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MEMBER AGENCY OF THE METROPOLITAN WATER DISTRICT DESOUTHERN CALIFORNIA July 1, 2009

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

A Joint Powers Authority Meeting of the Board of Directors of Las Virgenes Municipal Water District and Triunfo Sanitation District is hereby called, and notice of said Meeting is hereby given for 5:00 p.m. on Monday, July 6, 2009 at Oak Park Library, 899 North Kanan Road, Oak Park, California 91377 to consider the following:

- Joint Powers Authority Business Meeting (Agenda Attached)
- 2 Adjourn

By Order of the Board of Directors JANNA ORKNEY, Chair

John R. Mundy

Administering Agent General Manager

Joint Powers Authority

c: Each Director

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.

JULY 6, 2009

5:00 PM

1.	CALL TO ORDER AND ROLL CALL		:- II. O I.D	a. 1 %	0 0 1 tu 5 u
	The meeting was called to order atp. called the roll.	.m. by	In the Oak Pa	ark Library and	the Clerk of the Board
	Triunfo Sanitation District		<u>Present</u>	<u>Left</u>	Absent
	Dennis Gillette Tom Glancy Janna Orkney – Chair Linda Parks Michael Paule				
	Las Virgenes Municipal District	Water			
	Joseph Bowman Charles Caspary – Vice Chair Glen Peterson Lee Renger Jeff Smith				
2.	APPROVAL OF AGENDA				
	Moved by, seconded by, a approved as presented/amended.	and	, that the ago	enda for the Ju	ly 6, 2009 meeting be
3.	PUBLIC COMMENTS				

Members of the Public may address the panel on items that do not appear on the agenda; and on items within the jurisdiction of the panel, providing that no action shall be taken on any item not appearing on the agenda unless authorized by Government Code Section 54954.2.

ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS 4. Legislative Update 5. CONSENT CALENDAR Minutes of the Las Virgenes - Triunfo Joint Powers Authority Meeting of April 6, 2009. APPROVE Moved by Director ____, seconded by Director ____, and ____, that the Consent Calendar be approved and adopted as presented. 6. **ACTION ITEMS** Alternative Biosolids Process Moved by Director____, seconded by Director____, and____, that the Board direct staff to prepare and issue a Request for Proposals to compare composting versus biosolids disposal at Toland Road Landfill or any combination thereof. В Future Joint Powers Authority Meeting Dates Moved by Director ____, seconded by Director ____, and ____, that the Board authorize the Administering Agent/General Manager to issue a cancellation notice for the August 3, 2009 Las Virgenes-Triunfo Joint Powers Authority Board of Directors meeting; and in observance of the Labor Day holiday, reschedule the September 7, 2009 Las Virgenes-Triunfo Joint Powers Authority Board of Directors meeting to September 14, 2009 in the Las Virgenes Municipal Water District Board Room. С Proposed Joint Powers Authority Budget for Fiscal Year 2009-10 Moved by Director_____, seconded by Director_____, and_____, that the Board adopt the proposed Joint Powers Authority budget for Fiscal Year 2009-10 as amended to include a \$92,000 budget for Biofilter Maintenance. Watershed Coordinator - Joint Powers Authority Support D Moved by Director _____, seconded by Director _____, and _____, that the Board renew Joint Powers Authority financial support for the Watershed Coordinator position at \$5,000 per Fiscal Year for three years, subject to annual Joint Powers Authority review (Fiscal Year 2010-11 and Fiscal Year 2011-12 budget cycles).

7. BOARD COMMENTS

8. FUTURE AGENDA ITEMS

9. NON-ACTION ITEMS

Information Items

- (1) Award of Bid for Janitorial Services
- (2) Call for Bids: Sodium Hypochlorite
- (3) Declaration of Surplus Equipment: Irrigation Pipe and Fittings
- (4) Los Angeles Regional Water Quality Control Board: Comments 2008 Updated List of Impaired Waters, Los Angeles Basin (§ 305(j) and § 303(d) of the Clean Water Act)
- (5) Offsite Biosolids Disposal during Compost Reactor Building Maintenance
- (6) Rancho Las Virgenes Compost Reactor Building Ceiling Repair: Approval of Engineering Services
- (7) Tapia Water Reclamation Facility BNR Phase I Project: Ratification of Change Order #5

10. CLOSED SESSION

11. ADJOURNMENT

MINUTES OF A MEETING OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY HELD ON APRIL 6, 2009

The governing board of the Las Virgenes-Triunfo Joint Powers Authority met in a Meeting at 4232 Las Virgenes Road, Calabasas, California 91302 at 5:00 p.m. on Monday, April 6, 2009.

Chair Orkney called the meeting to order at 5:03 p.m.

The Pledge of Allegiance to the Flag was given, led by Director Renger.

Clerk of the Board called the roll. Directors present were: Glancy, Orkney, Paule, Bowman, Caspary, Renger and Smith.

Directors not present: Gillette, Parks and Peterson.

The Chair declared a quorum present.

- Administering Agent/General Manager Mundy stated there were no changes to the agenda. It was moved by Director Bowman, seconded by Director Caspary and carried by a vote of Ayes: 7, Noes: 0; Abstain: 0; Absent: 3, that the agenda for the April 6, 2009 meeting be approved as presented.
- 3 Public Forum no speaker cards were received from the public.
- 4 Illustrative and/or Verbal Presentation Agenda Items

Director Parks arrived at 5:04 p.m.

A - Solar Project Summary - Principal Engineer Zhao recommended rejecting all proposals; directing Las Virgenes staff to continue negotiations with the United States Environmental Protection Agency related to deed restrictions resulting from the utilization of grant funds when acquiring a portion of the property at Rancho Las Virgenes Composting Facility and to continue tracking the solar market with information being presented to the JPA Board once a combined solar and transmission project is feasible.

Director Gillette arrived at 5:18 p.m.

Solar Project Summary – two Public Speaker Cards were received from (1) Freeman Hall and (2) Michael Stern. Freeman Hall discussed the revised proposal from Solar Electrical Solutions, which was provided to Las Virgenes and encouraged utilization of the company as they can assist Las Virgenes staff with negotiating existing land use restrictions at Rancho Las Virgenes Composting Facility with the Environmental Protection Agency. Michael Stern also with Solar Electrical Solutions and a customer of Las Virgenes spoke in support of the solar project.

- B Preliminary JPA Budget for FY 2009/10 Director of Finance and Administration Schmidt provided the JPA Board with an overview of the preliminary JPA Budget for fiscal year 2009/10.
- C Wholesale Recycled Water Options for Joint Powers Authority Partners Administering Agent/General Manager Mundy discussed the summary of recycled water pricing options. After a general discussion of pricing options presented no additional information was requested, nor was any action was taken by the JPA Board.
- 5 Consent Calendar It was moved by Director Bowman, seconded by Director Paule, and carried by a vote of Ayes: 9, Noes: 0; Abstain: 0; Absent: 1, that the Minutes of the Las Virgenes—Triunfo Joint Powers Authority Meeting of February 2, 2009, be approved and adopted as presented.

6 Action Items

- A Las Virgenes Triunfo Joint Powers Authority: Conflict of Interest Code It was moved by Director Parks, seconded by Director Glancy, and carried by a vote of Ayes: 9, Noes: 0; Abstain: 0; Absent: 1, that the JPA Board authorize the Administering Agent/General Manager to sign and execute on behalf of the JPA, the Declaration of Chief Executive Officer for Multi-County Agencies and Notice of Intention to Adopt or Amend a Conflict of Interest Code with the Fair Political Practices Commission.
- B Rancho Las Virgenes Compost Reactor Building Ceiling Repair: Approval of the Request for Proposals (RFP) It was moved by Director Renger, seconded by Director Glancy, and carried by a vote of Ayes: 9, Noes: 0; Abstain: 0; Absent: 1, that the JPA Board approve the Request for Proposals for the evaluation of the ceiling structure and provision of plans and specifications for the construction of the Rancho Las Virgenes Compost Reactor Building Ceiling Repair Project.
- Board Comments Director Caspary stated the he and several Las Virgenes staff members attended the Los Angeles Regional Water Quality Control Board meeting of April 2, 2009, which included a discussion of the Triennial Review and related basin plans.
- 8 Future Agenda Items None.
- 9 Information Items
 - (1) Modifications to Flow Diversion Structure on El Cañon Ave. Project: Award of Contract
 - (2) Rancho Las Virgenes Centrate Line Replacement Project: Approval of Engineering Services
 - (3) Tapia Water Reclamation Facility BNR Project: BNR Phase I Project Change Order 4; and Tapia Tank Rehabilitation (Flights and Chains): Authorization of Purchase Order
 - (4) Summary of Outside Funding Initiatives
- 10 Closed Session None.
- There being no objection the Chair declared the meeting adjourned at the hour of 6:05 p.m.

ATTEST:	Janna Orkney, Chair			
Charles Caspary, Vice Chair				
(SEAL)				

TO:

Board of Directors

FROM:

Facilities & Operations

Subject:

Alternative Biosolids Process

SUMMARY

At the June 1, 2009 Joint Powers Authority meeting, Mark Lawler, the General Manager for Ventura Regional Sanitation District gave a presentation on the biosolids project located at the Toland Road Landfill. The process takes Class B biosolids from local Ventura County cities and agencies and dries it using an indirect heat drying process. The resulting Class A material is then used for alternative daily cover. The Board requested that an economic study be performed to compare this process to composting at Rancho. Digestion and dewatering will have to continue at Rancho in order to produce the Class B material that would be trucked to Toland Road. Staff proposes to issue a request for proposals to perform the study.

The study will focus on the following areas:

- 1. A comparison of the unit cost to process the Class B dewatered biosolids by composting verses the VRSD method.
- 2. Capital costs associated with constructing truck loading and odor control facilities.
- 3. Costs associated with maintaining the stranded assets such as the amendment facilities, reactor building and cure building.
- 4. Possible uses for the reactor and cure building if composting ceases.
- 5. Identify necessary approvals and permits

The study could also consider the alternative of composting only a portion of the dewatered biosolids to support the give away program. This alternative will result in additional capital costs for facilities to split the dewatered biosolids between a truck loading facility and the reactor building. It would also change the economic analysis.

FINANCIAL IMPACT

There is no financial impact at this time.

RECOMMENDATION

 Direct staff to prepare and issue a Request for Proposals to compare composting versus biosolids disposal at Toland Road Landfill or any combination thereof.

David Lippman, Director of Facilities & Operations, prepared this report.

John R. Mundy Di Administering Agent/General Manager

TO:

Board of Directors

FROM:

JPA Administering Agent/General Manager

Subject

Future Joint Powers Authority Meeting Dates

SUMMARY

On May 18, 2009, the Triunfo Sanitation District Board of Directors voted to cancel their Regular Meeting of August 24, 2009. Historically, when this action is taken by Triunfo the Joint Powers Authority Board of Directors has opted to cancel their Special Meeting scheduled for the first Monday of August.

The first Monday in September is not only the Special Meeting date of the Joint Powers Authority Board of Directors, but also the official observance of Labor Day.

RECOMMENDATIONS

- Authorize the Administering Agent/General Manager to issue a cancellation notice for the August 3, 2009 Las Virgenes-Triunfo Joint Powers Authority Board of Directors meeting; and
- In observance of the Labor Day holiday, reschedule the September 7, 2009 Las Virgenes-Triunfo Joint Powers Authority Board of Directors meeting to September 14, 2009 in the Las Virgenes Municipal Water District Board Room.

FINANCIAL IMPACT

None.

Kimmey Conklin, Clerk of the Board prepared this report.

John R. Mundy

Administering Agent/General Manager

6/11/09 Date



TO:

Board of Directors

FROM:

Finance and Administration

SUBJECT: Proposed Joint Powers Authority Budget for Fiscal Year 2009-10

SUMMARY

The Proposed Joint Powers Authority Budget for FY09/10 is presented at the meeting for adoption. The Boards previously reviewed the preliminary budget on May 4, 2009 and there have been no significant changes. However, a \$92,000 budget for Biofilter maintenance was inadvertently left out. Therefore. Staff is recommending the Board amend the proposed budget to include this amount.

The proposed operating budget for FY09/10 is \$15.2 million, which is 4.5% higher than the adopted budget for FY08/09. This change is primarily due to higher energy and chemical costs that are already in place.

The proposed capital projects budget for FY09/10 is \$8.8 million, which is \$0.5 million lower than FY08/09 budget because the current budget included major projects at Tapia to comply with the NPDES permit and these projects are in their final phases.

RECOMMENDATION

Adopt the proposed budget for FY09/10 as amended above.

Sandra Schmidt prepared this report.

TO:

Boards of Directors

FROM:

Resource Conservation and Public Outreach

Subject:

Watershed Coordinator - JPA Support

SUMMARY

Since its inception in 1994, the JPA has participated on the Malibu Creek Watershed Advisory Council, a consortium of state and local government and non-government agencies with interests or jurisdiction in the watershed. The council's primary objective is to improve communication between stakeholders, especially on water quality issues and other water-related resource issues. Participation on the council is voluntary, and council actions only advance with 100 percent consensus.

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) has been the lead sponsoring agency for the Watershed Advisory Council for many years, hosting the council's meetings and website¹ and working with participating agencies to keep the council informed on their issues. Since 2003, the JPA and other local cities and organizations have voluntarily contributed towards the cost of an RCDSMM-hosted watershed coordinator, primarily to support advisory council business but also to engage in external fund raising and other support for JPA projects and partnerships (see Discussion).

As it has in the past, the RCDSMM has asked for a three-year co-funding commitment, subject to the JPA's annual budget review and approval process. JPA staff recommends continuing JPA support for the Watershed Coordinator position at \$5,000 per Fiscal Year for three years (current funding level).

RECOMMENDATION

 Renew JPA financial support for the Watershed Coordinator position at \$5,000 per Fiscal Year for three years, subject to annual JPA review (FY10-11 and FY 11-12 budget cycle).

FINANCIAL IMPACT

Funds for the Watershed Coordinator are included in the FY09-10 JPA budget (Watershed Account 751840.6785).

DISCUSSION

The Malibu Creek Watershed Coordinator has played an essential role in bringing together diverse interests within the JPA service area to engage in constructive dialogue on a broad spectrum of water resource issues through the Malibu Creek Watershed Advisory Council and other venues. The coordinator has been responsible for significant educational efforts including print² and electronic media³, public outreach on watershed issues⁴, native planting education^{5,6}

² Living Lightly Guide

6D

¹ http://www.malibuwatershed.org/)

participation in watershed enhancement programs⁷ and water conservation efforts⁸. The coordinator also organizes the agenda and speakers for Advisory Council meetings, and proactively works to maintain this venue as an important "sounding board" for emerging water quality and regulatory issues.⁹

The JPA's sponsorship of this position has provided proportionate benefits for JPA customers. Some examples from the current funding cycle (2007-09) include:

- GO WILD Nativescaping project (\$321,341 Prop. 50 Round 1, SMBRC PIE grant: \$14,324.75)
- The Clean Water Act and Our Backyards: Improving Water Quality in the Santa Monica Mountains (\$14,541)
- Living Lightly Guide update and reprint (\$46,304)
- The Water Runoff Conference 2008 (Pepperdine) (\$43,245)
- New Zealand Mud Snail Public Service Announcement: \$5,000
- Federal budget commitment for USACE Malibu Creek Restoration Feasibility Study: \$610,000

The coordinator position has also included JPA facilities in watershed tours for the public. The affiliated film A Watershed Experience: the Malibu Creek Watershed Tour 2004 aired on local cable television.

The JPA has been well-served by the Watershed Coordinator position and recommends continuing its support, subject to annual review by JPA staff during the FY10 and FY11 JPA budget cycle. While recognizing that this position is jointly funded by multiple public and non-profit agencies with diverse interests, staff recommend annual review of the coordinator's activities is to ensure that the position maintains a focus on JPA projects commensurate with its contribution.

Dr. Randal Orton, Resource Conservation Manager, prepared this report.

Carlos G. Reves

6/24/09 Date

Director Resource Conservation & Public Outreach

dohn R. Muhdy

Date

06/25/09

³ The Clean Water Act and Our Backyards: Improving Water Quality in the Santa Monica Mountains aired on local cable in 2007

⁴ 2008 Water Runoff Conference (Pepperdine University)

⁵ "Go Wild" Prop 50 grant funded Natives Plants gardens at Malibu High School, Webster School and A. E. Wright Middle School in Calabasas.

⁶ JPA garden class

⁷ The current coordinator serves as alternate on the IRWMP Leadership Committee for the north Santa Monica Bay Watersheds region.

⁶ In 2008 the watershed coordinator secured over \$35k in external funding for the Water Runoff Conference.

⁹ The watershed council continues to be the primary local venue for RWQCB staff presentations on draft water quality regulations, including TMDLs.

INFORMATION ONLY

July 6, 2009 JPA Board Meeting

TO:

Board of Directors

FROM:

Finance and Administration

SUBJECT:

Award of Bid for Janitorial Services

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The Las Virgenes Board, as the administering agent, awarded the contract of Janitorial services to Century Maintenance, Inc. in the amount of \$65,400 at their June 9, 2009 meeting.

SUMMARY

At the April 28, 2009 meeting, the Las Virgenes Board authorized a call for bids for the Janitorial services, which are provided to all district facilities. Our contract with Bell Building Maintenance (BBM) expired on May 31, 2009. Upon notification Bell Building Maintenance proposed an increase of \$641.19, or 11% increase per month for an additional contract year. Staff felt it was in the best interest of the district not to renew this contract with BBM and to go out to bid this contract. Bids were received and opened publicly on May 26, 2009. Staff proposed a one year contract with two one-year renewal options.

FINANCIAL IMPACT

Estimated annual cost to the district for Janitorial Service is \$65,400, of which \$35,465 is JPA's share. This will have annual savings of \$4,548 for the district or \$2,466 for the JPA. Funds are available in the current budget and will be proposed in future budget for this service.

DISCUSSION

Invitation for bid proposals was sent to fifteen service providers, six responses were received as follows:

	Proposed Amount		
Century Maintenance, Inc	\$65,400		
Star Brite Building Maintenance	\$69,420		
Empire Building & Environmental Services	\$74,076		
Bell Building Maintenance	\$78,204		
Executive-Suite Services Inc	\$115,080		
Continental Bldg. Maintenance	\$118,020		

Century Maintenance, Inc. Company was the apparent lowest responsible bidder. After reviewing the required documentation and verifying references, staff recommended the contract be awarded to Century Maintenance Inc. to provide janitorial services to all district locations.

Carmen Ripley, Senior Buyer prepared this report.

Sandra Schmidt

Date

Director of Finance and Administration

John R. Mundy

Date

Administering Agent/General Manager

9(1)

INFORMATION ONLY

July 6, 2009 JPA Board Meeting

TO:

Board of Directors

FROM:

Finance and Administration

SUBJECT:

Call for Bids for Sodium Hypochlorite

Las Virgenes - Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The LVMWD Board, as Administering Agent, authorized a call for bids at their June 23, 2009 meeting.

SUMMARY

At the June 23, 2009 meeting, the Las Virgenes Board approved the proposed bid schedule and the Notice Inviting Sealed Bids for the supply and delivery of sodium hypochlorite. The district uses sodium hypochlorite for the disinfection of recycled water at the Tapia Water Reclamation Facility (WRF). The current contract with Olin Chlor will expire on August 9, 2009 and there are no renewal options left on this contract. Therefore, it is necessary at this time to go out to bid this product once again. Staff is proposing a one-year contract with two one-year renewal option.

FINANCIAL IMPACT

Total estimated annual cost to the district for sodium hypochlorite is \$368,500 for the use at Tapia WRF. Funds are available in the current budget and will be proposed in future budgets for this product.

DISCUSSION

Bids will be requested according to the following schedule:

Board Authorization Tuesday, 06/23/09
First Newspaper Advertisement Monday, 06/29/09
Second Newspaper Advertisement Monday, 07/06/09
Bid Opening Tuesday, 07/14/09
Award of Contract Tuesday, 07/28/09

The successful bidder will be awarded the contract based on a combination of pricing, reliability and customer service.

Carmen Ripley, Senior Buyer prepared this report.

Sandra Schmidt

Date

Director of Finance and Administration

John R. Mundy

Administering Agent/General Manager

9(2)

TO:

Board of Directors

FROM:

Facilities & Operations

Subject:

Declaration of Surplus Equipment

Irrigation Pipe and Fittings

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The Las Virgenes Board, as the administering agent, authorized the General Manager to negotiate the sale of these items at their June 9, 2009 meeting.

SUMMARY

Currently, the District has a large supply of obsolete and/or damaged irrigation pipe and fittings previously used at the various recycled water spray fields and now stored at Rancho. The District has no need for the pipe and may realize some revenues by its sale. The Foundation for Pierce College has expressed interest in some of the pipe and fittings for use on the college farm. Other potential buyers include scrap dealers.

FINANCIAL IMPACT

Staff estimates the scrap value of the pipe and fittings at a total value of \$8,500.

Marsha Eubanks, Facilities and Operations Administrative Services Officer, prepared this report.

David R. Lippman

Date

Director of Facilities and Operations

John R. Myndy

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www.lvmwd.com

4EMBER AGENCY OF THE METROPOLITAN WATER DISTRICT PSOUTHERN CALIFORNIA

June 16, 2009

INFORMATION ONLY

Ms. Tracy Egoscue, Esq. Los Angeles Regional Water Quality Control Board 320 W. 4th Street, Suite 200, Los Angeles, California 90013

Subject: Comments - 2008 Updated List of Impaired Waters, Los Angeles Basin

Dear Ms. Egoscue,

On behalf of the Las Virgenes Municipal Water District and our Joint Powers Authority (JPA) partner Triunfo Sanitation District, we are pleased to provide our comments on the 2008 update of the Los Angeles Basin List of Impaired Waters pursuant to §305(j) and §303(d) of the Clean Water Act.

Since the last update in 2006, the JPA and other government and non-governmental agencies have invested substantial financial and staff resources to better understand the nature and sources of water quality impairments in the Malibu Creek watershed and other water bodies in our service area. As a result, the amount of available data on local water quality has grown substantially, including over 30 new sites sampled by multiple government and non-governmental organizations, in addition to data from special projects focused on specific water quality issues ranging from benthic macroinvertebrates to algal growth to endangered fish species. This new information provides an unprecedently detailed snapshot of water quality in local creeks and lakes, which we have used to assess the state 303(d) list update.

Suggested Revisions

<u>Table 1</u> (attached) lists our recommended changes to the state's draft update for specific listings. The majority of our recommended changes to the state update are related to proposed listings that appear to be unsupported by the data in the state decision lines of evidence (LOE), or where data relevant to their decision may have been overlooked. The one exception is our recommendation to list Cold Creek for invasive species, which is based on our understanding of the invasive potential of the New Zealand mudsnail found in 2008 for the first time in the creek's headwaters.

Note we are recommending that the Regional Board <u>not</u> list several water bodies currently listed or proposed for listings for metals (selenium), nutrients, organic enrichment, and specific conductivity. Our findings strongly suggest that natural sources are responsible for the observed exceedances of the water quality objectives and guidelines for these pollutants in the affected water bodies. See our discussion of geological impacts on local water quality below.



Lines of Evidence (LOE)

Lines of Evidence (LOE) for each JPA-recommended revision are provided electronically (separate submittal) in the same format as the state's draft update to facilitate their incorporation into the administrative record in the current listing cycle. Each JPA LOE is keyed to its respective state decision number.

The data used in the JPA LOEs derive primarily from three sources:

- NPDES permit monitoring data provide long time-series data (1978 2009) primarily from JPA monitoring stations located in the lower Malibu Creek watershed. Data QA/QC details are provided in JPA LOE 1 submitted electronically.
- Recent time series data (1998 2009) the upper watershed and nearby coastal streams were compiled from the Heal The Bay Stream Team website (http://www.healthebay.org/streamteam/data/chem/query/). Details are provided in JPA LOE 2 & 3, submitted electronically.
- Shorter but more recent timeseries data (2005 2007) were obtained from the Malibu Creek Watershed-Wide Monitoring Project, a Prop. 13 funded partnership of local cities and the JPA. Details are provided in JPA LOE 4 submitted electronically.

Other information sources consulted included:

- California Toxics Rule (CTR) data collected by the JPA
- USGS geological mapping (Yerkes & Campbell, 2000)
- Los Angeles County Hydro Unit Stream Gage records (F-130R)
- Peer-reviewed scientific and technical reports (footnoted where referenced)

Our review also included available datasets used in the state update pursuant to the CWA §305(j) biennial update requirement as an independent, JPA check on the state's listing decisions for the Malibu Creek watershed.

JPA staff also reviewed our comments on earlier 303(d) updates in 2002 and 2006 to determine which recommendations were addressed by the state and/or incorporated into the state's current draft update. Formal requests were submitted for both the 2002 and 2006 state updates to better document the 303(d) listing process, from source data to staff recommendation. We are pleased to report substantial progress by the state in this regard for the current 303(d) list update, although the traceability of pre-2006 listings remains extremely difficult.

Biostimulatory Substances – Potential Criteria

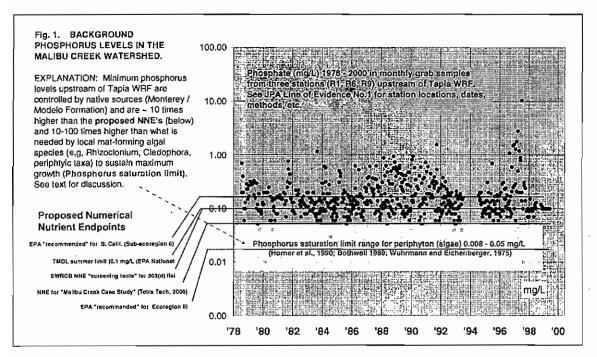
A long-standing problem throughout the country is how to translate narrative Biostimulatory Substances objectives into numerical thresholds – so called "Numerical Nutrient Endpoints, or NNE's - for quantifying the levels at which biostimulatory substances impair beneficial uses. Both the state and the US EPA have tried to provide

national, regional and sub-regional guidance on this issue, as referenced in the 2008 Update Staff Report in Tables 3-2 and 3-3¹. Some of this guidance is quite dated and/or unsupported by recent independent scientific peer review, and we therefore support the Regional Board's decision to defer adopting any of the potential criteria listed in Tables 3-2 and 3-3 in the current 303(d) listing cycle, pending further study by staff.

Nonetheless, we remain concerned that these criteria may be used in NPDES permits outside of the 303(d) listing process, or otherwise used to regulate JPA facilities. Our concerns center on three issues:

(1) Application of "guidance" criteria without adequate regard for site-specific, natural conditions at the watershed level.

Significantly, all five of the proposed NNE's for phosphorus in the staff report are exceeded in the Malibu Creek watershed, including the US EPA sub-ecoregional guidelines (Fig 1). Reference to the scientific literature on algal growth shows that these nutrient levels are consistently higher than that needed to support maximum growth in local mat-forming algal species (Fig. 1, saturation limit overlay).



In the following section and in our previous comments for the Triennial Review, we provide evidence that the nutrient levels observed in the Malibu Creek watershed do not fall below levels determined by natural sources of marine sedimentary phosphatic shale (Monterey Formation).

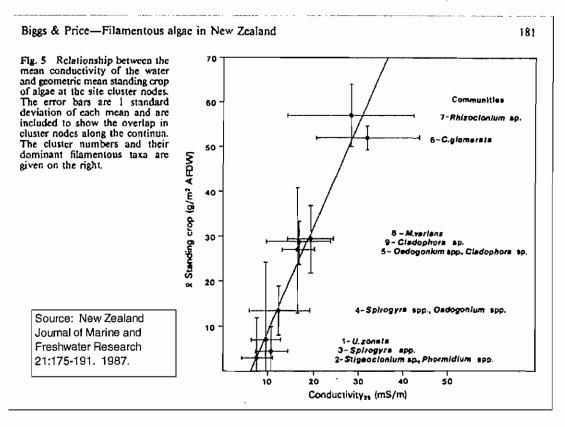
It is essential that the Regional Board acknowledge and address natural sources of nutrients, metals and salt within the current 303(d) listing cycle. Failure to do so may

¹ Note these two tables appear to have their titles reversed in the Regional Board staff report.

result in the subsequent promulgation of new regulations seeking to remedy water quality problems that are likely due to natural sources.

(2) Overly-narrow focus on phosphorus and nitrogen biostimulatory substances

For several decades regulators have focused almost exclusively on nitrogen and phosphorus compounds when applying and translating the biostimulatory narrative standard into water quality objectives. However, recent findings show that algal growth, particularly in those taxa responsible for the algal mats seen in local waters, is often better correlated with the specific conductivity of the waters in which they grow, with the highest growth seen in high conductivity waters (See Fig. 5 from Biggs and Price, 1987 below) ².



The precise mechanism behind this correlation is unknown³, although it appears to be independent of the particular ionic species that collectively contribute to overall water conductivity. Regardless, to date there have been five site-specific studies of algal growth in the Malibu Creek watershed; all five studies found better correlation of algal growth with specific conductivity. None of these studies were able to demonstrate a quantitative, <u>causal</u> relationship between "conventional" biostimulants – nitrogen and phosphorus – and algal growth, probably due to N and P levels in excess of that needed

² See our Triennial Review submission and associated electronic files regarding specific conductivity and

³ Potential mechanisms range from physiological advantages (e.g. better osmoregulation) to simple physical effects of saltier water (e.g. increased buoyancy = increased sunlight for attached algae that form floating algal mats).

for algal growth in the sites studied. This includes sites located in open spaces upstream of urban development.

(3) Recent scientific literature on saturation levels of biostimulatory substances in algae.

The fundamental premise to NNE's is that algal growth can be limited by reducing the concentration of at least one essential algal nutrient in a water body to a level insufficient to sustain maximum algal growth. The key question, then, is how low must one reduce nutrient levels in a water body to reduce algal growth? This is the so-called limiting nutrient concentration or numerical nutrient endpoint (NNE).

Most of the guidance-based biostimulatory NNE's cited in Table 3-3 of the Staff Report are correlative in nature, meaning they are based on various statistical measures of ambient nutrient levels found in relatively unimpaired freshwater streams and lakes. As regulatory remedies for excessive algal growth, these NNE's assume that nutrient levels in waters with low algal growth would also result in low algal growth if applied elsewhere⁴. The efficacy of this approach depends on two conditions; (1) that the NNE's can be met by controlling human nutrient sources and (2) that the NNE's, if met, are in fact capable of limiting algal growth. Our findings show that neither condition is met in the Malibu Creek watershed.

In our review we searched the scientific literature for laboratory and field studies on the limiting concentrations of nutrients for the specific algal taxa responsible for floating algal mats (e.g. *Cladophora* and *Rhizoclonium*) and bottom-coating algal films (periphytic diatoms) in the Malibu Creek watershed. Concentrations of phosphate of 0.714 mg/L and 0.12 – 0.47 mg/L were sufficient to sustain maximum growth in *Cladophora glomerata* and periphytic diatoms, respectively (Stevenson et. al., 1996; Taylor et al., 2001) ⁵.

As for the NNE's proposed by Regional Board staff in the Staff Report (Tables 3-2 & 3-3), these levels are consistently exceeded in the Malibu Creek watershed, including those locations upstream of all known point and non-point sources and presumably minimally impacted by human activities (see Fig. 1 and JPA LOEs 1-3). These levels are lower than all five of the NNE's proposed in the Staff Report.

We are not suggesting that the proposed NNE's are inappropriate for the entire Los Angeles basin. They may prove effective in those water bodies where algal impairments are related to algal species whose limiting nutrient levels are higher than the proposed NNE's, and where natural nutrient sources do not exceed these levels. We do note, however, that the algal species responsible for most occurrences of floating algal mats (e.g. Cladophora glomerata and Rhizoclonium sp.) are fairly widespread in the region, and can support sustained growth on relatively low levels of nutrients.

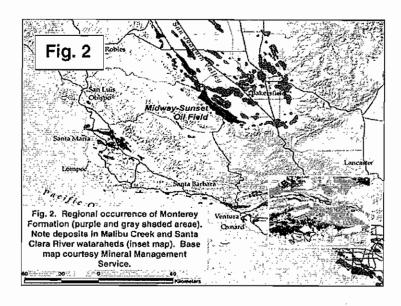
⁵Stevenson, R. J., M. Bothwell, and R. L. Lowe (eds.). 1996. *Algal Ecology: Freshwater Benthic Ecosystems* Academic Press, San Diego, CA.; Taylor, R.; Fletcher, R. L.; Raven, J. A.. 2001. Preliminary Studies on the Growth of Selected 'Green Tide' Algae in Laboratory Culture: Effects of Irradiance, Temperature, Salinity and Nutrients on Growth Rate. *Botanica Marina* 44(4): 327-336.

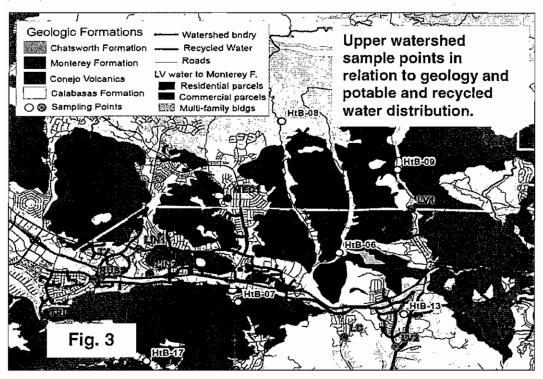
⁴ The sole exception is the US EPA National Guidance, which suggests NNEs of 1.0 and 0.1 mg/L for nitrogen and phosphorus respectively. However, this guidance is based on a very dated (1974) and simplistic desk-top estimate of the amount of N and P found in algae in relation to their amounts in treated sewage and other waters. It is not based on field work or laboratory study

Geological sources of 303(d) listed pollutants (nutrients, metals and salts)

Native geological sources of nutrients, metals and salts are well-known in the scientific literature (e.g. Isaacs & Rullkotter, 2001⁹), and their locations in the Los Angeles region

are documented in US Geological Survey and Mineral Management Service maps (Fig. 2). Yet neither the current Basin Plan nor any of the completed nutrient TMDLs for the Los Angeles region mentions this known source of metals (e.g. Selenium), biostimulatory substances (e.g. phosphorus, high specific conductivity), and high levels of total organic carbon (TOC).





Aside from its high salt content (responsible for the remarkably high levels of specific conductivity shown in Figs. 5 & 6, below), the majority of the biogenic compounds in the Monterey Formation are associated with unusually high levels of organic sediment derived from marine algae (diatoms). It should therefore come as no surprise that local streams fed by Monterey Formation-derived groundwaters are naturally enriched in algal nutrients such as phosphorus and nitrogen (Figs. 5 & 6), even in areas upstream of all known point and point sources (Fig. 3).

The effects of geology on surface water quality in southern California native streams was noted by Southern California Coastal Water Research Project staff in a regional study of presumably unimpaired natural reference streams that included Cold Creek and Cheseboro Creek in the Malibu Creek watershed (Stein & Yoon, 2007)⁶:

"The combined effect of geology and hydrology may also explain the higher nutrient fluxes observed in the natural streams in this study compared to nation-wide averages reported from a study by Clark et al. (2000). Clark reported total annual loading of nutrients from 85 natural stream basins across the United States, with a median annual basin flux of ammonia, total nitrogen, orthophosphate, and total phosphorus of 8.1, 86, 2.8, and 8.5kg/km2, respectively (Table 27). At four of the five sites from this study, nutrient flux was three to four time greater than the basin median value reported by Clark et al. The higher phosphorus loadings at the natural streams may have resulted from mineral weathering of phosphorus-enriched sediments. For example, the TP loadings at Santiago Creek, where the dominant geologic type is a marine sedimentary rock, were three times higher than the values recorded in the Clark et al. (2000) stream basin study."

[Emphasis by JPA]

In conclusion, the authors noted (p. 87) that,

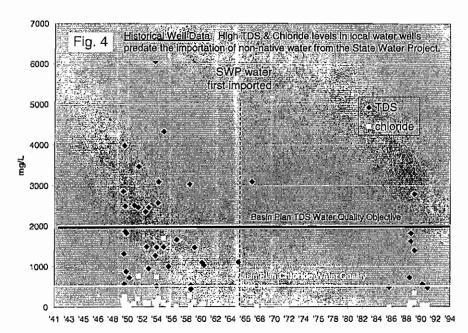
"Concentrations of several nutrients were higher than the USEPA proposed nutrient guidelines for Ecoregion III, 6. It is important to note that the ultimate approach for nutrient 88 criteria adopted in the State of California will likely differ from the approach used in the proposed EPA guidelines. Furthermore, the proposed guidelines were based on a combination of both wet and dry weather data. Nevertheless, this result indicates that background nutrient levels in southern California may be higher than in other portions of the country."

[Emphasis by Stein and Yoon]

It is also important to note that Stein and Yoon (2007) discussed potential geological effects in broad terms, noting that marine sedimentary rocks in general can contribute to high observed levels of TDS, nutrients and some metals. They did not specifically discuss Monterey Formation-fed streams, which show elevated levels of these pollutants significantly higher than the other marine sedimentary drainages in their study.

⁶ Stein, E. and V.K. Yoon. 2007. Assessment Of Water Quality Concentrations And Loads From Natural Landscapes. Southern California Coastal Water Research Project Report 500. Available at www.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/500_natural_loading.pdf

Several lines of evidence demonstrate that many of the proposed and existing 303(d) listings are due to this natural source. Historical water well logs often included basic water quality tests for total dissolved solids, conductivity and some metals. Well data from the Malibu Creek watershed show that Total Dissolved Solids (TDS) and chloride levels in excess of Basin Plan water quality objectives predate the importation of nonnative State Water Project water the majority of the region's development (Fig. 4)7.



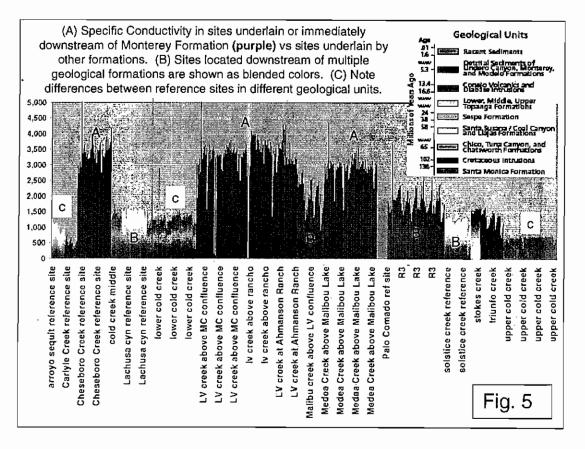
Two additional lines of evidence come from two independent studies of recent surface water quality monitoring results from sites located in undeveloped areas upstream of urban areas and potable and recycled water systems (See Fig. 3). In the Malibu Creek watershed these include creeks that lie within the Monterey Formation and immediately downstream of it (e.g. sites HTB-6, HTB-9 and LV-1), and also in similar undeveloped headwaters lying outside of the Monterey Formation (e.g. upper Cold Creek). Both datasets show that specific conductivity and phosphorus levels in the undeveloped Monterey Formation sites are substantially higher than similar sites in equally undeveloped areas underlain by other geology (Figs. 5-7)8.

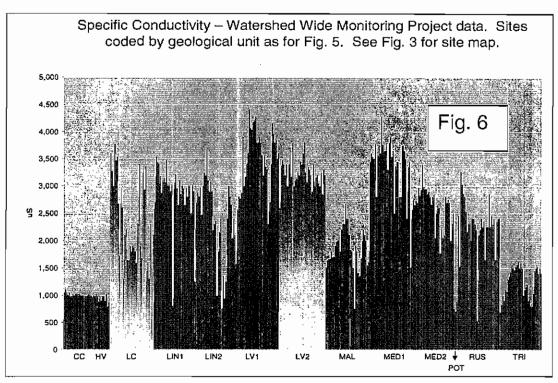
Aside from salts and nutrients, the Monterey Formation is a known source of sulfate and heavy metals (e.g. selenium) currently listed or proposed for listing in several tributary streams within the Monterey Formation or immediately downstream of it (see Table 1). Our CTR test results (Fig. 8) were consistent with this association, showing detectable levels of selenium and other metals known to occur in the Monterey Formation⁹, but nondetects for other organic compounds common in runoff from more developed areas 10.

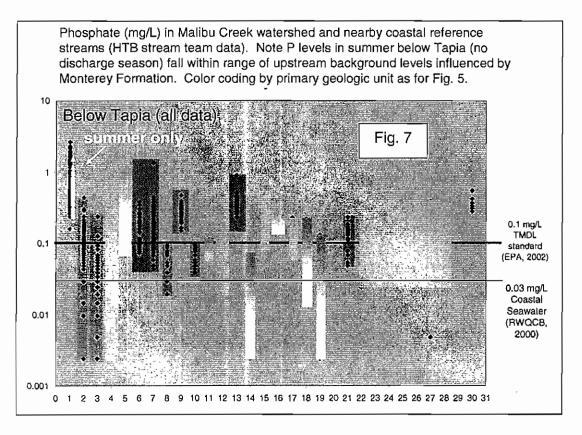
See JPA LOE No. 5 (historical well data - electronic submission)

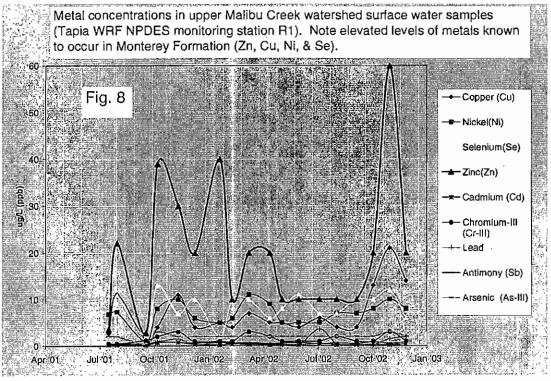
See JPA LOE No. 2-3 (Heal The Bay Streamteam® data) & JPA LOE No. 4 (Malibu Creek Watershed-Wide Monitoring Project data), submitted electronically.

⁹ Piper, D. Z and C, M. Isaacs. 2001. The Monterey Formation: Bottom-Water Redox Conditions and Photic-Zone Primary Productivity. In The Monterey Formation: From Rocks to Molecules. C.M. Isaacs & J. Rullkotter (eds). Columbia University Press. New York. 553 pp. ¹⁰ See JPA LOE 6 (CTR test results – submitted electronically)









Conclusion

In summary, the last decade has seen a substantial public investment in water quality monitoring in the Malibu Creek watershed and the JPA service area. We hope the Regional Board will carefully consider the findings presented here on the basis of these monitoring efforts, and incorporate these data and our recommendations for improving the accuracy of the state 303(d) list of impaired water bodies.

The JPA would welcome an opportunity to meet with your staff and other interested parties to review our findings, both with respect to the present 303(d) list update and the influence of native geology on local water quality. I am sure you can appreciate the need to fully vet these findings, particularly if they are to form the basis for specific listings or delistings in the 303(d) list, or to develop Site Specific Objectives (SSOs) for specific tributaries impacted by native geology.

As always, we appreciate the opportunity to comment. Please direct questions regarding our comments to Dr. Randal Orton in our Resource Conservation and Public Outreach Department. He can be reached at 818 / 251-2145 or via email at rorton@lvmwd.com.

Sincerely,

John R. Mundy General Manager

c. JPA Board of Directors

Attachments

z:/my documents 303d list comments

TO:

Board of Directors

FROM:

Facilities and Operations

Subject:

Offsite Biosolids Disposal during Compost Reactor Building Maintenance

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The Las Virgenes Board, as the administering agent, issued a purchase order to Synagro for offsite disposal of biosolids in the amount of \$41.75 per wet ton including \$2,500 for rental of the yard goat at their June 23, 2009 meeting.

SUMMARY

For the second time in 15 years, the Compost Reactor Building will be taken out of service in order to perform inspections of building structural materials, building maintenance and repainting of the agitators. In order to perform the work, staff solicited three quotes from biosolids land application or compost contractors. The guotes submitted for hauling and land application or composting of the biosolids are as follows:

Nursery Products

\$58.20 wet ton weekdays, \$65.20 wet ton weekends

Liberty Composting

\$44.30 wet ton \$41.75 wet ton

Synagro

Offsite biosolids cake hauling will begin on July 1, 2009, and continue until the inspections and maintenance work are complete, expected to be 90 days. In addition, Synagro will provide a yard goat for District use at a cost of \$2500 for 90 days.

FINANCIAL IMPACT

Expenses for offsite biosolids disposal are already included in FY 09-10 budget. The estimated hauling and disposal cost is \$110,000.

Jacqy Gamble, Management Analyst II, prepared this report.

David R. Lippman

Director of Facilities and Operations

John R. Mundy

TO:

Board of Directors

FROM:

Facilities & Operations

Subject:

Rancho Las Virgenes Compost Reactor Building Ceiling Repair:

Approval of Engineering Services

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The Las Virgenes Board, as the administering agent, accepted the proposal from Tectonics to provide engineering services for design of the Rancho Las Virgenes Compost Reactor Building Ceiling Repair in an amount not to exceed \$39,319 at their June 23, 2009 meeting.

SUMMARY

On April 6, 2009 the JPA approved a Request for Proposals (RFP) for the provision of engineering services to evaluate the ceiling structure in the reactor building at the Rancho Las Virgenes Compost Facility and to provide plans and specifications for the construction of necessary repairs. Serious corrosion has occurred on the ceiling structure in the "loading area" of the reactor building. In 2006, SGH structural engineers issued a letter report after evaluating the condition of the ceiling structure in the "loading area." In this report, it was determined that the trusses in the structure could not be properly recoated and it was recommended that the trusses be replaced with wide flange steel beams.

To properly evaluate the condition of the ceiling structure and develop plans and specifications for repair in the reactor building, an RFP was issued to qualified structural engineering firms. RFP's were sent to five consultant structural engineering firms, followed by an optional field tour of the facility. Two firms submitted proposals, which were reviewed by District staff.

Engineering Firm	Total Proposal Cost		
O'Connor & Associates	\$ 31,700		
Tectonics	\$ 39,319		

After evaluation of the proposals, Tectonics was selected as the top candidate for several reasons. Their proposal was technically complete, demonstrated a thorough understanding of the project, and adequately addressed all the issues of the RFP. Additionally, Tectonics has work experience in similar facilities, including previous work in the reactor building.

FINANCIAL IMPACT

The Fiscal Year 08-09 Budget provides funding for Rancho Las Virgenes: Compost Reactor Building Ceiling Repair under CIP Job #10391 in the amount of \$176,500.

Brett Dingman, Associate Engineer, prepared this report.

David R. Lippman

'Date

Director of Facilities and Operations

John R. Mundy

Date

TO:

Board of Directors

FROM:

Facilities & Operations

Subject:

Tapia Water Reclamation Facility BNR Phase I Project:

Ratification of Change Order #5

Las Virgenes-Triunfo Joint Powers Authority approved funding for this matter in the Joint Powers Authority Budget. The Las Virgenes Board, as the administering agent, ratified Change Order #5 for the Tapia WRF BNR Phase I Project in the amount of \$42,389.52 at their June 23, 2009 meeting.

SUMMARY

Change Order #5 was administratively approved for the Tapia BNR Phase I Project on June 8, 2009. This change order addresses three issues:

- 1. During construction staff discovered that aeration lines and drop legs in the feeder channels in BNR basins #3 and #4 have significant corrosion damage. After approximately 30 years, the existing galvanized steel piping is in need of replacement due to corrosion. These aeration lines are used to keep the mixed liquor in suspension and prevent it from attaining septic conditions in the feeder channels. Channel #3 and channel #4 each have approximately 160 feet of galvanized std. steel piping. There are 31 drop legs in channel #3 and 29 in channel #4. Staff requested quotes from the Contractor to supply and install the piping, valves and pipe supports and the District will supply the diffusers. The total cost for this work is \$33,962.00.
- 2. As a part of the ongoing Cathodic Protection program, the District also requested a quotation from Spiess to weld tabs on the forty eight swing-arm diffusers in the aeration basins to mount new sacrificial anodes. These new anodes were recommended by the District's corrosion consultant, Harper and Associates. The scope of work includes welding new tabs on each swing-arm and then re-coating the surface. The anodes will be mounted to the tabs by others. The total cost for this work is \$3,818.00.
- 3. As a part of the Tapia BNR Phase I contract, a control panel (CP-500) is to be demolished. Designated wires within the panel were called out to be re-routed. One set of motor control/feeder wires was not called out to be re-routed in the contract. These wires need to be re-routed to keep the transfer pump they power in operation. The proposed cost for this work is \$4,609.52.

The total cost for this change order is \$42,389.52. The costs for this change order were reviewed by District staff and consultants and deemed acceptable.

FINANCIAL IMPACT

The Fiscal Year 08-09 budget provides funding for 8 mg/L Nitrogen Compliance Tapia WRF under CIP Job #10184 in the amount of \$6,963,837. Construction costs spanning the 07-08 and 08-09 fiscal years are broken down as follows:

Centrate Treatment Project – Pascal & Ludwig (10379)	\$	1,827,596.00
Centrate Treatment Change Order #1	\$	16,241.40
Centrate Treatment Change Order #2	\$	10,546.00
Centrate Treatment Change Order #3	\$	3,832.00
Centrate Treatment Change Order #4	\$	18,539.00
Centrate Treatment Change Order #5	\$	34,777.00
Tapia BNR Phase I Project - Spiess Const (10378)	\$	3,245,770.00
BNR Phase I Project Change Order #1	\$	8,659.05
BNR Phase I Project Change Order #2	\$	48,394.50
BNR Phase I Project Change Order #3	(\$	8,665.00)
BNR Phase I Project Change Order #4	\$	7,040.57
BNR Phase I Project Change Order #5	\$	42,389.52
BNR Phase II Project - Spiess Const (10415)	\$	378,260.00
Pre-Purchased Jet Aeration System	\$	295,890.00
Pre-Purchased Swing Arm Diffusers	\$	361,915.00
Owner Furnished Internal Recycle Pumps	\$	108,200.00
Services During Construction – Boyle	\$	253,425.00
Services During Construction - MSO	\$	19,320.00
Services During Construction – Fugro	\$	7,000.00
Total Construction Cost		6,679,130.04

This project is a fixed based cost based on capacity rights in the treatment plant. As such, the cost split is 70.6% for LVMWD and 29.4% for Triunfo.

Brett Dingman, Associate Engineer, prepared this report.

David R. Lippman

Director of Facilities and Operations