

**AGENDA**  
**SAN ELIJO JOINT POWERS AUTHORITY**  
**MONDAY MARCH 9, 2009 AT 9:00 A.M.**  
**SAN ELIJO WATER RECLAMATION FACILITY – CONFERENCE ROOM**  
**2695 MANCHESTER AVENUE**  
**CARDIFF BY THE SEA, CALIFORNIA**  
**AND TELECONFERENCED WITH**  
**559 UNION STREET, ENCINITAS, CALIFORNIA**

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1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. ORAL COMMUNICATIONS (NON-ACTION ITEM)
5. PRESENTATION OF AWARDS  
CSRMA Safety Superstar 2008 award
6. \* **CONSENT CALENDAR**
7. \* APPROVAL OF MINUTES FOR THE FEBRUARY 9, 2009 MEETING
8. \* APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS
9. \* SAN ELIJO WATER RECLAMATION FACILITY TREATED EFFLUENT FLOWS – MONTHLY REPORT
10. \* SAN ELIJO JOINT POWERS AUTHORITY RECYCLED WATER PROGRAM – MONTHLY REPORT
11. \* ITEMS REMOVED FROM CONSENT CALENDAR

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

**REGULAR AGENDA**

12. RECYCLED WATER IMPROVEMENT AND EXPANSION PROJECT

It is recommended that the Board of Directors:

1. Approve the transfer of \$90,000 from the Water Reclamation Fund account to the new capital improvement project titled: Recycled Water Improvement and Expansion Project;
2. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with DUDEK for professional environmental services associated with California Environmental Quality Act (CEQA) documentation;

3. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with Trussell Technologies, Inc. for professional engineering services associated with water treatment and disinfection;
4. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for entering into an agreement for an amount not to exceed \$30,000 with Kennedy/Jenks Consultants for professional services associated with the Clean Water State Revolving Loan Fund and grant funding applications;
5. Authorize the General Manager to request qualifications from engineering firms for developing the design and construction documents for the Recycled Water Improvement and Expansion Project; and
6. Discuss and take action as appropriate.

Staff Reference: General Manager, Michael T. Thornton, P.E.

13. GENERAL MANAGER'S REPORT

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

14. GENERAL COUNSEL'S REPORT

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

15. 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.

16. 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".

17. ADJOURNMENT

The next regular scheduled San Elijo Joint Powers Authority Board Meeting will be April 13, 2009.

**NOTICE:**

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

The agenda package and materials related to an agenda item submitted after the packet's distribution to the Board is available for public review in the lobby of the SEJPA Administrative Office during normal business hours. Agendas and minutes are available at [www.sejpa.org](http://www.sejpa.org). The SEJPA Board meetings are held on the second Monday of the month, except August.

**AFFIDAVIT OF POSTING**

I, Michael T. Thornton, Secretary of the San Elijo Joint Powers Authority, hereby certify that I posted, or have caused to be posted, a copy of the foregoing agenda in the following locations:

San Elijo Water Reclamation Facility, 2695 Manchester Avenue, Cardiff, California  
City of Encinitas, 505 South Vulcan Avenue, Encinitas, California  
City of Solana Beach, 635 South Highway 101, Solana Beach, California

The notice was posted at least 72 hours prior to the meeting, in accordance with Government Code Section 54954.2(a).

Date: March 4, 2009

A handwritten signature in black ink, appearing to read 'M. T. Thornton', is written over a horizontal line.

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

SAN ELIJO JOINT POWERS AUTHORITY  
MINUTES OF THE BOARD MEETING  
HELD ON FEBRUARY 9, 2009  
AT THE  
SAN ELIJO WATER RECLAMATION FACILITY

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Dave Roberts, Chair

Maggie Houlihan, Vice Chair

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A Meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Monday, February 9, 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  
Thomas Campbell

*Others Present:*

General Manager  
Assistant General Manager  
Finance Manager  
Administrative Assistant  
Accounting Tech  
Sr. Maintenance Mechanic  
Sr. Laboratory Analyst

Michael Thornton  
Patricia "Tish" Berge  
Greg Lewis  
Monica Blake  
Carrie Cook  
Joe Hernandez  
Ravy Chea

*SEJPA Counsel:*

Procopio, Cory, Hargreaves & Savitch

Aiko Osugi

City of Encinitas, Director of Public Works  
City of Encinitas,

Larry Watt

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

Zijlstra Architecture

Sjirk Zijlstra

3. PLEDGE OF ALLEGIANCE

Ravy Chea led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

None

5. PRESENTATION OF AWARDS

General Manager Mike Thornton informed the Board of Directors that several SEJPA employees have been recognized by the San Diego Section (SDS) of the California Water Environment Association (CWEA) for their outstanding work and commitment to the water protection industry. Jose Hernandez, who is the agency's Senior Maintenance Mechanic, was awarded the 2008 Mechanical Technician of the Year. Ravy Chea, who is the agency's Senior Laboratory Analyst, was awarded the 2008 Laboratory Person of the Year. As section award winners, Mr. Hernandez and Ms. Chea will be in the running for the state-wide CWEA award for their respective positions.

The General Manager also recognized Patricia Berge, SEJPA Assistant General Manager, for her efforts in obtaining a Special District Administrator Certification from the Special District Leadership Foundation.

In addition, the General Manager informed the Board of Directors that the San Elijo Water Reclamation Facility was awarded the CWEA-SDS 2008 Plant of the Year and 2008 Small Plant Safety awards. The agency will now be competing for the state award in these categories.

6. CONSENT CALENDAR

Moved by Board Member Campbell and seconded by Board Member Barth to approve the Consent Calendar with unanimous vote of approval.

Consent calendar:

- |                    |  |
|--------------------|--|
| Agenda Item No. 7  | Approval of Minutes for the January 9, 2009 Strategic Planning Meeting and January 12, 2009 meeting. |
| Agenda Item No. 8  | Approval for Payment of Warrants and Monthly Investment Report                                       |
| Agenda Item No. 9  | San Elijo Water Reclamation Facility Treated Effluent Flows – Monthly Report                         |
| Agenda Item No. 10 | San Elijo Joint Powers Authority Recycled Water Program – Monthly Report                             |

11. ITEMS REMOVED FROM CONSENT CALENDAR

None

12. APPROVAL OF CONTINGENCY FUNDING USE FOR FLETCHER COVE PUMP STATION

The General Manager reported that the Fletcher Cove Wastewater Pump Station is a below-grade concrete structure that is experiencing cracking in the roof and walls. These cracks expose the reinforcing steel bars within the concrete to the corrosive coastal environment that in turn causes further cracking. The SEJPA and the City of Solana Beach Engineering Department recommend approving the repair of the damaged concrete.

Moved by Board Member Campbell and seconded by Board Member Barth to authorize the General Manager to use up to \$10,000 of contingency funding for engineering services to prepare plans and specifications to repair the concrete vault at the Fletcher Cove Wastewater Pump Station. Motion carried with unanimous vote of approval.

Vice Chair Houlihan arrived at 9:10 a.m.

13. ZIJLSTRA ARCHITECTURE EASEMENT REQUEST

Assistant General Manager Tish Berge stated that the SEJPA received a request from Zijlstra Architecture, just before the start of the Board Meeting, for purchase of the easement land.

The Assistant General Manager reported that Zijlstra Architecture's easement request dated September 5, 2008 would allow contractors hired by Zijlstra Architecture or the homeowner to perform work on SEJPA property which would require oversight on behalf of the SEJPA. Such oversight would require an investment of time from SEJPA and may require the assistance of Legal Counsel and does not protect the interests of the SEJPA. It was stated that SEJPA recommends disapproving the Zijlstra Architecture easement request.

Mr. Sjirk Zijlstra stated that he obtained a commercial appraisal of the value for purchasing the easement land.

The Board requested SEJPA staff to return with a holistic approach to the "Fuel Modification Zone" that would be inclusive of all properties bordering the SEJPA property on the west hillside. Board requested Mr. Zijlstra be kept current of findings.

Moved by Chair Roberts and seconded by Board Member Campbell to approve the staff's recommendation of not entering into an Easement Agreement with Zijlstra Architecture. Motion carried with unanimous vote of approval.

14. SAN ELIJO JOINT POWERS AUTHORITY MID-YEAR REVIEW OF THE FISCAL YEAR 2008-09 OPERATING BUDGET

Finance Manager/Treasurer Greg Lewis presented an analysis of estimated operating expenditures through the end of Fiscal Year 2008-09. The Finance Manager stated that the SEJPA is expected overall to be 5 percent under budget, about \$246,028. The report shows breakdown by classification in personnel, capital outlay, and contingency.

No action was required.

15. CALPERS RESOLUTION TO APPROVE AN AGREEMENT TO PREFUND OTHER POST EMPLOYMENT BENEFITS THROUGH CALPERS

Finance Manager/Treasurer Greg Lewis presented the Agreement to Prefund Other Post Employment Benefits resolution in regard to Governmental Accounting Standards Board 45, Accounting and Financial Reporting by Employers for Post Employment Benefits Other Than Pensions.

SEJPA staff recommended approval to fully fund the unfunded liability of \$98,075 at the end of this fiscal year if funds were available. Staff also recommended that future annual required contributions be paid annually to keep this liability fully funded.

Moved by Vice Chair Roberts and seconded by Board Member Houlihan to postpone the request to adopt the resolution to prefund Other Post Employment Benefits. Motion carried with unanimous vote of approval.

The Board of Directors requested research of the actuarial assumptions and information on custodial options other than CalPERS as the trustee, including costs to manage the trust, and to return this item for future consideration.

16. FEDERAL STIMULUS PACKAGE FOR INFRASTRUCTURE PROJECTS

General Manager Mike Thornton presented the highest ranking capital improvement projects that would warrant consideration for the federal economic stimulus package now being prepared by Congress. These projects include:

1. Electrical Systems Upgrade Project for the San Elijo Water Reclamation Facility at an estimated capital cost of \$1.4 million
2. Recycled Water Improvement and Expansion Project at an estimated capital cost range of \$5 million to \$8 million

The General Manager informed the Board of Directors that these projects were identified in the SEJPA 2007 Water Reclamation Facility Master Plan as projects of need. The SEJPA has retained professional engineering services to prepare the conceptual design of some of the elements of the proposed recycled water project. The conceptual design is expected to be completed shortly. The General Manager stated that this staff report is for information only and that staff will return this item in the future with recommendations for proceeding.

Board Member Campbell left meeting at 10:08 a.m.

17. GENERAL MANAGER'S REPORT

The General Manager reported that the State Water Resource Control Board has signed a statewide recycled water policy. The General Manager also informed the Board of Directors that the WaterReuse California Conference is March 22-24 and will

provide timely information on the new state recycled water policy. Finally, the General Manager provided a brief overview of key topics presented at the California Association of Sanitation Agencies (CASA) conference that he attended in January.

18. GENERAL COUNSEL'S REPORT

General Counsel Aiko Osugi presented the Board of Directors with revised copies of The Ralph M. Brown Act, as of January 1, 2009.

19. BOARD MEMBER COMMENTS

Board Member Barth asked about any updates to the Marine Life Protection Agency. The General Manager will give an update at next month's meeting.

Chair Roberts thanked the SEJPA for the use of the parking lot for the grand opening of the San Elijo Nature Center on January 31, 2009.

Vice Chair Houlihan thanked the SEJPA staff for the get well card.

20. CLOSED SESSION

None

21. ADJOURNMENT

The Board of Directors adjourned at 10:15 a.m. The next Board of Directors meeting will be held on Monday, March 9, 2009.

Respectfully submitted,

  
Michael T. Thornton, P.E.  
General Manager



PAYMENT OF WARRANTS

09-03

24-Feb-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
<b>09-03 WARRANTS</b>		
AG Tech, LLC	Biosolids hauling - January	\$11,048.95
A T & T	Alarm service - February	\$380.84
A T & T / MCI	Phone service - January	\$353.18
Airgas West	Equipment rental - lab	\$208.12
Alliant Insurance Service	Life and disability insurance - February	\$2,042.68
Aquatic Bioassay	Lab testing - January	\$870.00
Aramark	Uniform service - January	\$218.92
Aramark	Uniform service - February	\$117.51
Arrowhead	Lab supplies - January	\$137.58
Ashbrook Simon - Hartley	Hydraulic filter, strainer, gasket	\$412.36
Atlas Pumping Service	Grease and scum pumping - January	\$277.44
Atlas Pumping Service	Grease and scum pumping - February	\$277.44
Atlas Pumping Service	Grit and screening	\$742.35
Berge, Patricia	Expense report - CASA conference	\$528.13
Blake, Monica	Expense report - mileage	\$67.26
Boot World	Safety boots - E. Hurtado	\$150.00
Boot World	Safety boots - C. Larsen	\$150.00
CWEA - San Diego Section	CWEA awards banquet	\$675.00
California Water Technologies	Ferric chloride - plant	\$5,017.81
City of Encinitas	Generator and electrical improvement - Cardiff P.S.	\$1,078.87
Coast Waste Management, Inc.	Grit and screening - Cardiff P.S.	\$372.00
Complete Office	Office supplies - January	\$116.76
Conocophillips Fleet	Vehicle fuel - January	\$463.31
Cor-o-van Records Mgmt. Inc.	Record storage - January	\$195.14
Covad Communications	T-1 service - February	\$359.00
Creative Printing	Purchase orders forms	\$204.44
CS-Amsco	Plug valve - plant	\$887.86
DLT & V	Programing for flow equalization basin pump	\$212.00
DMV	Safety records	\$3.00
Detection Instruments	Hydrogen sulfide gas calibration	\$432.28
Edco Waste and Recycling Service	Trash and recycling service - January	\$184.01
Gierlich Mitchell, Inc.	Primary tank repair parts	\$2,048.27
Goates Consulting Group	Preparation and facilitation of strategic planning workshop	\$3,500.00
Golden State Overnight	Shipping monthly reports	\$52.05
Grainger	Air compressor, strut pipe and anti-skid tape	\$542.69
Grainger	Bottle jack, grinding wheels and sump pump	\$493.08
Green Valley Landscape	Use of wood chipper - one day - plant and stormdrain	\$300.00
Green Valley Landscape	Tree removal and haul away debris - plant	\$650.00
Harrington Industrial Plastics	Plant and field supplies - adapters, plugs and elbows	\$264.28
Hernandez, Joe	Expense report - parts for tech system	\$67.85
Hernandez, Joe	Expense report - usb serial port	\$45.24
Holz Rubber Co., Inc.	Duct expansion joint and flanges - plant	\$919.75
Holz Rubber Co., Inc.	Carbon steel galvanized floating flanges - plant	\$140.19
Horizon Health	Training - Teams at Work - all staff	\$275.00
Horizon Health	Employee Assistance Program - January	\$367.84
Industrial Valve & Automation	Repair Auma actuator - plant	\$190.00
Infrastructure Engineering Corp.	Flow equalization - water reclamation	\$3,697.00
Ingersoll - Rand Co.	Air-compressor service - water reclamation	\$416.94
Ingersoll - Rand Co.	Air-compressor repair - water reclamation	\$2,510.58
Jani-King	Janitorial service - February	\$882.64

PAYMENT OF WARRANTS

09-03

24-Feb-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
Kennedy/Jenks Consultants	Cardiff pump station electrical project	\$1,106.49
Konica	Monthly copier maintenance	\$147.06
Larsen, Casey	Expense report - field work supplies	\$103.41
Larsen, Casey	Expense report - sp3 for scada laptop	\$66.45
Lewis, Greg	Expense report - flash drives	\$23.40
MBC	Intensive ocean water monitoring and testing	\$21,783.29
McMaster-Carr Supply	Low profile polyethylene spill control, hour meter - plant	\$682.23
Mdamele.Ilc	Primary sludge control programing - plant	\$807.50
NCG Group	Administrative, human resources and safety services	\$4,080.00
Napa Auto Parts	Vehicle maintenance	\$20.52
O.M.W.D.	Manchester - 12/08 - 01/09	\$29.68
Olin	Sodium hypochlorite - bleach	\$4,309.89
PERS - Health	Health - February	\$12,011.26
PERS - Retirement	Retirement premium - 01/30/09	\$12,079.80
PERS - Retirement	Retirement premium - 02/13/09	\$12,035.91
Pacific Green	Landscape service - January	\$1,250.00
Pacific Pipeline Supply	Parts - for aeration tank hosebibs - plant	\$558.69
Postmaster	Postage	\$233.20
Preferred Benefit	Dental insurance - February	\$1,659.39
Probuild	Repair, shop and field supplies	\$113.05
Procopio	Legal services - general - December	\$1,366.63
Procopio	Legal services - labor and employment - December	\$57.00
RSF Security Systems	Patrol service - February	\$465.00
RTC	500 ml whole volume residue - lab	\$94.60
Rotary Club of Encinitas	Dues - P. Berge	\$62.00
SWRCB Accounting Office	Annual fee for storm water permit	\$1,008.00
Safe Hearing America	On site mobile hearing testing - all staff	\$763.75
San Diego Gas and Electric	Gas and electric - 12/05 - 01/07	\$41,839.86
San Diego Gas and Electric	Cardiff P.S. - 12/05 - 01/08	\$2,582.50
San Dieguito Water District	Manchester - 11/24 - 01/26	\$136.47
San Dieguito Water District	Manchester - 11/24 - 01/26	\$174.39
San Dieguito Water District	S. Coast Highway 101 - 11/24 - 01/26	\$38.80
San Dieguito Water District	Manchester - 12/02 - 12/30	\$1,795.64
San Dieguito Water District	Manchester - 12/02 - 12/30	\$5,454.76
San Dieguito Water District	Manchester - 12/02 - 12/30	\$110.24
San Dieguito Water District	Manchester - 12/30 - 01/29	\$2,069.12
San Dieguito Water District	Manchester - 12/30 - 01/29	\$106.00
San Dieguito Water District	Manchester - 12/30 - 01/29	\$6,260.36
San Elijo Payroll Account	Payroll - 01/30/09	\$65,820.73
San Elijo Payroll Account	Payroll - 02/13/09	\$66,113.08
Santa Fe Irrigation District	Water service - Seabright - 11/06 - 01/05	\$48.96
Santa Fe Irrigation District	Water service - Valley - 12/31 - 01/30	\$33.59
Santa Fe Irrigation District	Water service - Lomas Santa Fe Dr - 11/18 - 01/15	\$628.80
Saturn Electric	Cardiff P.S. generator - electrical project	\$31,485.60
Siemens	Hydrogen peroxide - plant, Cardiff P.S., Olivenhain P.S.	\$6,346.30
Sign Line	10" x 8" printed signs - water reclamation	\$122.84
Sloan Electric Company	Trouble shoot reclaim pump #1	\$489.10
Sloan Electric Company	Remove and install reclaim water pump starter #2	\$3,896.34
Smart & Final	Kitchen supplies	\$144.53
Sound Billing, LLC	Vehicle maintenance	\$66.99
Southern California Fleet Service	Vehicle maintenance	\$230.16
Sprint	Cellular phone service	\$690.45

PAYMENT OF WARRANTS  
09-03  
24-Feb-09

VENDOR	DESCRIPTION OF EXPENSE	AMOUNT
Stitcheree	Work shirts	\$87.23
Terminix	Pest control - January	\$81.00
Test America	Lab testing - January	\$726.00
Test America	Lab testing - February	\$152.25
The Plumbers Warehouse	Supplies to install piping - plant	\$1,438.58
Thornton, Michael	Expense report - CASA conference	\$773.50
Thornton, Michael	Expense report - meeting and airfare	\$312.35
Tony Lipka	Draft electrical safety program	\$1,750.00
Trussell Technologies, Inc	Treatment process analysis	\$10,087.00
UPS	Shipping	\$22.38
Underground Service Alert	Dig alert - January	\$75.00
VWR International, Inc	Lab supplies - tubes, membrane kit, bile, broth	\$956.79
WEF	Membership dues - A. Simonson	\$177.00
WEF	Membership dues - M. Henke	\$217.00
Wonderware	Annual support - 02.17.09 - 02.16.10	\$3,838.40
Total 09-03 Warrants:		<u>\$379,845.93</u>

SAN ELIJO JOINT POWERS AUTHORITY

PAYMENT OF WARRANTS SUMMARY

24-Feb-09

PAYMENT OF WARRANTS		\$379,845.93
Reference Number	09-03	

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.

  
\_\_\_\_\_  
Gregory Lewis  
Finance Manager/Treasurer

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

24-Feb-09

<u>FUNDS ON DEPOSIT WITH</u>	<u>AMOUNT</u>
<b>LOCAL AGENCY INVESTMENT FUND</b> <i>(DECEMBER 2008 YIELD 2.54%)</i>	
SELF INSURANCE RESERVE	\$ 300,000.00
RESTRICTED SRF RESERVE	\$ 630,000.00
UNRESTRICTED DEPOSITS	\$ 5,279,854.10
 <b>CALIFORNIA BANK AND TRUST</b> <i>(DECEMBER 2008 YIELD 0.10%)</i>	
REGULAR CHECKING	\$ 4,144.56
PAYROLL CHECKING	\$ 5,000.00
 TOTAL RESOURCES	 \$ 6,218,998.66

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

March 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 effluent limitation requirements for the month of January 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).

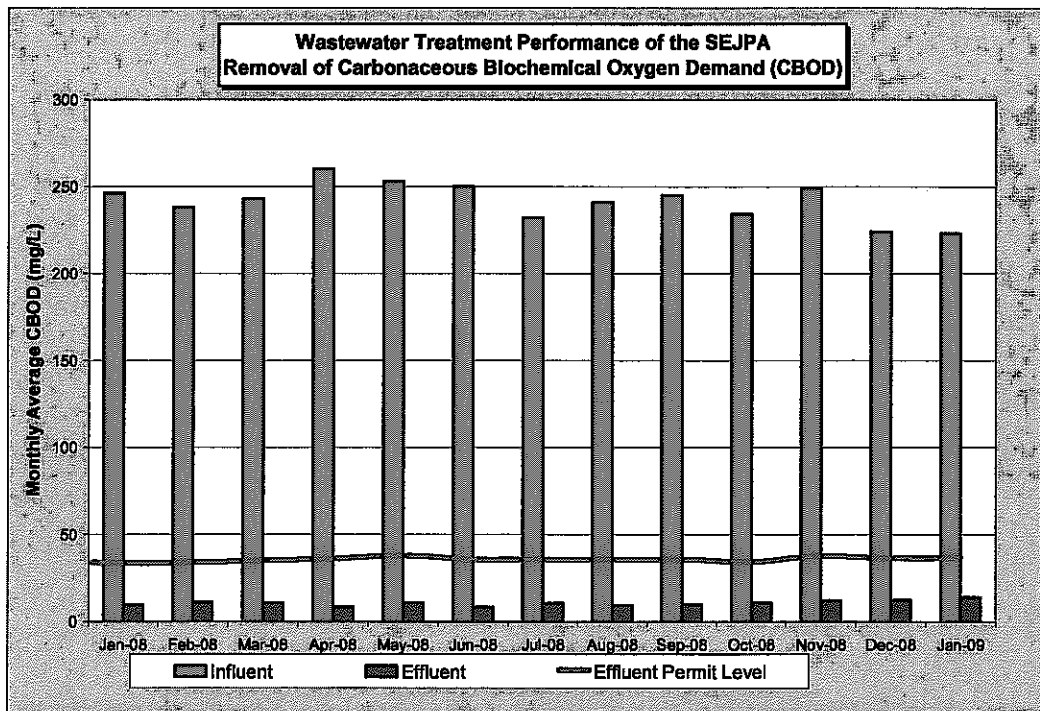


FIGURE 1

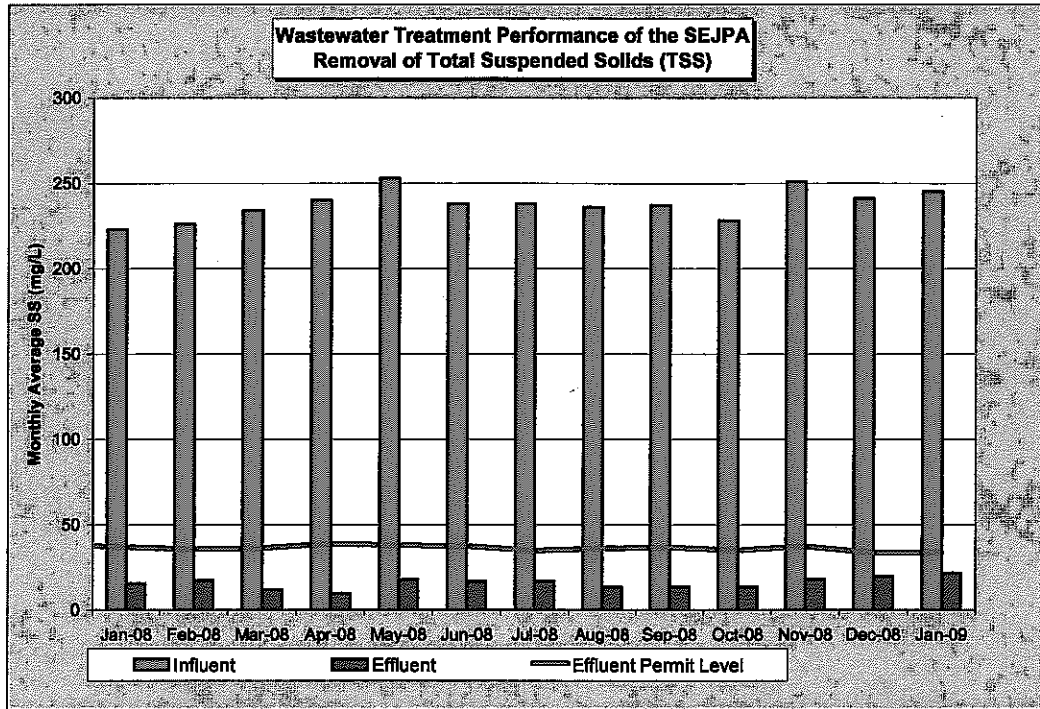


FIGURE 2

**Member Agency Flows**

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

	January	
	<u>Influent (mgd)</u>	<u>Effluent (mgd)*</u>
Cardiff Sanitary Division	1.522	1.256
City of Solana Beach	1.354	1.117
Rancho Santa Fe SID	<u>0.141</u>	<u>0.116</u>
<b>Total San Elijo WRF Flow</b>	<b>3.017</b>	<b>2.489</b>

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

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

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.

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 January:

	January (mgd)
Escondido (Average flow rate)	11.5
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 January is as follows:

	January (EDU)
Cardiff Sanitary Division	8,177
Rancho Santa Fe SID	462
City of Solana Beach	7,428
San Diego (to Solana Beach)	300
<b>Total EDUs to System</b>	<b>16,367</b>

Respectfully submitted,



Michael T. Thornton, P.E.  
General Manager

Attachments:      Table: SEWRF Monthly Report – Flows and EDUs  
                             Figure: Average Daily Flow

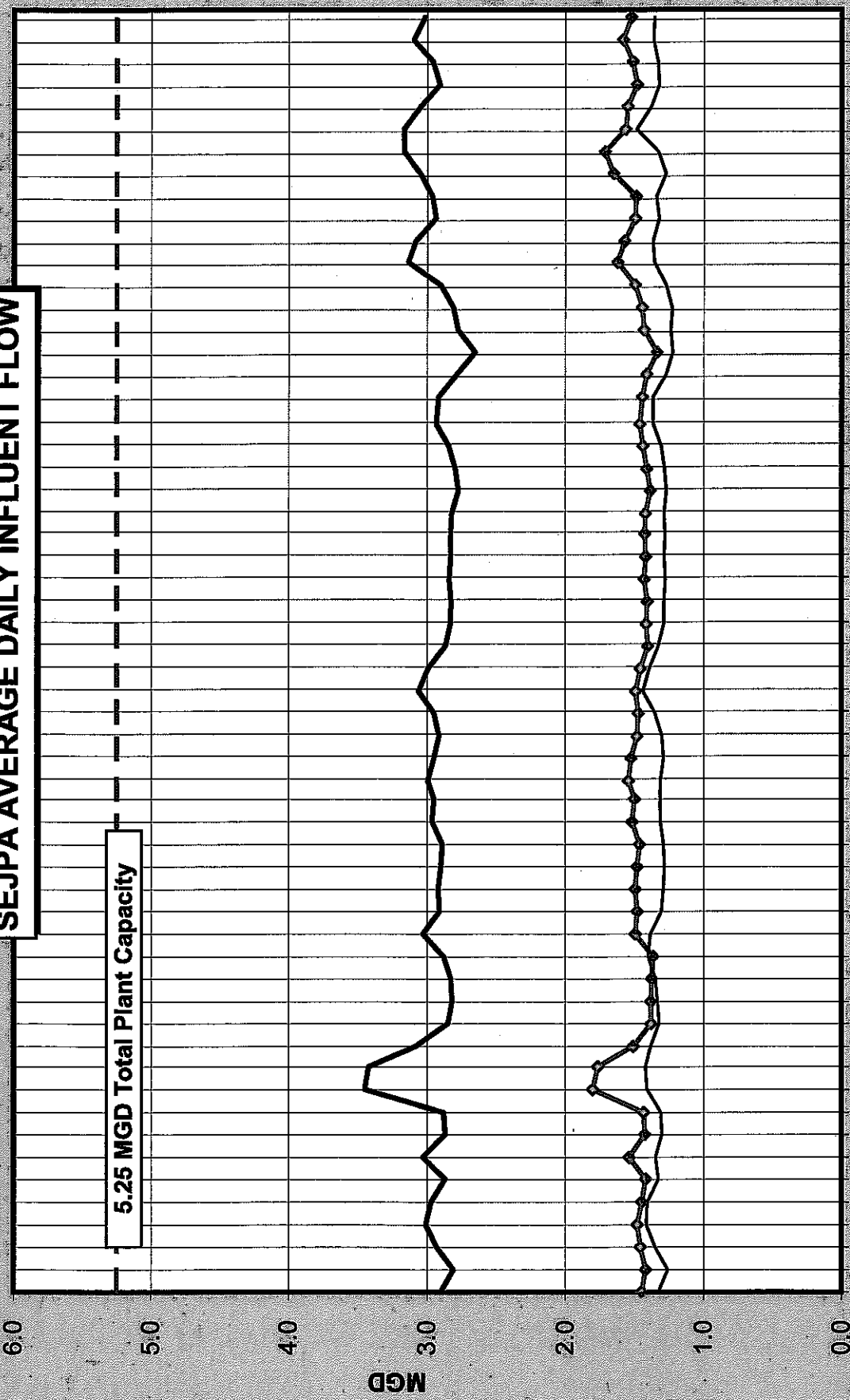


**SAN ELIJO WATER RECLAMATION FACILITY MONTHLY REPORT - FLOWS AND EDJUS**

MONTH	AVERAGE DAILY INFLUENT FLOW RATE (MGD)			AVERAGE DAILY EFFLUENT FLOW RATE (MGD)			TOTAL PLANT			AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDJ/DAY)			TOTAL PLANT			
	GSD	RSE/GSD	SB	GSD	RSE/GSD	SB	GSD	RSE/GSD	SB	GSD	RSE	SB				
Apr-04	1.450	0.127	1.327	2.900	1.261	0.106	1.154	2.521	7.910	375	7,659	15,944	183	339	173	182
May-04	1.421	0.127	1.259	2,910	0.753	0.069	0.667	1.469	7,915	377	7,659	15,951	180	337	164	176
Jun-04	1.458	0.120	1.353	2,930	0.684	0.056	0.634	1.374	7,917	381	7,659	15,957	184	315	177	184
Jul-04	1.478	0.114	1.414	3,010	0.644	0.051	0.616	1.311	7,929	383	7,659	15,971	186	298	185	188
Aug-04	1.447	0.116	1.408	2,970	0.725	0.057	0.706	1.488	7,945	386	7,659	15,990	182	301	184	186
Sep-04	1.420	0.124	1.327	2,870	1.038	0.089	0.970	2.097	7,950	382	7,659	16,001	179	316	173	179
Oct-04	1.538	0.144	1.348	3,030	1.471	0.140	1.287	2.898	7,961	395	7,659	16,015	193	365	176	189
Nov-04	1.426	0.131	1.301	2,870	1.367	0.138	1.247	2.752	7,965	395	7,659	16,019	179	370	170	179
Dec-04	1.433	0.143	1.308	2,880	1.459	0.141	1.331	2.931	7,973	395	7,659	16,027	180	362	171	180
Jan-05	1.803	0.242	1.420	3,450	1.880	0.248	1.469	3.597	7,976	396	7,659	16,031	226	611	184	215
Feb-05	1.766	0.229	1.420	3,420	1.764	0.234	1.418	3.416	7,982	398	7,659	16,039	221	575	185	213
Mar-05	1.509	0.187	1.363	3,080	1.625	0.203	1.489	3.317	7,988	399	7,659	16,046	189	469	181	192
Apr-05	1.379	0.150	1.320	2,850	1.427	0.157	1.366	2.960	7,989	403	7,659	16,051	173	372	172	177
May-05	1.381	0.107	1.332	2,820	1.525	0.117	1.471	3.113	7,993	406	7,659	16,058	174	264	174	176
Jun-05	1.374	0.107	1.349	2,830	1.478	0.115	1.451	3.044	7,996	409	7,659	16,064	173	262	176	176
Jul-05	1.365	0.115	1.399	2,880	1.471	0.125	1.508	3.104	8,016	409	7,659	16,084	170	281	183	179
Aug-05	1.484	0.149	1.385	3,030	1.515	0.164	1.404	3.073	8,020	410	7,659	16,089	186	363	181	188
Sep-05	1.479	0.131	1.302	2,910	1.484	0.129	1.306	2.919	8,023	416	7,659	16,098	184	315	170	181
Oct-05	1.483	0.134	1.280	2,920	1.593	0.146	1.376	3.115	8,033	418	7,659	16,110	186	321	168	181
Nov-05	1.480	0.142	1.288	2,900	1.485	0.140	1.284	2.909	8,034	420	7,659	16,113	184	338	167	180
Dec-05	1.463	0.143	1.288	2,890	1.456	0.138	1.282	2.876	8,040	421	7,659	16,120	182	340	168	180
Jan-06	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	184
Feb-06	1.499	0.139	1.313	2,951	1.268	0.118	1.111	2.497	8,044	423	7,659	16,126	186	329	171	183
Mar-06	1.542	0.144	1.309	2,995	1.475	0.137	1.252	2.864	8,044	424	7,659	16,127	192	340	171	186
Apr-06	1.523	0.139	1.288	2,950	1.400	0.128	1.184	2.712	8,044	424	7,659	16,196	189	328	167	182
May-06	1.480	0.134	1.299	2,913	0.979	0.089	0.859	1.927	8,066	429	7,728	16,223	183	312	168	180
Jun-06	1.471	0.130	1.350	2,961	0.762	0.068	0.699	1.529	8,080	430	7,728	16,238	182	302	175	182
Jul-06	1.490	0.135	1.436	3,061	0.719	0.065	0.693	1.477	8,087	431	7,728	16,246	184	313	186	188
Aug-06	1.456	0.144	1.392	2,992	0.748	0.074	0.715	1.537	8,088	432	7,728	16,248	180	333	180	184
Sep-06	1.403	0.136	1.327	2,868	0.744	0.072	0.704	1.520	8,092	432	7,728	16,252	173	319	172	176
Oct-06	1.414	0.132	1.286	2,832	0.943	0.088	0.857	1.888	8,092	432	7,728	16,252	175	306	166	174
Nov-06	1.408	0.135	1.284	2,827	1.100	0.105	1.003	2.208	8,094	434	7,728	16,256	174	311	166	174
Dec-06	1.429	0.138	1.275	2,842	1.296	0.126	1.156	2.578	8,099	436	7,728	16,263	176	317	165	175
Jan-07	1.419	0.128	1.282	2,829	1.205	0.109	1.089	2.403	8,100	441	7,728	16,269	175	290	166	174
Feb-07	1.425	0.129	1.277	2,831	1.284	0.116	1.150	2.550	8,106	443	7,728	16,277	176	291	165	174
Mar-07	1.421	0.118	1.285	2,824	1.014	0.085	0.917	2.016	8,112	444	7,728	16,284	175	266	166	173
Apr-07	1.386	0.122	1.267	2,775	0.868	0.076	0.794	1.738	8,115	447	7,728	16,290	171	273	164	170
May-07	1.411	0.106	1.281	2,798	0.763	0.058	0.693	1.514	8,116	448	7,728	16,292	174	237	166	172
Jun-07	1.438	0.104	1.304	2,846	0.697	0.051	0.632	1.380	8,117	449	7,728	16,294	177	232	169	175
Jul-07	1.461	0.109	1.364	2,934	0.657	0.049	0.613	1.319	8,119	450	7,728	16,297	180	242	177	180
Aug-07	1.442	0.110	1.365	2,917	0.571	0.044	0.541	1.159	8,120	450	7,728	16,298	178	244	177	179
Sep-07	1.410	0.107	1.270	2,787	0.596	0.046	0.537	1.179	8,124	452	7,728	16,303	174	237	164	171
Oct-07	1.335	0.096	1.222	2,653	0.777	0.056	0.712	1.545	8,124	452	7,728	16,303	164	213	158	163
Nov-07	1.430	0.113	1.235	2,778	1.122	0.088	0.989	2.179	8,138	453	7,728	16,318	176	250	160	170
Dec-07	1.443	0.143	1.225	2,811	1.380	0.137	1.171	2.688	8,144	453	7,728	16,324	177	316	159	172
Jan-08	1.491	0.144	1.268	2,903	1.488	0.144	1.266	2.898	8,146	454	7,728	16,327	183	318	164	178
Feb-08	1.620	0.162	1.365	3,137	1.499	0.150	1.254	2.903	8,150	456	7,728	16,334	199	356	175	192
Mar-08	1.569	0.149	1.365	3,083	1.261	0.119	1.097	2.477	8,151	456	7,728	16,335	192	326	177	189
Apr-08	1.493	0.125	1.318	2,936	1.154	0.097	1.019	2.270	8,151	456	7,728	16,335	183	274	171	180
May-08	1.487	0.136	1.339	2,962	0.755	0.069	0.680	1.504	8,153	456	7,728	16,337	182	299	173	181
Jun-08	1.649	0.131	1.270	3,050	0.647	0.052	0.498	1.197	8,161	456	7,728	16,345	202	288	164	187
Jul-08	1.713	0.131	1.324	3,168	0.722	0.055	0.558	1.197	8,163	466	7,728	16,347	210	288	171	194
Aug-08	1.562	0.125	1.483	3,170	0.608	0.048	0.577	1.233	8,165	457	7,728	16,350	191	274	192	194
Sep-08	1.547	0.121	1.378	3,046	0.813	0.064	0.724	1.601	8,167	459	7,728	16,354	189	264	178	186
Oct-08	1.476	0.111	1.319	2,908	0.671	0.051	0.599	1.321	8,170	460	7,728	16,358	181	242	171	178
Nov-08	1.511	0.118	1.329	2,958	1.080	0.084	0.950	2.114	8,171	462	7,728	16,361	185	256	172	181
Dec-08	1.580	0.156	1.362	3,098	1.446	0.143	1.246	2.835	8,172	462	7,728	16,362	193	338	176	189
Jan-09	1.522	0.141	1.354	3,017	1.256	0.116	1.117	2.489	8,177	462	7,728	16,367	186	306	175	184

ASSUMPTIONS: BB average flow includes San Elijo Hills flow of .131 mgd  
 SB Connected EDJUs include 300 EDJUs for the City of San Diego  
 GSD: Cardiff Sanitary Division  
 RSE/GSD: Ranch Santa Fe Community Service District  
 SB: Solana Beach  
 EDJ: Equivalent Dwelling Unit

# SEJPA AVERAGE DAILY INFLUENT FLOW



— TOTAL PLANT      - - - PLANT DESIGN CAPACITY      —◆— SB

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

March 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 January 2009, recycled water demand was 53.40 acre-feet (AF), which was met using 53.26 AF of recycled water and 0.14 AF of supplementation with potable water. This equates to a blend mix for January of 99.7 percent recycled water and 0.3 percent potable water supplementation.

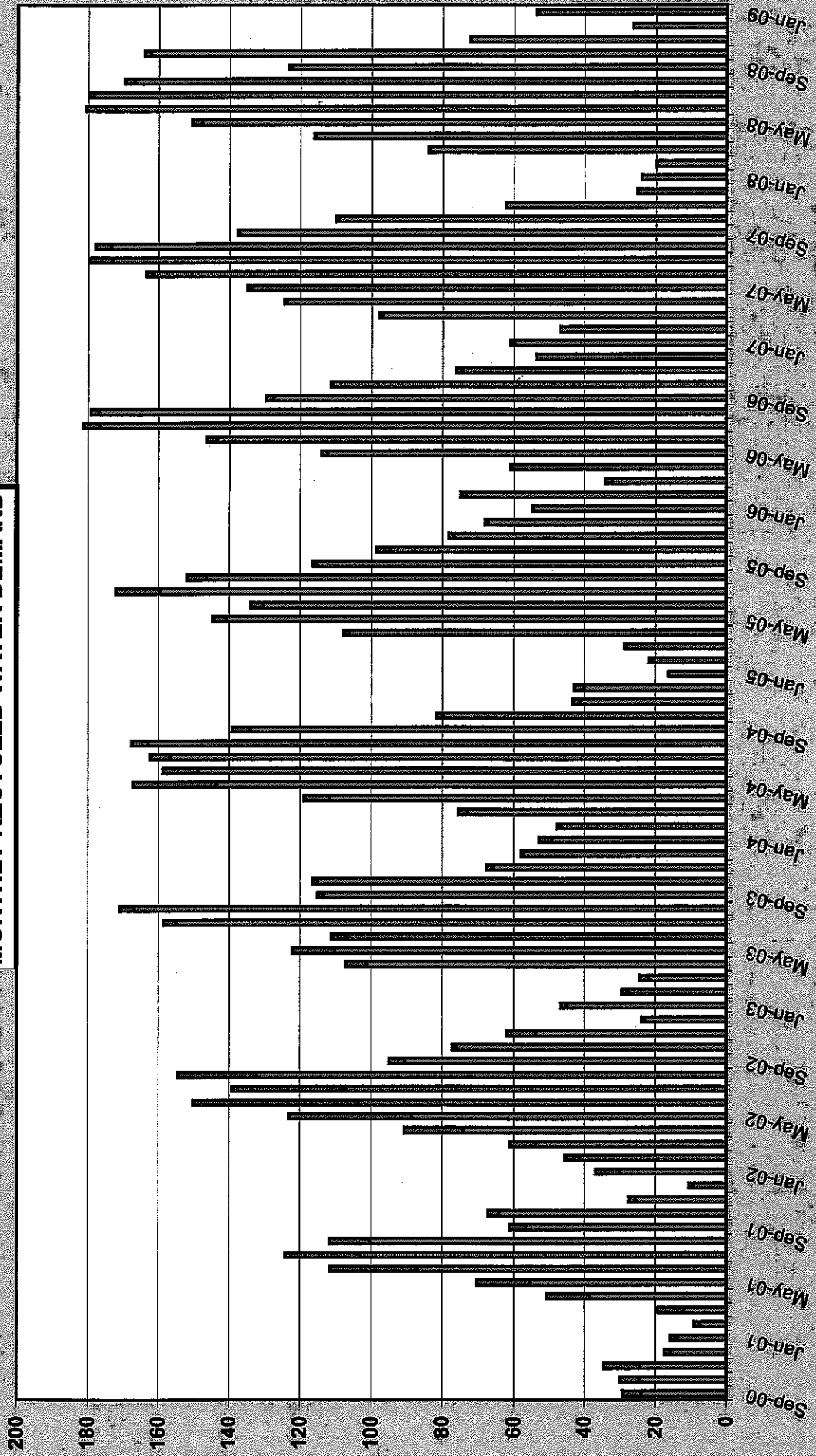
The attached Figure 1 provides monthly supply demands for recycled water since the inception of the program. The program has experienced a steady growth in the customer base that, in general, has translated into steady growth in recycled water demand from year to year. The attached Figure 2 provides a graphical view of annual recycled water demand spanning the last seven 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.

For the first seven months of FY 2008-09, recycled water demand totaled 788 AF, which is slightly more than the demand for the same period one year ago.

Respectfully submitted,

  
Michael T. Thornton, P.E.  
General Manager

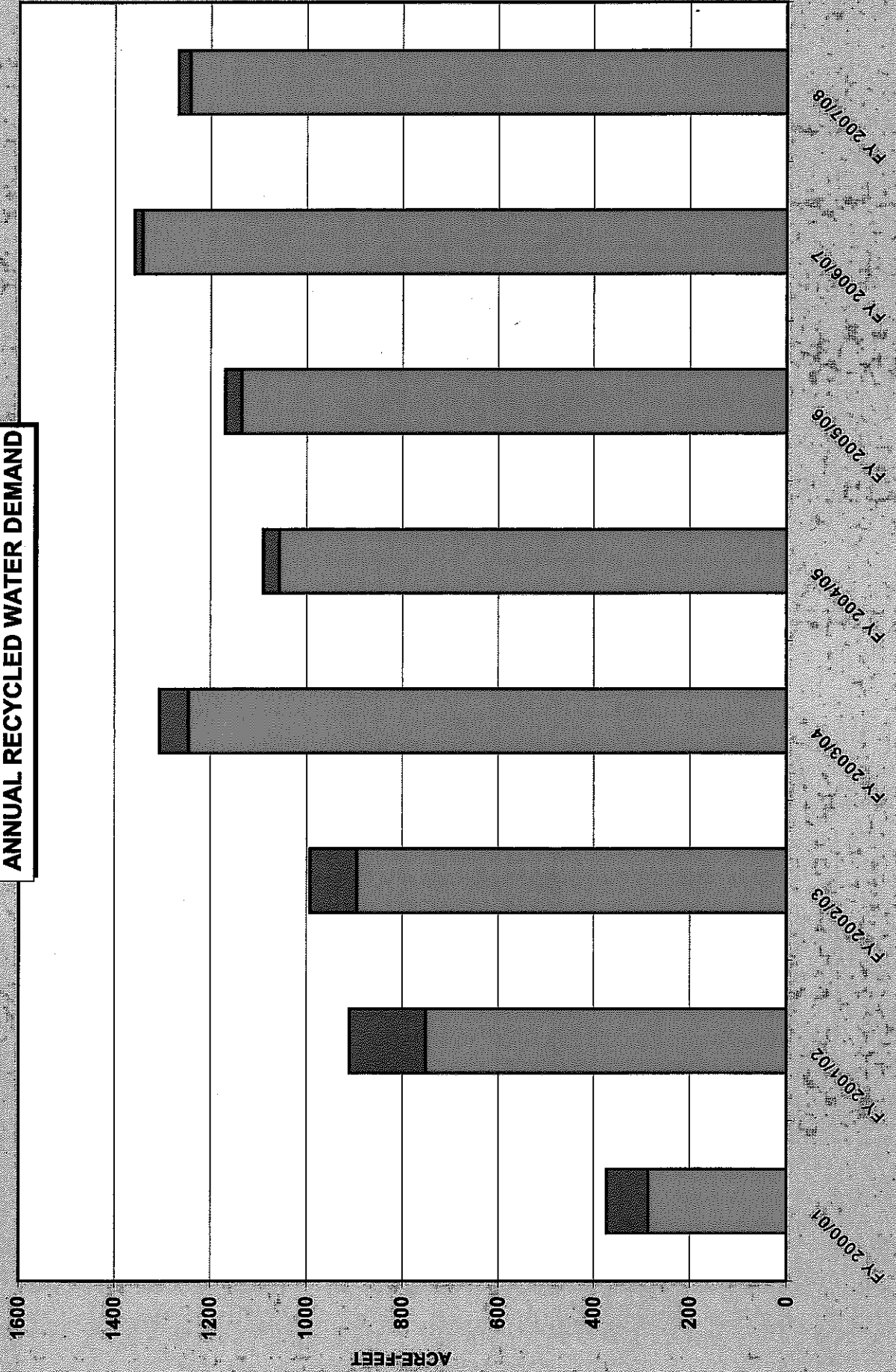
**MONTHLY RECYCLED WATER DEMAND**



■ Recycled Water ■ Potable Water

Figure 1

**ANNUAL RECYCLED WATER DEMAND**



■ Recycled Water ■ Potable Water

Figure 2

SAN ELIJO JOINT POWERS AUTHORITY  
MEMORANDUM

March 9, 2009

TO: Board of Directors  
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: RECYCLED WATER IMPROVEMENT AND EXPANSION PROJECT

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the transfer of \$90,000 from the Water Reclamation Fund account to the new capital improvement project titled *Recycled Water Improvement and Expansion Project*;
2. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with DUDEK for professional environmental services associated with California Environmental Quality Act (CEQA) documentation;
3. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with Trussell Technologies, Inc. for professional engineering services associated with water treatment and disinfection;
4. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for entering into an agreement for an amount not to exceed \$30,000 with Kennedy/Jenks Consultants for professional services associated with the Clean Water State Revolving Loan Fund and grant funding applications;
5. Authorize the General Manager to request qualifications from engineering firms for developing the design and construction documents for the Recycled Water Improvement and Expansion Project; and
6. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns and operates a water reclamation system that serves the San Dieguito Water District (SDWD), Santa Fe Irrigation District (SFID), and the City of Del Mar. Currently the recycled water program serves an annual demand of approximately 1,300 acre-feet (AF) or 423 million gallons. The SEJPA's recycled water program has become an important component of diversifying and supplementing the local water supply.

Over the last seven years, the SEJPA has investigated opportunities to improve and expand the recycled water program. Based on previous and ongoing engineering studies, it appears feasible to expand the recycled water program. Potential use from new customers ranges from 300 AF per year for sites relatively close to the existing distribution system to more than 600 AF per year if the conveyance system was extended to serve the Santa Fe Golf Course and surrounding area.

The main components needed to expand the program include adding water storage, constructing conveyance system improvements, and building treatment facilities to lower the levels of total dissolved solids (TDS) in the recycled water. Water storage could be added at the treatment plant or within the distribution system and there could be benefits to eventually adding storage to both. However, based on work completed to date, it appears that the most cost effective solution is to convert an existing 450,000 gallon tank located at the treatment plant to recycled water storage.

Needed conveyance system improvements include increasing distribution pumping capacity, constructing new pipelines, and installing service connections to reach new customers.

Water treatment improvements would likely require the addition of an advanced treatment system (micro filtration and reverse osmosis) to remove TDS and other undesirable constituents. The treatment system may be able to increase the overall output of the water reclamation facility, but its main function will be to maintain water quality compliance. Concentration levels of TDS in the potable water supply have increased as water supplies have become constrained due to the statewide drought. This has had a direct effect on the TDS levels in the wastewater received by the SEJPA. Furthermore, the Member Agencies of the SEJPA have limited options for regulating or banning salt discharges to the public sewer system, which includes residential use of salt-based water softeners. Without treatment options, the SEJPA will continue to have difficulty in complying with its Recycled Water Master Permit for TDS daily maximum concentrations as well as contractual obligations of its wholesale water agreements. This element of the project is expected to be the most expensive part of the project.

In 2008, the SEJPA retained professional engineering services to prepare the conceptual design of new water storage facilities at the water reclamation facility that could benefit both the Water Reclamation Program and the San Elijo Ocean Outfall. This scope of work was amended to include analyzing the conversion of underutilized wastewater tanks as a cost-effective alternative to building new facilities. The amendment also included incorporating new and previous work performed on demineralization treatment including location requirements, sizing criteria, and utility layouts. The intent is that this conceptual design work, which has built upon findings from previously efforts, will lay the ground work for the preliminary and final design should authorization be given. Studies and reports that have contributed to this effort include the 2002 Demineralization and Conveyance System Improvements Preliminary Design Report, 2005 SEJPA Recycled Water Optimization and Expansion Study, 2005 SFID Recycle Water Master Plan, and the 2007 SEJPA Water Reclamation Facility Master Plan.

## DISCUSSION

### **PROJECT PURPOSE & GOALS**

After careful consideration, staff recommends pursuing the development of the *Recycled Water Improvement and Expansion Project*. This proposed project will have three main components: (1) advanced treatment for TDS removal, (2) onsite storage, and (3) conveyance system improvements to serve new customers. The primary goals of the project are as follows:

- Improve water quality to meet or exceed permit and water agreement requirements
- Increase system production and distribution capacity

- Provide infrastructure to serve new customers
- Increase recycled water demand by 300 AF per year within five years of project completion

Secondary goals of the project are as follows:

- Provide limited hydraulic equalization to the San Elijo Ocean Outfall System
- Provide limited allowances to Member Agencies for groundwater discharge to sewer system
- Provide limited allowances to Member Agencies for diverting dry weather urban runoff to sewer system

The secondary project goals provide benefits to the Member Agencies through the use of water treatment for non-wastewater flows. These flows may be related to construction dewatering needs or as part of storm water pollution prevention plans. The SEJPA is currently unable to accept such flows due to TDS concerns. With the addition of advanced treatment, limited discharges could be permissible to the Member Agencies' sanitary sewer systems.

Due to the broad range of benefits, the conceptual project has received support from many organizations including the City of Encinitas, City of Solana Beach, City of Escondido, San Elijo Lagoon Conservancy, SDWD, SFID, Encinitas Ranch Golf Course, and the Surfrider Foundation San Diego Chapter. The City of Encinitas Engineering Department has estimated that the allowance of discharging construction dewatering to the sewer system could result in \$300,000 of construction savings on a planned project.

### *PROJECT FINANCING*

The preliminary capital cost estimate for this project has a range of \$6 million to \$8 million. The project may qualify for partial grant funding and would qualify for performance incentives provided under existing agreements between the SEJPA and the Metropolitan Water District and the San Diego County Water Authority.

The primary funding source will be focused on obtaining a low-interest Clean Water State Revolving Fund (SRF) loan from the state of California. The recently approved federal stimulus package, American Recovery and Reinvestment Act (ARRA) of 2009, has designated \$4 billion to the Clean Water SRF program. It is anticipated that projects funded through this funding will receive an interest rate less than the current SRF interest rate of 2.3 percent. The ARRA may also provide some grant funding but at this time the exact details are unclear. Funds will likely be based on project readiness to proceed to construction and on its environmental benefits. Compliance driven projects are also expected to receive higher ranking consideration.

The SEJPA Water Reclamation Fund has an FY 2008-09 balance of \$2.96 million. Staff has recommended transferring an initial \$90,000 from this fund to the proposed Recycled Water Improvement and Expansion Project for funding the preliminary efforts. Upon selection of the engineering design team and negotiation of the scope of work and fee, staff will make a second funding request from the Water Reclamation Fund. It is anticipated that the SRF loan will be a reimbursement loan and that the SEJPA may be required to provide 16 percent of the project cost as a down payment. If this is the case, the SEJPA Water Reclamation Fund has adequate funding.

### *PROJECT SCHEDULE*

The SEJPA should find several advantages for pursuing this project now. The project provides infrastructure necessary for permit compliance and to create additional new water supplies. The project will last for close to two years and provide jobs ranging from engineers and environmental scientists to plumbers and electricians. Furthermore, the current economic climate is producing



competitive construction bids and favorable construction interest rates, possibly below two percent. Additional timing benefits to the cities of Encinitas and Solana Beach could be cost savings to their capital projects that have dewatering needs.

Probably the most challenging aspect of this project is to meet aggressive ARRA schedule goals, which have been described as being ready for construction in one year or less. From the information released to date, the ARRA SRF loan has a deadline of March 24, 2009 for the initial SRF loan application. Projects with the most complete application package including design and CEQA documentation will receive priority. Therefore, the SEJPA would benefit if the CEQA documentation and the project's basis of design report was completed by June 2009, at which time the final SRF application would be submitted with these documents included. It is reasonable to foresee that the final design would also require a compressed schedule such that construction bidding documents might be ready by late October 2009. This would facilitate the construction bid opening in mid-December and possibly allow for a construction contract recommendation to the SEJPA Board of Directors in January 2010.

**PRELIMINARY PROJECT SCHEDULE**

Month	Critical Activities
March 2009	Submit SRF Initial Loan Application & Complete Conceptual Design Report Begin CEQA Documentation & Conduct Tracer Study on Disinfection System
April 2009	Request Qualifications from Engineering Firms for Design Services Interview Engineering Firms, Select Best Qualified Firm & Negotiate Scope & Fee
May 2009	Board Action – Award Engineering Contract & 2 <sup>nd</sup> Funding Transfer for Project
June 2009	Accept CEQA Documents & Basis of Design Report Submit SRF Final Loan Application
August 2009	Notice by SRF of Project Acceptance
October 2009	Board Action – Accept Project Design & Authorize Advertisement for Construction
November 2009	Advertise Construction Project & Conduct Pre-Bid Job Walk
December 2009	Construction Bid Opening & Review of Bid Packages
January 2010	Board Action – Award Construction & Construction Management Contracts

As can be seen from the proposed schedule, effort has been given to compress and fast-track most activities. As listed previously, there are many reasons and benefits for the SEJPA to consider such an aggressive schedule. In May 2009, it is expected that staff will be providing a recommendation for awarding the engineering design contract to the SEJPA Board of Directors. Concurrently, staff will request Board approval for transferring additional funds from the Water Reclamation Fund for this project.

It is therefore recommended that the Board of Directors:

1. Approve the transfer of \$90,000 from the Water Reclamation Fund account to the new capital improvement project titled *Recycled Water Improvement and Expansion Project*;
2. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with DUDEK for professional environmental services associated with California Environmental Quality Act (CEQA) documentation;
3. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for an amount not to exceed \$30,000 with Trussell Technologies, Inc. for professional engineering services associated with water treatment and disinfection;
4. Authorize the General Manager to use funds from the Recycled Water Improvement and Expansion Project for entering into an agreement for an amount not to exceed \$30,000

with Kennedy/Jenks Consultants for professional services associated with the Clean Water State Revolving Loan Fund and grant funding applications;

5. Authorize the General Manager to request qualifications from engineering firms for developing the design and construction documents for the Recycled Water Improvement and Expansion Project; and
6. Discuss and take action as appropriate.

Respectfully submitted,

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

Michael T. Thornton, P.E.  
General Manager