

**LAS VIRGENES - TRIUNFO
JOINT POWERS AUTHORITY
AGENDA**

CLOSING TIME FOR AGENDA IS 8:30 A.M. ON THE TUESDAY PRECEDING THE MEETING. GOVERNMENT CODE SECTION 54954.2 PROHIBITS TAKING ACTION ON ITEMS NOT ON POSTED AGENDA UNLESS AN EMERGENCY, AS DEFINED IN GOVERNMENT CODE SECTION 54956.5 EXISTS OR UNLESS OTHER REQUIREMENTS OF GOVERNMENT CODE SECTION 54954.2(B) ARE MET.

5:00 PM

March 3, 2014

PLEDGE OF ALLEGIANCE

1. CALL TO ORDER AND ROLL CALL

A The meeting was called to order at _____ p.m. by _____ in the Oak Park Library and the Clerk of the Board called the roll.

<u>Las Virgenes Municipal Water District</u>	<u>Present</u>	<u>Left</u>	<u>Absent</u>
Charles Caspary, Chair	_____	_____	_____
Glen Peterson	_____	_____	_____
Leonard Polan	_____	_____	_____
Lee Renger	_____	_____	_____
Barry Steinhardt	_____	_____	_____
<u>Triunfo Sanitation District</u>			
Steven Iceland, Vice Chair	_____	_____	_____
Michael McReynolds	_____	_____	_____
Janna Orkney	_____	_____	_____
Michael Paule	_____	_____	_____
James Wall	_____	_____	_____

2. APPROVAL OF AGENDA

A Moved by _____, seconded by _____, and _____, that the agenda for the Regular Meeting of March 3, 2014, be approved as presented/amended.

3. PUBLIC COMMENTS

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

4. CONSENT CALENDAR

A Minutes: Regular Meeting of February 3, 2014. Approve

5. **ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS**

2

A JPA Budget Workshop for Fiscal Year 2014-15

B Sanitation and Recycled Water Master Plan Updates: Preliminary Review

C JPA Infrastructure Investment Plan: Fiscal Year 2014-15 through 2017-18

Receive and file the draft JPA Infrastructure Investment Plan for Fiscal Years 2014-15 through 2017-18, and provide staff with feedback for incorporation in a final version of the document.

6. **ACTION ITEMS**

A Rancho Las Virgenes Third Digester Construction: Change Order No. 4

Authorize the General Manager/Administering Agent to approve Change Order No. 4 with Pacific Hydrotech Corporation in the amount of \$173,097.69, including extension of the contract duration by 28 calendar days for the Rancho Las Virgenes Third Digester Project; and appropriate additional funds in the amount of \$352,491 to CIP Job No. 10487.

B Solar Generation Project: Application of Energy Savings

Consider three options for the application of energy cost-savings realized as a result of the operation of the Solar Generation Project and select the preferred methodology.

C Heal the Bay's "Bring Back the Beach" Event: Attendance

Determine whether or not to participate in Heal the Bay's "Bringing Back the Beach" event, and, if participation is approved, authorize the Chair of each agency and the General Manager/Administering Agent to attend the event at a cost of \$500.00 per person.

7. **BOARD COMMENTS**

8. **ADMINISTERING AGENT/GENERAL MANAGER REPORT**

9. **FUTURE AGENDA ITEMS**

10. **INFORMATION ITEMS**

A Board Meeting Follow-up Items

B Information on Plastic Microbeads

C Recycled Water Incentive Program

11. **PUBLIC COMMENTS**

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

12. **CLOSED SESSION**

A Conference with District Counsel – Existing Litigation (Government Code Section 54956.9(a)):

1. Las Virgenes Municipal Water District vs. Onsite Power Systems, Inc.
2. Las Virgenes - Triunfo Joint Powers Authority v. United States Environmental Protection Agency

13. ADJOURNMENT

**LAS VIRGENES - TRIUNFO
JOINT POWERS AUTHORITY
MINUTES**

5:00 PM

February 3, 2014

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Director McReynolds.

1. CALL TO ORDER AND ROLL CALL

A Call to order and roll call:

The meeting was called to order at 5:00 p.m. by Director McReynolds in the Las Virgenes Municipal Water District Headquarters and Clerk of the Board Bodenhamer called the roll. Those answering present were Directors Caspary, McReynolds, Orkney, Paule, Polan, Renger, Steinhardt and Wall. Directors Iceland and Peterson were absent.

2. APPROVAL OF AGENDA

A Approval of Agenda

Administering Agent/General Manager Pedersen requested to add an item before 5A for the designation of the calendar year Chair and Vice Chair for JPA.

Discussion between JPA Board took place regarding switching of Chair and Vice Chair of the Board. Director Steinhardt suggested to put it on the next agenda as it is not an emergency; Director Orkney stated it is procedural and asked for someone to look up the bylaws; Director McReynolds asked Legal Counsel Lemieux and Matthews how to proceed; (Lemieux: if the bylaws say chairmanship rotates from one president to the other, board-to-board, then Director Caspary would be Chair; a copy of the bylaws was provided by Clerk of the Board Bodenhamer; Legal Counsel Matthews added that it rotates the second meeting of every year; Director Paule noted it does not require a vote; Director Orkney stated that we have never voted on it in the past; Director Steinhardt stated that does not mean it is right; after reading the bylaws, Legal Counsel Lemieux advised that the Chairs will alternate annually; Director Caspary is the Chair and Director Iceland is the Vice Chair.

Director Caspary asked for a motion to approve the agenda as published.

Director Iceland arrived at 5:03 p.m.

On a motion by Director Barry Steinhardt, seconded by Director Lee Renger, the Board of Directors voted 9-0 -1 to Approve the agenda as presented.

AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Polan , Renger , Steinhardt , Wall

ABSENT: Director(s) Peterson

3. PUBLIC COMMENTS

ITEM 4A

Members of the public may now address the Board of Directors **ON MATTERS NOT** ⁵
APPEARING ON THE AGENDA, but within the jurisdiction of the Board. No action shall be
taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of
Government Code Section 54954.2

No speaker cards were received from the public.

4. CONSENT CALENDAR

A Minutes: Regular Meeting of January 6, 2014. Approve

On a motion by Director Michael McReynolds, seconded by Director Steven Iceland, the Board of Directors voted 9-0 -1 to Approve the minutes of January 6, 2014 as presented.
AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Polan , Renger , Steinhardt , Wall
ABSENT: Director(s) Peterson

5. ACTION ITEMS

A Financial Review: Second Quarter of Fiscal Year 2013-14

Receive and file.

Administering Agent/General Manager Pedersen gave an overview on Second Quarter Fiscal Year Financial Review; the operating revenues are about 19% above budget being driven by increase of sales of wholesale recycled water primarily due to the dry conditions; operating costs are down by about 4.4% below budget; staff vacancies are causing the numbers to fall below budget; operating expenses are looking favorable.

Discussion took place on the Financial Review and JPA questions were answered.

Director Peterson arrived at 5:16 p.m.

On a motion by Director Leonard Polan, seconded by Director Janna Orkney, the Board of Directors voted 10-0 to Approve to receive and file.
AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Peterson , Polan , Renger , Steinhardt , Wall

B Impressed Current Cathodic Protection System for Centrate Treatment and Storage Tanks: Construction Award

Award a construction contract to Exaro Technologies Corporation in the amount of \$98,800 for the Construction of Impressed Current Cathodic Protection System for Centrate Treatment and Storage Tanks Project; reject all remaining bids upon receipt of duly executed contract documents; and approve an appropriation of \$30,000 for CIP Job No. 10544 for professional engineering and other miscellaneous services during construction.

Administering Agent/General Manager Pedersen presented on the Impressed Current Cathodic Protection System for Centrate Treatment and Storage Tanks stating the key issue with this project was a timing one, because of dry conditions and fish flows, the timing was not right previously; call for bids was done on December 2, 2013; the low bidder was Exaro Technologies Corporation with a bid of \$98,800; the bid includes an optional item to delay the project for one year if necessary to address timing issues; a recommendation was made to reject all other remaining bids and to approve an appropriation of \$30,000 for CIP Job No. 10544.

Discussion took place on the item and questions were answered.

On a motion by Director Michael Paule, seconded by Director Janna Orkney, the Board

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of Directors voted 10-0 to Approve as presented.

AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Peterson , Polan , Renger , Steinhardt , Wall

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C Recycled Water Reservoir No. 2 Improvements: Accept Design Proposal

Accept the proposal from and authorize the General Manager/Administering Agent to execute a professional services agreement with Pacific Advanced Civil Engineering, Inc. in the amount of \$54,432 to perform the design of the Reservoir No. 2 Improvements Project; and appropriate \$61,000 to CIP Job No. 10522 for the work.

Administering Agent/General Manager Pedersen presented on the Recycled Water Reservoir No. 2 Improvements; there are three components involved in the improvement process; cleaning of the reservoir, installation of membrane liners and potential use of shade balls on the reservoir; on October 7, 2013, the board approved an RFP that was sent to five engineering firms; proposals were received from PACE Engineering and HDR in the amounts of \$54,432 and \$55,500; staff reviewed the proposals and found that PACE submitted a superior proposal; they have experience in reservoir maintenance and may be able to eliminate the need for shade balls; staff toured LADWP's Ivanhoe Reservoir and it was noted that they have had a good experience with the shade balls.

Discussion on the item took place and questions were answered.

On a motion by Director Janna Orkney, seconded by Director Steven Iceland, the Board of Directors voted 10-0 to Approve to accept the proposal as presented.

AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Peterson , Polan , Renger , Steinhardt , Wall

D Budget Planning Calendar for Fiscal Year 2014-15: Updated

Receive and file.

Administering General/Manager Pedersen reported that there was a request for the JPA Audit Committee to meet in March; the date is not reflected yet on the calendar as it will be based on availability of the members; on May 5th, they will be reviewing the Recycled Water Master Plans.

Discussion on this item took place and questions were answered.

President Caspary urged the TSD Board to be prepared with questions. Director Paule explained that the JPA audit committee meeting was no longer needed.

On a motion by Director Michael Paule, seconded by Director Michael McReynolds, the Board of Directors voted 10-0 to Approve to receive and file.

AYES: Director(s) Caspary , Iceland , McReynolds , Orkney , Paule , Peterson , Polan , Renger , Steinhardt , Wall

6. BOARD COMMENTS

Director Orkney was one of the board representatives for the Wastewater Tour and commended staff for doing an outstanding job; she appreciated Jeff Reinhardt's presentation; she thanked staff for gathering data; she commented that the LA Times reported that microbeads for personal care products are a big problem and asked staff if they are finding it to be problem in the effluent water? (Pedersen: is not aware of microbeads)

Discussion took place on the microbeads and questions were answered.

Director Peterson commented on letter of Allocation of Energy Savings; he asked to not have

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bottled water provided at Board meetings.

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Director Steinhardt was not happy about having bottled water provided; he does not use bottled water at home and we should not have it here.

Jeff Reinhardt commented that there was bottled water left over from the tour on Saturday. Director Steinhardt said it could be used for the next tour and there is no excuse for having it at the meeting.

Director McReynolds commented that with the water shortage in California, we need to be thinking about the next steps for the Recycled Water Seasonal Storage Project, including preparing the guiding principles.

Director Paule reported that "Super Saturday" at Oak Park School District was a great event; he commented that he believes there is a focus and awareness of the water shortage and how to make water last longer.

7. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager Pedersen commented that 34 guests attended the Wastewater Tour.

8. FUTURE AGENDA ITEMS

Director Renger requested staff to look into the plastic particle problem to see if there is any in the incoming or outgoing streams.

9. INFORMATION ITEMS

A Board Follow-up Items

B Liability Insurance Coverage for JPA and Triunfo Sanitation District

C Rancho Las Virgenes Third Digester Project: Approval of Scope Change for Materials Testing Services

D Solar Generation Project: Approval of Scope Change for Field Electrical Inspections

Director Polan asked why the cost was so high for field inspection on the Solar Generation project? (Zhao: the high cost is due to overhead and travel expense)

E Lost Hills Interchange Improvement Project: Project Information and Schedule

Director Polan asked if Bob Woodward was a City of Calabasas Engineer or does he work for someone else? (Pedersen: he is an employee at the city) (Zhao: Bob has his own firm, but also works part time at the City of Calabasas) Director Polan asked staff why was there nothing mentioned about cycling.

F Insurance Coverage for Sub-Consultant Services

10. PUBLIC COMMENTS

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ITEM 4 A

No speaker cards were received from the public.

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The meeting convened to break at 6:14 p.m and Closed session started at 6:16 p.m.

11. CLOSED SESSION

Closed session ended at 6:49 p.m.

A Conference with District Counsel – Existing Litigation (Government Code Section 54956.9(a)):

1. Las Virgenes Municipal Water District vs. Onsite Power Systems, Inc.
2. Las Virgenes - Triunfo Joint Powers Authority v. United States Environmental Protection Agency
3. Heal the Bay, Inc. v. Lisa P. Jackson

12. ADJOURNMENT

The meeting was adjourned at 6:50 p.m.

Charles Caspary, Chair

ATTEST:

Steven Iceland, Vice Chair

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject: JPA Budget Workshop for Fiscal Year 2014-15

SUMMARY:

Staff will present an overview of the key indicators and driving factors for the Fiscal Year (FY) 2014-15 JPA Budget.

The following budget workshop documents are attached:

1. Allocation of JPA Expenses to Participants for FY 2013-14
2. G&A Cost Pool Methodology
3. Recycled Water Wholesale Rate Computation

At the meeting, staff will provide a presentation to review the major factors affecting the preliminary budget and answer questions from the JPA Board. Among the important factors affecting the preliminary budget is the wholesale rate for recycled water purchased from the JPA based on the key components that factor into the computation of the rate.

Wholesale Recycled Water Rate:

The preliminary budget includes establishing the FY 2014-15 wholesale recycled water rate in accordance with criteria previously approved by the JPA Board, which could result in a rate reduction for FY 2014-15 based on preliminary data. The current rate is \$407.27 per acre foot. The potential reduction is driven in part by cost-savings associated with the planned operation of the solar generation project and a possible projected increase in recycled water sales over last year's budgeted sales.

LVMWD and TSD staff discussed potential concerns with a reduction in the wholesale recycled water rate given the existing contractual relationship between TSD and Calleguas Municipal Water District (Calleguas) for the purchase and sale of recycled water. Currently, Calleguas purchases recycled water from TSD at a rate of 5 percent above the established wholesale rate, conveys the recycled water through its system, and sells it back to TSD at 80% of its Tier 1 potable water rate. As such, Calleguas would receive the benefit of any reduction in the wholesale recycled water rate.

A joint meeting of LVMWD and TSD staff will be held in early April to review the preliminary JPA budget. This meeting will present TSD staff an opportunity to provide valuable input in the budget process, to request any revisions, and to establish accurate estimates of revenues and expenditures.

Prepared By: David W. Pedersen, General Manager/Administering Agent

ATTACHMENTS:

Allocation of JPA Expenses

G&A Cost Pool

Recycled Water Wholesale Rate Computation

FISCAL YEAR 2013-14 OPERATING BUDGET
ALLOCATION OF JOINT POWERS AUTHORITY EXPENSES TO PARTICIPANTS

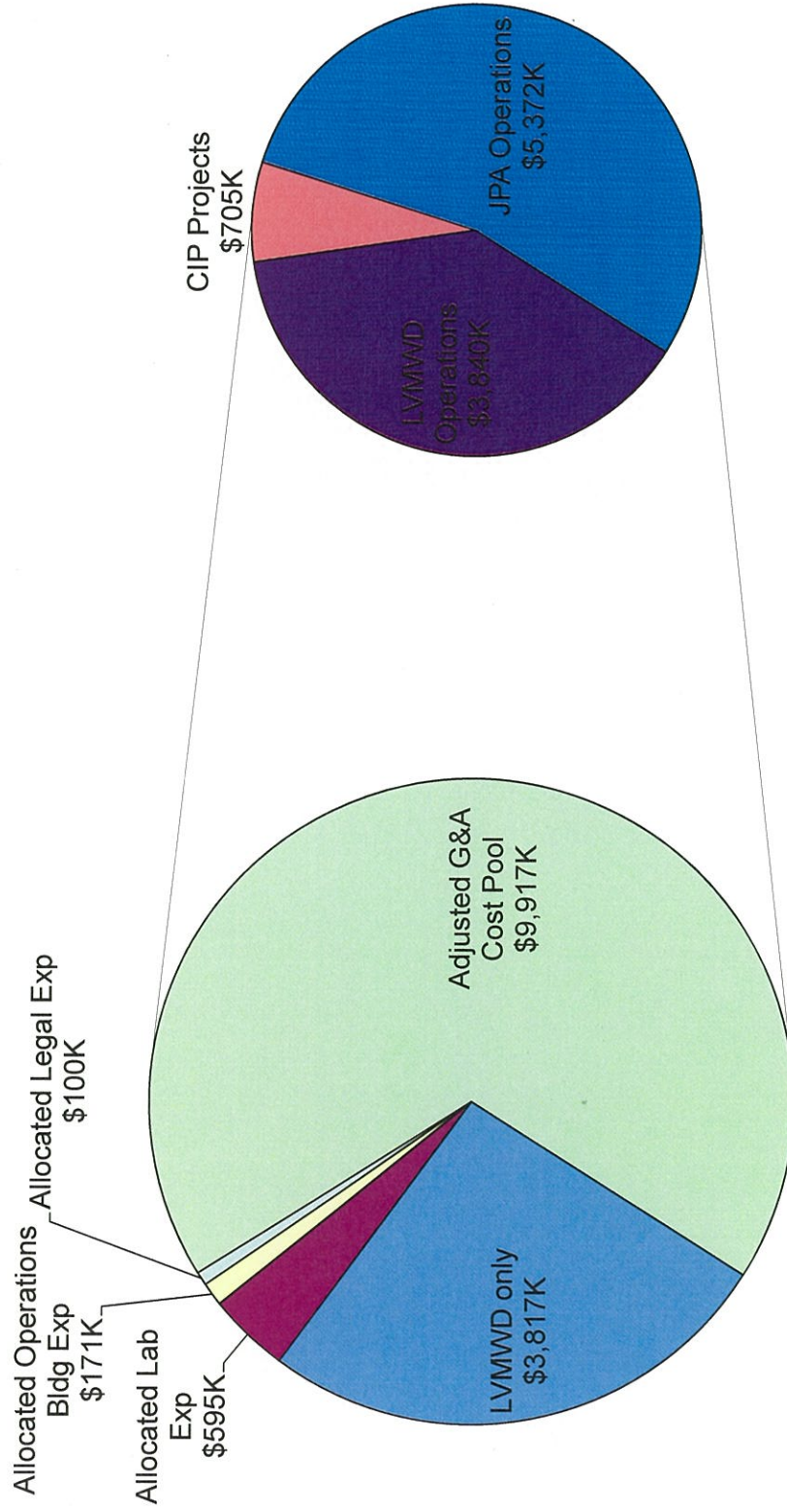
EXPENSES (REVENUES)	JPA EXPENSES BY ALLOCATION GROUPS				
	A	B	C	D	E
SEWER EXPENSE	273,928	0	0	0	0
TREATMENT RECLAMATION	0	4,600,778	2,887,186	0	0
TREATMENT COMPOSTING	0	2,843,417	1,730,442	0	0
TREATMENT INJECTION	0	153,670	120,086	0	0
PUMP STATIONS	0	1,269,959	0	0	0
TANKS/RESERVOIR WELLS	0	92,890	0	0	0
SYSTEM OPERATION	0	31,172	0	0	0
WATER SYSTEM	0	81,115	0	0	0
ADMINISTRATIVE EXPENSES	0	1,005,227	0	5,300	0
TAPIA WAREHOUSE	0	3,100	0	0	0
REVENUES	0	(2,624,426)	0	0	(20,000)
TOTAL EXPENSES	273,928	7,456,902	4,737,714	5,300	(20,000)
	A	B	C	D	E
					TOTAL

PARTICIPANTS SHARE	ALLOCATION OF EACH GROUP TO PARTICIPANTS									
	A		B		C		D		E	
	%	\$	%	\$	%	\$	%	\$	%	\$
U-1 SANITATION DISTRICT	36.3%	99,436	53.1%	3,959,615	47.1%	2,231,463	25.0%	1,325	79.2%	(15,848)
U-2 SANITATION DISTRICT	3.1%	8,492	17.5%	1,304,958	18.9%	895,428	25.0%	1,325	0.0%	0
TOTAL LVMWD	39.4%	107,928	70.6%	5,264,573	66.0%	3,126,891	50.0%	2,650	79.2%	(15,848)
TRIUNFO SANITATION DISTRICT	60.6%	166,000	29.4%	2,192,329	34.0%	1,610,823	50.0%	2,650	20.8%	(4,152)
TOTAL ALLOCATION	100.0%	273,928	100.0%	7,456,902	100.0%	4,737,714	100.0%	5,300	100.0%	(20,000)
	A	B	C	D	E					TOTAL

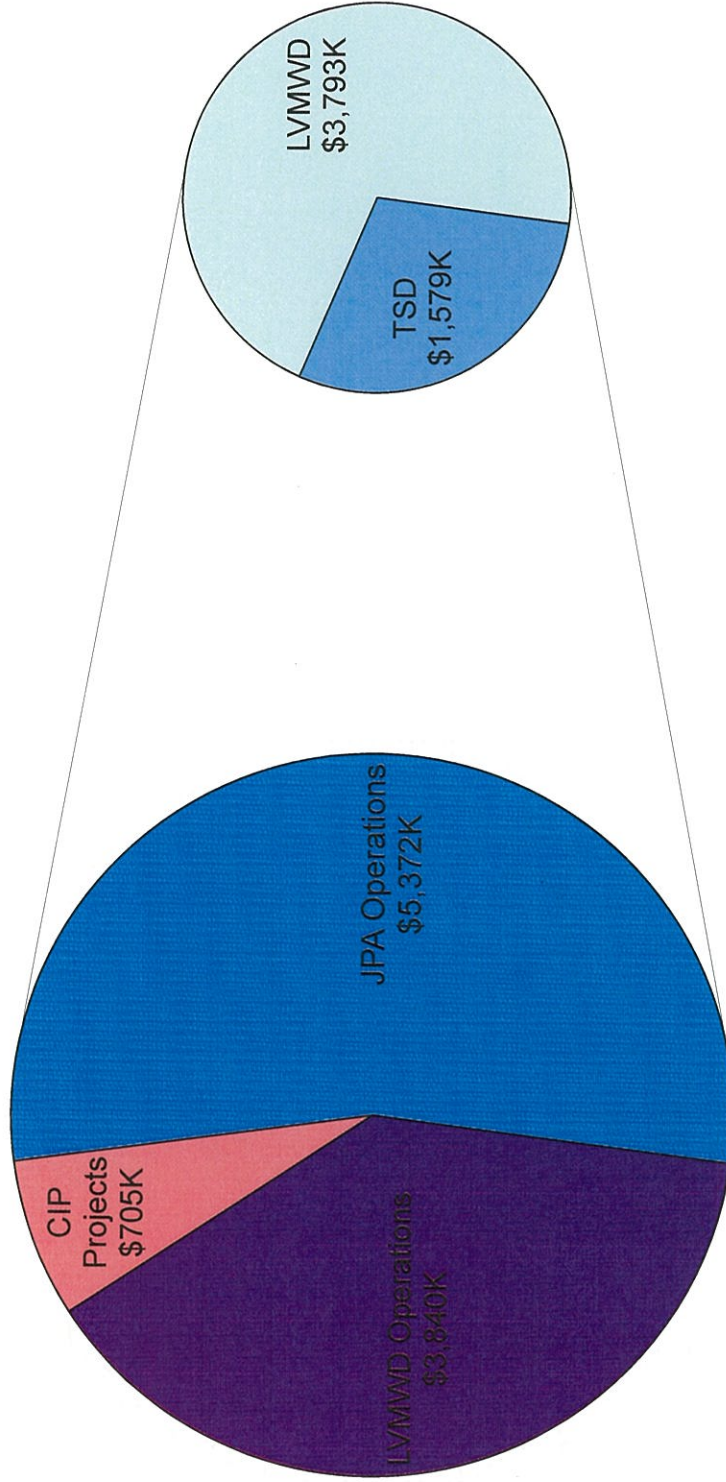
- GROUP**
- A** Basis of allocation to each participant is participant's reserve capacity rights in the trunk sewer.
 - B** Basis of allocation to each participant is participant's reserve capacity rights in the treatment plant and reclaimed water system.
 - C** Basis of allocation to each participant is participant's flow into the treatment plant.
 - D** Each participant is allocated an equal share.
 - E** Basis of allocation is each participant's average monthly cash balance.

ITEM 5A

LVMWWD FY 2013-14 G&A Cost Pool



LVMWD FY 2013-14 Adjusted G&A Cost Pool



RW WHOLESALE RATE COMPUTATIONS per FY 2013-14 Operating Budget

FY 2013-14 Budgeted Costs	Total Cost	Base Cost	Add'l Pumping	East-West Cost
Pump Stations	1,269,959	470,920	799,039.50	
Reservoirs	92,890	92,890		
System Operations	31,172	31,172		
Distribution	81,115	81,115		
Administration	99,034	99,034		
subtotal: Operations & Admin	<u>1,574,170</u>	<u>775,131</u>		
Depreciation FY11-12	845,000	845,000	-	
Total Cost	<u>\$ 2,419,170</u>	<u>\$ 1,620,131</u>	<u>\$ 799,040</u>	
Costs per Acre Foot		<u>\$ 269.39</u>	<u>\$ 137.88</u>	<u>\$ 407.27</u>

FY 2013-14 Estimated Deliveries (avg. prior 3 years)

	Acre Feet	Rate	
LV Valley	219	\$ 269.39 /AF	\$ 58,996.41
LVMWD East	1,914	\$ 407.27 /AF	\$ 779,514.78
LVMWD West	<u>2,378</u>	\$ 407.27 /AF	<u>\$ 968,488.06</u>
Total LVMWD	<u>4,511</u>		<u>\$ 1,806,999.25</u>
TSD	<u>1,503</u>	\$ 407.27 /AF	<u>\$ 612,126.81</u>
	<u>6,014</u>		<u>\$ 2,419,126.06</u>

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject: Sanitation and Recycled Water Master Plan Updates: Preliminary Review

SUMMARY:

On December 10, 2012, the JPA approved a proposal from Kennedy/Jenks Consultants (KJ) and HDR, Inc. as a sub-consultant to prepare updates to the JPA's Sanitation, Recycled Water and Integrated Master Plans. A technical memorandum describing projected future wastewater flows and recycled water demands was presented to the JPA Board on September 3, 2013.

Wastewater flows are projected to increase to approximately 12 million-gallons-per-day by 2035. Annual recycled water demands could increase by 2,669 acre-feet, depending on which recycled water extensions are implemented. However, it should be noted that many of the extensions are very expensive and would create the need for additional potable water supplement unless the proposed seasonal storage reservoir is constructed.

The Sanitation Master Plan Update identifies various projects to improve reliability and capacity for nutrient removal, reduce energy consumption at both the Tapia Water Reclamation Facility and Rancho Las Virgenes Composting Facility (Rancho), enhance digestion capacity and efficiency at Rancho, and improve compost quality^[1]. The projects have a total cost of \$19,675,000, of which \$2,570,000 have a high priority, \$12,705,000 have a medium priority and \$4,400,000 have a low priority.

For the first time, the Recycled Water Master Plan Update includes hydraulic modeling of both the JPA and Calleguas Municipal Water District recycled water systems acting as one system. Previous master plans only considered recycled water usage in Ventura County as demand points at the Los Angeles-Ventura County line for the modeling effort. Various recycled water system extensions in both Ventura and Los Angeles Counties were modeled. For the most part, the existing recycled water system has sufficient capacity to support the extensions without major improvements.

The need to supplement the recycled water system with potable water to meet high summer-time demands increases with each additional customer. However, conversely, new customer demands help to reduce the quantity of excess recycled water for disposal, including that discharged to Malibu Creek, during the "shoulder" months. The more ambitious extension proposals such as serving Conejo Creek Park in Thousand Oaks and Pierce College in the City of Los Angeles will require improvements to the existing system.

At the Board meeting, staff from KJ and HDR will provide a detailed presentation on the content of the draft Sanitation and Recycled Water Master Plan Updates. Executive summaries for the two master plan updates are attached. Complete version of the master plan updates will be provided to the JPA Board on April 7, 2014.

[1] The Sanitation Master Plan Update assumed that current water quality limits remain unchanged.

Prepared By: David R. Lippman, Director of Facilities & Operations

ATTACHMENTS:

[Sanitation Master Plan Update - Executive Summary](#)

[Sanitation Master Plan Update - Draft CIP](#)

[Recycled Water Master Plan Update - Executive Summary](#)

Executive Summary

Background

The JPA of the Las Virgenes Municipal Water District (LVMWD, District) and Triunfo Sanitation District (TSD) operate and maintain a sewer system and wastewater treatment facilities that serve the Malibu Creek Watershed within Los Angeles and Ventura Counties. The TWRP provides tertiary treatment and disinfection to the wastewater prior to beneficial reuse for irrigation of golf courses and green belts. Surplus recycled water that is not used in the recycled water system is released to Malibu Creek after it is dechlorinated. Wastewater solids generated during wastewater treatment are pumped to the Rancho Las Virgenes composting Facility (Rancho) using a 4-mile long buried pipeline. These solids undergo anaerobic digestion, dewatering, composting and then are distributed to the public as Class A Exceptional Quality compost.

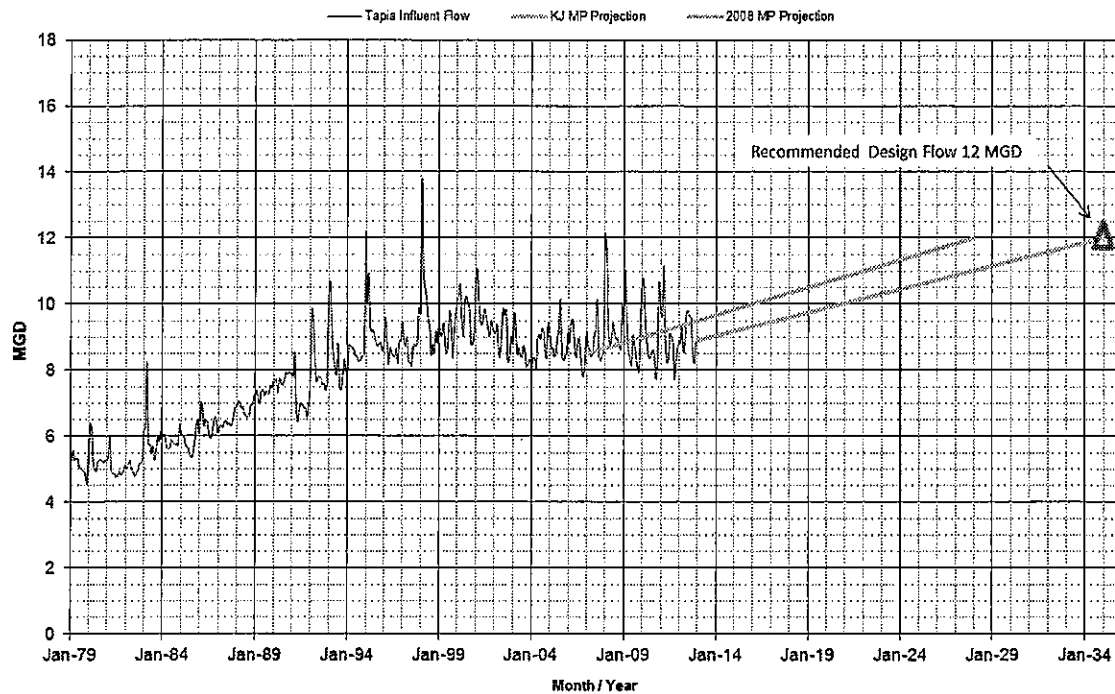
The focus of the 2014 Sanitation Master Plan is to support the following objectives:

1. Establish the system and facility requirements to meet the needs of the Joint Powers Authority (JPA) for providing sanitation services through the year 2035.
2. Provide a schedule for the construction of sanitation facilities at both the Tapia Water Reclamation Facility (TWRP) and the Rancho Las Virgenes Composting Facility (Rancho) to adequately serve growth projections within the service area and meet current regulatory constraints.
3. Integrate this sanitation plan with the updated plans for water and recycled water.
4. Develop a CIP that identifies needed projects along with the scheduling and estimated construction cost.
5. Serve as a basis for future financial planning.

Current and Projected Wastewater Flows

There was a generally steady increase in wastewater flows from the late 1970's to mid 1990's. Since that time, wastewater flows to Tapia have remained relatively constant, even though overall population in the JPA's service area has increased. To ascertain the projected level of future flows, a comprehensive evaluation of changes in both population and unit wastewater flow factors was performed. The results of the analyses suggest that projected flows could increase to approximately 12 MGD. As shown in Figure ES-1, this value is comparable to the findings of the 2008 Sanitation Master Plan, and is therefore recommended as the basis of the TWRP design flow.

ES-1: Comparison of Wastewater Flow Projections



Process Evaluation Findings and Recommendations

Given a 12 MGD basis of design, an evaluation of the liquid and solids processing were performed. Below is a listing of the key design criteria followed by a description of the methodology used to evaluate both of the wastewater treatment process streams. The updated biological process simulator was used to:

- Project biological nitrogen removal at 12 mgd under steady state conditions,
- Assist in identification of process bottlenecks, and
- Validate process bottlenecks previously identified by other consultants.

The results of the biological process simulations, identified the following key deficiencies in the liquid treatment and biosolids management systems:

- At Tapia, the aerobic treatment volume seems to be marginal with regard to nitrogen removal.
- At Tapia, there may be insufficient carbon to satisfactorily drive the de-nitrification process.

- At Tapia, the existing oxygen transfer is inefficient.
- The percent solids in the feed sludge to the digesters is limited by the capabilities of the transfer line from Tapia to Rancho. The dilute concentration of the feed sludge impacts the hydraulic capacity of the digesters. Considering the cost of a new line, it is more cost effective to thicken the sludge on the Rancho site prior to digestion.
- With the two existing operational digesters, there is insufficient redundancy to perform required maintenance. A third digester is currently under construction.
- The existing composting operation, while effective, is potentially more energy and operationally intensive than needed, as compared to some new composting technologies.
- Small plastic pieces continue to show up in the compost compromising the quality of the final product.
- The centrate treatment system is an essential part of the overall strategy to meet nutrient limits for nitrate and nitrite. Another Equalization Tank is needed to provide an adequate level of redundancy for reliable compliance and redundancy.

The improvements recommended to mitigate these items are included in Section 5: Proposed Capital Improvement Program. The total cost of these improvements is approximately \$19.7 Million. To support their implementation and prioritization, the identified improvements are generally derived to address the following key considerations for the District's Sanitation facilities:

- Improved reliability and capacity for nutrient removal
- Reduced energy consumption for liquid treatment at Tapia
- Enhanced digestion capacity and efficiency at Rancho
- Reduced energy consumption for biosolids treatment at Rancho
- Improved compost product quality at Rancho

Sanitation Master Plan - Capital Improvement Program

PROJECT NO.	PROJECT LOCATION	PROJECT DESCRIPTION	TIMEFRAME		PROJECT COST Estimated Cost (\$1,000)	PRIORITY			TREATMENT THEMES			NOTES	
			Short Term (0-20 years)	Long Term (21+ years)		High	Medium	Low	Capacity/Reliability Improvements	Operational Efficiency Improvements	Asset/Planting Facility Improvements		Regulatory Compliance Improvements
1	TWRF	Increase Aerobic basin volume by converting anaerobic volume to diffused zone separation, WAS drop and provision for supplemental carbon	X		\$1,200	X				X			The process modeling indicated that at the flow approach 12 mgd there is insufficient aerobic volume in the aeration tanks to secure complete nitrification. One option is to increase the aerobic volume in the aeration tanks to the superior of the aerobic volume and enhance the effectiveness of the aeration in the existing aeration tanks. Other options are to provide for supplemental carbon. Other options are to provide for supplemental carbon.
3	TWRF	New Equalization on Primary Effluent (also need secondary pump station)		X	\$22,000		X			X			Primary Effluent equalization. This would buffer out peaks for improved performance from secondary process. Additionally, would serve final function by also providing the equivalent of recycled water storage by increasing TWRF's ability to supply RW during the night when influent flows are typically low and recycled water demands are high. Assume 4 million gallons of storage.
5	Rancho Composting Facility	Thickening of Sludge from Taps Prior to Digestion	X		\$500		X			X			Thickening of sludge from Taps prior to digestion would fit to specs available. Implementation of thickening would increase capacity of digesters.
7	TWRF	Address issues of Infrastructure Setting	X		\$50	X				X	X		Study to evaluate best strategy for supplying additional carbon to five denitrification in aeration tanks.
9	CP STUDY	Market Study for Possible Local Carbon Sources	X		\$25		X			X			Study to evaluate best strategy for supplying additional carbon to five denitrification in aeration tanks.
11	CP STUDY	Market Study for Possible Local Carbon Sources	X		\$25		X			X			Study to evaluate best strategy for supplying additional carbon to five denitrification in aeration tanks.
Totals					\$19,675	\$2,570	\$12,705	\$4,400					

To: David Lippman (Las Virgenes MWD), Mark Norris (Triunfo SD)	
From: Dan Ellison	Project: JPA Recycled Water MP
CC: Roger Null, Kennedy-Jenks Consultants, Kristine McCaffrey, Calleguas MWD	
Date: Feb. 21, 2014	Job No:

RE: Summary of Recycled Water Master Plan

This memorandum provides a summary of key findings of the Recycled Water Master Plan

Introduction

The recycled water system that is jointly owned and operated by the Las Virgenes Municipal Water District (LVMWD), Triunfo Sanitation District (TSD), and the Calleguas Municipal Water District (CMWD) is recognized throughout California as a model for how wastewater can be effectively recycled. For well over a decade, all water reaching the Tapia Water Reclamation Facility during the summer has been beneficially reused. This achievement is the result of forward-thinking, long-range planning, and commitment. This master plan is one of a series of recycled water master plans, dating to the 1970s, when ambitious concepts for a regional system were first developed. This system currently serves customers ranging from Calabasas in the east to Thousand Oaks in the west.

The system begins at the Tapia Water Reclamation Facility (Tapia WRF), which is owned by the Joint Powers Authority (JPA) of LVMWD and TSD, where up to 10 million gallons per day (MGD) of wastewater is currently treated to a high level, allowing it to be distributed for non-potable uses such as landscape irrigation and various commercial uses. The JPA also owns and operates a complex distribution system, consisting of pipelines, pump stations, tanks and reservoirs, and associated appurtenances to deliver the recycled water to areas of Los Angeles and Ventura Counties. Master Plans for this distribution system were prepared in 1973, 1985, 1988, and 1999 and updated in 2007.

Within Los Angeles County, recycled water is served to LVMWD customers in the cities of Calabasas, Agoura Hills and Westlake Village. When the recycled water enters Ventura County, it is sold to Calleguas Municipal Water District (CMD), which distributes it to Oak Park Water Service (a public utility operated by TSD), California Water Service Company (CalWater), and Lake Sherwood Community Services District. These utilities sell and distribute the water to customers in the Oak Park Community, to Lake Sherwood Golf Course, and to the Westlake and North Ranch portions of the City of Thousand Oaks.

Water recycling is particularly beneficial in this region of Southern California. The areas served by LVMWD and TSD have almost no native water sources. Natural surface water is only seasonal and groundwater basins are shallow and generally of poor quality. Essentially all water consumed in this area is imported through the Sacramento delta, where environmental issues and droughts have restricted the amount of water available for export. The only reliable and relatively abundant local source of water for LVMWD and TSD is recycled water.

As a commodity, the recycled water produced by Tapia WRF is virtually free to the JPA partners. Whether the water is reused or discharged, the cost of treatment is the same. The only major variable cost is pumping. To distribute the water, it must be pumped from an elevation of less than 500 feet (Tapia WRF) to various distribution tanks, ranging in elevation from 1225 feet to 1752 feet. While the cost of energy to pump the water is significant, it is far less than the cost of pumping water out of the Sacramento River and over the Tehachapi Mountains to Southern California. The low commodity costs and relatively low pumping costs means that recycled water is economically and environmentally preferred, wherever it is available and can be used.

Availability is the key word. What limits recycled water availability? The primary limit is the affordability of the distribution system—the pumps, tanks and pipelines needed to convey water to where it can be used. Most water consumers are served by a single pipeline, which provides water for drinking, irrigation, sanitation, and fire fighting. For a water customer to receive recycled water, a second pipeline is required, essentially doubling the cost of distributing water on that particular street and to that particular customer. The cost of such water infrastructure is not negligible. For the construction of a second main to be economical, it generally must generate sufficient revenue to recoup the cost of the additional pipe.

The other limitation is supply; the JPA already sells all of its recycled water in the summer, but there are two good reasons for adding more customers. First, during the fall, winter and spring, much of the recycled water goes unused, and goes to waste. Second, the supply of recycled water will grow, so new customers are needed to keep pace with supply. To optimize the use of recycled water, other sources of water must be added to the system judiciously.

The primary focus of recycled water planning is to develop concepts for distribution systems that make economic sense; systems that will distribute enough water to pay for the cost of the infrastructure. Traditional users of recycled water are schools, parks, golf courses, and similar irrigation users, where a large amount of water is consumed through a small number of meters. Mains to these customers often make economic sense. Along the way, the mains may serve others too (homeowners associations, commercial facilities, and roadway landscaping), but these smaller customers are seldom the drivers for a main extension.

Planning for expansions of the JPA's recycled water system is not simple. Within the JPA's service areas of Calabasas, Agoura Hills, Westlake Village and Oak Park, there is no low-hanging fruit. Prior planning efforts have been successful in connecting virtually all the schools, parks and golf courses. The notable exceptions are Alice Stele School/Freedom Park in Calabasas and the Malibu Golf Course in the Santa Monica Mountains, and neither one is easily reached by the current system. Within these areas, there are many single-family residences with substantial irrigation demands, but serving single-family residences entails added operational costs (training, testing, and paperwork) required by state health officials. The other challenge involved in expanding the JPA system is hydraulic capacity. To make the system economical, the pipes in particular were sized for the customers they currently serve. Adding new customers, particularly large new customers, could result in diminished service to existing customers, if proper planning does not occur.

So why write a new master plan, if the low-hanging fruit is gone and the system is already maximized? The reasons are several:

- **Changing economics.** With the cost of imported water ever increasing, the benefits of certain investments will increase.
- **Regulatory incentives.** There are new state-mandated requirements to reduce per capita water consumption. These provide incentives for investment.
- **Potable water cost avoidance.** In cases where the potable systems are overtaxed, investments in recycled water pipelines may be more attractive than new potable pipelines. For LVMWD in particular, investments in recycled water system extensions could help avoid other investments in the Seminole/Latigo and Jed Smith Subsystems.

- **Resource diversification.** Greater use of local resources reduces some of the risks over which a utility has little control, including risks associated with imported water and climate change.
- **Discharge reduction.** The JPA is prohibited from discharging water to Malibu Creek during certain months of the year. When surplus recycled water exists during these periods, the JPA incurs various costs for disposing of this water using spray fields and pumping to the Los Angeles River drainage.
- **Revenue.** Expansion of the system eastward (to the City of Los Angeles) and westward (to new areas of Thousand Oaks) generates new revenue for the JPA, while possibly helping these neighboring utilities achieve their goals.

Background

As a subconsultant to Kennedy Jenks Consultants, HDR is under contract to the JPA to provide an update to the 2007 Recycled Water Master Plan. Under a separate agreement, HDR is under contract with CMWD to develop a hydraulic model of the recycled system in Ventura County, and analyze various system extensions. Because the JPA and CMWD systems must function together, a single hydraulic model was developed and the CMWD scenarios were analyzed in concert with this master planning effort. The results of both the JPA and CMWD analyses are provided in the new report. Completing these projects concurrently was both more efficient and more accurate than approaching these assignments as separate efforts. The products (this report and the hydraulic model) are also more comprehensive. For similar reasons, the analyses of the JPA's recycled water and wastewater systems has been concurrent with the master planning of LVMWD's potable water system. Each of these systems affects the other in terms of supply and demand.

This coordination of recycled water modeling within both Ventura County and Los Angeles County is a departure from previous master planning efforts. While TSD has participated in the 1999 and 2007 master plans, the earlier scopes of work did not include development and analysis of models for the CMWD portions of the system or investigating potential new customers in Ventura County. Instead, demands within Ventura County were modeled as point loads at the county line and future demand projections came from TSD staff. By modeling both portions of the recycled water system, how the operations of one system effect the other can be more clearly discerned. In addition to this report, both the JPA and CMWD will receive copies of the recycled water hydraulic model, which includes notes that document how the system was modeled.

This report is intended as an update to the last master plan for recycled water, following a similar outline and including some of the same information, where appropriate. This update is being undertaken to account for new information and changed conditions, and to allow the JPA to refine its capital improvement program and its strategic outlook. Among the changed conditions is the State of California's Water Conservation Act of 2009 (also referred to as "SBX7-7") which set a goal of 20 percent reduction in urban per capita water use by 2020 (i.e., the "20x2020 Rule"). Failure to meet this goal could have significant repercussions regarding future grant funding opportunities.

In contrast to earlier master plans, only few changes to the system have occurred since the last update in 2007:

- A project that doubles the capacity the Eastern Recycled Water Pump Station has been completed. This project enables greater disposal of excess recycled water to the Los Angeles River, which saves costs in operating spray fields for water disposal. Equally important, the larger pumping capacity provides greater flexibility to balance demands and supply between the eastern and western systems and makes possible extensions of the distribution system into the City of Los Angeles.
- Another important system upgrade was the completion of a new transmission pipeline from Tapia WRF to Mulholland highway. This improves the reliability of the system and enables better operational efficiency.
- In the planning stage is a project that will cover and line the sides of Reservoir 2. This should improve the quality of water as seen by customers at their sprinkler heads.

As with earlier master planning efforts, this master plan aims to economically maximize the use of recycled water. In doing so, the JPA partners and CMWD achieve:

- **Reduction in water imported** from the Sacramento Delta, via the State Water Project. The cost of these imports has grown rapidly in recent years due to environmental restrictions and shortage of supplies. Even higher costs are anticipated.
- **Greater local control** over water supply. Recycled water is the most reliable source of water. The quantity varies little with the season and the weather.
- **Revenue from sales** to other utilities. For the JPA partners, the water is virtually free. All revenues that exceed the cost of pumping are essentially operating income. [The cost of treating the water is essentially the same, whether it is reused or discharged.]
- **Reduced costs for water disposal.** Discharge prohibitions on the Tapia WRF during the spring and fall result in costs to dispose of water through pumping and spraying alternatives. Unless the use of recycled water increases, these costs will escalate when the supply grows or discharge restrictions increase, or both.

Results of Master Plan Analysis

A new hydraulic model was constructed and validated using information from the JPA's SCADA systems. The results showed very good agreement between current system operations and those predicted in the computer model. This model was then used to test various scenarios ranging from in-fill development within the Las Virgenes MWD service area to ambitious extensions of the system into the City of Los Angeles (Woodland Hills Golf Course and Pierce College) and the City of Thousand Oaks (Baxter Pharmaceutical and Conejo Creek Park). In general, the model showed that the current system is capable of serving these new customers, although it may be necessary to carefully schedule usage at large customers (such as golf courses) to avoid major impacts on existing customers. The one major exception was Pierce College. Serving the large demands created by an extension to Pierce College would require a larger transmission system running east from the main RW pump station toward the City of Los Angeles.

The costs of these main extensions were also estimated and evaluated in terms of how much additional recycled water would be sold annually. The results are shown in Table 1 below. Generally, if the cost per acre-ft is less than \$8,000, the project is considered economically feasible on its own merits, and those costing more than \$50,000 per AFY are unattractive.¹ [For reader convenience, those project with a cost per AFY of less than \$20,000 have been highlighted in red.]

The economic feasibility of many recycled water projects is expected increase, as the cost of imported water increases, and due to the need to conserve potable water for SBX7-7 compliance. Recycled water projects may also be attractive as a way of avoiding expenditures where deficiencies exist in the potable water system. For example, construction of the Decker Canyon project, although not particularly attractive economically, could delay or eliminate the need to construct similar improvements to the potable system in the southwest portion of the Las Virgenes service area. If grants or other sources of funding are found, these projects can become even more attractive.

Table 1 presents the projects in the order that they are discussed in the report, not based on priority. A more detailed description of the customers served by these projects and the associated main extensions were presented in earlier technical memoranda. The table also shows the retail utility that currently serves the customers who would be converted from potable water use to recycled water. "Other Projects" at the bottom of the table, are potential improvements that would improve system reliability or provide other benefits.

¹ The \$8,000 figure is derived from the benchmark cited in the 2007 Master Plan, with adjustment for general inflation. However, because the cost of water imported by MWDSC has been increasing more rapidly than general inflation, a higher benchmark may be warranted.

Table 1. Summary of Potential RW Projects

System Extension Projects	Retail Utility	Estimated Cost	Acre feet per Year (AFY)	\$/AFY
T.O. Boulevard Extension	CalWater	\$ 5,140,000	251	\$ 20,500
T.O. Blvd Extension - Shorter Version	CalWater	\$ 3,810,000	215	\$ 17,700
Westlake Elementary	CalWater	\$ 125,000	15	\$ 8,300
Triunfo Community Park	CalWater	\$ 611,000	60	\$ 10,200
Evenstar Park	CalWater	\$ 364,000	42	\$ 8,700
Southshore Hills Park	CalWater	\$ 790,000	14	\$ 56,400
North Ranch Park / Lindero Greenbelts	CalWater	\$ 844,000	58	\$ 14,600
Capris Tract / Lindero Greenbelt	TSD / CalWater	\$ 864,000	55	\$ 15,700
Montenegro Community Ctr Extension	TSD	\$ 219,000	4	\$ 54,800
Hillcrest Tract / Oak Park North	TSD	\$ 300,000	21	\$ 14,300
Conejo Creek Parks Extension	Thousand Oaks	\$ 5,500,000	206	\$ 26,900
Decker Canyon Project	LVMWD	\$ 12,130,000	229	\$ 53,000
Alternative Decker Canyon Project	LVMWD	\$ 18,280,000	459	\$ 39,800
Hidden Hills Extension	LVMWD	\$ 3,700,000	50	\$ 74,000
Woodland Hills GC Extension	LADWP	\$ 9,790,000	324	\$ 30,200
Pierce College Extension	LADWP	\$ 20,900,000	666	\$ 31,400
Other Projects				
Morrison Pump Station Upgrades		\$ 345,000	N/A	N/A
Reservoir 2 Improvements		\$ 1,100,000	N/A	N/A
Agoura Road Pipeline		\$ 1,200,000	N/A	N/A
Seasonal Storage Reservoir		\$ 68,000,000	1500	\$ 45,300

Red = project cost < \$20,000 per AFY

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject: JPA Infrastructure Investment Plan: Fiscal Year 2014-15 through 2017-18

SUMMARY:

The JPA Infrastructure Investment Plan (IIP) for Fiscal Years 2014-15 through 2017-18 is a planning document that outlines various projects needed to expand, rehabilitate or replace JPA assets. The IIP is based on facility master plans, specific project plans, regulatory requirements and infrastructure condition assessments.

The proposed IIP covers a four-year planning horizon in recognition of the on-going development of the Sanitation and Recycled Water Master Plan Update documents. The IIP is expected to return to a five-year planning document, including new recommendations from the master planning effort, with the development of the Fiscal Year 2015-16 version of the document.

The proposed IIP includes projects with a total cost of \$19,099,911 over the four-year period. The allocated costs for LVMWD and Triunfo Sanitation District are \$13,272,108 and \$5,827,803, respectively. The following major projects are identified in the IIP: Process Air Improvements (No. 99910), Reservoir No. 2 Improvements (No. 10522) and Tapia BNR Improvements (No. 99933).

Staff will provide additional details on the proposed projects at the March 3rd JPA Board meeting.

RECOMMENDATION(S):

Receive and file the draft JPA Infrastructure Investment Plan for Fiscal Years 2014-15 through 2017-18, and provide staff with feedback for incorporation in a final version of the document.

FINANCIAL IMPACT:

This action does not have a financial impact. The project implementation costs are summarized in the IIP.

Prepared By: Doug Anders, Administrative Services Coordinator

ATTACHMENTS:

Draft JPA Infrastructure Investment Plan

JPA Infrastructure
Investment Plan

Fiscal Year 2014/15 - Fiscal Year 2017/18
LVMWD Report No. _____

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Priority and Justification Criteria	
Roles and Responsibilities for Project Managers	

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Section 1

Las Virgenes - Triunfo Joint Powers Authority
Infrastructure Investment Plan
For the Period of FY 2014/15 - FY 2017/18

Overview

The Capital Improvements Plan or Infrastructure Investment Plan (Plan) is a planning document used to identify, prioritize and establish baseline expenditures for facility improvements or replacement projects which ensure the Las Virgenes - Triunfo Joint Powers Authority can consistently meet the needs of the public, both for now and into the future.

This Plan typically covers a five (5) year planning horizon, however due to the Plan development coinciding with the development of the Sanitation and Recycled Water Master planning documents, a four (4) year Plan is being proposed in anticipation of the results of those documents. Following completion of the master planning documents, it is anticipated that the Plan will return to a five year planning document with the refreshed information - starting with the development of the FY 2015/16 Plan.

The information provided in this Plan is intended to inform the reader of current and proposed capital improvement projects, their status and potential costs. Reports are included that sort projects and costs by project priority and by project location. Detailed project descriptions, sorted in numerical order, are found in Section 3.

The Infrastructure Investment Plan has been prepared and reviewed by staff to identify the candidate projects for future funding consideration and accomplishment. The Plan incorporates facility needs identified by a number of sources. These include: integration of new facility improvements identified in master planning documents; implementation of actions recommended in major studies; the facilities or programs necessary to meet regulatory compliance requirements; and, maintenance, repair, or replacement of component systems to continue normal operations.

The Plan places the prospective projects into various program years to organize them over the four-year period. Because of the complexity of facility planning, either deferral or speeding up of projects may occur. These changes are dealt with in the Annual Budget and are amended in the next year's Plan. Receipt of the Infrastructure Investment Plan by the JPA Board of Directors is recognized as one of the key planning steps necessary to formulate an overall Financial Plan and Budget for the JPA.

ITEM.5C

Assumptions

The Las Virgenes - Triunfo Joint Powers Authority faces many important policy issues that may have a significant effect on the Infrastructure Investment Plan ("Plan") programs and projects. These issues include:

- Sanitation and Recycled Water System Master Plans are being revised and are expected to be completed by June, 2014. Projects included in this Plan and out-year projects will be evaluated relative the new master planning work. Projects included in this Plan and additional projects may be modified/added to the Plan based on the master plan update effort.
- Projects related to proposed regulatory standards for Malibu Creek and their impact to the Tapia Water Reclamation Facility ("Tapia") are not forecast in this plan, but will be included in future updates based on the standards adopted and the associated implementation schedules.
- Construction of the third digester at the Rancho Las Virgenes Compost Facility will be completed in fiscal year 2013-14.
- Development of a Recycled Water Storage Study (now a JPA project) is proposed to further clarify options for recycled water storage identified in previous studies.

Summary

This year's Plan follows the previous trend on placing emphasis on "replacement-funded" projects for Recycled Water and Sanitation facilities. The proposed expenditures reflect the replacement of maturing district infrastructure and the need to replace, upgrade or refurbish existing systems to continue to provide high quality, reliable service. Exceptions to this trend are the pro-rata portions of projects that are attributed to new development or new users that include associated connection fee funding.

Major projects and programs outlined in this Plan are summarized below.

Recycled Water System

- Recycled Water Storage Study (10393)
- Rehabilitation of 18" recycled water pipeline between Tapia and Mulholland Highway (10418).

Recycled Water (RW) System (continued)

- Installation of a 16 inch pipeline from the intersection of Park Granada and Park Capri (Calabasas) to the Los Angeles city boundary and extending to the Woodland Hills Country Club (10474).
- Improvements to Reservoir #2 (10522)
- Construct 5,000 feet of recycled water main extension along Agoura Road (10536).
- Relocate existing 10" recycled water pipeline in the Lost Hills overpass (10540).

Tapia Water Reclamation Facility

- Concrete repair and installation of protective coating in primary tanks (10512).
- Replace existing sluice gates in tanks as well as drive mechanisms for flights and chains (10513).
- Replace the channel mixing air system with new air piping and diffusers (10538).
- Construct a centrate equalization tank at the centrate treatment facility (99932).

Rancho Las Virgenes

- Clean out and evaluate the condition of existing digester #1 and #2 (99934).
- Construct cathodic protection system for centrate treatment and storage tanks (10544).
- Clean minerals from the existing centrate line (80742).
- Purchase a new loader to move amendment and compost (99942).
- General facility improvements at Rancho (99947).

Sewers and Lift Stations

- Initiate F2/F3 sewer rehabilitation work (80720).
- Design a Sewer Grit Handling removal system (99946)

Administrative Programs

- SCADA System Communication upgrades (10520).

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Infrastructure Investment Plan
Fiscal Year 2014-15 -- Fiscal Year 2017-18

Expenditures by Fund

	FY15	FY16	FY17	FY18	4-Year Total
Sanitation Construction	\$60,000	\$0	\$321,240	\$469,360	\$850,600
Sanitation Replacement	\$3,657,489	\$4,044,287	\$3,128,845	\$2,830,690	\$13,661,311
RW Conservation	\$400,000	\$818,800	\$15,000	\$0	\$1,233,800
RW Replacement	\$2,551,700	\$735,000	\$67,500	\$0	\$3,354,200
Total Costs	\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

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Infrastructure Investment Plan
Fiscal Year 2014/15 - Fiscal Year 2017/18

Las Virgenes - Triunfo Joint Powers Authority Cost Sharing

	FY15	FY16	FY17	FY18	4-Year Total
Sanitation Construction	\$42,360	\$0	\$226,795	\$331,368	\$600,524
Sanitation Replacement	\$2,577,612	\$2,642,224	\$2,208,965	\$1,998,467	\$9,427,268
RW Conservation	\$282,400	\$578,073	\$10,590	\$0	\$871,063
RW Replacement	\$1,804,032	\$521,566	\$47,655	\$0	\$2,373,253
LVMWD Share	\$4,706,404	\$3,741,863	\$2,494,005	\$2,329,835	\$13,272,108

	FY15	FY16	FY17	FY18	4-Year Total
Sanitation Construction	\$17,640	\$0	\$94,445	\$137,992	\$206,529
Sanitation Replacement	\$1,079,877	\$1,402,063	\$919,880	\$832,223	\$4,234,043
RW Conservation	\$117,600	\$240,727	\$4,410	\$0	\$362,737
RW Replacement	\$747,668	\$213,434	\$19,845	\$0	\$980,947
TSD Share	\$1,962,785	\$1,856,224	\$1,038,580	\$970,215	\$5,827,803
TOTAL COSTS	\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

ITEM 5C

Infrastructure Investment Plan
Fiscal Year 2014/15 - Fiscal Year 2017/18

Expenditures by Location

	FY15	FY16	FY17	FY18	Four-year total
ADMINISTRATIVE	\$33,849	\$56,137	\$38,285		\$128,271
PROGRAMS	\$5,000	\$20,000	\$15,000		\$40,000
RANCHO/FARM	\$933,890	\$41,300	\$1,045,000	\$1,296,000	\$3,316,190
RECYCLED WATER	\$2,986,200	\$1,482,800	\$15,000	\$0	\$4,484,000
SEWER/LIFT STATIONS	\$65,000	\$698,500	\$0		\$763,500
TAPIA	\$2,645,250	\$3,299,350	\$2,419,300	\$2,004,050	\$10,367,950
TOTAL ALL PROJECTS	\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

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Infrastructure Investment Plan
Fiscal Year 2014/15 - Fiscal Year 2017/18

Expenditures by Priority

	FY15	FY16	FY17	FY18	Four-year total
Priority 1	\$1,984,750	\$741,500	\$0		\$2,726,250
Priority 2	\$3,895,739	\$3,774,637	\$823,885	\$953,250	\$9,447,511
Priority 3	\$788,700	\$1,081,950	\$2,708,700	\$2,346,800	\$6,926,150
TOTAL ALL PROJECTS	\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

- Priority 1: Essential project. Required by law or regulation; by disaster response; or by emergency or hazardous situation.
- Priority 2: Necessary project. Required to maintain service reliability; safety; cost related efficiency or matching funds; water quality; current demand.
- Priority 3: Desirable or Routine Project. Routine improvement; no direct cost benefit; cosmetic; or future demand.

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Section 2

Infrastructure Investment Plan
Fiscal Year 204/15 - Fiscal Year 2017/18

Projects by Priority

Priority	Project Number	Title	FY15	FY16	FY17	FY18	Four-year total
1	10522	Reservoir #2 Improvements (Lining Cover)	1,565,000				1,565,000
1	99927	Tapia Structural Repairs	46,500				46,500
1	99928	Tapia Primary Flow Diversion		454,000			454,000
1	99934	Rancho Las Virgenes Digester Cleaning and	287,500	287,500			575,000
1	99935	Tapia Alternative Disinfection Safety	85,750				85,750
SUB-TOTAL PRIORITY 1			\$1,984,750	\$741,500			\$2,726,250
2	10515	Sanitation Master Plan Update					
2	10516	Recycled Water Master Plan					
2	10520	SCADA System Communication Upgrades	33,849	56,137	38,285		128,271
2	10487	Construct 3rd Digester at Rancho					
2	10534	Rancho Solar Project	-20,000				-20,000
2	80742	Rancho: Rehabilitate Existing Centrate Line	175,390				175,390
2	10544	Centrate Tank Cathodic Protection (CP)	125,000				125,000
2	10549	Rancho Las Virgenes Compost Facility	14,000				14,000
2	10551	Centrate System - New Pump Impellers	35,000				35,000
2	99926	Rancho Las Virgenes Sludge Thickening				600,000	600,000
2	10474	Woodland Hills Golf Course RW Pipeline	310,000	310,000	15,000		635,000
2	10393	Recycled Water Storage Study	300,000				300,000
2	10540	Lost Hill Overpass Recycled Water Main	313,000				313,000
2	10536	Agoura Road Recycled Water Main -	320,000	664,000			984,000
2	80720	Manhole Rehabilitation, F2/F3 Line	15,000	698,500			713,500
2	99946	Sewer Grit Handling	50,000				50,000
2	10512	Tapia: Primary Tank Rehabilitation	323,000	323,000	323,000	323,000	1,292,000
2	10513	Tapia Sluice Gate and Drive Replacement	175,000	175,000	175,000		525,000
2	99901	NPDES Permit Renewal	25,000				25,000
2	10537	Raw Sludge Wet Well Mixing Improvements	100,000				100,000
2	10538	Tapia Channel Mixing Improvements	410,000				410,000
2	99929	Tapia Supplemental Carbon Study	85,000				85,000
2	99932	Centrate Equalization Tank	890,000				890,000
2	99933	Tapia BNR Improvements		1,442,000			1,442,000
2	99936	Programmable Logic Controller Upgrades	216,500	106,000	272,600	30,250	625,350
SUB-TOTAL PRIORITY 2			\$3,895,739	\$3,774,637	\$823,885	\$953,250	\$9,447,511

ITEM 5C

Infrastructure Investment Plan
Fiscal Year 204/15 - Fiscal Year 2017/18

Projects by Priority

Priority	Project Number	Title	FY15	FY16	FY17	FY18	Four-year total
3	99953	Security Upgrades - JPA	5,000	20,000	15,000		40,000
3	10446	Buffer Land at Rancho	250,000				250,000
3	80748	Rancho: Replace Agitators			1,020,000		1,020,000
3	99911	Rancho Las Virgenes: FOG Receiving			25,000	696,000	721,000
3	99930	Rancho Las Virgenes Aerated Static Pile Pilot		39,800			39,800
3	99942	Rancho Las Virgenes Composting Facility:	180,000				180,000
3	99947	Rancho Facility Improvements	174,500	1,500			176,000
3	10418	Rehabilitation of 18" RW Pipe	178,200				178,200
3	80013	Western RWPS Expansion		508,800			508,800
3	10493	Tapia Sludge Screening		442,350			442,350
3	99910	Process Air Improvements			1,581,200	1,650,800	3,232,000
3	99950	Tapia Electrical and Instrumentation	1,000	69,500	67,500		138,000
SUB-TOTAL PRIORITY 3			\$788,700	\$1,081,950	\$2,708,700	\$2,346,800	\$6,926,150
TOTAL ALL PROJECTS			\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

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ITEM5C

Infrastructure Investment Plan
Fiscal Year 2014/15 - Fiscal Year 2017/18

Projects by Location

Project Number	Title	FY15	FY16	FY17	FY18	Four-year total
ADMINISTRATIVE						
10515	Sanitation Master Plan Update	0	0	0		0
10516	Recycled Water Master Plan	0	0	0		0
10520	SCADA System Communication	33,849	56,137	38,285		128,271
	SUB-TOTAL ADMINISTRATIVE	\$33,849	\$56,137	\$38,285		\$128,271
PROGRAMS						
99953	Security Upgrades - JPA	5,000	20,000	15,000		40,000
	SUB-TOTAL PROGRAMS	\$5,000	\$20,000	\$15,000		\$40,000
RANCHO/FARM						
10446	Buffer Land at Rancho	250,000	0	0		250,000
10487	Construct 3rd Digester at Rancho	0	0	0		0
10534	Rancho Solar Project	-20,000	0	0		-20,000
10544	Centrate Tank Cathodic Protection (CP)	125,000				125,000
10549	Rancho Las Virgenes Compost Facility	14,000	0	0		14,000
10551	Centrate System - New Pump Impellers	35,000	0	0		35,000
80742	Rancho: Rehabilitate Existing Centrate	175,390	0	0		175,390
80748	Rancho: Replace Agitators	0	0	1,020,000		1,020,000
99911	Rancho Las Virgenes: FOG Receiving	0	0	25,000	696,000	721,000
99926	Rancho Las Virgenes Sludge Thickening				600,000	600,000
99930	Rancho Las Virgenes Aerated Static Pile		39,800			39,800
99942	Rancho Las Virgenes Composting	180,000				180,000
99947	Rancho Facility Improvements	174,500	1,500			176,000
	SUB-TOTAL RANCHO/FARM	\$933,890	\$41,300	\$1,045,000	\$1,296,000	\$3,316,190
RECYCLED WATER						
10393	Recycled Water Storage Study	300,000	0	0		300,000
10418	Rehabilitation of 18" RW Pipe	178,200	0	0		178,200
10474	Woodland Hills Golf Course RW Pipeline	310,000	310,000	15,000	0	635,000
10522	Reservoir #2 Improvements (Lining)	1,565,000	0	0		1,565,000
10536	Agoura Road Recycled Water Main -	320,000	664,000			984,000
10540	Lost Hill Overpass Recycled Water Main	313,000	0	0		313,000
80013	Western RWPS Expansion	0	508,800	0		508,800

ITEM5C

**Infrastructure Investment Plan
Fiscal Year 2014/15 - Fiscal Year 2017/18**

Projects by Location

Project Number	Title	FY15	FY16	FY17	FY18	Four-year total
	SUB-TOTAL RECYCLED WATER	\$2,986,200	\$1,482,800	\$15,000	\$0	\$4,484,000
SEWER/LIFT STATIONS						
80720	Manhole Rehabilitation, F2/F3 Line	15,000	698,500	0		713,500
99946	Sewer Grit Handling	50,000				50,000
	SUB-TOTAL SEWER/LIFT STATIONS	\$65,000	\$698,500	\$0		\$763,500
TAPIA						
10493	Tapia Sludge Screening	0	442,350	0	0	442,350
10512	Tapia: Primary Tank Rehabilitation	323,000	323,000	323,000	323,000	1,292,000
10513	Tapia Sluice Gate and Drive	175,000	175,000	175,000	0	525,000
10537	Raw Sludge Wet Well Mixing	100,000	0	0		100,000
10538	Tapia Channel Mixing Improvements	410,000	0	0		410,000
99901	NPDES Permit Renewal	25,000	0	0	0	25,000
99910	Process Air Improvements	0	0	1,581,200	1,650,800	3,232,000
99927	Tapia Structural Repairs	46,500				46,500
99928	Tapia Primary Flow Diversion		454,000			454,000
99929	Tapia Supplemental Carbon Study	85,000				85,000
99932	Centrate Equalization Tank	890,000	0			890,000
99933	Tapia BNR Improvements		1,442,000			1,442,000
99934	Rancho Las Virgenes Digester Cleaning	287,500	287,500	0		575,000
99935	Tapia Alternative Disinfection Safety	85,750				85,750
99936	Programmable Logic Controller	216,500	106,000	272,600	30,250	625,350
99950	Tapia Electrical and Instrumentation	1,000	69,500	67,500		138,000
	SUB-TOTAL TAPIA	\$2,645,250	\$3,299,350	\$2,419,300	\$2,004,050	\$10,367,950
TOTAL ALL PROJECTS		\$6,669,189	\$5,598,087	\$3,532,585	\$3,300,050	\$19,099,911

ITEM5C

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Section 3

Recycled Water Storage Study

Job Number: 10393 Project Manager: Zhao FY Originated: FY07-08	Priority: 2 Category: Capacity/Supply Program: No
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Scope of Work

To perform a study for potential recycled water storage area identified in 2006 TEA and 2007 RW Master Plan update and the 2012 recycled water storage feasibility study by RMC. The study would include but not be limited to geological, environmental, CEQA, water quality and any regulatory constraints.

Project Justification

In order to expand the utilization of recycled water within the LVMWD service area, additional storage capacity is needed and was identified in the 2006 TEA Study and 2007 Master Plan update.

A water recycling facilities planning grant of \$59,050 was received from the state.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees	\$199,906	\$60,050	\$923			\$260,879		
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS	\$199,906	\$60,050	\$923			\$260,879	\$570,715	\$309,836

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$300,000	\$0	\$0		\$300,000	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$0		\$0	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$300,000	\$0	\$0		\$300,000	\$560,879

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	20.0%	30.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	50.0%	0.0%		29%

Rehabilitation of 18" RW Pipe (Tapia/Mulholland Highway)

Job Number: 10418 Project Manager: Cao FY Originated: FY03-04	Priority: 3 Category: Facility Improvements Program: No
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Scope of Work

Rehabilitation of 18" RW pipe between Tapia and Mulholland Highway due to excessive failure rate. Cost estimate is based on the installation of an active cathodic protection system. The project is divided in three phases: 1) FY12-13; 2) FY13-14; 3) FY14-15.

Project Justification

The 18-inch RW pipe between Tapia and Mulholland Highway has experienced several significant failures due to corrosion. The 18-inch pipe needs to be maintained, because it is needed, along with the proposed 24-inch pipe as a redundant system to handle the current flow rate of 9.3 MGD, with the capability to handle future increased flows.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees		\$1,548	\$20,450			\$21,998		
Contracts/Equipment			\$160,898			\$160,898		
District Labor			\$27,523	\$2,801		\$30,325		
G & A Allocations			\$43,081	\$2,783		\$45,865		
TOTALS		\$1,548	\$251,953	\$5,584		\$259,085	\$235,000	-\$24,085

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$7,250	\$0	\$0		\$7,250	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$14,500	\$0	\$0		\$14,500	
Bidding	\$1,450	\$0	\$0		\$1,450	
Construction	\$145,000	\$0	\$0		\$145,000	
District Labor	\$10,000	\$0	\$0		\$10,000	
TOTALS	\$178,200	\$0	\$0		\$178,200	\$437,285

APPROPRIATION REQUEST: \$202,285

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%			71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	0.0%	100.0%		29%

Buffer Land at Rancho

Job Number: 10446 Project Manager: Zhao FY Originated: FY07-08	Priority: 3 Category: Facility Improvements Program: No
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Scope of Work

Potential land acquisition of additional buffer land around Rancho.

Project Justification

Prevents encroachment on Rancho operations that would constrain Rancho operations.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS							\$250,000	\$250,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$250,000	\$0	\$0	\$0	\$250,000	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$0	\$0	\$0	\$0	\$0	
District Labor	\$0	\$0	\$0	\$0	\$0	
TOTALS	\$250,000	\$0	\$0	\$0	\$250,000	\$250,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction 0.0%	Sanitation Construction 0.0%	RW Conservation 0.0%	LVMWD 71%	
P/W Replacement 0.0%	Sanitation Replacement 100.0%	RW Replacement 0.0%	TSD 29%	

Woodland Hills Golf Course RW Pipeline Extension

Job Number: 10474 Project Manager: Schlageter FY Originated: FY07-08	Priority: 2 Category: Regulatory Compliance Program: No
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Scope of Work

Installation of a 16 inch pipeline from the intersection of Park Granada and Park Capri (Calabasas) to the Los Angeles city boundary and extending to the Woodland Hills Country Club. The JPA will manage the development of the preliminary design, environmental documentation (with CEQA) and final design and construction of the project. The JPA will be reimbursed for all costs related to this project by the LADWP.

FY 2014-2015 activity includes development of a Preliminary Design Report (PDR) for the project. Construction costs will be added once the PDR provides a construction cost estimate.

Project Justification

This project stems from the JPA's desire to provide surplus recycled water customers outside of the JPA service area.

The estimated maximum daily demand outside of the JPA service area 430 gpm.

Project identified in 2007 Master Plan and will be included in the 2013 Master Plan update. Currently in negotiation with the City of LA for an agreement for CEQA / PDR.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations	\$23,638					\$23,638		
TOTALS	\$23,638					\$23,638	\$400,000	\$376,362

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$300,000	\$0	\$0	\$0	\$300,000	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$300,000	\$0	\$0	\$300,000	
Bidding	\$0	\$0	\$5,000	\$0	\$5,000	
Construction	\$0	\$0	\$0	\$0	\$0	
District Labor	\$10,000	\$10,000	\$10,000	\$0	\$30,000	
TOTALS	\$310,000	\$310,000	\$15,000	\$0	\$635,000	\$658,638

APPROPRIATION REQUEST: \$0

Fund:

% of Project Allocated by

JPA Partner:

P/W Construction	Sanitation Construction	RW Conservation	LVMWD
0.0%	0.0%	100.0%	71%
P/W Replacement	Sanitation Replacement	RW Replacement	TSD
0.0%	0.0%	0.0%	29%

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Construct 3rd Digester at Rancho

Job Number: 10487 Project Manager: Zhao FY Originated: FY07-08	Priority: 2 Category: Capacity/Supply Program: No
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Scope of Work

Construct a third anaerobic digester at the Rancho Composting Facility including heating, mixing and gas collection. Convert the two existing digesters from steam injection heating to hot water heat exchangers.

Project Justification

Meet future demand and provide redundancy to allow maintenance of existing digesters.

Project is expected to be complete in FY 2013-2014.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees		\$241,913	\$260,431			\$502,344		
Contracts/Equipment			\$761,160	\$5,334,305		\$6,095,465		
District Labor		\$13,255	\$36,111	\$41,056		\$90,422		
G & A Allocations		\$20,862	\$60,634	\$72,063		\$153,559		
TOTALS		\$276,031	\$1,118,335	\$5,447,424		\$6,841,790	\$6,841,790	\$0

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$0		\$0	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$0	\$0	\$0		\$0	\$6,841,790

APPROPRIATION REQUEST: \$0

Funds:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	20.0%	0.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	80.0%	0.0%		29%

Tapia Sludge Screening

Job Number: 10493 Project Manager: Dingman FY Originated: 10-11	Priority: 3 Category: Business Improvements Program: No
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Scope of Work

Install a screener for primary and secondary sludge at Tapia. Includes design, piping modifications and odor control.

Project Justification

Inert particles and hair clog the recirculation pumps and piping at Tapia and Rancho. These solids also cause operational issues. A screener can be incorporated into the process to remove the solids before they become a problem. The solids removed from the process will be landfilled.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$385,000	\$385,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$5,000	\$0	\$0	\$5,000	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$38,500	\$0	\$0	\$38,500	
Bidding	\$0	\$3,850	\$0	\$0	\$3,850	
Construction	\$0	\$385,000	\$0	\$0	\$385,000	
District Labor	\$0	\$10,000	\$0	\$0	\$10,000	
TOTALS	\$0	\$442,350	\$0	\$0	\$442,350	\$442,350

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia: Primary Tank Rehabilitation

Job Number: 10512 Project Manager: Dingman FY Originated: FY10-11	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Concrete repair and the installation of a protective coating in the tanks. This project also includes the replacement of existing aluminum launders with fiberglass launders, new coatings for inlet diffusers and gate replacement.

Design will be completed in FY13-14. The same design basis will be used for all tanks over the multiyear project.

Project Justification

Tanks are 40 years old and the concrete is degrading. Launders are delaminating and need replacement.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees				\$28,852		\$28,852		
Contracts/Equipment								
District Labor				\$1,628		\$1,628		
G & A Allocations				\$1,820		\$1,820		
TOTALS				\$32,300		\$32,300	\$685,000	\$652,700

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$10,000	\$10,000	\$10,000	\$10,000	\$40,000	
Bidding	\$3,000	\$3,000	\$3,000	\$3,000	\$12,000	
Construction	\$300,000	\$300,000	\$300,000	\$300,000	\$1,200,000	
District Labor	\$10,000	\$10,000	\$10,000	\$10,000	\$40,000	
TOTALS	\$323,000	\$323,000	\$323,000	\$323,000	\$1,292,000	\$1,324,300

APPROPRIATION REQUEST: \$0

Fund:

% of Project Allocated by

JPA Partner:

P/W Construction	Sanitation Construction	RW Conservation	LVMWD
0.0%	0.0%	0.0%	71%
P/W Replacement	Sanitation Replacement	RW Replacement	TSD
0.0%	100.0%	0.0%	29%

Tapia Sluice Gate and Drive Replacement

Job Number: 10513 Project Manager: Schlageter FY Originated: FY09-10	Priority: 2 Category: Facility Improvements Program: Yes
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Scope of Work

Replaces existing gates in the tanks and channels at Tapia as well as drive mechanisms for flights and chains.

Project Justification

Many of the gates that separate channels and tanks are worn and do not work properly. The drives for the sludge collection system are over 30 years old. These items have reached their useful life and are in need of replacement.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$342,000	\$342,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$160,000	\$160,000	\$160,000	\$0	\$480,000	
District Labor	\$15,000	\$15,000	\$15,000	\$0	\$45,000	
TOTALS	\$175,000	\$175,000	\$175,000	\$0	\$525,000	\$525,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%	0.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	100.0%	0.0%		29%

Sanitation Master Plan Update

Job Number: 10515 Project Manager: Cao FY Originated: FY12-13	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

To provide an update to the 2008 Sanitation Master plan taking into account the numerous regulatory and operational changes and usage patterns since the last update.

Approximately 40% of the project is expected to be complete in FY12-13 with the balance of the work to be performed in FY13-14.

It is expected that 40% will be spent during FY12-13 and the balance will be spent in FY13-14.

Project Justification

The Sanitation Master plan update will enhance and refine the development of the Infrastructure Investment Plan (IIP) and will provide an updated overview of sanitation system needs for the Las Virgenes - Triunfo Joint Powers Authority (JPA).

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment			\$8,898	\$42,546		\$51,444		
District Labor			\$1,951	\$2,649		\$4,600		
G & A Allocations			\$2,957	\$3,499		\$6,456		
TOTALS			\$13,805	\$48,694		\$62,500	\$62,500	\$0

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$0		\$0	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$0	\$0	\$0		\$0	\$62,500

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Recycled Water Master Plan

Job Number: 10516 Project Manager: Cao FY Originated: FY12-13	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

To provide update to the 2007 Recycled Water Master Plan taking into account the changes in recycled water demand as well as regulatory changes impacting the future expansion of the recycled water system.

It is expected that 40% will be spent during FY12-13 and the balance will be spent in FY13-14.

Project Justification

The Recycled Water Master Plan update will provide an updated basis for the projects and programs identified in the Infrastructure Investment Plan (IIP) and will provide a current overview of recycled water program needs for the JPA.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment			\$7,872	\$39,500		\$47,372		
District Labor			\$1,951	\$5,356		\$7,307		
G & A Allocations			\$3,008	\$4,813		\$7,821		
TOTALS			\$12,831	\$49,669		\$62,500	\$62,500	\$0

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$0		\$0	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$0	\$0	\$0		\$0	\$62,500

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
		100.0%		29%

SCADA System Communication Upgrades

Job Number: 10520 Project Manager: McIntyre FY Originated: FY12-13	Priority: 2 Category: Business Improvements Program: No
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Scope of Work

Migration of the existing communication system from a serial radio network to an Ethernet based radio network. Provide redundant data paths for uninterrupted communication. Eliminate need to rely on telephone company equipment.

Project Justification

The existing system is now limited in speed, bandwidth and flexibility. The system is also past its peak communication bandwidth and expected life-span. Upgrading will dramatically increase the bandwidth of the system allowing the use of security cameras, voice over IP (VOIP) phone and certain types of smart sensors.

The upgrades will reduce dependency on telephone company equipment and will help reduce time spent coordinating repairs with outside vendors.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees			\$6,239			\$6,239		
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS			\$6,239			\$6,239	\$93,100	\$86,861

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$249	\$437	\$285		\$971	
Construction	\$28,600	\$50,700	\$33,000		\$112,300	
District Labor	\$5,000	\$5,000	\$5,000		\$15,000	
TOTALS	\$33,849	\$56,137	\$38,285		\$128,271	\$134,510

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Reservoir #2 Improvements (Lining Cover)

Job Number: 10522 Project Manager: Dingman FY Originated: FY12-13	Priority: 1 Category: Regulatory Compliance Program: No
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Scope of Work

A study was completed in 2013 to define the scope of work. The scope includes lining the earthen sides and covering the water surface of recycled water reservoir #2 with shade balls. The bottom of the reservoir is currently concrete.

Project Justification

Reservoir #2 provides source water to the recycled water distribution system. In the 2010 NPDES permit, the RWQCB required sampling for discharge to the L.A. River (005) to take place in the recycled water distribution system after reservoir #2.

Because the sides are earthen and the reservoir is not covered, turbidity at the 005 sampling site has been high. Covering and lining the reservoir will be used as a means to alleviate this problem.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees			\$36,683	\$5,326		\$42,010		
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS			\$36,683	\$5,326		\$42,010	\$50,000	\$7,990

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$15,000	\$0	\$0	\$0	\$15,000	
Construction	\$1,500,000	\$0	\$0	\$0	\$1,500,000	
District Labor	\$50,000	\$0	\$0	\$0	\$50,000	
TOTALS	\$1,565,000	\$0	\$0	\$0	\$1,565,000	\$1,607,010

APPROPRIATION REQUEST: \$1,557,010

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
		100.0%		29%

Rancho Solar Project

Job Number: 10534 Project Manager: Zhao FY Originated: FY09-10	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Staff time associated in obtaining a PPA agreement for solar electrical generation at Rancho to feed power consumption at RWPS and perform CEQA mitigation.

Construction budget of \$50,000 provides funding for expenses related to mitigation measures required by CEQA.

Project Justification

To provide renewable energy that also makes financial sense to power RWPS.

Project anticipated to be completed in FY 2013-2014.

Expenditure in FY 2013-2014 included refundable deposit to SCE for a California Solar Initiative grant. Refund is expected in FY 2014-2015.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees			\$38,750	\$11,732		\$50,482		
Contracts/Equipment			\$2,500			\$2,500		
District Labor			\$590	\$10,351		\$10,941		
G & A Allocations			\$775	\$15,274		\$16,049		
TOTALS			\$42,615	\$37,357		\$79,972	\$70,000	-\$9,972

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	-\$20,000	\$0	\$0		-\$20,000	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$0		\$0	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	-\$20,000	\$0	\$0		-\$20,000	\$59,972

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%	0.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	100.0%	0.0%		29%

Agoura Road Recycled Water Main - Ladyface to Cornell Road

Job Number: 10536 Project Manager: Schlageter FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

To construct 5,000 feet of 8" PVC recycled water main extension along Agoura Road to Ladyface Drive to Cornell Road.

Project Justification

The City of Agoura Hills is widening Agoura Road from Cornell to Ladyface Road. The construction of the RW water main along with the Agoura road widening provide significant construction savings for the RW water main construction.

The extension will provide recycled water to business parks, the shopping center at Kanan and Agoura Road, and the shopping center at Cornell and Agoura Road and the planned Agoura Village Center.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees			\$7,188	\$71,112		\$78,300		
Contracts/Equipment								
District Labor			\$2,189	\$8,920		\$11,109		
G & A Allocations			\$3,388	\$10,306		\$13,694		
TOTALS			\$12,765	\$90,338		\$103,103	\$100,000	-\$3,103

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0			\$0	
Land Acquisition	\$0	\$0			\$0	
Design	\$0	\$0			\$0	
Bidding	\$0	\$0			\$0	
Construction	\$300,000	\$624,000			\$924,000	
District Labor	\$20,000	\$40,000			\$60,000	
TOTALS	\$320,000	\$664,000			\$984,000	\$1,087,103

APPROPRIATION REQUEST: \$323,103

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement	100.0%	TSD
				29%

Raw Sludge Wet Well Mixing Improvements

Job Number: 10537 Project Manager: Johnson FY Originated: FY12-13	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Replace the existing centrifugal mixing pump with a pump that is more appropriate for sludge mixing.

Project Justification

The existing centrifugal mixing pump is not able to convey enough flow to properly mix the raw sludge in the wet wells which results in the settlement of heavier solids to the bottom of the tank. The collection of settled solids reduces tank capacity.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$100,000	\$100,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$25,000	\$0	\$0		\$25,000	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$74,000	\$0	\$0		\$74,000	
District Labor	\$1,000	\$0	\$0		\$1,000	
TOTALS	\$100,000	\$0	\$0		\$100,000	\$100,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia Channel Mixing Improvements

58

Job Number: 10538 Project Manager: Dingman FY Originated: FY12-13	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Replace the air piping and drop legs in the channels at Tapia.

Project Justification

The channel mixing system at Tapia was identified by the Tapia Process Air Study as needing replacement. The existing system is worn and not mixing the channel efficiently.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$454,000	\$454,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$400,000	\$0	\$0	\$0	\$400,000	
District Labor	\$10,000	\$0	\$0	\$0	\$10,000	
TOTALS	\$410,000	\$0	\$0	\$0	\$410,000	\$410,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Lost Hill Overpass Recycled Water Main Relocation

Job Number: 10540 Project Manager: Zhao FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Relocate the existing 10" recycled water pipeline in the Lost Hills overpass to the new overpass that will under construction beginning December 2014 (FY 2014-15).

Project Justification

The existing line must be relocated due to the demolition of the existing Lost Hills overpass. The existing 10" line runs through the overpass.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees				\$45,826		\$45,826		
Contracts/Equipment								
District Labor				\$285		\$285		
G & A Allocations				\$492		\$492		
TOTALS				\$46,603		\$46,603	\$355,000	\$308,397

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$3,000	\$0	\$0		\$3,000	
Construction	\$300,000	\$0	\$0		\$300,000	
District Labor	\$10,000	\$0	\$0		\$10,000	
TOTALS	\$313,000	\$0	\$0		\$313,000	\$359,603

APPROPRIATION REQUEST: \$4,603

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction 0.0%	Sanitation Construction	RW Conservation		LVMWD 71%
P/W Replacement	Sanitation Replacement	RW Replacement 100.0%		TSD 29%

Centrate Tank Cathodic Protection (CP) System Replacement

60

Job Number: 10544 Project Manager: Cao FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Construction of impressed current cathodic protection system for centrate treatment and storage tanks at the Rancho Las Virgenes Compost Facility.

Project Justification

The original cathodic protection (CP) system for the centrate tank failed and no longer prevents corrosion control for the centrate tank at Rancho.

The existing CP system failed over time and the district's consultant recommends replacement with a new CP system to effectuate the ongoing protection of the tank.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor				\$6,172		\$6,172		
G & A Allocations				\$6,043		\$6,043		
TOTALS				\$12,215		\$12,215	\$110,000	\$97,785

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0				\$0	
Land Acquisition	\$0				\$0	
Design	\$0				\$0	
Bidding	\$0				\$0	
Construction	\$120,000				\$120,000	
District Labor	\$5,000				\$5,000	
TOTALS	\$125,000				\$125,000	\$137,215

APPROPRIATION REQUEST: \$27,215

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Rancho Las Virgenes Compost Facility Agitator Control Upgrade

61

Job Number: 10549 Project Manager: Korkosz FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

During the FY11-12 shutdown of the Rancho Compost Facility (Rancho) repairs were made to the agitator #1 control system. This project will implement a similar upgrade to the agitator #2 control system.

Project Justification

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$14,000	\$14,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$12,000	\$0	\$0	\$0	\$12,000	
District Labor	\$2,000	\$0	\$0	\$0	\$2,000	
TOTALS	\$14,000	\$0	\$0	\$0	\$14,000	\$14,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Centrate System - New Pump Impellers

Job Number: 10551 Project Manager: Johnson FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Upgrade centrate system pump impellers to handle solids in the system.

Project Justification

The current pump system will not handle solids from the Tapia Water Reclamation Facility (Tapia). The new impellers will handle solids coming from Tapia.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS							\$35,000	\$35,000

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$35,000	\$0	\$0		\$35,000	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$35,000	\$0	\$0		\$35,000	\$35,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Western RWPS Expansion

Job Number: 80013 Project Manager: Zhao FY Originated: FY00-01	Priority: 3 Category: Capacity/Supply Program: No
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Scope of Work

Provides for design and construction of suction pipeline and additional pump capacity at the western RW pump station.

Details of the additional capacity needed will be studied in the 2014 master plan update.

Project Justification

The 2007 RW Master Plan indicates a future need for additional pumping capacity from current demand of 11.7 mgd to 12.2 mgd at the western RW pump station. This project provides this capacity consistent with anticipated RW availability. This project is needed to meet long-range future demands in the western recycled water system.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$21,500	\$0	\$0	\$21,500	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$43,000	\$0	\$0	\$43,000	
Bidding	\$0	\$4,300	\$0	\$0	\$4,300	
Construction	\$0	\$430,000	\$0	\$0	\$430,000	
District Labor	\$0	\$10,000	\$0	\$0	\$10,000	
TOTALS	\$0	\$508,800	\$0	\$0	\$508,800	\$508,800

APPROPRIATION REQUEST: \$0

Fund:

% of Project Allocated by

JPA Partner:

P/W Construction 0.0%	Sanitation Construction 0.0%	RW Conservation 100.0%	LYMWD 71%
P/W Replacement 0.0%	Sanitation Replacement 0.0%	RW Replacement 0.0%	TSD 29%

Manhole Rehabilitation, F2/F3 Line

Job Number: 80720 Project Manager: Schlageter FY Originated: FY01-02	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

The F2/F3 Sewer Rehabilitation Study identified priority 1 and 2 manholes needing repair. Work on priority 1 manholes was completed. Priority 2 manholes will be addressed in FY15-16.

Project Justification

Project will maintain integrity of trunk sewer system.

Fiscal Year 2014-2015 Planning funds are for the inspection of manholes.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$15,000	\$29,500	\$0		\$44,500	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$59,000	\$0		\$59,000	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$590,000	\$0		\$590,000	
District Labor	\$0	\$20,000	\$0		\$20,000	
TOTALS	\$15,000	\$698,500	\$0		\$713,500	\$713,500

APPROPRIATION REQUEST: \$15,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%	0.0%		40%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	100.0%	0.0%		60%

Rancho: Rehabilitate Existing Centrate Line

Job Number: 80742 Project Manager: Schlageter FY Originated: FY10-11	Priority: 2 Category: Capacity/Supply Program: No
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Scope of Work

Provide mechanical and/or chemical cleaning of minerals from the existing centrate line.

No planning is needed due to the availability of existing documentation.

Project Justification

A large amount of mineral deposits have accumulated in the centrate line between the dewatering facility and the centrate treatment tanks.

Rehabilitation of the centrate treatment line is possible because of the availability of the existing bypass treatment line.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0			\$0	
Land Acquisition	\$0	\$0			\$0	
Design	\$14,900	\$0			\$14,900	
Bidding	\$1,490	\$0			\$1,490	
Construction	\$149,000	\$0	\$0		\$149,000	
District Labor	\$10,000	\$0			\$10,000	
TOTALS	\$175,390	\$0	\$0		\$175,390	\$175,390

APPROPRIATION REQUEST: \$175,390

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%	0.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	100.0%	0.0%		29%

Rancho: Replace Agitators

Job Number: 80748 Project Manager: Dingman FY Originated: FY10-11	Priority: 3 Category: Capacity/Supply Program: No
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Scope of Work

Purchase new compost agitators to replace the existing ones.

Project Justification

The existing agitators are approaching the end of their service life will need to be replaced. The original agitators had a seven year life as they were placed in service in 1994 and replaced in 2001-2002.

The existing agitators are approaching the end of their service life. An aggressive maintenance schedule has increased the service life of these agitators.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$0	\$0	\$0		\$0	
Bidding	\$0	\$0	\$0		\$0	
Construction	\$0	\$0	\$1,000,000		\$1,000,000	
District Labor	\$0	\$0	\$20,000		\$20,000	
TOTALS	\$0	\$0	\$1,020,000		\$1,020,000	\$1,020,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
0.0%	0.0%	0.0%		71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
0.0%	100.0%	0.0%		29%

NPDES Permit Renewal

Job Number: 99901 Project Manager: Dingman FY Originated: FY12-13	Priority: 2 Category: Regulatory Compliance Program: No
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Scope of Work

This project provides funding for assistance from outside sources related to the National Pollution Discharge Elimination System (NPDES) Permit renewal for Tapia.

Project Justification

Experts from outside the Las Virgenes - Triunfo Joint Powers Authority (JPA) will be needed to help with the legal and environmental issues involved in NPDES permit renewal.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$25,000	\$0	\$0	\$0	\$25,000	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$0	\$0	\$0	\$0	\$0	
District Labor	\$0	\$0	\$0	\$0	\$0	
TOTALS	\$25,000	\$0	\$0	\$0	\$25,000	\$25,000

APPROPRIATION REQUEST: \$25,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM 5C

Process Air Improvements

Job Number: 99910 Project Manager: Dingman FY Originated: FY12-13	Priority: 3 Category: Facility Improvements Program: No
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Scope of Work

This is a two phase project. The first phase is to replace the existing Roots blowers with new, high efficiency, single stage blowers.

Phase 2 is to replace the air diffusers in the aeration basins with new full floor mounted fine bubble diffusers.

Project Justification

The Tapia Process Air Study was completed in 2012 and showed that an annual energy savings \$184,000 could be achieved by implementing these improvements.

Additionally, aging infrastructure will be replaced and plant reliability will improve with the implementation of this program.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$66,000	\$69,000	\$135,000	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$132,000	\$138,000	\$270,000	
Bidding	\$0	\$0	\$13,200	\$13,800	\$27,000	
Construction	\$0	\$0	\$1,320,000	\$1,380,000	\$2,700,000	
District Labor	\$0	\$0	\$50,000	\$50,000	\$100,000	
TOTALS	\$0	\$0	\$1,581,200	\$1,650,800	\$3,232,000	\$3,232,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
	20.0%			71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	80.0%			29%

Rancho Las Virgenes: FOG Receiving Facilities

Job Number: 99911 Project Manager: Dingman FY Originated: FY12-13	Priority: 3 Category: Facility Improvements Program: No
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Scope of Work

FOG: To conduct a study to determine the market for local high strength wastes (food waste, fats, oils, and grease (FOG)) that can be fed into the third digester. After completion of the study, the installation of facilities for receiving and conveying fats, oils, and grease (FOG) and food waste into the newly constructed third digester.

Project Justification

FOG: The FOG introduced into the new digester is expected to increase the amount of gas generated and to reduce the amount of sludge produced while reducing odor potential. The gas can be used to create energy through co-generation facilities.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$25,000	\$10,000	\$35,000	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$60,000	\$60,000	
Bidding	\$0	\$0	\$0	\$6,000	\$6,000	
Construction	\$0	\$0	\$0	\$600,000	\$600,000	
District Labor	\$0	\$0	\$0	\$20,000	\$20,000	
TOTALS	\$0	\$0	\$25,000	\$696,000	\$721,000	\$721,000

APPROPRIATION REQUEST: \$0

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
	20.0%			71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	80.0%			29%

Rancho Las Virgenes Sludge Thickening

Job Number: 99926 Project Manager: Dingman FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Installation of a thickening centrifuge or rotary drum at Rancho to increase the solids percentage of raw sludge before it is fed to the digestors.

Project Justification

This project will thicken the sludge before it is fed to the digestors which would provide an increase in capacity.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning				\$25,000	\$25,000	
Land Acquisition				\$0	\$0	
Design				\$50,000	\$50,000	
Bidding				\$5,000	\$5,000	
Construction				\$500,000	\$500,000	
District Labor				\$20,000	\$20,000	
TOTALS				\$600,000	\$600,000	\$600,000

APPROPRIATION REQUEST:

Funds:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia Structural Repairs

Job Number: 99927 Project Manager: Dingman FY Originated: FY13-14	Priority: 1 Category: Facility Improvements Program:
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Scope of Work

Repair the foundation of the RAS pump station, including modifications to sub-grade to address settling. Flex coupling are also to be added to relieve pipe strain.

Project Justification

The RAS pump station has differentially settled from surrounding structures. This places strain on the piping which transverses the structures as well as the pump cans and needs to be repaired.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0				\$0	
Land Acquisition	\$0				\$0	
Design	\$10,000				\$10,000	
Bidding	\$1,500				\$1,500	
Construction	\$30,000				\$30,000	
District Labor	\$5,000				\$5,000	
TOTALS	\$46,500				\$46,500	\$46,500

APPROPRIATION REQUEST: \$46,500

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia Primary Flow Diversion

Job Number: 99928 Project Manager: Dingman FY Originated: FY13-14	Priority: 1 Category: Regulatory Compliance Program: No
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Scope of Work

Installation of permanent piping to convey primary effluent to RAS re-aeration basins.

Project Justification

This project would divert up to 1 MGD of primary effluent to the RAS re-aeration basins to promote nitrogen reduction for permit compliance.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning		\$0			\$0	
Land Acquisition		\$0			\$0	
Design		\$40,000			\$40,000	
Bidding		\$4,000			\$4,000	
Construction		\$400,000			\$400,000	
District Labor		\$10,000			\$10,000	
TOTALS		\$454,000			\$454,000	\$454,000

APPROPRIATION REQUEST:

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia Supplemental Carbon Study

Job Number: 99929 Project Manager: Dingman FY Originated: FY13-14	Priority: 2 Category: Regulatory Compliance Program: No
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Scope of Work

Study available supplemental carbon sources to improve biological performance at Tapia.

Project Justification

Tapia has low carbon (or food) in the influent to promote biological activity. The biological denitrification process is driven by high levels of carbon, so additional carbon sources need to be explored.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$80,000				\$80,000	
Land Acquisition	\$0				\$0	
Design	\$0				\$0	
Bidding	\$0				\$0	
Construction	\$0				\$0	
District Labor	\$5,000				\$5,000	
TOTALS	\$85,000				\$85,000	\$85,000

APPROPRIATION REQUEST: \$85,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM 5C

Rancho Las Virgenes Aerated Static Pile Pilot Study

Job Number: 99930 Project Manager: Dingman FY Originated: FY13-14	Priority: 3 Category: Business Improvements Program: No
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Scope of Work

Perform a pilot study using Gore cover over the compost pile so that it is aerated static composting rather than the daily agitated composting.

Project Justification

The use of the Gore cover would allow static pile composting and prevent the production of ammonia that is currently generated with the IPS composting system. The pilot study allows an evaluation of air demand and gas generation under static pile conditions and does not require an agitator.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning		\$1,500			\$1,500	
Land Acquisition						
Design		\$3,000			\$3,000	
Bidding		\$300			\$300	
Construction		\$30,000			\$30,000	
District Labor		\$5,000			\$5,000	
TOTALS		\$39,800			\$39,800	\$39,800

APPROPRIATION REQUEST:

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Centrate Equalization Tank

Job Number: 99932 Project Manager: Dingman FY Originated: FY13-14	Priority: 2 Category: Regulatory Compliance Program: No
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Scope of Work

Construct a centrate equalization tank at the centrate treatment facility.

Project Justification

Currently, there are two centrate treatment reactor tanks which are operated as batch reactors. When one tank needs to be taken out of service, the remaining tank cannot be used as a batch reactor because of centrate feed from Rancho. A new equalization tank would be used to store centrate generated at Rancho and feed it to the centrate reactors.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$37,500	\$0			\$37,500	
Land Acquisition	\$0	\$0			\$0	
Design	\$75,000	\$0			\$75,000	
Bidding	\$7,500	\$0			\$7,500	
Construction	\$750,000	\$0			\$750,000	
District Labor	\$20,000	\$0			\$20,000	
TOTALS	\$890,000	\$0			\$890,000	\$890,000

APPROPRIATION REQUEST: \$890,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia BNR Improvements

Job Number: 99933 Project Manager: Dingman FY Originated: FY13-14	Priority: 2 Category: Regulatory Compliance Program: No
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Scope of Work

Modify aeration basins at Tapia to increase aerobic zones and install baffles to prevent oxygen migration into anoxic zones. Install drop structures and provisions for supplemental carbon addition.

Project Justification

Process modeling has shown that more aerobic zone volume is necessary to nitrify the wastewater. The aerobic zone can be increased by adding aeration to the anoxic zone. The smaller anoxic zone can be compensated by adding supplemental carbon to increase denitrification efficiency.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning		\$60,000			\$60,000	
Land Acquisition		\$0			\$0	
Design		\$120,000			\$120,000	
Bidding		\$12,000			\$12,000	
Construction		\$1,200,000			\$1,200,000	
District Labor		\$50,000			\$50,000	
TOTALS		\$1,442,000			\$1,442,000	\$1,442,000

APPROPRIATION REQUEST:

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Rancho Las Virgenes Digester Cleaning and Repair

Job Number: 99934 Project Manager: Dingman FY Originated: FY13-14	Priority: 1 Category: Facility Improvements Program: No
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Scope of Work

To clean out and evaluate the condition of existing digesters # 1 and #2. The full scope of repairs is unknown at this time but could include coatings ,concrete patching, pipe and valve repairs, removal of the steam lances, and repairs to hatches and seals.

Project Justification

The digesters have not been taken off line for cleaning in their 20 years of service. It is recommended that digesters are cleaned every 10 years. With the completion of the third digester project in 2014, there will be enough digester capacity for the existing digesters to be cleaned and repaired.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0		\$0	
Land Acquisition	\$0	\$0	\$0		\$0	
Design	\$25,000	\$25,000	\$0		\$50,000	
Bidding	\$2,500	\$2,500	\$0		\$5,000	
Construction	\$250,000	\$250,000	\$0		\$500,000	
District Labor	\$10,000	\$10,000	\$0		\$20,000	
TOTALS	\$287,500	\$287,500	\$0		\$575,000	\$575,000

APPROPRIATION REQUEST: \$287,500

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

Tapia Alternative Disinfection Safety Improvements

Job Number: 99935 Project Manager: Dingman FY Originated: FY13-14	Priority: 1 Category: Facility Improvements Program: No
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Scope of Work

This project includes the installation of a canopy over the ammonia pumps and electrical control panels, handrails along the sidewalk and the installation of a toxic gas detector to detect ammonia gas leaks.

Project Justification

After completion of the Tapia Alternative Disinfection Project there were some safety issues that needed to be addressed. A canopy is needed because the electrical equipment and pumps should be protected from sunlight as UV radiation can cause damage to components. Handrails need to be installed along the concrete walkway to prevent a fall and the toxic gas sensor is necessary to provide a warning if there is an ammonia gas leak.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0				\$0	
Land Acquisition	\$0				\$0	
Design	\$5,000				\$5,000	
Bidding	\$750				\$750	
Construction	\$75,000				\$75,000	
District Labor	\$5,000				\$5,000	
TOTALS	\$85,750				\$85,750	\$85,750

APPROPRIATION REQUEST: \$85,750

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Programmable Logic Controller Upgrades

79

Job Number: 99936 Project Manager: Dingman FY Originated: FY13-14	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

This project replaces programmable logic controllers (PLC's) with newer PLCs and provides necessary equipment upgrades (fiber optics, network switches and programming) to complete the installation. This is a program project which addresses Tapia in the first three years and centrate treatment in the fourth year. Design will occur in the first year for all facilities.

Project Justification

The PLC's at Tapia and centrate treatment have become obsolete and need to be replaced with new PLC's and ancillary equipment.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$55,000	\$0	\$0	\$0	\$55,000	
Bidding	\$1,500	\$1,000	\$2,600	\$250	\$5,350	
Construction	\$150,000	\$100,000	\$260,000	\$25,000	\$535,000	
District Labor	\$10,000	\$5,000	\$10,000	\$5,000	\$30,000	
TOTALS	\$216,500	\$106,000	\$272,600	\$30,250	\$625,350	\$625,350

APPROPRIATION REQUEST: \$216,500

Fund: % of Project Allocated by JPA Partner:

P/W Construction	Sanitation Construction	RW Conservation	LVMWD	71%
P/W Replacement	Sanitation Replacement	RW Replacement	TSD	29%
	100.0%			

ITEM5C

Rancho Las Virgenes Composting Facility: Purchase of New Loader

80

Job Number: 99942 Project Manager: Dingman FY Originated: FY14-15	Priority: 3 Category: Business Improvements Program: No
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Scope of Work

Replace the existing Michigan/Volvo loader used to move amendment and compost at Rancho with a like model.

Project Justification

The existing Michigan/Volvo loader is original equipment and has been in service since 1994. It has reached the end of its useful life. Repairs are more frequent and some of the items that need repair are no longer available due to the age of the equipment.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning Land Acquisition Design Bidding Construction District Labor						
	\$180,000				\$180,000	
TOTALS	\$180,000				\$180,000	\$180,000

APPROPRIATION REQUEST: \$180,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Sewer Grit Handling

Job Number: 99946 Project Manager: Olney FY Originated: FY14-15	Priority: 2 Category: Facility Improvements Program: No
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Scope of Work

Plan design and build a sewer grit removal system at Tapia. This project will reduce the weigh of inorganic grit that is removed and disposed as solid waste.

Project Justification

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$5,000				\$5,000	
Land Acquisition						
Design	\$5,000				\$5,000	
Bidding						
Construction	\$40,000				\$40,000	
District Labor						
TOTALS	\$50,000				\$50,000	\$50,000

APPROPRIATION REQUEST: \$50,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Rancho Facility Improvements

<p>Job Number: 99947 Project Manager: Johnson FY Originated: FY14-15</p>	<p>Priority: 3 Category: Facility Improvements Program: No</p>
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Scope of Work

Replace and repair significant components of the JPA's Rancho Las Virgenes Composting Facility.

- 1) Replacement Sump Pumps (4 @ \$8K/ea.) - \$35,000
- 2) Amendment Bin Overhaul (welding/coating) - \$50,000
- 3) Conveyor Screw Replacement (2) - \$30,000
- 4) Dewatering Compressor (1) - \$10,000

Project Justification

Damaged and worn facilities require periodic maintenance and replacement to assure ongoing operations.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$1,500	\$1,500			\$3,000	
Land Acquisition	\$0				\$0	
Design	\$1,000				\$1,000	
Bidding	\$3,500				\$3,500	
Construction	\$165,000				\$165,000	
District Labor	\$3,500				\$3,500	
TOTALS	\$174,500	\$1,500			\$176,000	\$176,000

APPROPRIATION REQUEST: \$174,500

Funds:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
		100.0%		29%

ITEM5C

Tapia Electrical and Instrumentation Upgrades

Job Number: 99950 Project Manager: Korkosz FY Originated: FY13-14	Priority: 3 Category: Facility Improvements Program: No
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Scope of Work

- 1 - Replace obsolete and malfunctioning mechanical protective relays for generators with new solid state controls. The controls will provide better generator protection and troubleshooting capabilities (generators 1 & 2): \$75,000
- 2 - Install roots blower/motor vibration system to protect expensive motor and reduce repair cycle: \$6,000
- 3 - Roots interface upgrade: \$20,000
- 4 - Replace failing sludge force main flow meter: \$4,000
- 5 - Replace failing and inefficient facility lighting: \$25,000

Project Justification

The JPA's Tapia Water Reclamation facility represents a significant investment that is necessary for ongoing sewage treatment.

Treatment plant equipment and appurtenances are inspected and evaluated on an ongoing basis to determine the most cost effective repair/replace maintenance schedules.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees Contracts/Equipment District Labor G & A Allocations								
TOTALS.								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$500				\$500	
Land Acquisition	\$0				\$0	
Design	\$500				\$500	
Bidding	\$0	\$2,000			\$2,000	
Construction	\$0	\$65,000	\$65,000		\$130,000	
District Labor	\$0	\$2,500	\$2,500		\$5,000	
TOTALS	\$1,000	\$69,500	\$67,500		\$138,000	\$138,000

APPROPRIATION REQUEST: \$1,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
		100.0%		29%

Security Upgrades - JPA

84

Job Number: 99953 Project Manager: Miller FY Originated: FY13-14	Priority: 3 Category: Business Improvements Program: Yes
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Scope of Work

Remote Access Control: \$10,000
 Security Cameras: \$15,000
 Lock and Key Control: \$5,000

Project Justification

Continually improve security and safety at JPA facilities through upgrades and improvements.

Expenditures & Appropriations - Inception to Date & Anticipated (unaudited)

	Prior Yrs.	FY11-12	FY 12-13	FY 13-14	FY 14-15	Inception to Date	Approved Approp.	Carryover (deficit)
Design Effort/Fees								
Contracts/Equipment								
District Labor								
G & A Allocations								
TOTALS								

Proposed Project Expenditures

	FY 14-15	FY 15-16	FY 16-17	FY 17-18	4-Year Total	Total Project (projected)
Planning	\$0	\$0	\$0	\$0	\$0	
Land Acquisition	\$0	\$0	\$0	\$0	\$0	
Design	\$0	\$0	\$0	\$0	\$0	
Bidding	\$0	\$0	\$0	\$0	\$0	
Construction	\$5,000	\$20,000	\$15,000		\$40,000	
District Labor	\$0	\$0	\$0		\$0	
TOTALS	\$5,000	\$20,000	\$15,000		\$40,000	\$40,000

APPROPRIATION REQUEST: \$5,000

Fund:	% of Project Allocated by			JPA Partner:
P/W Construction	Sanitation Construction	RW Conservation		LVMWD
				71%
P/W Replacement	Sanitation Replacement	RW Replacement		TSD
	100.0%			29%

ITEM5C

Section 4

DRAFT

Planning Guidelines for Project Costs

All estimated costs for a project will be based on the estimated construction cost of the work.

To estimate Construction Costs use:

- Previous project work of similar scope and complexity
- Previous estimates for work updated and inflated by 3% compounded for each year since the estimate was prepared
- Project costs shown in the current Master Plan
- Means Estimating Guides (available in Engineering)
- Project costs shown in recent Water System Design Reports for pipelines, tanks, pump stations and the like
- Use 15% for contingency costs

To estimate Planning Costs use:

- Preliminary Design Report - 5% of Construction Cost
- Environmental Reports
 - \$10-20,000 for Neg Dec's/MND's
 - \$150,000 - 350,000 for full EIR's (depending on complexity)

Land Acquisition Costs

- Rural land use \$5,000/acre
- Urbanized land use \$50,000/acre
- For fees use 10% of acquisition cost

Design Costs

- Use 10% of Construction Cost (Assume consultants bill at \$125/hr)
- For very complex projects with numerous staff reviews use 15%

Bidding Costs

- Use 1% of Construction Cost

Other Costs related to construction

- Surveillance/inspection and administration use 6%
- Testing and other laboratory work use 2%
- District furnished equipment use vendor catalogs/pricing
- Construction Management Costs use 10% (private consultant)
- Operation and Maintenance Manual Preparation use 2%

District Labor Guidelines (includes G&A)

- Project cost \$25K to \$150Kuse \$5000
- Project cost \$150K to \$500Kuse \$10,000
- Project cost \$500K to \$1 Miluse \$20,000
- Project cost > \$1 Mil.....use \$50,000

ITEM5C

Priority and Justification Criteria

Priority:

This identifies projects with a vocabulary of timeliness and need sensitivity. The higher priorities reflect projects that are typically driven by external needs or regulations rather than district needs. The overall CIP Program is achieved by a blend of projects in all Priorities consistent with fund availability.

1. Essential Projects
 - Required by law, regulation, or court mandate to be accomplished immediately.
 - Disaster recovery work needed to restore service
 - Emergency repairs to maintain/restore service reliability, or to resolve or correct a hazardous situation.
2. Necessary Projects
 - High need for scheduled repair, replacement, or upgrade to maintain or improve service reliability
 - Safety improvement to protect life or property
 - Improvement to protect facilities, equipment and structures
 - Cost related efficiency improvements
 - Conservation of resources
 - Water quality improvements - no regulatory requirement
 - Matching funding available (like grants)
 - Current demand related improvements
3. Desirable or Deferrable Projects
 - Routine improvements or repairs to systems
 - No direct cost benefit
 - Cosmetic improvements
 - Future demand related improvements

Justification Categories

The intent here was to group projects with similar reasons for being done or outcomes for ease of analysis of how Capital funds are being invested over time. It provides another index to analyze how the district is investing in facilities for the short and long-range future. The key question answered by this index is "Why is this project being done?"

1. Safety
2. Water Quality
3. Delivery reliability
4. Regulatory Requirements
5. System Supply or Demand
6. Business Improvements (i.e., how we enhance our business practices)
7. Facility Improvements (i.e., upgrades and enhancements in general)

ITEM5C

Roles and Responsibilities for Project Managers

- A. Project Planning
1. Review current CIP for continuation of existing projects
 2. Review current CIP for projects programmed for next fiscal year
 3. Update status and data for existing projects on Project Sheets
 4. Review Master Plan or other studies and reports for new projects
 5. Review operational problems which need correction with CIP project work
 6. Brainstorm with users to identify CIP requirements
 7. Review various permits issued to operate facilities for new or added CIP project requirements
 8. Review regulatory requirements for new CIP project needs to meet compliance needs
 9. Consider 'wish list' needs for CIP projects
- B. Project Development
1. Prepare CIP Project Sheet
 2. Write/verify Project Scope
 3. Write Justification for Project
 4. Compute Project Costs
 5. Determine Program Year(s) for Project
- C. 5-Year CIP Program Preparation
1. Verify project scope, justification, costs, program year
 2. Provide answers and feedback as necessary
 3. Participate in planning meetings
- D. CIP Program Execution
1. Serve as single point of contact for project - assume ownership
 2. Establish schedule for work
 3. Establish significant milestones for work
 4. Establish budget for work
 5. Track/approve monthly invoices and costs of work on project
 6. Monitor progress of work, resolve issues, and keep project moving
 7. Provide quarterly status reports (consider costs, schedule, problems, slippages, etc.)
 8. Prepare necessary Board packages for review/approval of budget changes or other authorizations
 9. Provide quarterly cash flow projections
 10. Prepare project completion documents

ITEM5C

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject: Rancho Las Virgenes Third Digester Construction: Change Order No. 4**SUMMARY:**

On February 4, 2013, the JPA Board awarded the contract to construct the Rancho Las Virgenes Third Digester Project to Pacific Hydrotech in the amount of \$5,796,000.00. Change Order No. 4, consisting of 11 items, is necessary to resolve unknown field conditions, omissions of some support elements for the pump station building and piping in the construction documents, and credit for damages to the existing boiler caused by the contractor. The total cost for Change Order No. 4 is \$173,097.69, or 2.99% of the original bid. The total cost of all four construction change orders is \$308,542.50, or 5.32% of the original bid.

RECOMMENDATION(S):

Authorize the General Manager/Administering Agent to approve Change Order No. 4 with Pacific Hydrotech Corporation in the amount of \$173,097.69, including extension of the contract duration by 28 calendar days for the Rancho Las Virgenes Third Digester Project; and appropriate additional funds in the amount of \$352,491 to CIP Job No. 10487.

FINANCIAL IMPACT:

An additional appropriation of \$352,491 is required for the project. The total appropriation to-date for CIP Job No. 10487 is \$6,841,790. However, the total amount for the project's design, bidding, and construction contracts with change orders (including proposed Change Order No. 4) is \$7,194,281.

Following is a summary of the original contact amounts and change orders, including proposed Change Order No. 4, for the project. The \$352,492 additional appropriation consists of \$179,394 for previously-approved change orders and \$173,098 for proposed Change Order No. 4. Appropriation requests for the previous change orders should have been submitted in conjunction with the approval process.

<u>Item</u>	<u>Contract Amount</u>	<u>Change Order Amount</u>	<u>Total</u>
Kennedy/Jenks (Project Design)	\$444,051	\$47,400	\$491,451
Kennedy/Jenks (Bid Support)	11,000	0	11,000
Geolabs (Soil Inspection)	19,538	22,079	41,617
Pacific Hydrotech (Construction)	5,796,000	135,445	5,931,445
Kennedy/Jenks (Construction Mgmt.)	545,670	0	545,670
Subtotal Approved:	<u>\$6,816,259</u>	<u>\$204,924</u>	<u>\$7,021,183</u>
Proposed (Change Order No. 4):	-	\$173,098	-
Total Contract/Change Order Amounts:	<u>\$6,816,259</u>	<u>\$378,022</u>	<u>\$7,194,281</u>

In addition to the project's external costs summarized above, internal labor and General and Administrative (G&A) costs have accrued and will continue to accumulate until the project is completed. These costs will be "trued up" with an additional appropriation request prior to final acceptance of the project. As of January 31, 2014, the labor and G&A costs for CIP Job No. 10487 are approximately \$270,000.

DISCUSSION:

There are a total of 11 items included in Change Order No. 4 as follows:

Item 1: Minor piping modifications in the amount of \$314.21.

ITEM 6A

Minor piping modifications were made in order to facilitate possible tie-ins for an additional digester in the

Item 2: Additional conduit construction in the Energy Recovery Building in the amount of \$2,446.88.

The as-built drawings that the design was based on showed a spare conduit that could be used for this project. Field verification revealed that no spare conduit was available and, therefore, an additional conduit was needed.

Item 3: Additional pothole for utility location in the amount of \$1,090.83.

In order to locate underground electrical utilities, an additional pothole was requested and completed under the direction of the inspection staff.

Item 4: Alternative method of digester piping tie-in to the existing two digesters in the amount of \$5,034.31.

Due to inoperative valves, the current piping system carrying sludge could not be isolated to perform the tie-in as specified in the design drawings. Alternative hot taps were performed to achieve the tie-in. Staff plans to repair the inoperative valves when the third digester is operational.

Item 5: Modifications of the hot water system, resulting in a **credit** of \$4,697.97.

Minor modifications to the hot water system were made for efficiency and reduced the construction cost.

Item 6: Addition of six columns and five beams for the digester building roof connections in the amount of \$13,595.77.

The design documents did not show three columns and three beams on the perimeter of the digester building roof and three columns and two beams on the upper roof connection near the stairwell. Kennedy/Jenks' Structural Engineer reviewed and deemed the proposed cost reasonable and in-line with the schedule of pricing for the building structure, which totals \$3,370,800.00, as submitted by the contractor.

Item 7: Modifications to shop drawings and submittals by the contractor to correct certain elevation conflicts for the stairs in the digester building in the amount of \$1,994.10.

The current design documents for the stairs in the digester building have certain elevation conflicts. As a result, additional shop drawings and submittals are required from the contractor.

Item 8. Extension of electrical conduit from the existing pull box to the new digester building in the amount of \$5,453.07.

The as-built drawings showed an existing conduit located in front of the proposed digester building. Field verification after potholing showed that the existing conduit is about 40 feet short of the proposed digester building. A change is necessary to account for the difference in conduit length.

Item 9. Addition of pipe supports in the amount of \$107,688.16.

The design document specified that pipe supports for pipes of less than 6-inch diameter would be the responsibility of the contractor, and pipe supports for pipes of greater than 6-inch diameter would be shown in the design documents. However, many of the pipe supports were not shown in the design documents. Staff and Kennedy/Jenks Consultants worked with the General Contractor to obtain three quotes for pipe support materials, and the lowest bid was included in the General Contractor's initial change order proposal of \$110,523. Kennedy/Jenks also performed two independent engineering estimates, which were \$107,916 and \$134,037. After negotiation, the General Contractor agreed to a price of \$107,688.16. A total contract duration extension of 28 calendar days is needed in order to fabricate and install the pipe supports.

Item 10. Reimbursement of repair costs for damaged linkage on the existing boiler caused by the Contractor, resulting in a **credit** of \$1,915.02.

Although the damage was on the existing boiler, which is to be replaced by a new boiler, the repair had to be made in order to keep the existing boiler operational during construction.

Item 11. Construction of additional electrical conduit from outside of the Edison Transfer Station to the⁹¹ Energy Recovery Building in the amount of \$42,093.35.

The design documents called for utilization of existing spare conduits from outside of the Edison Transfer Station to the Energy Recovery Building. However, it was determined that only one-third of the spare conduit is existing and that portion was damaged and unusable. Therefore, a new conduit must be installed. A cost proposal in the amount of \$45,370.58 was received from the contractor. In addition, staff solicited a quote from Taft Electrical in the amount of \$52,000. After engineering review and further negotiation with the General Contractor, a change order in the amount of \$42,093.35 was agreed upon.

These changes were necessary primarily because of unknown field conditions or omissions in the design documents. The majority of unknown field conditions and omissions have been resolved. If these conditions had been known or if the omissions had not been made, the additional costs would have been included in the original bid. In order to ensure that the costs were competitive, staff either obtained or required the contractor to obtain competitive bids as was the case for the material for the pipe supports. In addition, engineering estimates and competitive bids were used to negotiate competitive pricing from the contractor.

Change Order No. 4 is attached. Additionally, there are over 200 pages of supporting documentation that is not attached but available upon request.

Prepared By: John Zhao, P.E., Principal Engineer

ATTACHMENTS:

Change Order No. 4



CONTRACT CHANGE ORDER

No. 04

4232 Las Virgenes Road
Calabasas, California 91302-1994

Project Las Virgenes – Triunfo Joint Powers Authority Rancho Las Virgenes Third Digester

Project No. Acct. No. 10487.1880.505

Contractor Pacific Hydrotech Corporation

Date XX February 2014

CONTRACTOR CHANGE ORDER NO. 04 The Contractor is hereby authorized and directed to make the herein described changes from the Plans and Specifications or do the following work not included in the Plans and Specifications for the construction of this project.

This change requested by: Pacific Hydrotech Corporation

DESCRIPTION OF CHANGES:

- 1) Work Directive Change No. 1 (attached):
 - a. Install a 6" nozzle on the 20" DSL riser pipe as shown on Sketch RFQ No. 003-1 and 2 at a centerline elevation of 841.00. Relocate the 6" plug valve to the nozzle. Extend the 6" RSL pipe to the plug valve and nozzle. Centerline elevation of the 6" RSL shall be relocated to 841.00
 - b. Eliminate the 20" Tee and 20" x 6" Reducer and install a 20" 90° Elbow in that location.
- 2) Work Directive Change No. 6 (attached):
 - a. The contractor shall furnish and install a 4-inch conduit between the Energy Recovery Building Electrical Room and Panel EDP1.
- 3) Work Directive Change No. 7 (attached):
 - a. Potholing for the electrical conduit between the Maintenance Building and the Energy Recovery Building (ERB) near the electrical pull box heading down to the pull box in front of the Maintenance Building.
- 4) Work Directive Change No. 8 (attached):
 - a. Providing 4 tapping sleeves and tap the existing 20-inch DSL lines behind the existing digester building. Gate valves for the tap will be provided by the District.
 - b. Elimination of the following:
 1. 20-inch ductile iron flanged spools (provide these custom/non-returnable spools to the District)
 2. 20-inch ductile iron flanged tees
 3. 20-inch victaulic/flange adapters

DESCRIPTION OF CHANGES CONTINUES:

Page 2

- 5) Work Directive Change No. 9 (attached):
 - a. Replace three 6-inch three-way valves (T port configuration) with three 4-inch three way valves (L-port configuration). Applies to valves V-302, V-312, and V-322.
 - b. Add 4-inch by 6-inch reducers to connect 4-inch three-way valves to 6-inch HWS and HWR piping to the sludge heat exchangers
 - c. Replace 6-inch globe valves with 6-inch butterfly valves.
 - d. Provide 120v power to flow meters FI467 and FI477.
 - e. Replace 2-inch SG pipe to the Indirect Fired Boiler with 3-inch SG pipe.
 - f. Delete solenoid valves and check valves on gas feeds to the Indirect Fired Boiler.
- 6) Work Directive Change No. 10 (attached):
 - a. Shop materials, labor and drawings and field labor for installation of six steel columns and five beams for the digester building roof connections on the perimeter of the building and the perimeter of the stairwell.
- 7) Work Directive Change No. 11 (attached):
 - a. Modifications to shop drawings as a result of elevation changes required for the stairs in the digester building.
- 8) Work Directive Change No. 12 (attached):
 - a. Extend electrical conduit (2 – 4-inch and 3 – 2-inch) from the existing pull box to the new digester building.
- 9) Addition of pipe supports for the above ground pipe in accordance with RRFI No. 20 and its addendums (attached).
- 10) Repairs to the linkage on the boiler damaged by the Contractor.
- 11) Replacement of electrical conduit identified on as-built drawings between the Maintenance Building and Energy Recovery Building which could not be located. Installation by horizontal directional drilling to avoid numerous pipelines and conduits.

INCREASES
 TOTAL AT AGREED PRICES OR FORCE ACCOUNT \$ 173,097.69
 DECREASES

ITEM 6A

Contract Change Order No. 04 Project No. _____ Acct. No. 10487-1880.505

Date XX February 2014

(2) Estimate of increases and/or decreases in contract items at contract unit prices:

INCREASES

Item	Description	Quantity	Unit Price	Total
1	Work Directive Change No. 01 (see page 1)			\$314.21
2	Work Directive Change No. 06 (see page 1)			\$2,446.88
3	Work Directive Change No. 07 (see page 1)			\$1,090.83
4	Work Directive Change No. 08 (see page 1)			\$5,034.31
6	Work Directive Change No. 10 (see page 2)			\$13,595.77
7	Work Directive Change No. 11 (see page 2)			\$1,994.10
8	Work Directive Change No. 12 (see page 2)			\$5,453.07
9	Addition of Pipe Supports (see page 2)			\$107,688.16
11	Replacement of Electrical Conduit (see page 2)			\$42,093.35
TOTAL INCREASES				\$179,710.68

DECREASES

Item	Description	Quantity	Unit Price	Total
5	Work Directive Change No. 09 (see page 1)			(\$4,697.97)
10	Credit for Damage to Boiler Broken Linkage			(\$1,915.02)
TOTAL DECREASES				\$6,612.99

TOTAL NET increase IN CONTRACT ITEMS AT CONTRACT UNIT PRICES \$173,097.69

TOTAL COST OF THIS CHANGE ORDER \$173,097.69

INCREASE

DECREASE

It is agreed 28 consecutive calendar days extension of time will be allowed by reason of this change.

Recommended by

Departmental Approval

John Zhao, P.E.
Principal Engineer

David R. Lippman
Director of Facilities and Operations

ACCEPTED:

APPROVED:

Pacific Hydrotech Corporation

Las Virgenes Municipal Water District

By: _____

By: _____
David Pedersen, P.E.
General Manager

Date: _____

Date: _____

Note: Attention is called to the sections of the Special Provisions and Standard Provisions on EXTRA, ADDITIONAL OR OMITTED WORK.

- THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY OWNER ITEM 6A
- IF ACCEPTABLE TO THE CONTRACTOR, THIS CHANGE ORDER IS EFFECTIVE IMMEDIATELY

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject: Solar Generation Project: Application of Energy Savings**SUMMARY:**

On January 6, 2014, staff presented the JPA Board with three options to apply the expected energy cost-savings the JPA will realize as the result of the operation of the Solar Generation Project. At the meeting, JPA Director Glen Peterson requested that staff determine if the previously recommended option (Option No. 3) is legal and consistent with Generally Accepted Accounting Principles (GAAP). Staff consulted with the JPA's Legal Counsel and Independent Auditor to respond to these two questions.

RECOMMENDATION(S):

Consider three options for the application of energy cost-savings realized as a result of the operation of the Solar Generation Project and select the preferred methodology.

FINANCIAL IMPACT:

The Solar Generation Project is expected to result in a near-term energy cost-savings of approximately \$122,000 per year for the JPA. The cost-savings will be passed on to the JPA partners, and Calleguas Municipal Water District (CMWD) in the case of Option Nos. 1 and 2, in slightly differing amounts depending on the option selected for application of the cost-savings:

Option No.	LVMWD (%)	LVMWD (\$)	TSD (%)	TSD (\$)	CMWD (%)	CMWD (\$)
1	73.2%	\$89,300	11.3%	\$13,800	15.5%	\$18,900
2	72.7%	\$88,715	14.7%	\$17,882	12.6%	\$15,403
3	70.6%	\$86,132	29.4%	\$35,868	n/a	n/a

DISCUSSION:**Background:**

On April 1, 2013, the JPA Board authorized the Administering Agent/General Manager to execute Solar Power Purchase and Performance Guarantee Agreements with SolarCity Corporation for a new one megawatt solar array. The Agreements enable the JPA to purchase power generated by the project at a rate of 10.5 cents per kWh with no escalation for a 20-year period, which is estimated to result in an annual near-term cost savings of \$122,000 for the JPA. As designed, the power produced by the solar array will be supplied to the JPA's Recycled Water Pump Station via a newly constructed transmission line.

Problem Description/Statement:

As designed, the lower-cost power produced by the solar array will be physically supplied to the Recycled Water Pump Station and, therefore, reduce the overall operating cost of the facility. Since the Recycled Water Pump Station is primarily utilized to pump wholesale recycled water throughout the JPA's transmission system, the decrease in operating cost for the facility will effectively drive the wholesale rate of recycled water down. TSD currently has a contract with CMWD to supply recycled water to Calleguas at a maximum rate of 5% higher than the JPA's wholesale recycled water rate. As a result, a reduction in the wholesale recycled water rate would result in reduced revenue to TSD. CMWD has indicated that the loss in revenue could be used to fund recycled water extensions in the TSD service area. The challenge is to determine an approach to apply the cost-savings that will be realized due to the availability of lower-cost solar power such that the benefits are perceived to be accrued equitably to both JPA partners. ITEM 6B

Apply the annual solar savings first to pumping operations for disposal of excess recycled water to the Los Angeles River, which is budgeted in the Sanitation Treatment business unit, and then to the Recycled Water Pump Station (wholesale recycled water). This option involves applying all of the cost-savings to the facility where the electricity is physically delivered.

Option No. 2:

Apply the annual solar savings to the JPA's Recycled Water and Sanitation Enterprises in proportion to the amount of electricity utilized by the respective enterprises.

Option No. 3:

Apply all of the annual solar savings the JPA's Sanitation Enterprise. Effectively, the lower-cost power generated by the solar facility would be purchased by the JPA Sanitation Enterprise for use in the treatment of wastewater solids at the Rancho Las Virgenes Composting Facility.

Legal Review of Option No. 3:

Legal Counsel Lemieux provided the attached analysis of Option No. 3. The analysis cites a nexus between the Solar Generation Project and the Rancho Las Virgenes Facility because both facilities are located on land acquired decades ago with the proceeds of a federal grant for the purpose of constructing a solids handling facility. As a result, the analysis concludes that it is reasonable to conclude that cost-savings produced by the solar panels on the property be allocated back to the cost of operating the Rancho Las Virgenes Facility.

Generally Accepted Accounting Principles for Option No. 3:

Staff contacted the Independent Auditor for the JPA, Nitin Patel, to determine if Option No. 3 would be consistent with GAAP. Mr. Patel responded that the question is not covered by GAAP; however, he did express an audit concern with the proposed methodology. The concern centered the importance of properly valuing the costs and benefits accrued to the Recycled Water and Sanitation Enterprises. Staff requested a memo from Mr. Patel on the subject; however, he was not comfortable preparing such a memo because his firm's contract with the JPA has expired.

Prepared By: David W. Pedersen, Administering Agent/General Manager

ATTACHMENTS:

Legal Analysis

January 29, 2014

David W. Pedersen, General Manager
Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 91302

Re: Allocation of Energy Savings

The Las Virgenes Municipal Water District – Triunfo Sanitation District Joint Powers Authority (“Joint Venture”) board of directors asked us to determine whether a proposed allocation of energy savings (known as “credits”) resulting from the use of solar power is lawful.

The Joint Venture collects and treats sewage and disposes of treated effluent by waste spraying or distribution to customers as recycled water. Solar arrays have reduced the cost of electricity for the sanitation enterprise. Staff proposes to credit this cost savings to collection, treatment and disposal, but not distribution of recycled water. The Joint Venture adheres to Generally Accepted Accounting Practices (“GAAP”). Compliance with GAAP is a safe harbor for challenges, but is not a mandatory method for accounting. The Interim Finance Director concluded the proposed allocation complies with GAAP. We address whether there is a rational basis for the allocation.

The solar panels are located on land acquired decades ago with the proceeds of a federal grant for construction of a solids injection facility (“Rancho”). The grant agreement and the deed stated Rancho will revert to federal ownership if the land is not used for the purposes of the grant. As a result, the District requested the grant auditors (EPA and the State Water Resources Control Board, California Division of Financial Assistance) to approve installation of facilities other than solids handling. The District inquired whether installing solar panels at Rancho would be consistent with the purpose of the grant. By email dated June 12, 2009, the EPA replied use of Rancho for solar panels would be consistent with the grant deed. A letter from State Water Resources Control Board, Division of Financial Assistance, dated July 7, 2009 concurred.¹

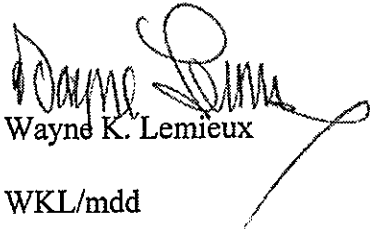
The energy savings was not mentioned. This letter shows the importance of conforming use of Rancho to the grant purposes and discloses a rational basis for the proposed credit allocation. It

¹ The district mistakenly asked for approval of two recycled water pumps which were actually off Rancho. EPA and the state also approved the recycled water pumps at Rancho.

is reasonable to conclude credits produced by facilities at Rancho should be allocated back to the cost of operating Rancho facilities.

Very truly yours,

LEMIEUX & O'NEILL



Wayne K. Lemieux

WKL/mdd

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject: Heal the Bay's "Bring Back the Beach" Event: Attendance

SUMMARY:

Each year the environmental group Heal the Bay holds its "Bring Back the Beach" dinner in Santa Monica as one of its key fundraising activities. This year's event will be held on Thursday, May 15, 2014, at the Jonathan Beach Club in Santa Monica.

Over the years, JPA Directors have attended the event to build relationships, not only with Heal the Bay, but also with other environmental group representatives attending the function. Previously, the JPA reserved a 10-seat table, but when costs rose from \$3,000 to \$5,000, it was decided to only send the Chairs of each Board. Individual seats for the event are \$500.

RECOMMENDATION(S):

Determine whether or not to participate in Heal the Bay's "Bringing Back the Beach" event, and, if participation is approved, authorize the Chair of each agency and the General Manager/Administering Agent to attend the event at a cost of \$500.00 per person.

FINANCIAL IMPACT:

Sufficient funds for the event are available in the adopted Fiscal Year 2013-14 Budget. Historically, this expense has been charged to the "Watershed Programs" portion of the JPA's Administration Budget, which is allocated 70.6% to LVMWD and 29.4% to TSD.

Prepared By: David W. Pedersen, Administering Agent/General Manager

ATTACHMENTS:

[Bring Back the Beach Information](#)



Heal the Bay

VOLUNTEER TAKE ACTION OUR WORK SANTA MONICA PIER AQUARIUM **BE A MEMBER** EN ESPAÑOL

HOME » BE A MEMBER » BRING BACK THE BEACH

BE A MEMBER

- Donate & Join Now
- More Ways to Give
 - In Honor/Memory Gifts
 - Friendraise
 - Major Donor Program
 - Matching Employee Gifts
 - Adopt an Aquarium Animal
 - Partner with Heal the Bay
 - Bequest
 - Shop
- Give With Confidence
- Bring Back the Beach
 - Tickets
 - Honorees
 - Forms
 - Sponsorships and Ads
 - Information

BRING BACK THE BEACH GALA



May 15, 2014 at the Jonathan Club in Santa Monica

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Come party with 1,000 of your fellow beach lovers at Heal the Bay's annual fundraising gala -- Bring Back the Beach -- to be held May 15, 2014 at the Jonathan Beach Club in Santa Monica. Always a fixture on L.A.'s social calendar, our spring event attracts leaders from Southern California's environmental, political, business and entertainment communities. Musical guests in the past have included Jack Johnson, Brian Wilson, the Bangles and Ozomatli. Ask anyone who has attended, and they'll tell you it's the ultimate beach party! (Check out the slide show below to get a taste.)

So dig your toes in the sand and come join us for a fun-filled evening under the stars to celebrate our honorees and support the mission of Heal the Bay. Last year we raised more than \$1 million for programs that work toward clean beaches and oceans. Rest assured: Our teachers, water quality scientists, policy advocates, beach cleanup organizers, and aquarists, to name a few, plan have definitely put those dollars to good work over the past 12 months.

This year's "Bring Back the Beach" will honor the environmental dedication of some key supporters of our work: Mike Sullivan, president of LAcarGuy; LA Sanitation, the city's public works unit leading the charge to create a more sustainable city; and rock band incubus, whose Make Yourself Foundation has underwritten numerous Heal the Bay programs aimed at protecting our local shorelines. You can read more about our honorees here.

We recommend buying your tables or individual tickets as soon as possible. This event sells out every year! If you are interested in sponsorship opportunities, please contact Afarin Davari.

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Learning to Love: the Sea & Huia Pio

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject: Board Meeting Follow-up Items

SUMMARY:

Attached is a list of follow-up items from previous JPA Board meetings. The list provides a brief description of the various items, origination dates, and responsible managers.

Prepared By: David W. Pedersen, Administering Agent/General Manager

ATTACHMENTS:

Board Meeting Follow-up Items

JPA BOARD MEETING FOLLOW-UP ITEMS

Item No.	Origination Date	JPA or LVMWD	Description	Responsible Manager
1	09/04/2013	JPA	FUTURE AGENDA ITEM - Incorporate comments provided on Recycled Water Master Plan Update.	Lippman
2	11/04/2013	JPA	Develop a means to address the issue of capital improvement projects with a negative "project balance".	Lippman
3	11/04/2013	JPA	Estimate the quantity/value of recycled water disposed of via the sprayfields and the possibility of signing up golf courses (or others) as "incentive" customers to use the water at a reduced rate when requested.	Reyes
4	01/06/2013	JPA	FUTURE AGENDA ITEM - Determine if the application of the solar savings to the Sanitation Enterprise is: (1) legal, and (2) consistent with GAAP. Also, determine the estimated % allocation of the solar savings to LVMWD and TSD under Option Nos. 1 and 2.	Pedersen
5	01/06/2013	JPA	Provide an update on changes to the State's draft Toxicity Policy.	Lippman
6	02/03/2014	JPA	FUTURE AGENDA ITEM - Investigate potential concerns with "microbeads" in wastewater stream (reference: January 25, 2015 LA Times article)	Lippman

ITEMIOA

2/25/2014

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject: Information on Plastic Microbeads

SUMMARY:

On February 3, 2014, the JPA Board discussed the attached Los Angeles Times article entitled "*Microbeads a major problem in L.A. River*" and directed staff to bring back additional information on the concern.

Microbeads are tiny plastic particles used as scrubbing agents in personal care products sold around the world. The microbeads range in size from 0.0005 to 0.5 mm in diameter, which is small enough such that most can pass through the filtration systems used to produce tertiary-treated recycled water. As a result, the particles can accumulate in receiving waters where they absorb chemicals and can be ingested by fish and other organisms.

The Tapia Water Reclamation Facility has twelve mono-media filters that are used to produce tertiary-treated recycled water. Each filter contains a four-foot-deep layer of anthracite coal. The diameter of the anthracite coal particles is approximately 1.4 mm, and they remove particles down to a size of approximately 0.4 mm in diameter. Based on this information, only the largest diameter microbeads are filtered out at Tapia.

Currently, there are no regulatory requirements for removal of microbeads from the JPA wastewater treated at Tapia. There are existing technologies that can effectively remove microbeads, though. One such technology involve the use of membrane bioreactors (MBR), which have pore sizes ranging from 0.000003 to 0.00001 mm and, therefore, would remove all microbeads. The estimated for installation of MBR technology at Tapia is approximately \$110 million.

Several large manufacturers of personal care product have responded to the concern with microbeads and pledged to eliminate them from their products. For example, Unilever, whose brands include Dove, Pond's and Caress, has pledged to eliminate plastic beads from its products by 2015. Also, Colgate and Johnson & Johnson have made similar promises to remove the microbeads from their products.

On February 13, 2014, Assemblymember Richard Bloom of Santa Monica introduced AB 1699 (copy attached), which prohibits selling or offering cleaning or personal care products with microplastic in California and establishes penalties for violations. Microplastics are defined as plastic particles of 5 mm or less in all dimensions. Also attached is a copy of Assemblymember Bloom's press release on the topic.

Prepared By: Brett Dingman, Water Reclamation Manager

ATTACHMENTS:

[L.A. Times Microbead Article](#)

[AB 1699](#)

[Assemblymember Richard Bloom's Press Release](#)

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Microbeads a major problem in L.A. River

The tiny plastic beads, common in personal care products and not biodegradable, are an emerging concern among scientists and environmentalists.

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Microbeads
Marcus Eriksen tests Los Angeles River water for microbeads found in facial cleansers and other household product.

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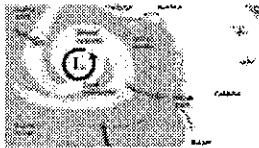
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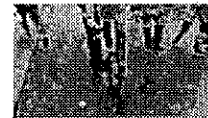


By Louis Sahagun
January 25, 2014 | 10:00 a.m.

Scientist Marcus Eriksen stood ankle deep in the murky Los Angeles River on Friday and dipped a net into the water, looking for a problem.

Eriksen was searching for "microbeads," bits of plastic no bigger than salt grains that absorb toxins such as motor oil and insecticides as they tumble downstream and into the Pacific Ocean.

The tiny polyethylene and polypropylene beads are an emerging concern among scientists and environmentalists. The beads come mostly from personal care products such as facial exfoliants and body washes. They are not biodegradable, however, and because they are not removed easily by wastewater treatment plants, they flow out to sea and enter the food chain.



Photos: Deadly clashes in Kiev



L.A. Times Book Prize finalists for 2013



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Bus riders protest proposed fare hikes

ITEM10B

Statewide ban on single-use plastic bags, fee for other bags proposed



Unrelenting winter dryness brings unseasonably high fire risk

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"Microplastic is now a ubiquitous contaminant in the Pacific Ocean — and seas around the world," said Eriksen, a scientist with the 5 Gyres Institute, a nonprofit dedicated to researching plastics in the world's waterways. "We believe that 80% of it comes from coastal watersheds like Los Angeles."

Eriksen is just starting to test the Los Angeles River to determine if it holds microbeads, and if so, their source. On Friday, he found what he was looking for in about 10 minutes.

Near the confluence of the river and Arroyo Seco, about three miles north of downtown, Eriksen found a handful of algae and wriggling leeches speckled with tiny filaments, shards and beads that could have come from myriad sources: laundry wastewater, degraded plastic bags, stir sticks, personal care products.

"The scary thing is that the beads sponge up toxins, then get consumed by organisms from shellfish to crabs to fish" later eaten by humans, he said.

Scientists are only beginning to understand the hazards posed by microplastic pollution in the world's oceans and

inland waterways. In 2012, Eriksen and a team of researchers discovered large amounts of microbeads and other microplastic pollution in the Great Lakes. Those findings prompted a coalition of mayors of Great Lakes cities to ask the U.S. Environmental Protection Agency to determine the possible health risks to lake ecosystems and humans.

A year later, 5 Gyres launched a campaign asking the manufacturers of personal care products to remove plastic microbeads and replace them with nonplastic alternatives such as crushed walnut husks and apricot kernels that will degrade naturally. Several companies have agreed to phase microbeads out of their product lines.

In a statement, the Johnson & Johnson Family of Consumer Companies, for example, said it has "stopped developing new products containing polyethylene microbeads." The company expects by 2015 to have replaced microbeads with alternatives in half the products that currently use them.

That's not soon enough for 5 Gyres, which is circulating a petition titled, "Get plastic off my face and out of my water now!"

Standing in the river, Eriksen demonstrated the problem. He squeezed several drops of Johnson & Johnson's Clean and Clear facial scrub into a small jar full of water, then shook it up and filtered the foamy mixture through a black T-shirt.

Left behind on the fabric were hundreds of tiny white, pink and blue plastic beads. "We estimate there are about 330,000 microbeads per tube," he said.

The source of beads washing down the L.A. River isn't known yet. In rainy weather, the river holds vast amounts of runoff from across the region. But in the current drought, 80% of the flow comes from the Donald C. Tillman Water Reclamation Plant, which sits 12 miles upstream from Eriksen's survey site and treats sewage from the homes of 800,000 San Fernando Valley residents. The other 20% is from myriad sources in the area.

Jimmy Tokeshi, a spokesman for the Los Angeles Department of Public Works, suggested it's not coming from the plant, which sends sewage through a series of holding tanks, digesters, filters and sanitizers before discharging the treated water into the river at a rate up to 27 million gallons a day.

"The city of L.A. meets and/or exceeds all Clean Water Act requirements as well as all local, county and state water regulations," Tokeshi said. Using cloth filters, "We capture microplastics that are larger in size than 10 microns, or 0.01 millimeters, in the water reclamation plant," he said.

Most of the visible plastic debris Eriksen found was much larger than 10 microns in size.

Eriksen said he doesn't yet know the origin of the beads. But he said his nets don't lie.

"Using a net only 2 feet wide for 10 minutes in a stream a few hundred feet across, I caught dozens of bits of plastic," he said. "So, it's easy to extrapolate that millions of plastic particles flow through this channel every day."

He pivoted to face downstream, and with a wave of his muddy hands, he declared: "That's a problem."

louis.sahagun@latimes.com



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VIDEO

ITEM10B

ASSEMBLY BILL**No. 1699**

**Introduced by Assembly Member Bloom
(Coauthor: Assembly Member Nestande)**

February 13, 2014

An act to add Chapter 5.9 (commencing with Section 42360) to Part 3 of Division 30 of the Public Resources Code, relating to waste management.

LEGISLATIVE COUNSEL'S DIGEST

AB 1699, as introduced, Bloom. Waste management: microplastics. The Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) prohibits any person, in the course of doing business, from knowingly and intentionally exposing any individual to a chemical known to the state to cause cancer or reproductive toxicity without giving a specified warning, or from discharging or releasing such a chemical into any source of drinking water, except as specified. Existing law prohibits the sale of expanded polystyrene packaging material by a wholesaler or manufacturer. Existing law prohibits a person from selling a plastic product in this state that is labeled with the term "compostable," "home compostable," or "marine degradable" unless, at the time of sale, the plastic product meets the applicable American Society for Testing and Materials standard specification.

This bill would prohibit, after January 1, 2016, a person in the course of doing business, as defined, from selling or offering for promotional purposes in this state any cleaning product, personal care product, or both containing microplastic, as specified. The bill would provide exceptions to the above provision, including an exception for the sale

of a product containing less than 1 part per million (ppm) by weight of microplastic, as provided.

The bill would require the imposition of a civil penalty not to exceed \$2,500 per day for each violation. The bill would authorize the penalty to be assessed and recovered in a civil action brought in any court of competent jurisdiction by the Attorney General or local officials, as provided, or a by a person in the public interest, as specified.

The bill would require the Department of Resources Recycling and Recovery to administer and implement these provisions and would authorize the department to adopt and modify regulations as necessary to further the purposes of this act.

The bill would establish the Plastic Pollution Fund in the State Treasury. The bill would authorize the department to expend the funds, upon appropriation by the Legislature, to implement and administer the act by, among other things, providing grants to local governments or other entities. The bill would require 50% of all civil penalties collected pursuant to the act, and any interest earned on the money in the fund, to be deposited into the fund. The bill would require 50% of all civil penalties collected in an action pursuant to the act to be paid to the Attorney General, local officials, or to a person acting in the public interest, whichever entity brought the action.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Chapter 5.9 (commencing with Section 42360)
2 is added to Part 3 of Division 30 of the Public Resources Code, to
3 read:

4
5 CHAPTER 5.9. MICROPLASTIC NUISANCE PREVENTION LAW

6
7 42360. The Legislature finds and declares all of the following:
8 (a) Plastic does not biodegrade like other organic materials, but,
9 upon exposure to the elements photodegrades into smaller pieces
10 causing land and water pollution that is virtually impossible to
11 remediate.

12 (b) Plastic pollution is the dominant type of anthropogenic debris
13 found throughout the marine environment.

1 (c) Plastic pollution is an environmental and human health
2 hazard and a public nuisance.

3 (d) Consumer personal care products such as facial scrubs,
4 soaps, and toothpaste increasingly contain thousands of
5 microplastic particles, ranging from 50-500 microns, which are
6 flushed down drains as part of their intended use.

7 (e) Microplastics in personal care products are not recoverable
8 through ordinary wastewater treatment and so are released into
9 the environment.

10 (f) Microplastics of the size found in cleaning and personal care
11 products are ingested by marine organisms.

12 (g) Microplastics are persistent organic compounds that attract
13 other pollutants commonly present in the environment, many of
14 which are recognized to have serious deleterious impacts on human
15 health or the environment, including DDT, DDE, PCBs, and
16 flame-retardants.

17 (h) Microplastics have been found in surface waters within the
18 United States, as well as in fish, marine mammals, and reptiles,
19 and in the digestive and circulatory systems of mussels and worms.

20 (i) PAHs, PCBs and PBDEs from plastic transfer to fish tissue
21 during digestion and bioaccumulate, resulting in liver damage.

22 (j) Fish that humans consume have been found to ingest
23 microplastics.

24 (k) There are many biodegradable, natural alternatives to
25 microplastics that are economically feasible alternatives to
26 microplastics, as evidenced by their current use in some consumer
27 personal care products.

28 42361. As used in this chapter, the following terms have the
29 following meanings:

30 (a) "Department" means the Department of Resources Recycling
31 and Recovery.

32 (b) "Cleaning products, personal care products, or both" means
33 mixtures and solutions used for bathing and cleaning, including,
34 but not limited to, hand and body soap, exfoliates, shampoos,
35 toothpastes, and scrubs.

36 (c) "Microplastic" means any plastic size 5 millimeter or less
37 in all dimensions.

38 (d) "Person" means an individual, trust, firm, joint stock
39 company, corporation, company, partnership, limited liability
40 company, and association.

1 (e) "Person in the course of doing business" does not include
2 any person employing fewer than 10 employees in his or her
3 business; any city, county, or district or any department or agency
4 thereof or the state or any department or agency thereof or the
5 federal government or any department or agency thereof; or any
6 entity in its operation of a public water system.

7 (f) "Plastic" means a synthetic material made from linking
8 monomers through a chemical reaction to create a polymer chain
9 that can be molded or extruded at high heat into various forms.
10 Plastics are typically made from petroleum, natural gas, or other
11 organic substances.

12 42362. On or after January 1, 2016, a person in the course of
13 doing business shall not sell or offer for promotional purposes in
14 this state any cleaning products, personal care products, or both
15 containing microplastic.

16 42363. (a) Section 42362 shall not apply to any person in the
17 course of doing business that sells or offers for promotional
18 purposes a cleaning product, personal care product, or both
19 containing microplastic in less than 1 part per million (ppm) by
20 weight.

21 (b) (1) Section 42362 shall not apply to any person in the course
22 of doing business if it is shown that an otherwise prohibited
23 cleaning product, personal care product, or both is designed for a
24 use where it is unlikely that the product will pass or probably will
25 pass into any wastewater treatment system or water of the state.

26 (2) The department shall adopt regulations as necessary to
27 implement this subdivision.

28 42364. (a) A person who violates or threatens to violate Section
29 42362 may be enjoined in any court of competent jurisdiction.

30 (b) (1) A person who violates Section 42362 is liable for a civil
31 penalty not to exceed two thousand five hundred dollars (\$2,500)
32 per day for each violation in addition to any other penalty
33 established by law. That civil penalty may be assessed and
34 recovered in a civil action brought in any court of competent
35 jurisdiction.

36 (2) In assessing the amount of a civil penalty for a violation of
37 this chapter, the court shall consider all of the following:

38 (A) The nature and extent of the violation.

39 (B) The number of, and severity of, the violations.

40 (C) The economic effect of the penalty on the person.

1 (D) Whether the person took good faith measures to comply
2 with this chapter and the time these measures were taken.

3 (E) The deterrent effect that the imposition of the penalty would
4 have on both the person and the regulated community as a whole.

5 (F) Any other factor that justice may require.

6 (c) Actions pursuant to this section may be brought by the
7 Attorney General in the name of the people of the state, by a district
8 attorney, by a city attorney of a city having a population in excess
9 of 750,000 persons, or, with the consent of the district attorney,
10 by a city prosecutor in a city or city and county having a full-time
11 city prosecutor, or as provided in subdivision (d).

12 (d) Actions pursuant to this section may be brought by a person
13 in the public interest if both of the following requirements are met:

14 (1) The private action is commenced more than 60 days from
15 the date that the person has given notice of an alleged violation of
16 Section 42362 that is the subject of the private action to the
17 Attorney General and the district attorney, city attorney, or
18 prosecutor in whose jurisdiction the violation is alleged to have
19 occurred, and to the alleged violator.

20 (2) Neither the Attorney General, a district attorney, a city
21 attorney, nor a prosecutor has commenced and is diligently
22 prosecuting an action against the violation.

23 (e) The court, in issuing any final order in any action brought
24 pursuant to this section, shall award costs of litigation, including
25 reasonable attorney and expert witness fees, to any prevailing or
26 substantially prevailing party, unless the court determines the
27 award is inappropriate.

28 42365. The department shall administer and implement this
29 chapter. The department may adopt and modify regulations as
30 necessary to implement and further the purposes of this chapter.

31 42366. (a) The Plastic Pollution Fund is hereby established in
32 the State Treasury. The department may expend the funds in the
33 Plastic Pollution Fund, upon appropriation by the Legislature, to
34 implement and administer this chapter by directly expending those
35 funds, by transferring those funds to other state agencies, or by
36 providing grants to local governments or other entities deemed
37 eligible by the department, including, but not limited to,
38 nongovernmental organizations and the California Conservation
39 Corps.

1 (b) In addition to any other moneys that may be deposited in
2 the Plastic Pollution Fund, all of the following amounts shall be
3 deposited in the fund:

4 (1) Fifty percent of all civil penalties collected pursuant to
5 Section 42364.

6 (2) Any interest earned upon the money deposited into the
7 Plastic Pollution Fund.

8 42367. Fifty percent of all civil penalties collected pursuant to
9 Section 42364 shall be paid to the office of the city attorney, city
10 prosecutor, district attorney, or Attorney General, whichever office
11 brought the action, or in the case of an action brought by a person
12 under subdivision (d) of Section 42364, to that person.

13 42368. This chapter does not alter or diminish any legal
14 obligation otherwise required in common law or by statute or
15 regulation, and nothing in this chapter shall create or enlarge any
16 defense in any action to enforce the legal obligation. Penalties and
17 sanctions imposed under this chapter shall be in addition to any
18 penalties or sanctions otherwise prescribed by law.

O

Press Releases

Assemblymember Richard Bloom Seeks Ban on Plastic Microbeads

Created on Thursday, 13 February 2014 08:13



SACRAMENTO – Assemblymember Richard Bloom (D-Santa Monica) today announced that he has introduced legislation, AB 1699, to ban the sale of personal care products that contain micro-plastic particle abrasives, commonly referred to as “microbeads,” that are found in products such as facial scrubs, soaps, and toothpaste.

“Microbeads are a significant part of the debris accumulating in the Pacific Ocean and are also found at alarming levels in our local waterways,” said Bloom. “We have no choice but to eliminate this pollution at the source. Waiting will only compound the problem and the price of cleaning up.

Microbeads have emerged as a pervasive form of plastic pollution in the marine environment. Studies have shown that the tiny particles are prevalent in ocean debris piles, the Great Lakes, and recently, the Los Angeles River. Microbeads are not biodegradable and absorb various toxins such as DDT, PCBs (flame retardants), and other industrial chemicals and are ingested or absorbed by a variety of marine life and other mammals. Because fish ingest these particles and absorb the toxins in their flesh, many in the scientific community also worry about the impacts on the fish, crabs, and shellfish that humans eat.

While tiny, the size of microbeads is actually the biggest problem. The particles are washed down the drain and are too small to be captured by all sewage and water treatment facilities. As a result, microbeads go directly into our rivers and streams. A single product can contain as much as 350,000 polyethylene or polypropylene microbeads.

“The 5 Gyres Institute continues to discover and monitor garbage patches of plastic pollution around the world, yet solutions happen far upstream, at the source. And one of those sources is California watersheds,” said Dr. Marcus Eriksen, who co-founded the 5 Gyres Institute. “With Richard Bloom’s leadership to eradicate microbeads from consumer products, we stand together to be a national example in the fight for plastic free waters.”

However, this is not a problem without a solution. Plastic microbeads are not essential to personal care products. Safer and biodegradable alternatives are available such as walnut husks, pecan shells, apricot shells, and cocoa beans. In fact, some brands already use environmentally safe alternatives and others

such as the Johnson and Johnson Family of Consumer Companies, Proctor and Gamble, and Colgate-Palmolive, will begin to phase out the use of microbeads over the next few years.

"There are natural alternatives in use and others have pledged to move to natural substitutes in the near future. Therefore, there really isn't a good argument against this law," Bloom added.

Richard Bloom chairs the Assembly Budget Subcommittee on Natural Resources and Transportation. He represents California's 50th Assembly District, which comprises the communities of Agoura Hills, Bel Air, Beverly Hills, Brentwood, Hollywood, Malibu, Pacifica Palisades, Santa Monica, Topanga, West Hollywood, and West Los Angeles.

Contact: Sean MacNeil (916) 319-2050

March 3, 2014 JPA Board Meeting

TO: JPA Board of Directors

FROM: Resource Conservation & Public Outreach

Subject: Recycled Water Incentive Program**SUMMARY:**

On November 4, 2013, the JPA Board requested information on effluent disposal on the JPA's Farm sprayfields and the potential to sign up customers to use recycled water at a reduced rate when excess is available during the creek discharge prohibition period.

In 1999, the District implemented a "Recycled Water Incentive Program" to encourage recycled water use during the "shoulder months", which covered up to a 10-week period after April 15th and prior to November 15th. Customers could use as much recycled water as they needed and paid no more than their recycled water bill in 1997. The only restriction was that no runoff from the property could occur.

All recycled water customers were eligible for the program. Although Westlake Golf Course used local groundwater for irrigation, they were connected to the recycled water system and, as a large user, could be called upon to utilize large volumes of excess recycled water on short notice. The gold course was not charged for the water. The District also leased the use of the Soka University grounds in the amount of \$264,000 annually, after it transitioned to ownership by the Mountains Recreation and Conservation Authority (MRCA) and became known as King Gillette Ranch. Diversion of the U-2 area sewage flow to the City of Los Angeles was also occasionally used to reduce the influent volumes to the Tapia Water Reclamation Facility, as necessary.

The attached table shows the volumes of recycled water for the various disposal options, along with credits issued to customers when the Recycled Water Incentive Program was in place. Until 2008, the order of effluent disposal, driven by ease of implementation and cost, was as follows:

1. Recycled Water Incentive Program/Westlake Golf Course
2. 005 Outfall - Los Angeles River (2 mgd flow limit)
3. Farm Sprayfields
4. King Gillette Ranch
5. Wastewater Diversion to the City of Los Angeles (reduced influent to Tapia)

Reliance on recycled water customers to use more excess water at the same time posed operational challenges for sustained compliance with the creek discharge prohibition. Ultimately, staff depended on effluent disposal options under the JPA's full control, such as the Farm sprayfields and the 005 outfall. Compliance required prompt operational intervention to manage the recycled water system.

With JPA's NPDES permit renewal in 2005, the restriction specifying the 005 outfall as a last resort with a limited flow was lifted, staff implemented a Capital Improvement Project to increase capacity at the 005 outfall. At the same time, the project allowed the JPA to avoid the costly annual lease payment for use the King Gillette Ranch. In fall 2008, the project was completed, and the District re-prioritized its disposal options as follows:

1. 005 Outfall - Los Angeles River
2. Farm Sprayfields
3. Wastewater Diversion to the City of Los Angeles

With this change, effluent disposal via the Westlake Golf Course and the Recycled water Incentive Program were deemed unnecessary. Under the Recycled Water Incentive Program, it was difficult to quantify the volumes of recycled water that customers actually used in excess of normal demands. Additionally, loss of

potential revenue was a major consideration in discontinuing the program. Together, these factors justified the termination of the program in 2008.

Management of effluent disposal as described above has resulted in consistent compliance with the creek flow discharge prohibition requirements, which are now going into their 17th year.

Prepared By: Carlos Reyes, Director of Resource Conservation & Public Outreach

ATTACHMENTS:

Recycled Water Incentive Program History

Year	Effluent Disposal Options (flow in million gallons)*							Notes
	Farm	005	Soka/King Gillette Ranch	Other Fields	Incentive Program			
					Volume	Credits Issued		
1998	17							Discharge prohibition from lagoon closure to 10/15
1999	48					45 \$ (120,596.67)		Discharge prohibition from 5/1 to 11/1; began Incentive Program
2000	51	21				86 \$ (249,049.12)		Discharge prohibition from 4/15 to 11/15; 005 discharge allowed up to 2 MG as a last resort
2001	49	18	61	84		96 \$ (278,084.82)		Began use of Soka/King Gillette Ranch, Greer, State Park, Malibu Valley Farms and New Millennium properties
2002	65	28	48	45		86 \$ (246,695.88)		
2003	69	37	84			52 \$ (149,155.77)		
2004	64	22	46			89 \$ (255,003.18)		
2005	49	39	41			59 \$ (167,145.36)		
2006	68	67	98			92 \$ (263,753.16)		Discharge to 005 allowed with no quantity limit or time constraint
2007	90	33	78			107 \$ (292,866.01)		
2008	37	41				105 \$ (348,392.55)		Increased 005 discharge capacity in the fall; ceased King Gillette Ranch operation
2009	53	210						
2010	97	175						
2011	75	181						
2012	87	117						
2013	50	12						

*Intermittent wastewater flow diversion to City of Los Angeles to reduce the Tapia WRF influent is not shown.