dieguito Water District service areas until the system reaches build-out capacity (1600 afy) in
  Fiscal Year 2019-20.
- Scenarios 3 and 4 assumes that Santa Fe Irrigation District and San Dieguito Water District
  each add 75 afy of new demand in the next 3 years as a result of drought pressures and then
  grow slowly to buildout by year Fiscal Year 2019-20.

#### Water Rate Increases

All scenarios assume that water rates increase at 5% per year. This increase in water rates is based on the fact that Metropolitan, the wholesale water supplier, is budgeting for steep increases in water rates (approximately 20% in 2010 and 12% in 2011). These increases in wholesale water pricing will influence retail rates.

#### Inflation Increases

All scenarios assume that SEJPA's operation costs will also increase at a rate of 5% per year.

#### Interest on Fund Balance

All scenarios assume that SEJPA will earn a 2% interest rate on its invested fund balance.

#### **Borrowing Rates and Terms**

The scenarios assume a range of borrowing conditions.

Under the most favorable assumptions the SEJPA would use the State Water Resources Control Board's "match" program. This program allows an agency to borrow money at a 0% interest rate, which is the rate at which the State borrows fund from the federal government, provided that the agency provides a 20% match to project costs, which is the match that the State must provide the federal government to access SRF Funds.

The scenarios also evaluate the impacts of using the State Water Resources Control Board's Revolving Fund Loan Program (SRF) conventional borrowing program to construct facilities. The conventional borrowing program allows agencies to borrow money at half the current state general obligation rate.

Finally the scenarios evaluate the use of market rate financing. This could occur if SEJPA were required to undertake the demineralization improvements on a compliance schedule dictated by the regional board and because of this did not have the opportunity to secure the most favorable financing package.

All scenarios assume that repayments on new loans begin in Fiscal Year 2012-13 (i.e. one year after the completion of construction).

#### CIP Improvements and Budget

Scenario 1 assumes the SEJPA constructs minimum capacity demineralization facilities at a cost of \$2.8 million. Scenario 2 assumes that SEJPA constructs demineralization facilities with a capacity of up to 1600 afy at a cost of \$3.8 million. Scenario 3 assumes that SEJPA constructs full capacity demineralization facilities and improvements to its pumping and storage facilities at a cost of \$5.8. Scenario 4 assumes construction of demineralization, pumping and storage improvements together with a distribution system extension at a total cost of \$7.8 million.

#### Increase in O&M Costs

It is assumed that SEJPA's non-fixed operating costs (labor, energy, chemicals, repair parts, etc.) will increase proportionally to water sales and demineralization operations. All scenarios assume that the demineralization facilities come on-line in Fiscal Year 2011-12. For Scenario 1, it is assumed that the SEJPA's operating costs increase by \$60,000. For Scenario 2, it is assumed that the SEJPA's operating costs increase by \$75,000. For Scenario 3, it is assumed that the SEJPA's operating costs

increase by \$105,000. For Scenario 4, it is assumed that the SEJPA's operating costs increase by \$135,000.

#### Repair and Replacement Fund

It is recommended that SEJPA consider implementing a Repair and Replacement Funding Policy to provide for the eventual repair and replacement of the program's infrastructure. SEJPA's recycled water infrastructure has a relatively long useable life (40 to 60 years in most cases). Targeting an annual repair and replacement reserve contribution of 2% (100%/50 years = 2%) of the system's total construction cost (book value) would provide a funding stream capable of supporting repair and replacement work as the system components approach the end of their useable life. As new improvements are added to the recycled water system, the total book value of the system increases and the annual reserve contribution would also increase. Table 5 presents the annual repair and replacement (R/R) contribution for each scenario, assuming a goal of funding 2% of the system costs annually.

Table 5 Repair and Replacement Funding Summary

	Status Quo	Scenario 1a and 1b	Scenario 2a, 2b and 2c	Scenario 3	Scenario 4
Existing System Value	\$16,500,000	\$16,500,000	\$16,500,000	\$16,500,000	\$16,500,000
Value of New Improvements	\$0	\$2,800,000	\$3,800,000	\$5,800,000	\$7,800,000
Total System Value	\$16,500,000	\$19,300,000	\$20,300,000	\$22,300,000	\$24,300,000
2% Annual Contribution	\$320,000	\$386,000	\$406,000	\$446,000	\$486,000

For the purposes of the financial modeling, funding the repair and replacement contribution begins in FY 2012-13, the year after SEJPA's completes its anticipated \$1 million contribution to the demineralization project. A contribution is made in the amount that revenues exceed expenses, up until the contribution equals the 2% target funding level.

#### Summary of Results

The spreadsheet model was used to analyze the impacts of each of the proposed scenarios on SEJPA's cash flow, unrestricted fund balance and R/R fund balance. In each case, the program cash-flow and unrestricted fund balance recover after the initial investment in system construction. In most cases the recovery is quite rapid, indicating that the program has the financial capacity to

make these investments. The slowest recovery is for Scenario 4, the most expensive scenario, indicating that a \$7.8 million investment is quite substantial for program of SEJPA's size.

#### Status Quo with Repair and Replacement Contribution

This scenario illustrates the effects of making a dedicated R/R contribution under current conditions (no demineralization improvements). The contribution begins in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$320,000 annually beginning in FY 2022-23. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$5.37 million to its R/R fund and will carry an unrestricted fund balance of \$12.5 million. The program's projected revenues, expenditures and fund balances for this scenario are illustrated in Figure 2 below.

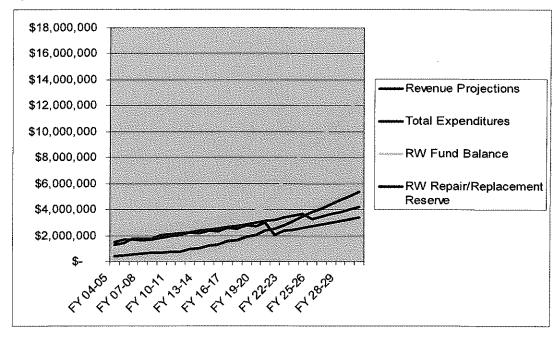


Figure 2 - Status Quo with Repair and Replacement Contribution

#### Scenario 1a

This scenario maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. This no-growth scenario produces a relatively static fund balance until FY 2020-21, when the system's initial SRF loan is paid off. In accordance with the recommended policy, this scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$386,000 annually beginning

in FY 2022-23. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$5.12 million to its R/R fund and will carry an unrestricted fund balance of \$8.1 million, approximately \$4.1 million less than the Status Quo with R/R funding. The program's projected revenues, expenditures and fund balances for Scenario 1a are illustrated in Figure 3 below.

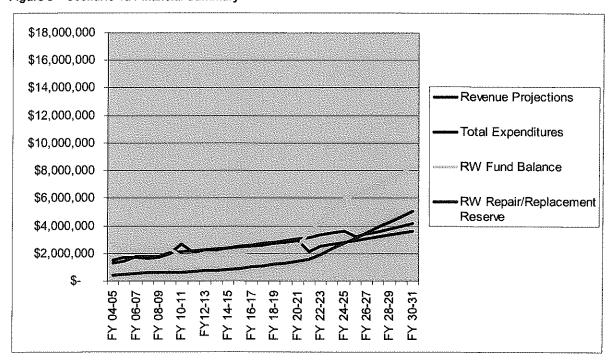


Figure 3 – Scenario 1a Financial Summary

#### Scenario 1b

This scenario is very similar to Scenario 1a. The program maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. Because of the higher interest rates paid on market rate bonds, the program has less available cash flow each year and makes smaller contributions to its R/R fund, until FY 2022-23, when it is able to fully fund it R/R program. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$4.9 million to its R/R fund and will carry an unrestricted fund balance of \$7.6 million, approximately \$4.9 million less than the Status Quo with R/R funding. The program's projected revenues, expenditures and fund balance for Scenario 1b are illustrated in Figure 4 below.

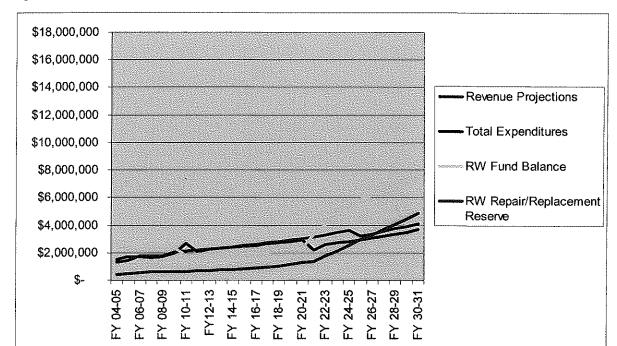


Figure 4 - Scenario 1b Financial Summary

#### Scenario 2a

This scenario maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. In accordance with the recommended policy, the scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$406,000 annually beginning in FY 2020-21, slightly earlier than with the no growth scenarios. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$7.1 million to its R/R fund and will carry an unrestricted fund balance of \$16.2 million, approximately \$3.7 million more than the Status Quo with R/R funding. This scenario outperforms the status quo and could fully fund recommended R/R reserve levels, depending on decisions regarding use of the unrestricted fund balance. The program's projected revenues, expenditures and fund balances for Scenario 2a are illustrated in Figure 5 below.

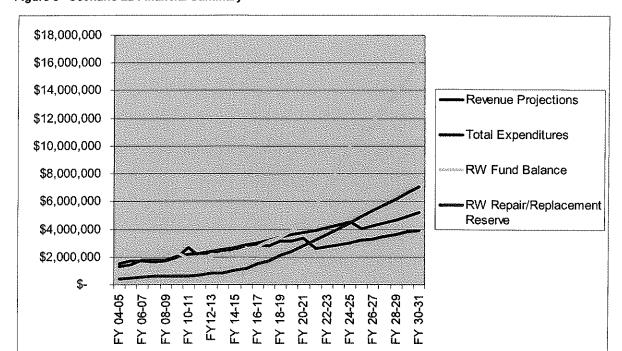
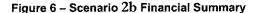
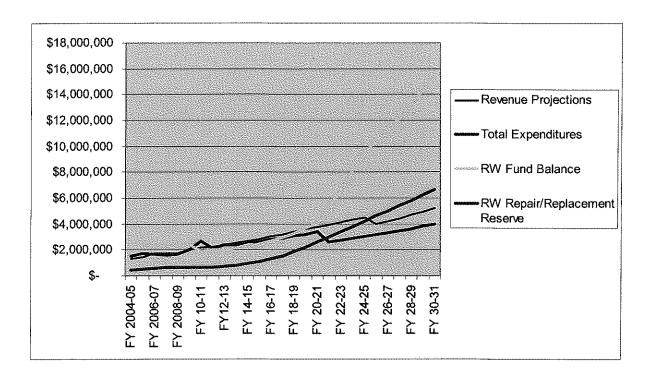


Figure 5- Scenario 2a Financial Summary

#### Scenario 2b

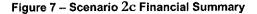
This scenario maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. In accordance with the recommended policy, the scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$406,000 annually beginning in FY 2022-23. This is slightly later than for Scenario 2a, because the borrowing terms modeled in this scenario constrain cash flow. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$6.7 million to its R/R fund and will carry an unrestricted fund balance of \$15.5 million, approximately \$3 million more than the Status Quo with R/R funding. This scenario outperforms the status quo and could fully fund recommended R/R reserve levels, depending on decisions regarding use of the unrestricted fund balance. The program's projected revenues, expenditures and fund balances for Scenario 2b are illustrated in Figure 6 below.

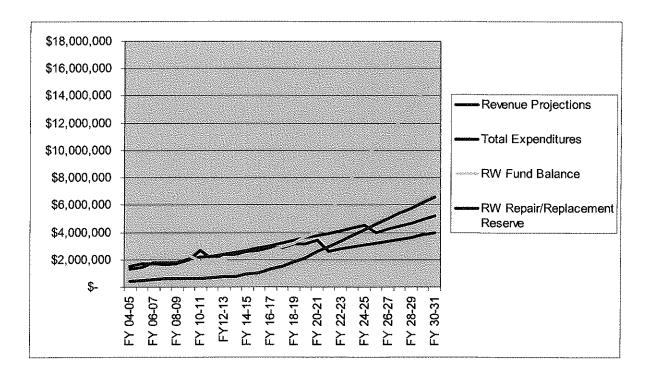




#### Scenario 2c

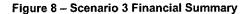
This scenario is very similar to Scenario 2b because the annual payments on a "market rate" loan with a 30-year term are vey similar to the annual payments on an SRF loan with a 20-year term. The program maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. In accordance with the recommended policy, the scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$406,000 annually beginning in FY 2022-23. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$6.6 million to its R/R fund and will carry an unrestricted fund balance of \$15.4 million, approximately \$2.9 million more than the Status Quo with R/R funding. This scenario outperforms the status quo and could fully fund recommended R/R reserve levels, depending on decisions regarding use of the unrestricted fund balance. The program's projected revenues, expenditures and fund balances for Scenario 2c are illustrated in Figure 7 below.

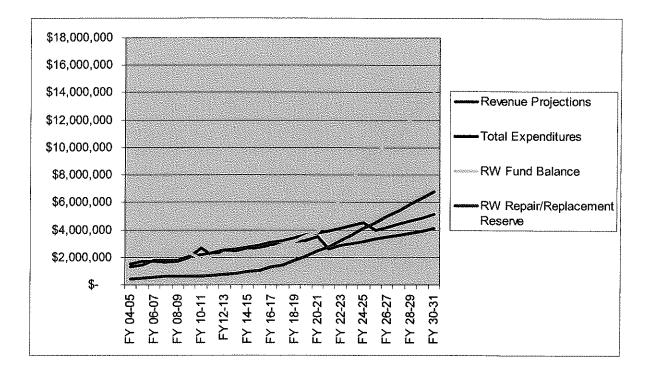




#### Scenario 3

This scenario also maintains positive cash flow, except in Fiscal Years 2009-10 and 2010-11 when the initial \$1 million investment is made. In accordance with the recommended policy, the scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$446,000 annually beginning in FY 2022-23. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$6.8 million to its R/R fund and will carry an unrestricted fund balance of \$13.9 million, approximately \$1.4 million more than the Status Quo with R/R funding. This scenario outperforms the status quo but does not perform quite as well as Scenario 2, where borrowing is more modest. However the program maintains healthy fund balances and could fund recommended R/R reserve levels, depending on decisions regarding use of the unrestricted fund balance. The program's projected revenues; expenditures and fund balance under Scenario 3 are illustrated in Figure 8 below.

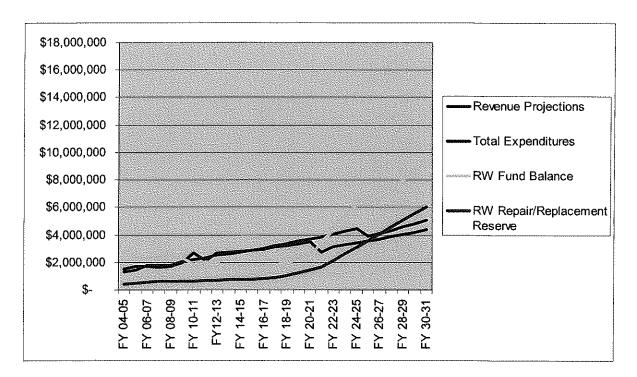




#### Scenario 4

This scenario presents the greatest near-term challenges to SEJPA's cash flow because it models the most aggressive near-term investments. Unlike Scenarios 2 and 3, the program's growth is not enough to quickly offset the increased expenditure levels. In accordance with the recommended policy, the scenario models capitalizing a repair and replacement reserve in FY 2012-13, with available funds. SEJPA is able to fully fund the recommended \$486,000 annually beginning in FY 2022-23. In 2030-31, the end of the modeling period, SEJPA will have funded a total contribution of \$6.1 million to its R/R fund and will carry an unrestricted fund balance of \$9.2 million, approximately \$3.3 million less than the Status Quo with R/R funding. While this scenario is not as financial challenging as Scenario 1, it is more financially challenging than Scenarios 2 and 3 where smaller capital investments are made. The program's projected revenues; expenditures and fund balance under Scenario 4 are illustrated in Figure 9 below.





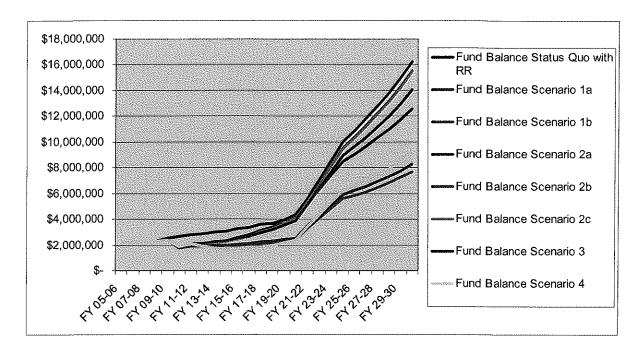
#### Comparative Summary

Figure 10, below, presents the unrestricted fund balance trends for the Status Quo and each of the modeled scenarios. The Status Quo with R/R investments, shown with a black solid line, has solid near-term performance. However the Status Quo with R/R scenario does not address the greatest present risk to the program (TDS loadings) and, as such, may not be an accurate indicator of actual future conditions.

Scenarios 2a, 2b, 2c and 3 all begin to outperform the Status Quo with R/R investments in approximately 2020, illustrating that program growth can support capital improvements and enhance the performance of the program under a range of investment and borrowing scenarios. Since the proposed demineralization improvements will enhance water quality and result in a more attractive product for customers, the investment should support modest growth.

Scenarios 1a, 1b and 4 perform more poorly than the Status Quo with R/R investments. This suggests two things. First, the program should not shy away from making investments that will encourage customers to connect to the recycled water system. Scenarios 1a and 1b model what could occur with a regulatory mandate to enhance water quality but no increased customer demand. Second, the program should be careful of over-investing: the \$5.8 million capital program modeled in Scenario 3 performs well, while the \$7.8 million capital program modeled in Scenario 4 may be a little too large for SEJPA's projected rate base, unless additional outside assistance or matching funds from partner agencies can be secured. Based on the modeling and analysis, all scenarios can be supported financially by SEJPA; however scenarios with reasonable investment and targeted growth produce the best value for the recycled water utility.

Figure 10 - Comparative Summary - Unrestricted Fund Balance All Scenarios



## SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

TO:

**Board of Directors** 

San Elijo Joint Powers Authority

FROM:

Director of Finance/Administration

SUBJECT:

MEMBER AGENCY CONTRIBUTIONS TO THE SAN ELIJO JOINT POWERS

AUTHORITY'S RECYCLED WATER PROGRAM

#### RECOMMENDATION

It is recommended that the Board of Directors:

1. Discuss and take action, as appropriate.

#### **BACKGROUND**

At the July 2009 Board meeting, Winzler & Kelly presented a financial study of the San Elijo Joint Powers Authority Recycled Water Program to assess the program's ability to carry new infrastructure debt. During the discussion, the Board of Directors requested that staff meet with Member Agency staff regarding the historical contributions made by the two Member Agencies to the water reclamation program. Staff was then to report the findings to the Board of Directors.

SEJPA staff met with staff from both Member Agencies and reviewed the annual contributions made by each Member Agency and recorded by the SEJPA for the water reclamation upgrade. The review was performed in two parts. The first part was for capital contributions made for the studies, design, and construction of the water reclamation facilities. The second part was for operating costs and State Revolving Loan payments made during the early years of the Water Reclamation Program.

Upon reviewing the financial information, all parties concurred that the contributions made by the Member Agencies total \$4,577,754.40 or \$2,288,877.20 per Member Agency. This information was presented to the SEJPA Board of Directors at the September 2009 meeting and staff was directed to investigate the possibility of a payback schedule with and without interest accruing on the outstanding contributions.

Legal counsel was directed to investigate the possibility of interest accruing from the time funds were advanced versus interest accruing from this point forward versus having no interest accruing on the outstanding balance.

#### DISCUSSION

Legal counsel's memorandum to the Board of Directors dated November 4, 2009, (Attachment) concluded that the repayment of the contributions may not include interest or a reasonable rate of return because it does not appear there was any understanding or expectation that interest or a reasonable rate of return would be paid when the Member Agencies made their capital contributions. Based on information available and on the November 2002 Board report presented by John S. Murk, P.E., SEJPA General Manager at the time, that the Member Agencies were to have their funds returned in full, but there is no indication that interest was intended to be accrued. This Board report included an Excel financial model that indicates the funds would be returned to the Member Agencies as they became available. The model showed the return of the original contributions, without interest, beginning in Fiscal Year (FY) 2017-18 and continuing until FY 2023-24.

As presented in the Winzler & Kelly Updated Financial Assessment for the Recycled Water Program, November 2009, it appears feasible for the Water Reclamation Program to begin repaying the Member Agency's contributions in FY 2017-2018, with the debt being paid in full within 8 to 10 years. Table 1 presents a possible payment schedule that would allow the SEJPA to return the Member Agency's contributions in concert with the final payments of the existing SRF loan. A nonlinear payment schedule would allow the SEJPA to begin making payments to the Member Agencies within eight years and is designed not to be over-taxing to the program. In FY 2021-22, the SEJPA will have completed payment on the \$12.6 million SRF loan, which will allow the agency to increase the payment value, if the SEJPA Board of Directors so choose.

TABLE 1
SEJPA Water Reclamation Program
Member Agency Repayment Schedule
Interest at 0% - \$4 577 754

Payment No.	Year	Interest	Cardiff	Solana Beach	Total
1.	FY 2017-18	\$0	\$40,000	\$40,000	\$80,000
2.	FY 2018-19	\$0	\$50,000	\$50,000	\$100,000
3.	FY 2019-20	\$0	\$100,000	\$100,000	\$200,000
4.	FY 2020-21*	\$0	\$100,000	\$100,000	\$200,000
5.	FY 2021-22	\$0	\$500,000	\$500,000	\$1,000,000
6.	FY 2022-23	\$0	\$500,000	\$500,000	\$1,000,000
7.	FY 2023-24	\$0	\$500,000	\$500,000	\$1,000,000
8.	FY 2024-25	\$0	\$498,877	\$498,877	\$997,754
Total		\$0	\$2,288,877	\$2,288,877	\$4,577,754

<sup>\* \$12.6</sup> million SRF loan paid off in FY2020-21.

#### SUMMARY

The SEJPA Board of Directors requested staff to report on the possible return of the Member Agencies' investment into the Recycled Water Program. The recent third party financial assessment of the Recycled Water Program indicates that the Member Agencies could start receiving payments during the Fiscal Year 2017-18 without adversely affecting the program. The Board of Directors also requested staff research returning the Member Agencies' contribution with interest. Based on legal counsel review, it is their conclusion that interest should not be accrued on Member Agencies'

contributions. Legal counsel interprets the November 2002 staff report as evidence supporting this conclusion. It appears that Member Agencies should be able to have their original capital contributions returned based on the repayment schedule provided in Table 1.

It is recommended that the Board of Directors:

1. Discuss and take action as appropriate.

Respectfully submitted,

Gregory Lewis

Director of Finance/Administration

Attachment: Repayment of Member Agencies' Contributions to the Water Reclamation Program

# ATTACHMENT



DATE:

November 4, 2009

### **MEMORANDUM**

Procopio, Cory, Hargreaves and Savitch LLP

TO: Board of Directors FILE NO: 114784.000000

San Elijo Joint Powers Authority

FROM: Gregory V. Moser CC: Mike Thornton

A. Aiko Osugi General Manager

RE: Repayment of Member Agencies' Contributions to the Water Reclamation Program

You have asked us whether the San Elijo Joint Powers Authority ("SEJPA") may pay back the capital contributions made by its member agencies for development of the infrastructure needed for the SEJPA Water Reclamation Program (the "Program"), and if so, what kind of return, if any, the member agencies would be entitled to on such funds.

Revenues generated by wholesaling recycled water to water suppliers has reached a point at which SEJPA may have sufficient cash flow, above Program expenses, to begin repayment of capital contributions made by the member agencies in or around 2018.

According to former SEJPA general manager John Murk, the member agencies made the capital contributions based on an understanding that they would be "made whole" after 20-25 years. Mr. Murk's recollection is consistent with a status report on the Program to the SEJPA Board of Directors, dated November 14, 2002, which states that "the reclamation program was premised upon the fact that JPA ratepayers would only front-end the funds necessary to get the program underway until such time as it was self-sustaining." Mr. Murk's recollection is also consistent with the SEJPA spreadsheet used to prepare the status report which includes projections for "JPA Front End Financing Repayment." However, neither the status report nor the spreadsheet mention or include any interest on the member agencies' contributions to the Program. SEJPA staff reviewed the SEJPA State Revolving Fund and Bureau of Reclamation files and found no mention of any interest payment to the member agencies.

Consequently, the current SEJPA Board of Directors may, at its discretion, determine the repayment schedule for the member agencies' capital contributions. (See, e.g., San Joaquin County Employees' Assn., Inc. v. County of San Joaquin (1974) 39 Cal.App.3d 83 (adjusted salary rates made retroactive to a date at which the salary rates were indefinite and subject to future determination by a public agency was not a gift of public funds).)

However, SEJPA's repayment may not include interest or a reasonable rate of return. Payment of interest or a reasonable rate of return would constitute an impermissible gift of

San Elijo Joint Powers Authority November 4, 2009 Page 2

public funds because it does not appear there was any understanding or expectation that interest or a reasonable rate of return would be paid when the member agencies made their capital contributions. (See *Sturgeon v. County of Los Angeles* (167 Cal.App.4th 630, 637 (the term "gift" includes all appropriations of public money for which there is no authority or enforceable claim, even if there is a moral or equitable obligation).)

Please don't hesitate to contact us if you have any further questions.

## SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

TO: Board of Directors

San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: CALIFORNIA STATE REVOLVING FUND (SRF) LOAN APPLICATION

AUTHORIZATION FOR RECYCLED WATER DEMINERALIZATION PROJECT

#### RECOMMENDATION

It is recommended that the Board of Directors:

- Adopt Resolution No. 2010-01, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Authorizing Entering into a Financial Assistance Agreement with the State Resources Control Board and Designating a Representative to Sign the Financial Assistance Agreement;
- Adopt Resolution No. 2010-02, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Dedicating the Source of Revenue for the Recycled Water Demineralization Project;
- Adopt Resolution No. 2010-03, Resolution of the Board of Directors of the San Elijo Joint Powers Authority of Intent to Reimburse Expenditures Related to Construction or Reconstruction of Certain Public Facilities; and
- 4. Discuss and take action, as appropriate.

#### **BACKGROUND**

The 2005 Recycled Water Optimization and Expansion study identified recycled water demineralization as a recommended improvement due to continued problems with high total dissolved solids (TDS) levels in the recycled water. Since then, SEJPA recycled water quality has been sited by the San Diego Regional Water Quality Control Board (San Diego Regional Board) as having TDS levels above permit thresholds. The recycled water demineralization project is currently in the preliminary design phase and has an estimated project cost range of \$3.8 million to \$4.2 million. This project will result in TDS levels well below the San Diego Regional Board limits.

#### **DISCUSSION**

The State Water Resources Control Board (SWRCB) has a State Revolving Loan Program that provides low interest loans to public agencies for construction of recycled water facilities and improvements.

As part of the SRF application process, the SEJPA Board must approve resolutions to authorize the application, Attachment 1, dedicate a source of revenue to repay the loan, Attachment 2, and adopt a reimbursement resolution, Attachment 3.

#### FISCAL IMPACT

There is no fiscal impact associated with this recommendation.

#### RECOMMENDATION

It is therefore recommended that the Board of Directors:

- Adopt Resolution No. 2010-01, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Authorizing Entering into a Financial Assistance Agreement with the State Resources Control Board and Designating a Representative to Sign the Financial Assistance Agreement;
- Adopt Resolution No. 2010-02, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Dedicating the Source of Revenue for the Recycled Water Demineralization Project;
- Adopt Resolution No. 2010-03, Resolution of the Board of Directors of the San Elijo Joint Powers Authority of intent to Reimburse Expenditures Related to Construction or Reconstruction of Certain Public Facilities; and
- 4. Discuss and take action, as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E.

General Manager

- Attachment 1: Resolution No. 2010-01, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Authorizing Entering into a Financial Assistance Agreement with the State Resources Control Board and Designating a Representative to Sign the Financial Assistance Agreement.
- Attachment 2: Resolution No. 2010-02, Resolution of the Board of Directors of the San Elijo Joint Powers Authority Dedicating the Source of Revenue for the Recycled Water System Demineralization Project.
- Attachment 3: Resolution No. 2010-03, Resolution of the Board of Directors of the San Elijo Joint Powers Authority of intent to Reimburse Expenditures Related to Construction or Reconstruction of Certain Public Facilities

## **ATTACHMENT 1**

#### **RESOLUTION NO. 2010-01**

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN ELIJO JOINT POWERS AUTHORITY AUTHORIZING ENTERING INTO A FINANCIAL ASSISTANCE AGREEMENT WITH THE STATE WATER RESOURCES CONTROL BOARD AND DESIGNATING A REPRESENTATIVE TO SIGN THE FINANCIAL ASSISTANCE AGREEMENT, AND ANY AMENDMENTS THERETO

WHEREAS, the San Elijo Joint Powers Authority ("SEJPA") is authorized to enter into a financial assistance agreement with the State of California and the State Water Resources Control Board;

WHEREAS, the Board of Directors of the SEJPA authorizes the General Manager to sign the financial assistance agreement, and any amendments thereto;

WHEREAS, the Board of Directors of the SEJPA agrees and further does authorize the aforementioned representative to certify that the SEJPA has and will comply with all applicable federal and state statutory and regulatory requirements related to any financial assistance funds received; and

NOW, THEREFORE, BE IT RESOLVED:

That the SEJPA's Board of Directors hereby adopts Resolution No. 2010-01.

PASSED AND ADOPTED at a meeting of the Board of Directors of the San Elijo Joint Powers Authority held on November 9, 2009, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
Chairperson SEJPA Board of Directors	
ATTEST:	
Secretary to the Board	

## **ATTACHMENT 2**

#### **RESOLUTION NO. 2010-02**

## RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN ELIJO JOINT POWERS AUTHORITY DEDICATING THE SOURCE OF REVENUE FOR THE RECYCLED WATER DEMINERALIZATION PROJECT

WHEREAS, the Board of Directors of the San Elijo Joint Powers Authority ("SEJPA") hereby dedicates the following source of revenue (recycled water sales) to payment of any and all Clean Water State Revolving Fund and/or Water Recycling Funding Program financing on the SEJPA Recycled Water Demineralization Project. This dedicated source of revenue shall remain in effect throughout the term of such financing unless modification or change of such dedication is approved in writing by the Sate Water Resources Control Board; and

NOW, THEREFORE, BE IT RESOLVED:

That the SEJPA's Board of Directors hereby adopts Resolution No. 2010-02.

PASSED AND ADOPTED at a meeting of the Board of Directors of the San Elijo Joint Powers Authority held on November 9, 2009, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:
Chairperson SEJPA Board of Directors
ATTEST:
Secretary to the Board

## **ATTACHMENT 3**

#### **RESOLUTION NO. 2010-03**

# RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN ELIJO JOINT POWERS AUTHORITY OF INTENT TO REMINBURSE EXPENDITURES RELATED TO CONSTRUCTION OR RECONSTRUCTION OF CERTAIN PUBLIC FACILITIES

WHEREAS, the Board of Directors of the San Elijo Joint Powers Authority ("SEJPA") desires to finance the costs of constructing and/or reconstructing certain public facilities and improvements relating to its recycled water system, including certain treatment facilities, pipelines and other infrastructure (the "Project");

WHEREAS, the SEJPA intends to finance the construction and/or reconstruction of the Project or portions of the Project with moneys ("Project Funds") provided by the State of California, acting by and through the State Water Resources Control Board (SWRCB);

WHEREAS, the SWRCB may fund the Project funds with proceeds from the sale of obligations the interest upon which is excluded from gross income for federal income tax purposes (the "Obligations");

WHEREAS, prior to either the issuance of the Obligations or the approval by the SWRCB of the Project Funds, the SEJPA desires to incur certain capital expenditures (the "Expenditures") with respect to the Project from available moneys of the agency;

WHEREAS, the SEJPA has determined that those moneys to be advanced on and after the date hereof to pay the Expenditures are available only for a temporary period and it is necessary to reimburse the SEJPA for the Expenditures from the proceeds of the Obligations; and

- NOW, THEREFORE, THE SEJPA DOES HEREBY RESOLVE, ORDER AND DETERMINE AS FOLLOWS:
- <u>SECTION 1.</u> The SEJPA hereby states its intention and reasonably expects to reimburse expenditures paid prior to the issuance of the Obligations or the approval by the SWRCB of the Project Funds.
- <u>SECTION 2.</u> The reasonably expected maximum principal amount of the Project Funds is four million (\$4,000,000) dollars.
- SECTION 3. This resolution is being adopted no later than 60 days after the date on which the SEJPA will expend moneys for the portion of the Project costs to be reimbursed with Project Funds.
- <u>SECTION 4.</u> Each expenditure will be of a type properly chargeable to a capital account under general federal income tax principles.

SECTION 5. To the best of our knowledge, the SEJPA is not aware of the previous adoption of official intents by this Agency that have been made as a matter of course for the purpose of reimbursing expenditures and for which tax-exempt obligations have not been issued.

SECTION 6. This resolution is adopted as official intent of the SEJPA in order to comply with Treasury Regulation §1.150-2 and any other regulations of the Internal Revenue Service relating to the qualification for reimbursement of Project costs.

<u>SECTION 7.</u> All the recitals in this Resolution are true and correct and the SEJPA so finds, determines and represents.

NOW, THEREFORE, BE IT RESOLVED:

That the SEJPA's Board of Directors hereby adopts Resolution No. 2010-03.

PASSED AND ADOPTED at a meeting of the Board of Directors of the San Elijo Joint Powers Authority held on November 9, 2009, by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
Chairperson SEJPA Board of Directors	-
ATTEST:	
Secretary to the Board	_

## SAN ELIJO JOINT POWERS AUTHORITY MEMORANDUM

November 9, 2009

TO: Board of Directors

San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: ODOR SCRUBBER PERMIT VIOLATION

#### RECOMMENDATION

It is recommended that the Board of Directors:

1. Discuss and take action as appropriate.

#### **BACKGROUND**

The San Elijo Water Reclamation Facility (SEWRF) utilizes two odor scrubbers for purposes of cleansing malodorous air of hydrogen sulfides ( $H_2S$ ). Each odor scrubber is regulated by the Air Pollution Control District of San Diego County (APCD) through a permit to operate. On July 31, 2009, APCD conducted an inspection of the SEWRF and its permitted assets. As part of the inspection, air samples were taken from the odor scrubbers and one sample from Odor Scrubber No. 1 was slightly above the permitted level for  $H_2S$ . Staff made adjustments to the scrubber and it returned to compliance specifications within 2 hours. The SEJPA has been fined \$900 by the APCD in response to this permit violation.

#### DISCUSSION

As wastewater enters the SEWRF, varying levels of H<sub>2</sub>S are released. The amount of H<sub>2</sub>S released from the wastewater is caused by a number of factors including but not limited to temperature, biological and chemical loadings, septicity, and turbulence.

Odor Scrubber No. 1 was constructed with the plant upgrade in 1990 to scrub odors at the headworks. The scrubber is 19 years old and nearing the end of its useful life, as maintenance costs have increased proportional to the odor scrubber's age and it is lacking in design to meet current APCD requirements. Over the years, the APCD has increased the performance requirements of the scrubber to meet new and more stringent standards. Although Odor Scrubber No. 1 can and does reduce  $H_2S$  levels, it is an older model scrubber that lacks automation to self-adjust to fluctuating  $H_2S$  levels. SEJPA staff has manually configured the odor scrubber to treat virtually 100 % of the incoming  $H_2S$ , as evidenced by the daily odor scrubber readings, however an abnormal spike in  $H_2S$  into the treatment plant could result in a reading above the permitted threshold.

A new odor scrubber, which is designed to continuously monitor and automatically adjust to the fluctuating  $H_2S$  levels, is recommended to ensure permit compliance and reduce maintenance costs. The SEJPA has researched the technology and cost of a new odor scrubber. The planning level cost estimate for a new odor scrubber that will accommodate the SEJPA's needs would be approximately \$500,000.

It is therefore recommended that the Board of Directors:

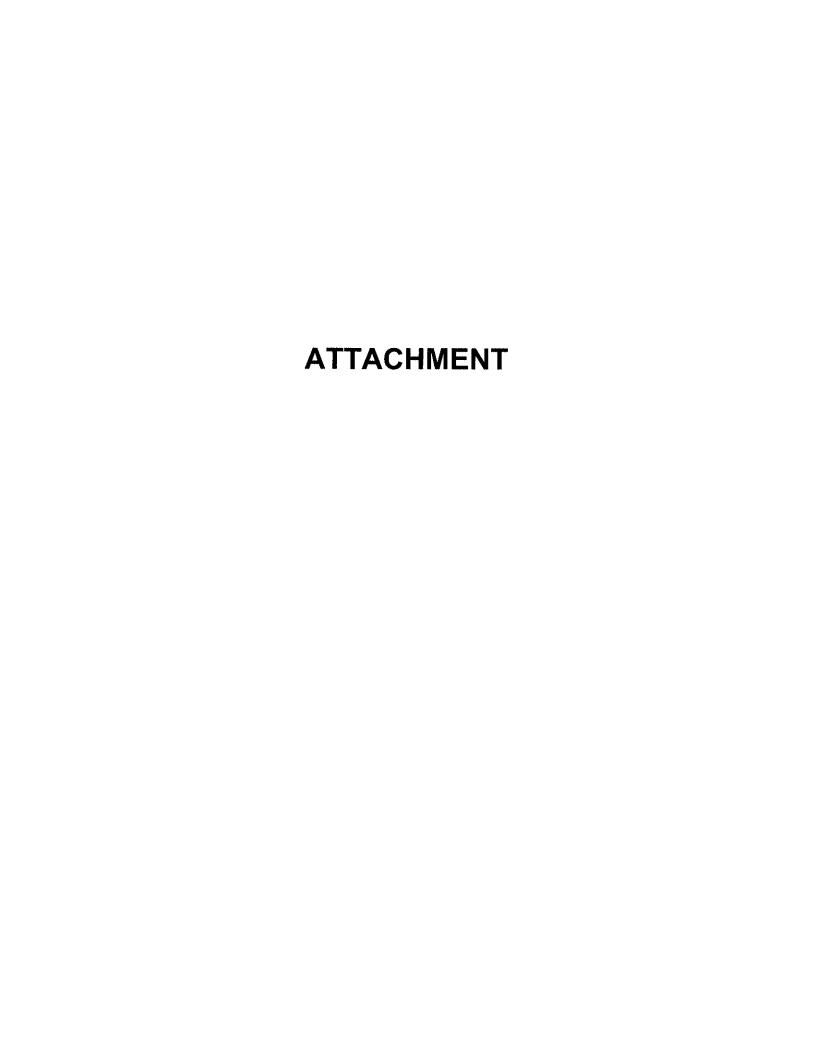
Discuss and take action as appropriate.

Respectfully submitted,

Michael T. Thornton, P.E.

General Manager

Attachment: Notice of Violation Letter from the APCD







Air Pollution Control Board

Greg Cox District 1 Dianne Jacob District 2 Parn Slater-Price District 3 Ron Roberts District 4 Bill Horn District 5

September 29, 2009

MICHAEL T. THORNTON SAN ELIJO JOINT POWERS AUTHORITY PO BOX 1077 CARDIFF BY THE SEA CA 92007

Please Direct Responses to: Heidi Gabriel-Pack, Civil Actions Investigator Air Pollution Control District 10124 Old Grove Rd. San Diego, CA 92131 858-586-2657

Email: Heidi.Pack@sdcounty.ca.gov

#### RE: NOTICE OF VIOLATION NUMBER 220275

Date of Alleged Violation: July 31, 2009

Location of Violation:

2695 Manchester Avenue, Cardiff By The Sea, CA 92007

Rule/Section Violated:

San Elijo Joint Powers Authority received a Notice of Violation from an Air Pollution Control District Inspector.

State law provides for criminal or civil penalties to deter air pollution violations. The Air Pollution Control District seeks penalties for air pollution violations for this purpose.

The Air Pollution Control District would like to settle this matter without going to court. Based on currently available information, the District offers to settle this matter as follows:

- 1. Payment of a civil penalty in the amount of \$900.
- 2. Proof of compliance (if it has not already been submitted to the District). Proof of compliance may be a written statement describing the action taken to correct the violation(s) and/or relevant documentation establishing compliance with the rules.
- 3. Upon compliance, receipt of the payment, and proof of compliance as specified above, San Elijo Joint Powers Authority shall be released from any and all claims by the District for civil or criminal penalties arising out of the incident referred to in the Notice of Violation.
- 4. Settlement of this matter shall not constitute an admission of liability in any administrative or judicial proceeding, nor shall evidence of the settlement be admissible in any such proceeding. However, the District reserves the right to prove the alleged violation in connection with any petition for a variance, permit revocation, or abatement order before the District Hearing Board, or to rely on the alleged violation in connection with the determination of the appropriate penalty in the event similar Notices of Violation are issued in the future.

California statutes specify the maximum penalty for the alleged violations can be either:

a. By civil penalties of up to \$10,000 per day for each day of violation; or

b. By prosecution as a criminal misdemeanor with a maximum fine of \$1,000 per day and/or 6 months in jail for each day of violation.

If the above terms are acceptable, please submit proof of compliance (if applicable) and payment in the amount of \$900, payable to the San Diego County Air Pollution Control District at 10124 Old Grove Rd., San Diego, California 92131 within 25 calendar days. Upon receipt of the documentation and payment, San Elijo Joint Powers Authority shall be released from liability as stated above.

The following factors and any other relevant circumstances determine the size of penalties in settling air pollution violations, including any violations in this case:

- 1) The extent of harm caused by the violation.
- 2) The nature and persistence of the violation.
- 3) The length of time over which the violation occurred.
- 4) The frequency of past violations.
- 5) The record of maintenance.
- 6) The unproven or innovative nature of the control equipment.
- 7) Any action taken, including the nature, extent, and time of response of the cleanup and construction undertaken, to mitigate the violation.
- 8) The financial burden to the violator.

If you would like to discuss the proposed penalty, or have information or questions relating to the above factors or wish to schedule an office conference to discuss this matter, please call or write Heidi Gabriel-Pack at the above phone number or address within 25 calendar days. If you would like a copy of the Notice of Violation please notify Heidi Gabriel-Pack at 858-586-2657 or at Heidi.Pack@sdcounty.ca.gov and a copy will be faxed or mailed to you.

Thank you for your cooperation.

HEIDI GABRIEL-PACK
Civil Actions Investigator

HKP:ap

cc: Permit Processing

ID No.: 89069A



#### FACT SHEET

## **Violation Settlement Program**

#### What is the Violation Settlement Program?

The District's Violation Settlement Program offers recipients of a Notice of Violation the opportunity to settle alleged violations out-of-court by reaching an agreement with the Air Pollution Control District.

#### What is a Notice of Violation?

A Notice of Violation is the District's claim that a violation of the District's rules and/or state air pollution laws has occurred. As provided by state law, a Notice of Violation may subject violators to monetary penalties, civil suit, or in serious cases, criminal prosecution. Normally, violations are settled through the District's Violation Settlement Program.

#### How is a violation settled?

After a violation is referred to the Violation Settlement Program, the alleged violator will receive a letter offering to settle the violation on stated terms or requesting the alleged violator to call the District's Violation Settlement staff to discuss settlement terms. The terms of a settlement may include both a monetary penalty and changes in operation or equipment to ensure the facility remains in compliance.

Settlements can only be reached when the alleged violator comes to an agreement with the District. If there is disagreement with the terms or penalty the District offers, the Violation Settlement staff should be contacted to discuss mitigating the penalty.

If the settlement discussions reach an impasse during the negotiation process, the Chief of Compliance may be contacted.

#### How is a penalty calculated?

State law establishes the maximum penalties ranging from \$1,000 to 10,000 per day for any strict liability violation (without regard to negligence or intent), to \$25,000 to \$100,000 per day for negligent emissions violations, to \$40,000 to \$250,000 per day for knowing emissions without corrective action, and to \$75,000 to one million dollars per day for willful and intentional emissions violations. A detailed list of penalties under state law is available at the District office.

When establishing a specific penalty, state law requires the District to consider all relevant factors including the following:

- The extent of harm caused by the violation.
- The nature and persistence of the violation.
- The violation duration.
- The violation frequency.
- The maintenance record.
- The unproven or innovative nature of the control equipment.
- Any action taken by the alleged violator including the nature, extent, and response time for cleanup and construction undertaken to mitigate the violation.
- The financial burden to the alleged violator.