### 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		Dec	ember 10, 2012
PLE	DGE	OF ALLEGIANCE		
1.	CAI	LL TO ORDER AND ROLL CALL		
	A	The meeting was called to order at Water District office and the Clerk of the E		
		Triunfo Sanitation District Steven Iceland Michael McReynolds Janna Orkney, Vice Chair Michael Paule James Wall Las Virgenes Municipal Water District Joseph Bowman Charles Caspary Glen Peterson Lee Renger, Chair Barry Steinhardt	Present Left	
2.	APF	PROVAL OF AGENDA		
	A	Moved by, seconded by, an Meeting of December 10, 2012, be approx		
3.	Men APF take	BLIC COMMENTS  The public may now address the Bore PEARING ON THE AGENDA, but within the en on any matter not appearing on the agent pernment Code Section 54954.2	jurisdiction of the	Board. No action shall be

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

Presentation to John R. Mundy

4.

Α

### 5. CONSENT CALENDAR

A Minutes: Regular Meeting of November 5, 2012 and December 3, 2012. Approve

### 6. ACTION ITEMS

### A Future Joint Powers Authority Regular Meeting Date

The Governing Board of the JPA to confirm a quorum of its members for the Regular Board Meeting of Monday, January 7, 2013 at Oak Park Library, or direct the Administering Agent General Manager to cancel said meeting, or schedule a special meeting to be held on an alternative date.

### B Joint Powers Authority Quarterly Financial Report at September 30, 2012

Receive and file.

### C Rancho Cogen Assignments and Amendment to Agreement for Energy Recovery Services

Approve the Assignment and authorize the Administering Agent/General Manager to execute the Consent to Assignment of the Lease and Agreement; approve the Assignment and authorize the Administering Agent/General Manager to execute the Consent to Assignment of the Agreement for Energy Recovery Services; and approve the Amendment to Agreement for Energy Recovery Services.

### D Recycled Water and Sanitation Master Plan Update 2012: Award of Contract

Approve the proposal from Kennedy/Jenks Consultants to prepare the sanitation master plan update in the amount of \$45,970.00; approve the proposal to prepare the recycled water master plan in the amount of \$62,298.00; approve the proposal to prepare the integrated master plan in the amount of \$10,963.80.

### 7. BOARD COMMENTS

### 8. FUTURE AGENDA ITEMS

### 9. INFORMATION ITEMS

- A JPA Compost Operation Information
- B Rancho Las Virgenes Design of a Third Digester: Approval of Plans and Specifications and Call for Bids
- C Rehabilitation of 18-inch Recycled Water Pipeline from Tapia State Park to Camp David Gonzalez: Approval of Plans and Specifications and Call for Bids

### 10. 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.

### 11. ADJOURNMENT



### Las Virgenes – Triunfo Joint Powers Authority 4232 Las Virgenes Road, Calabasas, CA 91302 818.251.2100



December 5, 2012

Call and Notice of Special Meeting of the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority

A Special Meeting of the Governing Board of the Joint Powers Authority is hereby called, and notice of said Special Meeting is hereby given for 5:00 p.m. on Monday, December 10, 2012 at Las Virgenes Municipal Water District, 4232 Las Virgenes Road, Calabasas, California 91302 to consider the following:

- 1. Call to Order and Roll Call
- 2. Special Meeting of December 10, 2012 (Agenda attached)
- 3. Adjournment

By Order of the Board of Directors LEE RENGER, Chair

John R. Mundy

Administering Agent General Manager

Joint Powers Authority

c: Each Director

### LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY MINUTES

5:00 PM November 5, 2012

### PLEDGE OF ALLEGIANCE

At the request of Chair Renger, the Pledge of Allegiance to the Flag was led by Director Wall.

### 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 Chair Renger in the Oak Park Library. Clerk of the Board Conklin called the roll. Those answering present were Directors Bowman, Caspary, Iceland, McReynolds, Orkney, Paule, Peterson, Renger, Steinhardt and Wall.

### 2. APPROVAL OF AGENDA

### A Approval of agenda

Administering Agent General Manager Mundy notified the JPA Board that "Information Item 8B: Purchase a spare 4,160 Volt Breaker for Tapia" inadvertently listed a recommendation, which should not be there as the Las Virgenes Board as Administering Agent had previously taken action on the item.

On a motion by Director Charles Caspary, seconded by Director Steven Iceland, the Board of Directors voted 10-0 to Approve the JPA Regular Board Meeting agenda of November 5, 2012, as amended.

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

### 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

No speaker cards were received from the public.

### 4. CONSENT CALENDAR

A Minutes: Regular Meeting of October 1, 2012. Approve

On a motion by Director Steven Iceland, seconded by Director Lee Renger, the Board of Directors voted 10-0 to Approve the recommendation as presented.

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

### 5. ACTION ITEMS

### A Biosolids and Compost Management

Provide staff direction on a study to analyze the use of composting and off site disposal of biosolids.

Administering Agent General Manager Mundy introduced the discussion of biosolids and compost management and referenced Triunfo Sanitation District board meeting minutes from September 2012, which state concerns regarding Las Virgenes' staff effectiveness to conduct a study and influencing of a third party, and noted there are no funds appropriated in the budget for conducting a study.

A summary of JPA Board comments and responses included: Renger: thought this topic was reviewed before (Mundy: comparisons were provided for hauling and Triunfo requested review of a hybrid process using composting and hauling); Bowman: what has already been looked at (Mundy: believes this would be a more comprehensive study, when the plant is down for maintenance there is approximately one truck per day, with a hybrid process a truck may sit for one week before it is full, so there are odor concerns (Lippman noted there is currently a request for proposals out now in regards to additional hauling, and asked what the JPA Board direction is concerning goals and objectives of a hybrid process)); Orkney: the JPA is a partnership and there are concerns in regards to how expensive the composting process is, is there a way through a hybrid process to save ratepayers money by hauling and keep the permit in force by composting; Bowman: to clarify, the question is what is the optimum plan to save money, correct (Orkney: yes); Steinhardt: we have been hauling, so what needs to be built (Mundy: scale, loading facility, odor control (there was a lawsuit from residents in past years that was odor related), shutdown was a temporary process that cannot be done on a permanent basis); Renger: doesn't want to spend Las Virgenes' money on a hybrid process and has concerns, reasonable study to see how to make process more effective in order to save money; Paule: questioned customer survey results of \$2.75 per month for composting and struggles with true cost of composting versus digestion and dewatering, what does composting really cost, everyone agrees with beneficial use of composting, but it needs to be efficient and economical for ratepayers (Lippman: two studies have been provided to the JPA Board, a composting versus digestion/dewatering study and a cost benefit study); Paule: Las Virgenes and Triunfo come up with two different dollar amounts with regard to the cost of composting (Lippman: study was completed by SCAP (The Southern California Alliance of Publicly Owned Treatment Works), so Las Virgenes does not know the exact components used to determine the cost of composting): Paule: keeping the composting permit is important. if the public is fine with spending \$2.75 per month for composting then we should move on, but we need to look at the 2010 study again; Iceland: the survey results need to be broken down, other agencies were at a lower cost, the permit needs to be kept, but what level is required in order to keep the composting permit and still haul (Mundy: most permits do not get into specific amounts whether issued by State Water Resources Control Board or Air Quality Management District); Iceland: what are other consumables (Lippman: polymer, amendment, biofilter media, energy (dewatering accounts for the majority of energy use); Bowman to Las Virgenes Legal Counsel Lemieux: what happens if one partner says yes and the other says no (Lemieux: Las Virgenes and Triunfo can each conduct their own independent study outside of the JPA, if JPA funded then there needs to be a majority vote of Las Virgenes board members and a majority vote of Triunfo board members to authorize an independent study); Peterson: Triunfo did not want to participate in the recycled water storage project and Las Virgenes moved forward with the process on its own; McReynolds: if JPA can compost and truck then the permit can be kept and money can be saved, stated Renger is concerned about stranded assets and hauling through the community, believes survey question wording can determine response results and JPA Board should move forward with a study; Peterson: does not want to spend more money

on another study, if Triunfo wants to study a hybrid process then fine, look at renewable energy; Caspary: can this data be looked at as part of the master plan process (Mundy: master plans look at growth, cost break downs (Lippman: cost of composting is not included in the current scope of work within the request for proposals)); Bowman: thought master plan looked at what is needed overall, don't approve a study when those around the table don't have a defined scope of work (Lippman: this is what the agenda item is for, to clarify a scope of work for a study); Orkney: why is dewatering a higher cost for the JPA than it is for other agencies (Lippman: pumping costs from Tapia to Rancho, most other sites are closer in proximity); Orkney: trucking occurred for six months, the process might have been Mickey Mouse facilities, but it was done; Paule: connections (Mundy: Equivalent Residential Units (ERUs) is the correct number to use, not actual connections); and Orkney: she and Caspary requested a breakdown of costs and repairs during the compost production shutdown (Lippman: this item is scheduled for the December JPA board meeting).

Chair Renger requested Mr. Mundy provide the JPA Board all of the documents, studies and reports again that are related to biosolids and composting management.

On a motion by Director Steven Iceland, seconded by Director Lee Renger, the Board of Directors voted 10-0 to Approve tabling of the biosolids and compost management plan to the December 2012, JPA board meeting.

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

Director Caspary requested the reports be emailed to the JPA Board, and stated saving money should be a goal for the ratepayers, wise savings is good, but there are times saving money is unwise.

### **B** Future Joint Powers Authority Regular Meeting Date

The Governing Board of the JPA to confirm a quorum of its members for the Regular Board Meeting of Monday, December 3, 2012, or direct the Administering Agent General Manager to cancel said meeting and reschedule a special meeting to be held on an alternative date.

Administering Agent General Manager Mundy stated quorum concerns as several Las Virgenes board members and staff would be in attendance at the ACWA Conference on Monday, December 3, 2012, and requested direction as to whether to hold the next JPA board meeting as scheduled or to cancel and reschedule to December 10, 2012.

Director Paule stated he was attending the ACWA Conference, but was available for the JPA board meeting on December 3rd. Director Peterson stated he was not available on December 10th.

On a motion by Director Janna Orkney, seconded by Director Charles Caspary, the Board of Directors voted 9-1 to Authorize Administering Agent General Manager Mundy to cancel the JPA Regular Board Meeting of December 3, 2012, and schedule a JPA Special Board Meeting on Monday, December 10, 2012.

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

NOES: Director(s) Peterson

### C Tapia Entrance Sign

Provide staff direction on any changes for the entrance sign at Tapia.

Administering Agent General Manager Mundy discussed Triunfo's request to modify the 5A entrance sign at Tapia, which states an incorrect acronym for their agency name; and stated

the costs were approximately \$1,500-\$3,500 depending on the process used to update the sign.

A summary of JPA Board comments included: Bowman: wants to hear from Triunfo Board as to why Las Virgenes should pay 70% of this cost; Steinhardt: can the "C" in "TCSD" be painted over; Orkney: can the 1988 portion of the sign be removed (Peterson: plant employees take pride in the award); Caspary: considering other issues being discussed this is not important (Orkney: JPA identity is important, commented on JPA letterhead quality and recent correspondence issued using the incorrect version of the letterhead); and Steinhardt: remove the "C".

Administering Agent General Manager Mundy stated he would have Las Virgenes staff take care of removing the "C" in "TCSD" from the Tapia entrance sign.

No action was not taken on this agenda item.

**D** Tapia Influent Pipeline and Valve Replacement Project and Tapia Influent Pipeline Rehabilitation Project: Final Acceptance

Appropriate \$34,770.00 for construction costs associated with the projects; approve a time extension of 10 calendar days to complete the project; ratify Change Order No. 3 and Change Order No. 4 in the amount of \$14,599.00 and \$16,028.00, respectively; approve Change Order No. 5 in the amount of \$57,656.00 and Change Order No. 6 in the amount of \$6,767.00; approve the final Progress Payment, in the amount of \$10,301.67 for the Tapia Influent Pipeline and Valve Replacement Project, and \$89, 215.55 for the Tapia Influent Pipeline Rehabilitation Project to GSE Construction, Inc.; approve the execution of a Notice of Completion by the Secretary of the Administrating Agent for and on behalf of the JPA and have the same recorded; and that in the absence of claims from subcontractors and others, release retention in the amount of \$30,358.00 for the Tapia Influent Pipeline and Valve Replacement Project, and \$52,116.70 for the Tapia Influent Pipeline Rehabilitation Project thirty calendar days after filing the Notice of Completion.

Director Iceland inquired as to whether or not the project had been completed to staff's satisfaction (Lippman: yes).

On a motion by Director Joseph Bowman, seconded by Director Barry Steinhardt, the Board of Directors voted 10-0 to Approve the recommendations as presented. AYES: Director(s) Bowman, Caspary, Iceland, McReynolds, Orkney, Paule, Peterson, Renger, Steinhardt, Wall

### 6. **BOARD COMMENTS**

Director Renger discussed the Smithsonian article and response in regards to the Malibu Lagoon; Director Iceland requested clarification on the request for proposals from November for transfer of energy from Rancho to Tapia (Mundy: Rancho to the recycled water pump station located at the headquarters campus, not Tapia) and was the request for proposals sent out (Lippman: yes); and Steinhardt discussed JPA letterhead (Mundy: in electronic format and staff person created their own correspondence without using the assistance of administrative support, Caspary: correspondence issued in the eleventh hour). Director Caspary stated at the Santa Monica Bay Restoration Commission meeting of October 18, 2012, the Governing Board considered approval of a resolution concerning commercial fishing activity in Santa Monica Bay, and Heal the Bay had pushed for no change to the existing commercial fishing plan.

### 7. FUTURE AGENDA ITEMS

Chair Renger requested the biosolids and compost management item be brought back in December.

### 8. INFORMATION ITEMS

### Malibu Creek Watershed Emerging Issues

Director of Facilities and Operations Lippman discussed Tapia's NPDES permit renewal application, which is due six months prior to the August 2015 expiration date and potential emerging issues within the Malibu Creek Watershed including: Malibu Creek and Lagoon Benthic Community Effects, Sedimentation and Benthic Macroinvertebrates TMDL; Ventura River Algae TMDL (Regional Board has a tendency to carry over limits from one watershed to another, so Las Virgenes is monitoring this process); California Biological Objectives Policy (how can numeric objectives be turned into narrative objectives (Resource Conservation Manager Orton stated he knows the comment letter is complex, water is brackish, EPA and State Board are developing the same thing); MS4 Permit (watershed wide monitoring is on hold until MS4 is in place, Las Virgenes is not the permit holder and has no control over enforcement of other agencies); and the Malibu Creek Watershed Wide Monitoring Plan submittal.

A summary of JPA Board comments and responses included: Bowman: can effluent be discharged to City of Los Angeles (Lippman: pipes are not large enough and discharge to L.A. River has more stringent limits for dichlorobromomethane (DCBM) and trihalomethanes (TTHMs); Mundy: concerns with storm drain system); Bowman: build a pipe as we may need to completely stay out of the creek (Lippman: believes a pipe would need to be built to Canoga Park High School); Paule: how much money to supplement to potable (Mundy: currently not allowed); Bowman: plan for worst case (Lippman: consent decree, staff is going to San Francisco to talk to EPA Region IX executive level directors); Bowman: how do stringent loads compare to Metropolitan (Lippman: much more stringent whole numbers versus tenths, 2005 Nutrient Reduction Master Plan/TEA looked at four options for staying out of the creek); Caspary: how many contributors in the Ventura watershed (Triunfo Legal Counsel Mathews: one, Ojai Valley Sanitation District); and Orkney: benthic community (Lippman: regulatory agencies want it to thrive).

Chair Renger requested the TEA Study numbers be updated and for staff to provide copies of the TEA and the Rancho Groundwater studies to the JPA Board.

**B** Purchase of spare 4,160 Volt Breaker for Tapia

Authorize the General Manger to issue a purchase order in the total amount of \$33,299.00 to California Electrical Supply.

No action was taken on this agenda item, which was provided as information only.

- **C** Sewer Bridge Rehabilitation Project Final Acceptance
- D Uniform Services Award of Bid

### 9. CLOSED SESSION

### 10. ADJOURNMENT

The Chair declared the meeting adjourned at 6:28 p.m.

	Lee Renger, Chair	
ATTEST:		
Janna Orkney, Vice Chair		

### LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY MINUTES

5:00 PM December 3, 2012

### PLEDGE OF ALLEGIANCE

- 1. CALL TO ORDER AND ROLL CALL
- 2. APPROVAL OF AGENDA
  - A Cancellation Notice: JPA Regular Meeting 12/03/2012.
- 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. BOARD COMMENTS
- 5. FUTURE AGENDA ITEMS
- 6. **INFORMATION ITEMS**
- 7. CLOSED SESSION
- 8. ADJOURNMENT



### Las Virgenes – Triunfo Joint Powers Authority 4232 Las Virgenes Road, Calabasas, CA 91302 818.251.2100



To Whom It May Concern:

This is to notify you that the December 3, 2012 Regular Meeting of the Governing Board of the LAS VIRGENES – TRIUNFO JOINT POWERS AUTHORITY has been canceled due to a lack of quorum.

By Order of the Board of Directors LEE RENGER, Chair

John R. Mundy

Administering Agent General Manager

Joint Powers Authority

Dated: November 28, 2012

c: Each Director

	Lee Renger, Chair	
ATTEST:		
Janna Orkney, Vice Chair		

### December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

**Subject: Future Joint Powers Authority Regular Meeting Date** 

### **RECOMMENDATION(S):**

The Governing Board of the JPA to confirm a quorum of its members for the Regular Board Meeting of Monday, January 7, 2013 at Oak Park Library, or direct the Administering Agent General Manager to cancel said meeting, or schedule a special meeting to be held on an alternative date.

### **FINANCIAL IMPACT:**

None.

Prepared By: John R. Mundy, Administering Agent General Manager

### December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject: Joint Powers Authority Quarterly Financial Report at September 30, 2012

### **SUMMARY:**

Operating revenue in the first quarter was higher than the prior year due to the increase in the wholesale price of recycled water, as expected. However, the operating revenue was even greater than anticipated in the budget because the JPA received a catch-up payment under the MWD Incentive Program for recycled water for \$149,811, which had not been paid for at least three years. Since this was a catch-up payment, it is unlikely that this will be repeated in the current year.

Operating expenses are higher than the same quarter last year, as anticipated in the adopted budget, but are less than anticipated for this point in time.

Capital project expenses to date of \$796,588 are higher than expenses in the prior year due to some major projects in progress, such as the new digester and the Ovation upgrade, both at Rancho. Tables showing expenses for each project are attached to this report.

### **RECOMMENDATION(S):**

Receive and file.

### **DISCUSSION:**

Operating expenses are higher than budgeted by 7.4% due to lower than anticipated energy and chemical expenses, lower maintenance labor and supplies expenses, and lower administrative expenses. As planned activities take place later in the year, the expenses are likely to increase. Also, staff found billing discrepancies in the electric bills for Tapia. Since March 2012, the monthly billings have been about 40% of the historical amounts. Staff contacted Southern California Edison ("Edison") but the issue has not been completely resolved. The JPA could be liable for any adjusted billings from Edison which, for the period of March-September 2012 could be approximately \$500,000.

Prepared By: Sandra Hicks, Director of Finance & Administration and Joseph Lillio, Finance Manager

### **ATTACHMENTS:**

1st Quarter Financial Report





# First Quarter Financial Review Joint Powers Authority

FY12-13 Year to Date at September 30

	FY11-12 Actual YTD	FY12-13 Budget YTD	FY12-13 Actual YTD
Net Uses of Fund	\$2,830,446	\$5,618,087	\$3,370,294
LV Share	\$1,936,595	\$3,907,044	\$2,235,219
TSD Share	\$893,851	\$1,711,043	\$1,135,075

ITEM 6B

11-12 Actual 12-13 Budget 12-13 Actual

Revenue Expense

# Joint Powers Authority Operations

# First Quarter

Total Operating Revenues         S         1,046,933         \$ 1,114,592         \$ 1,326,431           RW Pump Station         536,322         608,664         430,270         4           RW Tanks & Reservoirs         13,930         35,608         18,002         3           RW Tanks & Reservoirs         13,930         35,608         18,002         3           RW System Operations         6,059         13,212         14,980         3           RW Distribution         5,163         21,183         53,873           Sewer         49,878         91,203         293,420           Waste Water Treatment         1,761,645         2,001,243         1,717,633           Composting         1,032,511         1,135,247         1,069,330           Injection and Centrate         45,180         65,701         103,888           Administration         223,830         243,309         202,051           Total Operating (Expenses         3,674,518         4,215,370         3,903,447           Net Operating (Expenses)         2,627,585         3,100,778         2,577,016)		FY 11-12 Actual		FY 12-13 Budget FY 12-13 Actual
\$ 1,046,933 \$ 1,114,592 \$  536,322 608,664 13,930 35,608 6,059 13,212 5,163 21,183 49,878 91,203 1,761,645 2,001,243 1,032,511 1,135,247 45,180 65,701 223,830 243,309 \$ 3,674,518 4,215,370 \$ (2,627,585) \$ (3,100,778) \$		YTD	VTD	ATT)
536,322       608,664       430,270         13,930       35,608       18,002         6,059       13,212       14,980         5,163       21,183       53,873         49,878       91,203       293,420         1,761,645       2,001,243       1,717,633         45,180       65,701       103,888         223,830       243,309       202,051         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	otal Operating Revenues			5
13,930       35,608       18,002         6,059       13,212       14,980         5,163       21,183       53,873         49,878       91,203       293,420         1,761,645       2,001,243       1,717,633         45,180       65,701       1069,330         45,180       65,701       103,888         223,830       243,309       202,051         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	W Pump Station	536,322	608,664	
6,059       13,212       14,980         5,163       21,183       53,873         49,878       91,203       293,420         1,761,645       2,001,243       1,717,633         45,180       65,701       1069,330         223,830       243,309       202,051         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	W Tanks & Reservoirs	13,930	35,608	
5,163       21,183       53,873         49,878       91,203       293,420         1,761,645       2,001,243       1,717,633         1,032,511       1,135,247       1,069,330         45,180       65,701       103,888         223,830       243,309       202,051         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	W System Operations	6,059	13,212	
49,878       91,203       293,420         1,761,645       2,001,243       1,717,633         1,032,511       1,135,247       1,069,330         45,180       65,701       103,888         223,830       243,309       202,051         3,674,518       4,215,370       3,903,447         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	W Distribution	5,163	21,183	
1,761,645       2,001,243       1,717,633         1,032,511       1,135,247       1,069,330         45,180       65,701       103,888         223,830       243,309       202,051         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	Wer	49,878	91,203	
1,032,511       1,135,247       1,069,330         45,180       65,701       103,888         223,830       243,309       202,051         3,674,518       4,215,370       3,903,447         \$ (2,627,585)       \$ (3,100,778)       \$ (2,577,016)	aste Water Treatment	1,761,645	2,001,243	
45,180       65,701         223,830       243,309         3,674,518       4,215,370         \$ (2,627,585)       \$ (3,100,778)	omposting	1,032,511	1,135,247	
223,830 243,309 3,674,518 4,215,370 \$ (2,627,585) \$ (3,100,778) \$	je ction and Centrate	45,180	65,701	
\$,674,518 4,215,370 \$ (2,627,585) \$ (3,100,778) \$	dministration	223,830	243,309	
\$ (2,627,585) \$ (3,100,778) \$	otal Operating Expenses	3,674,518	4,215,370	
	et Operating (Expenses)		€>	

(in Thousands)

10/24/2012

ITEM 6B

# Joint Powers Authority Operations Quarterly Update - Comparison to Budget & Prior Year at September 30, 2012 FY12-13 Year to Date

	FY	11-12 Actual YTD	FY	12-13 Budget YTD	FY	12-13 Actual YTD
Total Revenues						
Operating Revenues Other Revenues Total Revenues	\$	1,046,933 4,898 1,051,831	\$	1,114,592 8,000 1,122,592	\$	1,326,431 3,310 1,329,741
Total Expenses						
Operating Expenses Capital Project Expenses Total Expenses	\$	3,674,518 207,759 3,882,277	\$	4,215,370 2,525,309 6,740,679	\$	3,903,447 796,588 4,700,035
Net (Uses) of Funds	\$	(2,830,446)	\$	(5,618,087)	\$	(3,370,294)
Las Virgenes Share		(1,936,595)		(3,907,044)		(2,235,219)
Triunfo Share		(893,851)		(1,711,043)		(1,135,075)

### **Joint Powers Authority Operations**

### Quarterly Update - Comparison to Budget & Prior Year at September 30, 2012 FY12-13 Year to Date

	FY	11-12 Actual YTD	FY	12-13 Budget YTD	FY	12-13 Actual YTD
<b>Las Virgenes Share:</b>						
Total Revenues						
Operating Revenues	\$	739,135	\$	786,902	\$	936,461
Other Revenues		2,708		5,648	*	2,170
Total Revenues		741,843		792,550		938,631
Total Expenses						
Operating Expenses	\$	2,531,760	\$	2,931,538	\$	2,611,459
Capital Project Expenses	Ψ	146,678	Ψ	1,756,202	Ψ	562,391
Total Expenses		2,678,438		4,687,740		3,173,850
1	-			1,007,710		3,173,030
Net (Uses) of Funds - LV	\$	(1,936,595)	\$	(3,895,190)	\$	(2,235,219)
Triunfo Share:						
Total Revenues		τ				
Operating Revenues	\$	307,798	\$	327,690	\$	389,970
Other Revenues		2,190		2,352		1,140
Total Revenues		309,988		330,042		391,110
Total Expenses						
Operating Expenses	\$	1,142,758	\$	1,283,832	\$	1,291,988
Capital Project Expenses	Ψ	61,081	Ψ	769,107	Ψ	234,197
Total Expenses		1,203,839		2,052,939	O	1,526,185
N.4 (Harris of East of Top	¢.	(002.071)	Φ.	(1.702.225)	•	10
Net (Uses) of Funds - TSD	\$	(893,851)	\$	(1,722,897)	\$	(1,135,075)
Total JPA Net (Uses) of Funds	\$	(2,830,446)	\$	(5,618,087)	\$	(3,370,294)

ITEM 6B

FR1Q12-4

## Joint Powers Authority Operations Quarterly Update - Comparison to Budget & Prior Year at September 30, 2012

FY12-13 Year to Date

	FY	11-12 Actual YTD	FY	12-13 Budget YTD	FY	12-13 Actual YTD
Total Operating Revenues	\$	1,046,933	\$	1,114,592	\$	1,326,431
RW Pump Station		536,322		608,664		430,270
RW Tanks & Reservoirs RW System Operations		13,930 6,059		35,608 13,212		18,002 14,980
RW Distribution		5,163		21,183		53,873
Sewer Waste Water Treatment		49,878 1,761,645		91,203 2,001,243		293,420 1,717,633
Composting Farm Operation		1,032,511 45,180		1,135,247 65,701		1,069,330
Adminstration		223,830	in	243,309		103,888 202,051
<b>Total Operating Expenses</b>		3,674,518		4,215,370		3,903,447
Net Operating (Expenses)	\$	(2,627,585)	\$	(3,100,778)	\$	(2,577,016)

Las Virgenes - Triunfo Joint Powers Authority Capital Improvement Project Status September 30, 2012

status	
Project .	
Improvement	
Capital	
JPA	

# - Description	% AT	** TSD % AT	Prior Year Unexpended ppropriations	Current Year Current Year Working Capital Expenditures	Current Year Expenditures	Contractual Commitments	Project Balance	LV Balance	TSD Balance
				mount maken					
10513 - Tapia Gate & Drive RpI-FY12-13	%9.07	29.4%	\$0	\$160,000	0\$	80	\$160,000	\$112,960	\$47,040
10515 - Sanitation Master Plan Update	%9.07	29.4%	80	\$62,500	\$0	\$0	\$62,500	\$44,125	\$18,375
10516 - Recycled Water Master Plan	%9.07	29.4%	80	\$62,500	\$0	\$0	\$62,500	\$44,125	\$18,375
10520 - SCADA System Communictn Upgr	%9.07	29.4%	80	\$46,550	\$0	\$0	\$46,550	\$32,864	\$13,686
10522 - Rsvr #2 Imprvmnt (Lining Cover	%9.07	29.4%	80	\$50,000	\$0	\$0	\$50,000	\$35,300	\$14,700
10523 - Rancho LV:Ovation Upgrade	%9.02	29.4%	\$0	\$750,000	\$128,700	\$365,800	\$255,500	\$180,383	\$75,117
-Year Projects			\$959,145	\$6,058,696	\$326,614	\$497,733	\$5,234,349	\$3,695,450	\$1,538,898
Totals			\$1,791,577	\$8,309,660	\$796,588	\$1,854,936	\$5,658,136	\$3,994,644	\$1,663,492
Totals: Las Virgenes MWD	0.0		\$1,264,853	\$5,866,620	\$562,391	\$1,309,585	\$3,994,644		
Totals: Triunfo Sanitation District	on Distri	ct	\$526,724	\$2,443,040	\$234,197	\$545,351	\$1,663,492		

Fiscal Year 2012-13 - through September 30, 2012 Capital Improvement Projects Working Capital Las Virgenes - Triunfo Joint Powers Authority

•	or the man and the	madac	in one	7100							
				И	Working Capital Requirement	Requiremen	t		Expenditures		
Jol	Job # - Description	% AT	LSD %	per Budget	Current Est	LV Share	TSD Share	Total	LVExp	TSD Exp	
	10257 - Combined Heat & Power (CHP)	%09.02	29.40%	0\$	\$84,577	\$59,711	\$24,866	\$0	\$0	\$0	
	10387 - Rancho Material Handling Imprv	%09.02	29.40%	\$110,900	\$102,660	\$72,478	\$30,182	\$1,068	\$754	\$314	
	10391 - RLV:Compost Reactor Bldg Ceilg	%09.02	29.40%	\$0	\$49,471	\$34,927	\$14,545	\$5,477	\$3,867	\$1,610	
	10418 - Rehab 18" RW Pipe (Tapia/Mlhd)	%09.02	29.40%	\$155,000	\$153,452	\$108,337	\$45,115	\$4,203	\$2,967	\$1,236	
	10446 - Buffer Land at Rancho	%09'02	29.40%	\$250,000	\$250,000	\$176,500	\$73,500	\$0	\$0	\$0	
	10448 - Rancho Polymer Feed System Reh	%09.02	29.40%	\$114,064	\$114,064	\$80,529	\$33,535	\$32,038	\$22,619	\$9,419	
	10451 - Tapia Gate & Drive Replacement	%09'02	29.40%	\$85,065	\$84,231	\$59,467	\$24,764	\$60,988	\$43,058	\$17,930	
	10453 - Tapia/Rancho Vulnerability Ass	%09'02	29.40%	\$0	\$50,000	\$35,300	\$14,700	\$0	\$0	\$0	
1	10457 - Tapia Altrntv Disinfectn Study	%09'02	29.40%	\$823,755	\$1,379,777	\$974,122	\$405,654	\$38,396	\$27,108	\$11,288 3	
1	10462 - Tapia: 20/24" Infint FrcMainUp	%09'02	29.40%	\$687,055	\$230,284	\$162,581	\$67,704	\$355,684	\$251,113	\$104,571	
1	10487 - Construct 3rd Digester @Rancho	%09'02	29.40%	\$3,531,418	\$3,738,969	\$2,639,712	\$1,099,257	\$160,605	\$113,387	\$47,218	
^	10492 - Groundwater Suplmnt Study-RW	%09.02	29.40%	\$25,000	\$25,000	\$17,650	\$7,350	\$0	\$0	\$	
0	10493 - Tapia: Sludge Screening	%09.02	29.40%	\$0	\$385,000	\$271,810	\$113,190	\$0	\$0	\$0	
)	10499 - Tapia Grit Cyclone ConveyorSys	%09.02	29.40%	\$150,000	\$150,000	\$105,900	\$44,100	\$0	\$0	0\$	
	10502 - Rancho Misc Equipment- FY11-12	%09.02	29.40%	\$0	\$27,625	\$19,503	\$8,122	\$9,429	\$6,657	\$2,772	
	10512 - Tapia: Primary Tank Rehab	%09.02	29.40%	\$343,000	\$343,000	\$242,158	\$100,842	\$0	\$0	\$0	
	10513 - Tapia Gate & Drive Rpl-FY12-13	%09'02	29.40%	\$160,000	\$160,000	\$112,960	\$47,040	80	\$0	\$0	
	10515 - Sanitation Master Plan Update	%09.02	29.40%	\$62,500	\$62,500	\$44,125	\$18,375	\$0	\$0	\$0	
	10516 - Recycled Water Master Plan	%09.02	29.40%	\$62,500	\$62,500	\$44,125	\$18,375	\$0	\$0	\$0	
	10519 - Misc. CIP (Bandsaw)	%09.02	29.40%	\$10,000	\$10,000	\$7,060	\$2,940	\$0	\$0	\$0	
.5	冊20 - SCADA System Communictn Upgrd <b>又</b>	%09.02	29.40%	\$46,550	\$46,550	\$32,864	\$13,686	\$0	0\$	0\$	
15-6	15-0		CONTRACTOR OF A CONTRACTOR OF	Joint Powers	Joint Powers Authority CIP Working Capital	rking Capital				Puge 1 of 2	f2

FR1Q12-8

			W	Vorking Capital Requ	Requiremen	ıt		Expenditures	
Job # - Description	% AT	LV % TSD %	per Budget	Current Est LV Share	LV Share	TSD Share	Total	LVExp	TSD Exp
10522 - Rsvr #2 Imprvmnt (Lining Cover	%09.02	29.40%	\$50,000	\$50,000	\$35,300	\$14,700	\$0	\$0	\$0
10523 - Rancho LV:Ovation Upgrade	%09'02	29.40%	\$750,000	\$750,000	\$529,500	\$220,500	\$128,700	\$90,862	\$37,838
		Totals	\$7,416,807	\$8,309,660	\$5,866,620	\$2,443,040	\$796,588	\$562,391	\$234,197

Footnotes 1 Unanticipated costs related to administration and installation of assets

3 Appropriate additional \$568,532, approved by JPA Board of Directors, 7/2/2012, Item 5A.

### December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Rancho Cogen Assignments and Amendment to Agreement for Energy Recovery Services

### **SUMMARY:**

On February 2, 2009, the JPA Board approved a Lease Agreement (Lease Agreement) and an Agreement For Energy Recovery Services (Energy Recovery Agreement) to US Energy Operating Services, LLC (the Company). The Company leases a portion of the Energy Recovery Building for generating of electricity using an internal combustion engine and excessive digester gas from the two biosolids digesters at Rancho Composting Facilities. On July 6, 2009, staff sent an Info-only memo informing the JPA Board that the Company had experienced delays in obtaining a South Coast Air Quality Management District (SCAQMD) permit for the project due to a permit moratorium at the SCAQMD caused by a lawsuit. On July 15, 2010, SCAQMD issued a construction permit for the project and construction started shortly after that. In February of 2011, major construction components were completed and test generation started. On July 27, 2011, a permit to electrically interconnect with South California Edison (SCE) power lines was approved and interconnection was made. A total of 324,589 kilowatt/hours (kWh) were generated during the testing period between February and September of 2011. During the test period, a number of deficiencies were discovered by LVMWD staff, such as gas leakage from the gas blower seals, and the Company was asked to repair the deficiencies before the project could be deemed complete and the operational Commencement Date could be declared in accordance with the Energy Recovery Agreement.

On October 31, 2011, the Company requested approval to assign the Lease Agreement and the Energy Recovery Agreement to CHPCE Las Virgenes, LLC (Assignee). Staff informed the Company that the deficiencies of the Cogen system had to be repaired and a SCAQMD air emission test and a Permit to Operate must be obtained before staff can take the assignment request to the JPA board for consideration. On September 17, 2012, after a lengthy delay to obtain repair parts from overseas, SCAQMD emission source tests were performed. Staff has verified the source test has passed and SCAQMD is in the process of issuing a Permit to Operate.

Staff also worked with the Company and Assignee to provide the attached assignments to the Lease Agreement, the Energy Recovery Agreement, and an Amendment to the Energy Recovery Agreement. The two Assignments and one Amendment have all been reviewed and approved by the Counsel as to form.

### **RECOMMENDATION(S):**

Approve the Assignment and authorize the Administering Agent/General Manager to execute the Consent to Assignment of the Lease and Agreement; approve the Assignment and authorize the Administering Agent/General Manager to execute the Consent to Assignment of the Agreement for Energy Recovery Services; and approve the Amendment to Agreement for Energy Recovery Services.

### **FINANCIAL IMPACT:**

None

### **DISCUSSION:**

The terms of the Amendment to the Energy Recover Agreement were agreed upon between LVMWD staff and the Assignee's staff to include additional items/circumstances that the original agreements did not account for:

1) The Assignee would like to make necessary and substantial investments to the Cogen system and suggested the operational commencement Date (when the system can be operated under normal conditions) to be no more than 120 days after the approval of the assignment. Staff believes it is a reasonable request in order to make the improvements to the system.

- 2) District staff added in item 3 of the Amendment that District shall review and approve all of the proposed modifications.
- 3) District staff added Item 4 of the Amendment to account for and reduce contractual obligation of any potential disruption of digester gas delivery to the cogen system during the upcoming construction of the third digester.
- 4) The Assignee added Item 5 to the Amendment in order to protect their additional investments (estimated at \$330,000) from the District exercising its purchase option with the original valuation before the additional investment. Staff added an additional performance standard of generating electricity at no less than 80% of availability in exchange for agreeing not to exercise the purchase option when the Assignee is performing above the standards.
- 5) Item 6 was added as suggested by the Counsel.

The parent company of the Assignee is CHP Clean Energy, LLC. It is a full service provider of powered combined heat and power (CHP) systems for wastewater treatment facilities with anaerobic digesters. It is operating two cogen projects at the San Luis Rey Water Reclamation Facility in Oceanside, CA and at the City of Santa Maria Wastewater Treatment Plant in CA. It is currently negotiating to purchase the Cogen systems at the City of San Luis Obispo Wastewater Treatment Plant and at the City of Thousand Oaks Hill Canyon Wastewater Treatment Plant.

Prepared By: John Zhao, Principal Engineer

### ATTACHMENTS:

Assign lease
Assign Energy

**Amendment Energy** 

RECORDING REQUESTED WHEN RECORDED MAIL T		
Las Virgenes Municipal Wa Attn: General Manager 4232 Las Virgenes Road Calabasas, CA 91302	ater District	
	ASS	SIGNMENT
interest in and to that cert Virgenes Municipal Water	tain lease and agree District ("District")	"Assignor"), hereby assigns all right, title, and eement dated February 2, 2009, between Las and Assignor ("subject agreement") to CHPCE Las consent of Las Virgenes Municipal Water District.
Date:	, 2012.	
US Energy Operati	ng Systems, LLC	
By: Louis C. Lagomarc	ino, Managing Mer	 mber
	CONSENT	TO ASSIGNMENT
	nee's agreement t	of the subject lease and agreement by Assignor to be bound by the agreement and submittal by ement.
Las Virgenes Municipal Wa	ater District	Attest:
By:		By:
John Mundy, General Man	ager	By: Charles Caspary, Secretary
Approved as to Form:		
District Counsel		
	АТТ	TORNMENT
		be bound by the terms and conditions of the of the Consent to Assignment by Las Virgenes
Date:	, 2012.	
Ву:		<del></del>
[Print or Type Name]	, M	anaging Member

### STATE OF CALIFORNIA **COUNTY OF LOS ANGELES**

On, 2012, before me, personally appeared <b>John Mundy</b> , who proved to be the person whose name is subscribed to the with he executed the same in his authorized capacity, a the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person or the entity upon behalf of which the person whose entity upon behalf of which the person which the person of the entity upon behalf of which the person which the person which the person which the person of the entity upon behalf of which the person which th	hin instrument and acknowledged to nd that by his signature on the instru	me that ment
I certify under penalty of perjury under the laws of paragraph is true and correct.	the State of California the foregoing WITNESS my hand and official seal.	
	Notary Public	
STATE OF CALIFORNIA COUNTY OF LOS ANGELES		
On, 2012, before me, personally appeared satisfactory evidence to be the person(s) whose na instrument and acknowledged to me that he/she/th authorized capacity, and that by his/her/their signal entity upon behalf of which the person(s) acted, ex	ney executed the same in his/her/the ture on the instrument, the person(s	ir
I certify under penalty of perjury under the laws of paragraph is true and correct.	the State of California the foregoing WITNESS my hand and official seal.	
	Notary Public	
STATE OF CALIFORNIA COUNTY OF LOS ANGELES		
On, 2012, before me, personally appeared satisfactory evidence to be the person(s) whose na instrument and acknowledged to me that he/she/th authorized capacity, and that by his/her/their signal entity upon behalf of which the person(s) acted, ex	me(s) is/are subscribed to the within ney executed the same in his/her/the ture on the instrument, the person(s	ir
I certify under penalty of perjury under the laws of paragraph is true and correct.	the State of California the foregoing WITNESS my hand and official seal.	
- 2 -	Notary Public	 ITEM 6C

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:	
Las Virgenes Municipal Water District Attn: General Manager 4232 Las Virgenes Road Calabasas, CA 91302	] ] ] ]
	ASSIGNMENT
interest in and to that certain agreement between Las Virgenes Municipal Water I	LC ("Assignor"), hereby assigns all right, title, and nt for energy recovery services dated February 2, 2009, District ("District") and Assignor ("subject agreement") ), subject to the consent of Las Virgenes Municipal
Date:, 2012	. <b>.</b>
US Energy Operating Systems, L	LC
By: Louis C. Lagomarcino, Managing	 J Member
CONSI	ENT TO ASSIGNMENT
	ent of the subject agreement for energy recovery services ignee's agreement to be bound by the agreement and sired by the agreement.
Las Virgenes Municipal Water District	Attest:
By:	Bv:
John Mundy, General Manager	By: Charles Caspary, Secretary
Approved as to Form:	
District Counsel	
	ATTORNMENT
	ss to be bound by the terms and conditions of the services as of the date of the Consent to Assignment by nergy recovery services.
Date:, 2012	•
Ву:	
[Print or Type Name]	_, Managing Member

### STATE OF CALIFORNIA COUNTY OF LOS ANGELES

On, 2012, before me, personally appeared <b>John Mundy</b> , who proved be the person whose name is subscribed to the he executed the same in his authorized capacit the person or the entity upon behalf of which t	, , ,
I certify under penalty of perjury under the law paragraph is true and correct.	s of the State of California the foregoing
paragraph is true and correct.	WITNESS my hand and official seal.
	Notary Public
STATE OF CALIFORNIA COUNTY OF LOS ANGELES	
instrument and acknowledged to me that he/sh	signature on the instrument, the person(s) or the
I certify under penalty of perjury under the law paragraph is true and correct.	ws of the State of California the foregoing WITNESS my hand and official seal.
	Notary Public
STATE OF CALIFORNIA COUNTY OF LOS ANGELES	
instrument and acknowledged to me that he/sh	ignature on the instrument, the person(s) or the d, executed the instrument.
	ITEM 6C

### Notary Public

# AMENDMENT TO AGREEMENT FOR ENERGY RECOVERY SERVICES

As of	, 2012,	Las Virgenes Munic	cipal Water District (	nerein
"District") as ac	lministering agent	of the Las Virgenes-T	riunfo Joint Powers Aut	hority,
and CHPCE La	s Virgenes, LLC	(herein "Company"), a	agree as follows:	

### 1. Purpose.

District entered into an agreement for energy recovery services on behalf of the Joint Powers Authority with US Energy Operating Services, LLC on February 2, 2009 ("Original Agreement"). The interests of US Energy Operating Services, LLC, were assigned to Company. District and Company desire to amend the agreement as set forth herein.

### 2. Amendment.

Section 5.2.2 of the Original Agreement is amended to read as follows:

"5.2.2 Operational Commencement Date does not occur within one hundred twenty (120) days of this Amendment. However, if the Company demonstrates it has timely taken required actions to obtain all approvals for the Energy System and Interface Facilities, has ordered all of the major Energy System components, and has begun construction, or if the Company is prevented from starting operations due to *force majeure*, the 120-day deadline shall be extended on a day-to-day basis as required to complete the Energy System if the Company continues to make a diligent effort to complete the Energy System."

### 3. Amendment.

Section 8.1 of the Original Agreement is amended to read as follows:

"8.1 The District shall review and approve technical system changes as determined by Company to include, but not limited to, the fuel treatment system, wireless telemetry, aftercooler radiator, engine exhaust insulation, and a new control system. These changes will occur prior to Operational Commencement Date. District approval shall not be withheld without reason."

### 4. Amendment.

Section 11.3 is added to the Original Agreement to read as follows:

"11.3 Section 11 of the Agreement for Energy Recovery Services shall be suspended upon the award of construction contract by the Board of directors

until the District has completed the proposed third Digester and related sludge heating system with estimated completion date in mid-2014. District will endeavor to maintain good digester operations per industry standards during the construction period."

### 5. Amendment.

Section 19.2 is added to the Original Agreement to read as follows:

"19.2 Company is proposing to invest to upgrade the existing cogeneration system immediately after the approval of this Amendment and in the future as needed. The District will not exercise its purchase option in Section 19 of the Agreement for Energy Recovery Services if Company maintains a performance level to generate electricity no less than 80% of availability when digester gas is available for energy generation."

### 6. Amendment.

Section 24 of the Original Agreement is amended to read as follows:

- "24.1 The Company grants a non-exclusive, non-transferable right to the District to use documents, computer programs, plans, renderings, charts, designs, drafts, surveys, and other intellectual property, developed by the Company pursuant to the Agreement. The Company will take such steps as are necessary to perfect or to protect the rights of the District in such property. The District shall maintain all such documents, computer programs, plans, renderings, charts, designs, drafts, surveys, and other intellectual property in strict confidence to the extent such confidence is not in conflict with the California Public Records Act or other applicable statutes or regulations.
- 24.2 Company shall provide documents stated in the original agreements within 60 business days after the approval of this Amendment by the District. These documents include, but are not limited to, performance bond (Section 7.1 of the Agreement for Energy Recovery Services), insurance (Section 11 of the Lease and Agreement), and business license (Section 17 of the Agreement for Energy Recovery Services) to the District."

7	Other.
/ -	ouiei.

Except as provided herein, the Original Agreement is reaffirmed.

Las Virgenes Municipal Water District	CHPCE Las Virgenes, LLC
By: Lee Renger, President Board of Directors	By: Thomas L. Moore, President Managing Member
ATTEST:	
By: Charles Caspary, Secretary	
(Seal)	
APPROVED AS TO FORM:	
By: Wayne K. Lemieux, District Counsel	

### December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Recycled Water and Sanitation Master Plan Update 2012: Award of Contract

### **SUMMARY:**

The purpose of this project is to update the 2007 potable water and recycled water master plans as well as the 2008 sanitation master plan. The master plans are being updated to reflect system upgrades since the previous master plans, as well as provide a roadmap for projects that address future demands, system deficiencies, including maintenance and replacement, regulatory compliance issues, and system reliability. A fourth plan, known as an integrated master plan, will also be prepared which will summarize each of the other plans and discuss the relationships and impact of prospective projects.

The LVMWD Board authorized the release of a request for proposals for the master plan updates at the July 24, 2012 meeting. Proposals were solicited from eight consultants (AECOM, CDM Smith, CH2M-Hill, Carollo, Kennedy/Jenks, MWH, RMC, and HDR), and three were received. After an initial review, staff conducted a secondary interview with two of the firms, Carollo Engineers and the team of Kennedy/Jenks Consultants and HDR Engineering, as part of the evaluation process. Staff recommends the selection of Kennedy/Jenks-HDR to prepare the updates to the potable, recycled, sanitation, and integrated master plans. The Kennedy/Jenks-HDR team has recently work with LVMWD and the JPA on the third digester design at the Rancho Las Virgenes Composting Facility and the proposed staff has extensive experience with the preparation of master plans. Kennedy/Jenks total proposed fee for the preparation of the master plans is \$297,550. A breakdown of costs for the individual plans is as follows:

Master Plan	Proposed Fee	% of Total
Potable Water Master Plan	\$158,828	53%
Recycled Water Master Plan	\$62,298	21%
Sanitation Master Plan	\$45,970	15%
Integrated Master Plan	\$30,455	11%

At this time, staff is requesting that the JPA Board approve the portion of the contract associated with the sanitation master plan, recycled water master plan and a share of the integrated master plan. The LVMWD Board approved the potable water and a share of the integrated master plan at their November 27, 2012 meeting. A summary of costs, and the proportional share for the LVMWD and JPA Boards is provided below:

ITEM 6D

### **LVMWD Share**

Total LVMWD	\$178.273.20
Integrated (64%)	\$19,491.20
Potable Water MP	\$158,828.00

### JPA Share

		TSD	LVMWD
Recycled MP	\$62,298.00		
Sanitation MP	\$45,970.00		
Integrated (36%)	\$10,963.80		
Total JPA	\$119,231.80	\$35,411.85	\$85,960.95

### **RECOMMENDATION(S):**

Approve the proposal from Kennedy/Jenks Consultants to prepare the sanitation master plan update in the amount of \$45,970.00; approve the proposal to prepare the recycled water master plan in the amount of \$62,298.00; approve the proposal to prepare the integrated master plan in the amount of \$10,963.80.

### **FINANCIAL IMPACT:**

The FY 2012-13 budget provides funding for the preparation of the sanitation master plan under project no. 10515 in the amount of \$62,500; and for the preparation of the recycled water master plan under project no. 10516 in the amount of \$62,500. No appropriation is required at this time.

### **DISCUSSION:**

Proposals were requested from eight consultants and three were received. A summary of costs for the proposals is as follows:

Carollo Engineers \$249,836 Kennedy/Jenks Consultants \$297,550 AECOM \$299,752

The proposal from AECOM was removed from consideration based on an inadequate project scope, lack of schedule, and higher cost. District staff further reviewed the proposals from Carollo and Kennedy/Jenks to assess each firm's project understanding, experience and qualifications, and overall cost of the proposal. Both Carollo and the Kennedy/Jenks-HDR team were then invited to participate in secondary interveiws to further evaluate each firm's project team and approach to the project.

One of the differences between the proposals was in the total number of labor hours associated with the preparation of the potable water, sanitation and integrated master plans. JPA costs were approximately the same between the two remaining proposals, as the additional costs are related to the potable water and integrated master plans. The Kennedy/Jenks-HDR proposal included approximately 220 additional labor hours. The majority of additional hours were due, in part, to some tasks that were not included in the other proposal. A detailed statistical analysis, used to link variables, such as economic factors, and evapotranspiration to demand; and parcel billing data will be used to develop the hydraulic model for the potable water master plan. This analysis would allow the District to more accurately estimate future potable water demands and provide the necessary data to support those estimates, as well as future conservation efforts such as "20 by 2020". The proposal from Carollo offered a more traditional approach to the potable water master plan and hydraulic modeling. Historical water use and land-use data would be used to forecast potable water demands and those projections would be used as the plan's foundation. While this method is acceptable, and was used to prepare previous potable water master plans, the statistical analysis offers a fresh perspective and provides another level of supporting data, other than population, for future capital improvement projects.

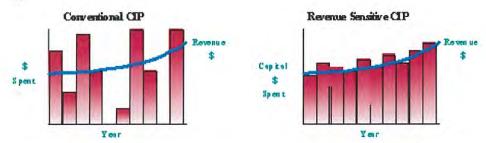
Kennedy/Jenks-HDR's proposal also included a more detailed evaluation of the LVMWD/JPA sanitation system, including modeling influent characteristics at the Tapia WRF, solids processing facilities at the Rancho Las Virgenes Composting Facility, and a discussion of regulatory trends and their potential impact. There was also additional effort included on the integrated master plan. The integrated master plan will describe links between the potable and recycled water models to better forecast the impact of future recycled water projects on the potable water system.

After conducting interviews, the consensus among the interview panel, which included District staff and Triunfo Sanitation District Manager, Mark Norris, was that both project teams were competent, had sufficient technical expertise, and available resources to perform the requested service. The Kennedy/Jenks-HDR team, however, very recently completed an evaluation and technical report on the District's sanitation system; and also included HDR Engineering as a subconsultant to prepare the recycled water master plan and assist in the preparation of the potable water master plan. The panel felt that Kennedy/Jenks-HDR project team offered a level of professional experience and familiarity with the District's system that was superior to that of Carollo. Based upon the evaluation of the proposals and interviews, staff recommends that Kennedy/Jenks-HDR be awarded the update of the potable water, recycled water, sanitation and integrated master plans.

### **ATTACHMENTS:**

Scope of Work

planning effort is the identification of a sound, defensible, time-phased CIP. We have found these and other deliberate Kennedy/Jenks master planning features provide our clients with a methodical road map that has a long shelf life.



Kennedy/Jenks implementation focus supports the development of revenue sensitive CIPs to eliminate large swings in annual funding obligations associated with conventional master plans, enhancing ratepayer acceptance.

From the preceding, it is clear our team has substantial knowledge of the District's system and the conduct of utility master planning. Accordingly, our general approach to this project is to focus the synergy created by the Kennedy/Jenks- HDR team to build revised and updated data sets to support master plan implementation and future data management needs, methodically update the key planning elements of unit demands and system performance factors, and utilize a workshop environment to communicate with District leadership and other stakeholders. The scope of work developed to comply with the District's RFP, and meet the identified issues follows.

# Scope of Work

The scope provided below includes the core needs of the District as outlined in the RFP. The budget associated with the Modeling/GIS task has been included the Potable, Recycled, and Sanitation Plans as appropriate.

# Project Management, QA/QC and Meetings/Workshops

This task includes project management and administration including coordination and communication with District staff and team members, meeting attendance (kick-off, progress meetings, and/or workshops), preparation of monthly status reports and invoicing. The Project Manager shall implement and enforce internal Quality Assurance and Quality Control (QA/QC) programs. QA/QC will be performed for all deliverables provided to the District.

Meetings and Board workshops will be instrumental in keeping the project on track and obtaining consensus and direction on key issues as the project evolves. It is assumed that all meetings and workshops will be used to facilitate discussion and address issues on all planning efforts. As such,

for budgeting purposes, the effort and costs of meetings have been spread among the project tasks that follow and are included as a line item cost under the Master Plan Document preparation.

For this assignment, we have budgeted a total of up to 10 meetings or workshops. Meetings may be in the form of telephone or video conferences as appropriate.

Anticipated Meetings and Workshop	Potable Water	Recycled Water	Sanitation
Project Kick-Off Meeting	X	X	X
Goals/Objectives/Schedule, Data Requirements, Communication Plan	Х	Х	Х
Known System Deficiencies	Х	Х	Х
Potential System Extensions (LADPW, Decker Canyon, CalWater, City of Thousand Oaks & Seasonal Storage Reservoir)		X	
System Evaluation Criteria	X	Х	Х
Demand Analysis Discussion & Workplan	Х	Х	X
Demand Analysis Workshop	X	X	X
Interagency Potable Water Emergency Connections And Recycled Water Use Opportunities Meetings (Combined)	Х	х	
Current - Demand Evaluation/Findings; Future - Land Use/Population Forecasts, Rank/Penetration For Difficult Access Parcels, Septic Tank Conversion, RW Market Assessment & Extensions, SBx7-7 Approach	х	х	х
Hydraulic Model Development & Calibration Meeting	Х	X	·X
Hydraulic Analysis Workshop			Marie 1
Current - System Analysis Results, Future - Fire Flow, Emergency Supply, Reservoir Operation, Demand Sensitivity, Other?	Х		
Special Problems Discussion - Phasing Plan for:  Jed Smith System (storage/pumping deficit)  Seminole System (pumping/pipeline deficit)  Upper Oaks System (pumping/storage deficit)	Х		
Potential System Extensions (LADPW, Decker Canyon, Calwater, City Of Thousand Oaks & Seasonal Storage Reservoir Findings)		Х	
Evaluation And Identification Of Liquid, Solids, And Conveyance System Deficiencies/Findings; Discussion Of Potential Innovations			х
Capital Improvement Plan Workshop	Х	х	Х
Present Planning-Level Opinions Of Cost	X	Х	X
Discuss Cost Allocation Approach	Х	Х	Х
Develop CIP Schedule And Prioritization	Х	Х	Х
Report Review Meeting/Workshop	X	X	X
Integrated Plan Review Meeting/Workshop	X	Х	Х

#### Task 1 - Potable Water Master Plan

The 2007 Potable Water System Master Plan will be updated to reflect existing system conditions, current water demands with new projections, integration of management practices (demand and supply), update/calibration of the hydraulic model, identification of system deficiencies (including fire flow conditions and emergency supply outage conditions), recommendations for improvement and development of a CIP. The Potable Water Master Plan Update will be implementation-focused to guide the District's capital expenditures into the future by addressing several key issues. These include:

- Confirm backbone system capacity for future demands
- How to best use and refill the Las Virgenes Reservoir
- Evaluate MWD outage and operations from Las Virgenes Reservoir (with and without use of the Kittridge Connection)
- Assess interconnection with Calleguas MWD for emergencies and reservoir refill support
- Evaluate specific known subsystem deficiencies

# Task 1.1 Evaluate Existing Water System

The existing water system will be reviewed from the GIS and other background data provided by the District. This may include pertinent information such as water system maps, planning and development information, historical records, billing data and detailed facility information. Discussions regarding the existing system operations and deficiencies will be held with District Water Division staff. The data review and discussions will assist Kennedy/Jenks identify operational inefficiencies and develop scenarios for hydraulic evaluation of the water distribution system (refer to Task 1.6) to determine future system improvements.

## Task 1.2 Perform Statistical Evaluation of Historical/Current Demands

While not requested in the District's RFP, given the importance of reliable demand forecasts, we propose to develop a water demand model that will utilize the District's historical and current consumption data to perform a statistical analysis of current demands relative to historical conditions. To supply the demand assessment task and the development and loading of the hydraulic modeling task, an additional effort to link essentially all of the District's water accounts to an associated parcel will be performed. This separate digital submittal would be instrumental in supporting various demand management tasks for the District in the future including the ability to expeditiously adopt and implement account-level budget based rates based on unique parcel characteristics and demand patterns. While economic and other factors may influence demand, the focus of this analysis is to assess the influence of weather on water demands (specifically Evapotranspiration (ET)). Kennedy/Jenks will utilize its Demand Model to perform a regression analysis, designed to normalize the demand data from variations in weather factors and support demand evaluations of various alternative scenarios. The Demand Model statistical analysis evaluates

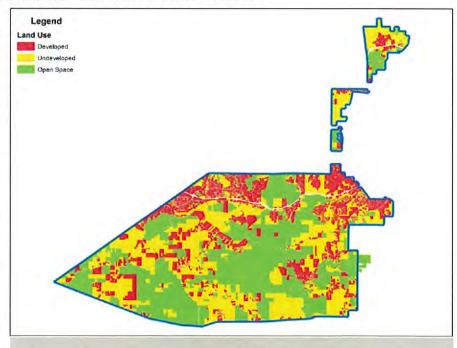
critical weather-related parameters such as precipitation, temperature, and ET, to normalize current demand data. To support this evaluation, we will perform a triangulation of available CIMIS station data to develop "unique" ET factors across the District's service area, resulting in a "IsoET" layer that can be spatially attributed to all District parcels. Upon completion of this demand analysis, future demands can be projected for various weather induced scenarios based on defined statistical values under "normalized" current conditions. Our budget assumes that historical customer usage is available in a digital file format and land use categories represents a high percentage of the District's demands.

Upon completion of the Demand Model in Task 1.2, various current and projected demands will be derived to support the master planning effort. These include current population and land use based factors and system Average Day Demands (ADD), Maximum Day Demands (MDD) and Peak Hour (PH) demands and peaking factors. These factors will be used in other modeling and other system evaluation tasks.

## **Task 1.3 Perform Demand Projections**

Demand forecasting for the District's 2010 Urban Water Management Plan was derived based on population estimates and the 2000 census data. Demand forecasting for the District's 2007 Potable Water Master Plan was derived based on densities of land use overlays from each agencies served by the District. Demand projections for the 2013 Water Master Plan will be based on the normalized current demand data and extrapolated to future conditions based several inter-related elements. These include: population

projections and changes in persons per household values for each agency served, updated General Plan/ Land Use Elements and/ or Specific Plans coverages, a general assessment of specific densifications and land use-intensification areas, agency specific and District policy on septic tank conversions, varying levels of demand offsets developed in the Recycled Water Master Plan, and other demand management programs programmed in the 2010 UWMP to meet SBx7-7 requirements. This information will be contrasted with the basis of future land use loadings contained in the current hydraulic model and



A parcel-by-parcel review of the undeveloped/open space areas will support the demand projection tasks.

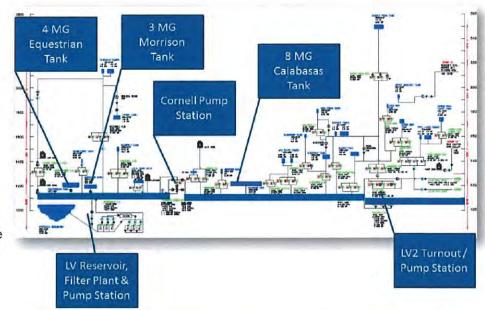
adjusted as appropriate. This spatial demand-growth analysis approach will provide the District with a defensible process and definitive methodology that can be used for future planning efforts and provide a foundation for considering planning criteria and other strategic programs relating to recycling, conservation, non-revenue (unaccountable) water reductions, etc. We have assumed that District staff will provide current agency land use mapping data, and Consultant will develop up to three different demand scenarios to support a sensitivity analysis effort.

## Task 1.4 Update Existing Hydraulic Model

Kennedy/Jenks will work closely with the District's staff to update the District's current Water Gems 2.0 model. Based on the data gathered from previous tasks, we will contrast the model with GIS to include all pipes not in the current model and refresh the model with changes in pipe diameter, age, material and other appropriate attributes. The updates will also include adding any feature updates and expansion of the water system,

verifying operational settings and system parameters provided by the District, addressing connectivity issues, developing demand sets and peaking factors based on District's billing data, and updating pump curves. Model demands will be updated for future scenarios based on the projections performed in previous tasks.

Model validation will be performed using SCADA data and running a steady state scenario to match model results with



The backbone system is a critical potable water system asset warranting a fresh hydraulic analysis.

the SCADA results for a selected time-frame. The results will be measured against pressure and hydraulic grade line (HGL) standards. We work with operations staff to assure system understanding, implement the resulting data in the hydraulic model, and refine model settings for further calibration as required.

# Task 1.5 Perform Hydraulic System Analysis

Once the hydraulic model is updated and calibrated, it will be utilized to evaluate the District's system and recommend improvements. In consultation with the District, Kennedy/Jenks will utilize the District's system performance criteria to analyze the water system. These will include standard criteria used in the industry by various utilities such as pressure, fire flow, velocity, and headloss standards. Based on these analyses, improvements will be recommended to correct the system hydraulic deficiencies under current and future demand conditions. During the hydraulic analyses particular focus will be given to evaluating deficiencies in the Jed Smith, Seminole and Upper Oaks sub-systems. The analysis to be performed include:

## **Existing Conditions**

- Maximum day extended period simulation with peak hour
- Maximum day with global fire flow analysis

#### **Future Conditions**

- Maximum day extended period simulation with peak hour
- Maximum day demands to provide 1250 gpm at 20 psi to all points in the system
- How to best use and refill the Las Virgenes reservoir
- Two additional emergency operations scenarios shall be run for MDD demands to assess MWDSC outages with and without LADPW (Kittridge) connection
- Consider evaluating up to two alternate sensitivity scenarios based on future demand sets

# Task 1.6 Perform Pumping and Storage Evaluation

A water balance calculation will be performed to evaluate the water system production, storage and pumping requirements compared to the estimated future demands of each pressure zone. The water balance will incorporate the findings of the water resources plan, the hydraulic analysis, and the operational strategy and assess the adequacy of operational/emergency storage and pumping capacity.

#### Task 1.7 Develop Capital Improvement Program (CIP)

Kennedy/Jenks will recommend CIP projects for system improvements based on demand management, and hydraulic deficiencies as a result of the previous tasks. The CIP will be based on findings from the previous tasks and discussions with the District. It will be phased to incorporate the District's funding strategies and costs allocated between existing and future customers to support the District's customer development fee approach.

# Task 1.8 Prepare Potable Water Master Plan Report

A draft Water Master Plan Update report which summarizes and documents the work developed during the master planning effort will be developed and submitted in a \*.pdf file format for easy distribution by the District. The report will incorporate and integrate evaluations from the demand

management, supply management and hydraulic evaluation aspects and provide a comprehensive look at the District current conditions and future CIP recommendations. Based on comments received from the District, and discussion during the Draft Water Master Plan Update review meeting, a Final Water Master Plan Update will be prepared. Ten hard copies and one electronic copy in Adobe Acrobat (PDF) format will be provided.

As previously discussed, project management and meetings have been spread among the three project elements, and are included as a line item cost herein.

## Task 2 - Recycled Water Master Plan

The 2013 Recycled Water System Master Plan will be updated to reflect existing system conditions, current recycled water demands with new projections, demand and supply comparisons, update of the hydraulic model, identification and evaluation of system improvements and future expansions. The Recycled Water Master Plan Update will be implementation-focused to guide the District's capital expenditures into the future. The following tasks will be included as part of this plan.

## Task 2.1 Review Recycled Water Data

The consultant will use a variety of readily available information sources as a basis of the preparation of the Recycled Water Master Plan and obtain appropriate GIS data related to land use, vacant land, parcels, streets, digital contours, and water line coverage's from the District. Data acquisition and review will include review of seasonal storage reservoir reports, reservoir 2 alternative improvement study, billing data for current and potential future RW customers like Malibu GC, Woodland Hills GC etc., General Plan, atlas maps, topographic maps, most recent Urban Water Management Plan and Water Master Plan, current mapping of land use among others. SCADA data at peak demands conditions will also be reviewed for various reservoirs and pump stations facilities like Tapia Pump station, Reservoir 2, RWPS East and West, Cordillera Tank, Indian Hills Tank, Supplemental Facilities at Reservoir 2, Cordillera, and Morrison PS, Oak Park PS, Oak Park Reservoir, Westlake Wells, and the metering stations at La Venta, Oak Park, and Lake Sherwood extension.

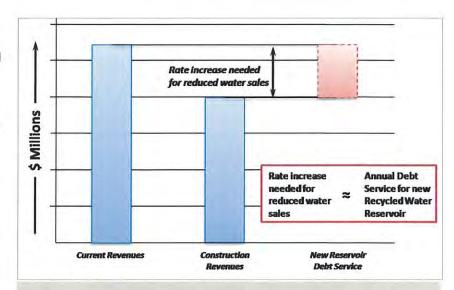
## Task 2.2 Perform Market Assessment and Supply vs Demand Comparison

As part of this task, the current and future supply/demands at MDD and on annual basis will be compared for various scenarios and combinations. The approach to this task is to develop a "bookend" of demands. The baseline projected demand conditions will be derived based on a modest organic increases in demands, which will occur from commercial and multi-family developments proximate to the distribution system. Aerial photos and land planning documents will be used to estimate these demands.

The 'aggressive" bookend future demand conditions will be derived based on several factors, but predominantly from new significant recycled water system extensions that would be required to serve new large customers/areas (see task 2.4). In this demand assessment, we will reassess market

demands from current billing data, estimate new estimated residential demands from aerial photography to estimate front-yard acreage and demands, and derive new non-residential demands from discussions with other agencies and available demand data.

Supplemental water required from LVMWD system will be evaluated and incorporated into the potable water system demand analysis. Pumping and storage analysis will be performed by updating prior spreadsheet analysis to reflect latest demands and best forecast. Seasonal storage analysis will also be performed as part of this task. The working volumes needed for a seasonal



In some cases, rate increases needed to offset reduced water sales from conservation or SBx7-7 compliance is comparable to the increase needed to build infrastructure, which has a better public message.

storage reservoir, based on various scenarios, will be evaluated and a summary of the recommended volume will be provided based on these evaluations and findings.

### Task 2.3 Update Existing Recycled Water Hydraulic Model

We will work closely with the District's staff to update the current RW model to the latest software version. Based on the data gathered from previous tasks, we will contrast the model with GIS to include all pipes not in the current model and refresh the model with changes in pipe diameter, age, material and other appropriate attributes. The updates will also include adding any expansion of the system, verifying operational settings and system parameters provided by the District, addressing connectivity issues, updating demand sets for ADD and MDD scenarios; diurnal patterns and peaking factors based on District's billing data, and updating pump curves. Model demands will be updated for future scenarios based on the projections performed in previous tasks. Facility updates will include adding new pipes including the 24-inch pipeline on LV road, adding Oak Park and Lake Sherwood systems among others.

## Task 2.4 Perform Recycled Water System Hydraulic Analysis

Once the model has been updated and validated, it will be used to evaluate the recycled water system. The hydraulic analysis will include system extension evaluations comparable to prior planning efforts for system extensions outside the JPA to the City of LA, City of Thousand Oaks, CalWater Service Company, and the Malibu Golf Course. We propose the following investigations:

- Perform hydraulic analysis and provide recommendations for pipe sizes and upgrades.
- Determine sources of supplemental water.
- Estimate cost of system extension and determine cost per AF of water supplied annually.

Residential Use Evaluation will also be carried out as part of the recycled water hydraulic analysis. Extensions to Hidden Hills, Upper Oaks, Foxfield Drive area, North Ranch, Old Agoura, and Medea Valley will be evaluated. We propose the following as part of this evaluation:

- Select pipeline routes based on assessment of hydraulic capacity, demands, and preliminary costs.
- Estimate cost of system extension and determine cost per AF of water supplied annually.

# Task 2.5 Develop CIP

Based on our system evaluation and discussions with the staff on results of the analysis, we will recommend CIP projects for system improvements. In a broad sense, the CIP will be based on the overall strategy for the recycled water system relative to modest or aggressive water use and SBx7-7 compliance strategy. At the project or program level, it will incorporate the District's decisions related to new service area extensions, shoulder month storage, and other overall infrastructure improvements. Conceptual level cost and cost per acre-ft of RW delivered annually will be prepared using up-to-date unit costs taken from recent bids. A brief summary of the benefits and triggers for the RWMP will be provided.

## Task 2.6 Prepare Recycled Water Master Plan Report

A draft Recycled Water Master Plan Update report which summarizes and documents the work developed during the master planning effort will be developed and submitted in a \*.pdf file format for easy distribution by the District. The report will incorporate and integrate evaluations from previous studies, supply/demand comparisons, review of regulatory requirements, hydraulic evaluation aspects and provide a comprehensive look at the District current conditions and future CIP recommendations. Based on comments received from the District, and discussion during the Draft Recycled Water Master Plan Update review meeting, a Final Recycled Water Master Plan Update will be prepared. Ten hard copies and one electronic copy in Adobe Acrobat (PDF) format will be provided.

## **Task 2.7 Conduct Recycled Water Workshop Sessions**

Workshops sessions will be an integral part of the three master plans. These will serve to facilitate key direction and decisions for the recycled water master plan. Many of these workshops will be held in conjunction with Potable MP workshops, if at all possible. Our workshop plan was previously discussed. Somewhat unique for the recycled water system, will be the need for meetings with LADPW, CalWater, and Thousand Oaks to discuss specific challenges and opportunities for recycled water use in their service areas.

#### Task 3 - Sanitation Plan

The focus of the Sanitation Plan is to project the magnitude of ultimate capacity required, evaluate the opportunities for improving operational efficiencies, reliability in the form of appropriate redundancy, and identify any general opportunities for improvements and incorporation of innovative technologies that might beneficially impact sanitation operation at the District. This task will leverage and update the Sanitation Master Plan Update 2008. The specific tasks are described below:

## 3.1 Update and Describe Existing Sanitation Facilities

Section 4 of the 2008 Master Plan Update includes descriptions of the existing sanitation facilities. We will work with the District to identify pertinent facility or operational changes that have occurred in the past nearly 5 years, such as the new third digester and cogeneration system at the Rancho Facility. We will prepare new descriptions of the existing, and designed, facilities that will leverage and expand on the 2008 Update write-ups to reflect the projected facility status in 2013.

## 3.2 Develop New Sanitation Growth, Flow and Loading Projections

Section 6 of the 2008 Update includes an analysis of District demographics reflective of conditions at the end of 2007. The flow data illustrated in Figure 1 of that update show a trend of decreasing per capita flow generation beginning in 2002 that has been observed throughout California. The projection for 2030 in that update considers the trend toward decreasing unit flow generation. Offsetting the trend of decreasing unit flows is the conversion of septic systems to service by the District.

The current project for design of a third digester included a detailed review of District flow and loading data for 2010 and 2011, prepared by the Kennedy/ Jenks team and presented in Sections 1 and 2 of the Preliminary Design Report. We will use that data analysis in combination with the analysis presented in the 2008 Update, water demand, and wastewater discharge (including septic conversion) developed in the potable water plan to finalize the future wastewater flows and loadings projections. The impacts of increasing loading and increasing wastewater strength will be considered in this master plan.

## 3.3 Review of Future Permit Considerations

We will include a discussion of regulatory trends and changes for recent permit renewals in the region. We will also include an analysis of likely impacts of changes to the District's effluent discharge program. As an example, what is the potential for recycling all of the dry season effluent and what would be the impacts on the treatment system. As an example, 100% recycled would likely relieve the nutrient treatment requirements and reduce energy consumption.

## 3.4 Evaluation of Liquid Processes

Update the District's existing BioWin model with new influent data to simulate operation of Tapia with actual and projected influent characteristics. The model can be used to conveniently evaluate process capacity to handle projected loads. We will identify any liquid process deficiencies and the flows at which they occur.

## 3.5 Evaluation of Solids Processes

Most of the solids processing facilities, upstream of the compost facility were evaluated as part of the pre-design effort for the Third Digester Project. The findings of that evaluation were included in that Preliminary Design Report and will be leveraged for this update of the Master Plan. The focus of this task will be an evaluation of the Rancho Composting Facility and farm for disposal of the biosolids.

## 3.6 Evaluation of District's Conveyance System

The layout and sizing of the conveyance system will be evaluated hydraulically considering peak wet weather flows. We will also assess the potential impacts of low dry weather flows on possible sulfide generation and associated odor potential.

#### 3.7 Identification of Deficiencies

In this task we will summarize the deficiencies that are identified during the evaluations of the wastewater collection and treatment plant liquid and solids processes. The key deficiencies will be described along with any key interactions among them.

#### 3.8 Potential Innovative Improvements and CIP

Applicable new technologies that could be used to address the identified deficiencies or needs for additional capacity will be derived in this task. As an example, if more organic treatment capacity is identified, the Kennedy/ Jenks team will consider the benefits of relatively inexpensive technologies like chemically enhanced primary treatment or primary effluent filtration to decrease load on an existing secondary system. This option could possibly be combined with sludge conditioning to satisfy the carbon needs of the BNR process.

Consistent with the other planning efforts, we will conduct and/or support various meetings and workshops with the District Staff and leadership to present the Sanitation findings and recommendations from the conveyance and liquid and solids process evaluations. We will discuss all of the identified deficiencies with District along with possible and innovative solutions. The goal in the workshop will be to gain consensus on a list of recommendations. Based on the findings of the previous tasks and discussions with the District, a CIP will be developed as part of this task.

## 3.10 Master Plan Report

A draft Sanitation Plan Update report which summarizes and documents the work developed during the previous tasks will be developed and submitted in a \*.pdf file format for easy distribution by the District. The report will incorporate and integrate evaluations from previous studies, projected discharge requirements, review of regulatory requirements, derived current deficiencies, alternative technology opportunities, and future CIP recommendations. Based on comments received from the District, and discussion during the Draft Sanitation Plan Update review meeting, a Final Sanitation Plan Update will be prepared. Ten hard copies and one electronic copy in Adobe Acrobat (PDF) format will be provided.

# Task 4 - Integrated Plan

Based on discussions with District staff, the Integrated Plan is essentially an executive summary of the three utility plans, with a correlating assessment of strategies and capital improvements such that the timing and interrelationship of these items are well documented. The scope of work for this task is: 1) meet with the District to review the three plans and prepare/submit a Draft integrated Plan Table of Contents. Integrate the District's comments and prepare a draft plan for review. Incorporate District comments and prepare a Final Integrated Plan.

Upon completion, prepare a brief summary report of the plan, in lay person's language, to support public understanding.

# Task 5 - Modeling and GIS

The cornerstone principle of our project approach is to utilize the considerable experience and tools gained through the preparation of numerous master plans to effectively incorporate District's existing data, use alternative methods to supplement this information if needed, maximize its use, and validate its accuracy. Central to this effort is the effective use of the District's GIS databases and development of hydraulic analysis tools to help integrate this data to develop the three master plans. Kennedy/Jenks will work closely with the District's staff to update the current water and recycled water models. As previously discussed, the budget for the development and use of GIS and the hydraulic model is included in other core tasks of the master plans. The discussion that follows represents scope oriented activities associated with the use of modeling and GIS tools.

# **Proposed Software Improvements for Existing Model**

Kennedy Jenks will work closely with the District's staff to update the current WaterGEMS 2.0 models to the latest WaterGEMS V8i version of the software. WaterGEMS is a comprehensive water distribution modeling application which can run within ArcGIS, AutoCAD, and MicroStation environments and is used for various types of hydraulic analysis of the water systems including capacity, fire flow, energy optimization etc. While updating Kennedy Jenks will make sure the model attributes developed in the earlier version will be migrated to the latest version while maintaining the compatibility between the V2 and the V8i versions.

Hydraulic distribution models are frequently used for the planning, design, and operational management of water distribution systems. The District mainly uses its potable system hydraulic model to run capacity and fire flow analysis to determine hydraulic deficiencies in the system and generate CIP based on the analyses. Nowadays, hydraulic models have also found applicability in areas like design, water quality, energy optimization, risk management, operation optimization among others. Once the District's model is updated, Kennedy/Jenks will use the model to perform both capacity and operational oriented evaluations.

Optional Task: Currently, the most prominent GIS-based hydraulic modeling software being used in the water industry are WaterGEMS (Bentley) and InfoWater (Innovyze). Both these software platforms are very robust and utilize comprehensive GIS-centric infrastructure modeling and analytical tools to evaluate system hydraulics. As stated above, our proposal is based on updating the District's WaterGEMS 2.0 model. However, should the District desire to utilize InfoWater we are equally comfortable in that modeling platform and can discuss the approach and budget for that additional effort, if required.

## Use of District's GIS to Develop the Master Plans

The following section provides an overview of how the District's GIS will be used as part of hydraulic modeling to develop the three Master Plans:

Model Update to Correct Data Errors, Resolve Data Gaps for Existing Models. The development and update of the hydraulic models is an important element of the Master Plans as they will serve as integral components for evaluating system hydraulic reliability and providing necessary information for critical decision making. The digital information necessary to develop, update, load, and calibrate the hydraulic models is readily available in the District's GIS. A hydraulic model will seamlessly integrates the various GIS datasets of the District including facilities, parcels, land use, customer billings data etc.

After the existing software version has been updated, the current models will be contrasted with the GIS and other background data provided by the District. Effective use of the GIS data and analysis tools will assist in populating missing information and verifying critical elements in the model. Initially, GIS will serve to identify missing and inconsistent information in the model in comparison to the District's GIS database. Through its spatial analyst capabilities, GIS will be used to identify missing pipes, inconsistencies in the current model relating to diameter, spatial location etc. The models will then be updated to include missing feature and expansion of the water system and address other connectivity issues.

**GIS Data Based Demand Loading and Projections.** Following data review, GIS will be used extensively during the data assessment, model development, demand projection and system analysis tasks. Using the customer billing data, current water demands will be allocated to the junctions in the model by geocoding the water billing data to correlate metered usage data with County Assessor Parcel Number (APN), create a

linkage between parcels and the nearest water system modeling node in the water model. Integrating available Traffic Area Zone (TAZ) data into our future demand projections to spatially distinguish changes in residential and non-residential demands, querying assessor parcel data for unimproved valuation/zero value field to create a coverage of currently vacant parcels will further help to key in valuable details into the model. This information, in conjunction with digital GIS coverage of the General Plan Land Use, vacant land, areas of redevelopment, and changing potable water use characteristics provides the basis for spatially transforming today's water system demands to a representative condition of system demands at some future planning horizon.

**Model Calibration using GIS Datasets.** Once the hydraulic model is developed it is checked against field conditions through the calibration process. Using SCADA data and available fire flow tests, the model is fine tuned to reflect the field conditions for an extended period. The calibration process adds a high confidence level in the results of the hydraulic model to be used for system evaluation. The District's GIS data will prove to be valuable in determining the spatial location of the hydrauts, identifying hotspot areas to be tested, and understanding the hydraulics of the system by integrating the various datasets available.

**System Analysis and CIP.** After the model has been calibrated, it will be used to run current and future hydraulic simulations, to identify system deficiencies for storage, fire flow, pumping, capacity etc. and develop a list of improvement projects needed for the future. The District's land use/parcel level GIS data along with the hydrant information will be used to flag fire flow nodes for demand allocation and model runs. Facility datasets received as part of the GIS database will help define the operational settings for running the system under various operational conditions. Other GIS data like maintenance records, topographic information, etc. will be used to identify rehab and replacement programs. Coordinating the District's CIP with other agency activities can be provided as it will not only help save money but also minimize public inconvenience associated with construction activities.

# Schedule

The schedule, included at the end of this section, shows our commitment to hit the ground running upon receipt of a Notice to Proceed. Our team is prepared to work on several tasks simultaneously and will implement our internal QA/QC program for every deliverable. We will keep this momentum throughout the course of the project to meet our commitments to the District.

# **Budget**

In accordance with your request, we have prepared an estimate of the fee for services as reflected in our Scope of Work, which is included on the next page. The base level budget includes all appropriate markups and costs. Based on our understanding of the services to be provided and our scope of work provided herein, our estimated budget for the master planning services requested is \$297,550.

In should be noted that we have included several scope items that are beyond the level of effort associated with a typical "update" – in particular statistical demand analysis, future projection GIS development and coverages, and other related deliverables. As such, if we have misunderstood the District's needs for these additional services, we can reduce our efforts on these task elements to a level commensurate with the District's base-level budgeted value. We look forward to meeting with you to discuss the specific scoping elements of the project and finalize a budget that is consistent with your vision and is mutually agreeable for all parties. The associated fee estimate breakdown is attached hereto.

CLIENT Name: Las Virgenes Municipal Water District
PROJECT Description: Potable Water, Recycled Water and Sanitation Master Plans
Proposal/Job Number: 10/1/2012

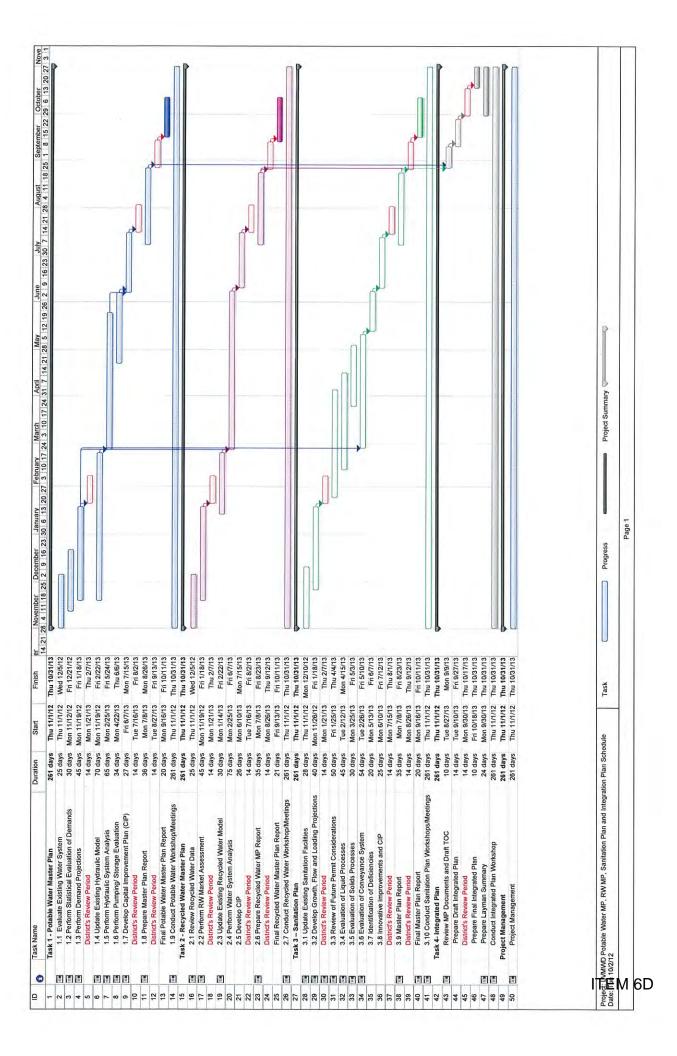
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Hourly Rate:	\$230	\$230	\$195	\$175 \$	5	5	\$30	Hours	Fees	Fees	1.4%	Fees					Fees
Task 1 - Potable Water Master Plan																	
1.1 Evaluate Existing Water System																	
1.1A Data Collection				9		10		16	\$2,300		0\$		\$0	\$2,300	05	30	\$2,300
1.1B Review Planning, GIS and Engineering Documents		2		10		16		28	\$4,210		0\$		80	\$4.210	So	05	\$4210
1.1C System's Operational Review Meeting with District		2		2				4	\$810	\$540	\$38	\$300	\$21	\$810	\$578	\$321	\$1 709
1.2 Perform Statistical Evaluation of Historical/Current Demands																	
1.2A Review Water Billing Data		2	4			80	Ĭ	14	\$2.240		30		So	\$2 240	08	S	42 240
1.2B APN/Billing Linkage; Develop Demand Model			01		24			8	\$5.430		80		So	\$5 430	08	9	\$5.430
1.2C Perform Regression Analysis			32			12		44	\$7.740		OS		OS.	87 740	9	5	67.740
1.2D Develop ET/ Water Use Factors			20			80		28	\$4,900		80		So	\$4,900	98	S	\$4 900
1.3 Perform Demand Projections		80	4	9	28	12		89	\$10,980	\$2.160	\$151		9	\$10,980	\$2311	9	\$13.791
1.4 Update Existing Hydraulic Model																3	107.014
1.4A Update Facilities				4		16		8	\$2,700		80		SO	\$2,700	So	S	\$2,700
1.4B Update Diurnal Patterns, Demands, Facitity Curves, Operational Settings etc.				4		24		28	\$3,700		80		So	\$3.700	So	S	\$3,700
1.4C Validate Model against SCADA Data		2		12		32		46	\$6,560		80		So	\$6.560	So	S	\$6.560
1.5 Perform Hydraulic Analysis																	
1.5A Perform Existing System Analysis			4	16		24		4	\$6,580		80		0\$	\$6,580	90	08	\$6.580
1.58 Perform Future System Analysis		80	4	30		09		102	\$15,370	\$2,160	\$151		So	\$15,370	\$2,311	20	\$17,681
1.6 Perform Pumping and Storage Evaluation		2	2	16		24		44	\$6,650	\$540	\$38		0\$	\$6.650	\$578	05	\$7,228
1.7 Develop Capital Improvement Plan (CIP)																	
1.7A Summary of CIP Projects		2 2		2		80		14	\$2,270	\$2,160	\$151		\$0	\$2,270	\$2,311	\$0	\$4,581
1.7B Prioritize and Rank		2		60		24		34	\$4,860		\$0		0\$	\$4,860	0\$	\$0	\$4,860
1.7C Develop Conceptual Costs		2 2		12		24		40	\$6,020		\$0		0\$	\$6,020	\$0	0\$	\$6,020
1.8 Prepare Master Plan Report											(in						
1.8A Prepare Draft Report		4	80	16	-	28 24	12	98	\$13,900	\$2,160	\$151	\$1,000	\$70	\$13,900	\$2,311	\$1,070	\$17,281
1.8B Prepare Final Report		2		10	=	80	9	32	\$4,530		So	\$2,000	\$140	\$4,530	\$0	\$2,140	\$6,670
1.9 Conduct Potable Water MP Workshops/Meetings (8)	32	01		32	-			2	\$12,960	\$2,160	\$151	\$500	\$35	\$12,960	\$2,311	\$535	\$15,806
Potable Water MP - PM/QAQC	4	20		12			16	88	\$17,340		\$0		0\$	\$17,340	\$0	\$0	\$17,340
Task 1 - Su	Subtotal 110	28	88	208	52	338 30	34	888	\$142,050	\$11,880	\$832	\$3,800	\$266	\$142,050	\$12,712	\$4,066	\$158,828
Task 2 - Recycled Water Master Plan								Ī									
2.1 Review Recycled Water Data								0	\$0	\$3,240	\$227		0\$	\$0	\$3,467	\$0	\$3,467
2.2 Perform Market Assessment & Supply vs. Demand Comparison								0	\$0	\$6,480	\$454		\$0	80	\$6,934	0\$	\$6,934
2.3 Update Existing Recycled Water Hydraulic Model								0	0\$	\$6,740	\$472		0\$	0\$	\$7,212	\$0	\$7,212
2.4 Perform Recycled Water System Analysis								0	0\$	\$7,660	\$536		S	0\$	\$8,196	\$0	\$8,196
2.5 Develop CIP								0	80	\$5,560	\$389		0\$	0\$	\$5,949	0\$	\$5,949
2.6 Prepare Recycled Water Master Plan Report								0	80	\$9,640	\$675	\$800	\$56	\$0	\$10,315	\$856	\$11,171
2.7 Conduct Recycled Water MP Workshops/Meetings (7)								0	\$0	\$6,440	\$451	\$500	\$14	0\$	\$6,891	\$514	\$7,405
Recycled Water MP - PM/QAQC	10	12					80	30	\$5,780	\$5,780	\$405		\$0	\$5.780	\$6,185	\$0	\$11,965
Task 2 - Su	Subtotal 10	12	0	0	0	0 0	80	30	\$5,780	\$51,540	\$3,608	\$1,300	\$70	\$5,780	\$55,148	\$1,370	\$62,298

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CLIENT Name: Las Virgenes Municipal Water District
PROJECT Description: Potable Water, Recycled Water and Sanitation Master Plans
Proposal/Job Number: 10/1/2012

Kennedy/Jenks Consultants

Free Fost		SOO P	CODCs   Code   Code	ODCs   12   12   12   12   12   12   12   1
E E M M E W N O W M M N	\$0	20 20 20 20 20 20 20 20 20 20 20 20 20 2	100   100	\$100



# December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

**Subject: JPA Compost Operation Information** 

#### SUMMARY:

Staff compiled a collection of studies and staff reports related to the Rancho Las Virgenes Composing Facility for your information. The collection provides a consolidated history of the efforts made at evaluating the JPA composting operation over approximately the last ten years, as well as recent efforts related to compost marketing and facility shutdown costs. Considering the volume of materials a separate binder of the documents is included with this agenda.

## **FINANCIAL IMPACT:**

There are no financial impacts related to the discussion of this item.

Prepared By: Doug Anders - Administrative Services Coordinator

## December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Rancho Las Virgenes Design of a Third Digester: Approval of Plans and Specifications and

**Call for Bids** 

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The LVMWD Board of Directors, acting as the administering agent, approved the plans and specifications for the Rancho Las Virgenes Third Digester Project; authorized a call for bids; and approved a contract with Kennedy/Jenks in the amount of \$11,000 for bid support services.

#### **SUMMARY:**

At the November 7, 2011 JPA meeting, the JPA awarded the design of a third digester at the Rancho Las Virgenes Composting Facility to Kennedy/Jenks Consultants. As part of their design services, Kennedy/Jenks was authorized to prepare plans and specifications for the proposed digester system. On September 4, 2012, District staff presented a progress report on the plan and specifications, and value engineering efforts taken at the 60% phase of design. The construction plans and specifications are now completed.

The proposed schedule will assure the project is complete by June 14, 2014:

Call for Bids

1st Advertisement

2nd Advertisement

November 26, 2012

December 3, 2012

Mandatory pre-bid job walk

December 12, 2012

Bid opening

Project award

Project completion

November 13, 2012

November 26, 2012

December 3, 2012

December 12, 2012

February 16, 2013

February 4, 2013

June 14, 2014

Additionally, Kennedy/Jenks Consultants, the design engineers for the project, submitted a proposal at the request of District staff, for bid support services. The estimated cost of service is \$11,000.00

# **FINANCIAL IMPACT:**

A total of \$3,531,418.00 was approved in the FY 12-13 budget. No additional funds are required at this time.

#### **DISCUSSION:**

The existing digesters have been in continuous service since the initial startup of the facility in 1993 and there is insufficient capacity to take either of the digesters out of service for cleaning and maintenance. Additionally, the digesters were originally designed for a loading rate of 80,000 gallons per day to achieve a 29 day solids retention time. Lately, Tapia has increased sludge production and is currently sending approximately 99,000 gallons per day to the digesters. The maximum allowable loading rate with two digesters is 120,000 gallons per day to assure a minimum 20 day solids retention time. To ensure that the required solids retention time is met and to provide the necessary redundancy for maintenance, the preliminary design report, received and filed by the JPA Board on April 2, 2012, recommended that a third 1.16 MG digester be constructed. The proposed digester will be a pre-stressed or cast-in-place, concrete tank similar to the existing two. Additionally, as part of the design for the proposed digester, upgrades will be made to the existing digester heating system. The digesters are currently heated by a steam injection system. This system, however, has partially failed; and the system cannot function using the waste heat from the cogeneration engine. The steam injection system will be replaced with a more efficient and retratile peat

exhanger system.

Prepared By: James Spicer II, Associate Engineer

## December 10, 2012 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Rehabilitation of 18-inch Recycled Water Pipeline from Tapia State Park to Camp David

Gonzalez: Approval of Plans and Specifications and Call for Bids

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The LVMWD Board of Directors, acting as the administering agent, approved the plans and specifications for the Rehabilitation of 18" REW Pipe Project; authorized a call for bids in accrodance with the project specifications and the proposed Bid Schedule at the November 13, 2012 meeting.

#### **SUMMARY:**

The 18-inch Recycled Water (REW) pipeline was installed in 1964. Eight leak repairs have occurred along this pipeline due to corrosion or poor mortar coating at joints. Five of the leaks were from Tapia State Park to Camp Gonzalez due to highly corrosive soil in the area. In 2004, a report was prepared by M.J. Schiff & Associates (now HDR/Schiff) recommending that cathodic protection (CP) be installed to extend pipeline life. In March 2008, Schiff prepared drawings and specifications for installation of a CP system on the 18-inch REW pipeline between the Tapia Water Reclamation Facility and Mulholland Highway. Due to the cost of bonding at every joint and lack of a redundant system to take the 18" REW out of service, this construction was postponed.

With the completion of the 24-inch REW pipeline in 2010 that provides system redundancy to the 18" REW, the District staff administratively approved a proposal from HDR in the amount of \$21,998.00 to modify the 2008 designs for the installation of CPs at the area where 5 leaks had occurred from Tapia State Park to Camp Gonzales. The scope also includes replacement of one 40-ft section of the 18" REW pipeline in Tapia Park. This section of the pipeline was observed to be badly corroded during the 24" REW pipeline construction. HDR completed the plans and specifications, and the proposed bid schedule is as follows:

Call for Bids	November 13, 2012
1st Advertisement	November 19, 2012
2nd Advertisement	November 26, 2012
Mandatory Pre-bid Job Walk	December 17, 2012
Bid Opening	January 9, 2013
Project Award	January 22, 2013
Project Completion	June 30, 2013

After completion of this project, electrical continuity for the rest of the pipelines of 18" REW will be confirmed, and cathodic protection can be added at relatively low cost to only the joints that have no electrical continuities.

### FINANCIAL IMPACT:

The FY 2012-13 budget provides funding in the amount of \$155,000 for this project under CIP Job No. 10418, Rehabilitation of 18" REW Pipe (Tapia/Mulholland Highway). No additional budget is required at this time.

Prepared By: Lindsay Cao, P.E., Associate Engineer