



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

NOTICE OF REGULAR MEETING OF BOARD OF DIRECTORS

DATE: Wednesday, November 20, 2013

TIME: 7:00 p.m.

LOCATION: Zone 7 Administration Building

100 North Canyons Parkway, Livermore, California

Any member of the public desiring to address the Board on an item under discussion may do so upon receiving recognition from the President. After receiving recognition, please step to the podium and state your name and address.

In compliance with the Americans with Disabilities Act, the meeting room is wheelchair accessible and disabled parking is available at the Zone 7 Administrative Building lot. If you are a person with a disability and you need disability-related modifications or accommodations to participate in this meeting, please contact the Zone 7 Board Secretary, Judy Rector, at (925) 454-5053 or fax (925) 454-5724. Notification 48 hours prior to the meeting will enable Zone 7 to make reasonable arrangements to ensure accessibility to this meeting. {28 CFR 35.102-35, 104 ADA Title II}

A G E N D A

1. Call Meeting to Order
2. Pledge of Allegiance
3. Citizens Forum

This is an opportunity for members of the public to speak on an item not listed on the agenda. The Board cannot deliberate or take action on a non-agenda item unless it is an emergency as defined under Government Code Section 54954.2.

4. Minutes of the Regular Meeting of October 16, 2013
5. Consent Calendar
 - a. ACWA Officer Elections at ACWA Fall Conference
 - b. Professional Services Contract for Water Treatment Support and Investigation

6. Staffing Update:

September Employee of the Month Recognition

7. Renewal of Municipal Water Quality Investigations Program Agreement

Recommended Action: Adopt resolution.

8. Committees - Water Resources Committee, October 21, 2013 - notes
- Finance Committee, November 14, 2013 - pending

9. Reports - Directors
 - a. Verbal comments by President
 - b. Written report by Director Quigley
 - c. Verbal reports
10. Items for Future Agenda - Directors
11. Staff Reports (Information items. No action will be taken.)
 - a. General Manager's Report
 - b. Communications Outreach Activities
 - c. Legislative Update
 - d. Monthly Budget Report
 - e. Update Related to the Bay Delta Conservation Plan
 - f. Verbal Reports
12. CLOSED SESSION
 - (a) Conference with Legal Counsel -- Significant exposure to litigation pursuant to Gov't Code Section 54956.9(d) (2): 1 case.
 - (b) Conference with Legal Counsel -- Potential litigation pursuant to Gov't Code section 54956.9(d) (3): 2 cases.
 - (c) Conference with Labor Negotiators:
Agency Negotiator: G.F. Duerig
Employee Organizations: Alameda County Management Employees Association; Alameda County Building and Construction Trades Council, Local 342, AFL-CIO; International Federation of Professional and Technical Engineers, Local 21, AFL-CIO; Local 1021 of the Service Employees International Union, CTW; Unrepresented Management.
13. Open Session and Report Out of Closed Session
14. Adjournment
15. Upcoming Board Schedule: (All meeting locations are in the Boardroom at 100 North Canyons Parkway, Livermore, California, unless otherwise noted)
 - a) Special Board Meeting (if needed): December 4, 2013
 - b) Regular Board Meeting: December 18, 2013, 7:00 p.m.

Materials related to an item on this agenda that have been provided to the Board less than 72 hours prior to the meeting are available for public inspection at the Zone 7 office at the time of, and prior to, the meeting and at www.zone7water.com. All other material otherwise provided to the Board will be available at the public meeting.

MINUTES OF THE BOARD OF DIRECTORS
ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

REGULAR MEETING

October 16, 2013

President Stevens called the meeting to order at 7 p.m. The following were present:

DIRECTORS: SANDS FIGUERS
JOHN GRECI
AJ MACHAEVICH
SARAH PALMER
RICHARD QUIGLEY
ANGELA RAMIREZ HOLMES
BILL STEVENS

DIRECTORS ABSENT: NONE

ZONE 7 STAFF: JILL DUERIG, GENERAL MANAGER
KURT ARENDS, ASSISTANT GENERAL MANAGER, ENGINEERING
TOM HUGHES, ASSISTANT GENERAL MANAGER, ADMINISTRATION
ELKE RANK, ASSOCIATE WATER RESOURCES PLANNER
COLLEEN WINEY, ASSISTANT GEOLOGIST
JUDY RECTOR, BOARD SECRETARY

COUNSEL: DAVID ALADJEM, DOWNEY BRAND

Item 1 - Call Meeting to Order

Item 2 - Pledge of Allegiance

President Stevens led a salute to the flag.

Item 3 - Citizens Forum - None.

Item 4 - Minutes of the Regular Meeting of September 18, 2013

Director Ramirez Holmes noted corrections to the minutes including Page 4, a change in the wording to a sentence “she questioned why those were requested additions” in place of the wording “She feels the Principles of the Board are to control behaviors of Board Members.” The second correction was a change in the minutes to delete a reference to the way Director Quigley voted no with her but she corrected the minutes to reflect only her comments. In the third correction on Page 7, Item 13 (c), she thanked Linnea Allen, Water Resources Coordinator from City of Livermore, for a great event and asked that it be added to the minutes.

Director Palmer moved that the corrected minutes for September 18, 2013, be approved and Director Quigley seconded the motion. The minutes passed by a 7-0 voice vote.

Item 5 - Consent Calendar

Director Ramirez Holmes requested that Consent Items 5(e) and 5(f) be pulled. Director Palmer asked that Consent Items 5(c) and 5(d) be pulled.

Director Ramirez Holmes moved that Consent Items 5(a) and 5(b) be approved and Director Quigley seconded the motion. Both items were approved by a voice vote of 7-0.

Resolution No. 14-4311 Board of Directors approved amending the Zone 7 Water Agency Strategic Planning Priorities by adding language to develop long-term balanced management of watersheds and manage the watershed to maintain and improve source water quality to protect public health and safety. (Item 5a)

Resolution No. 14-4312 Authorized the General Manager to negotiate and execute a Lease Agreement with the City of Livermore for installation and Maintenance of a solar panel and antenna for Cal Water Turnout No. 7. (Item 5b)

Director Palmer referred to the Location Map, which was part of Consent Item 5(c) and asked if the landscaping would impede the trail but Mr. Arends confirmed it would not. Director Quigley moved to adopt the resolution and Director Ramirez Holmes seconded the motion, which was approved by the Board with a voice vote of 7-0.

Resolution No. 14-4313 Authorized the General Manager to negotiate and execute a License Agreement between the Dublin San Ramon Services District and Zone 7 for installation and maintenance of landscaping along the Line G-1-1 channel. (Item 5c)

Director Palmer asked if Item 5 (d) took into account the FEMA flood zone downstream of Del Valle dam. Mr. Arends replied that the purpose of the agenda item is public awareness of flood threats and preparing for flooding. Director Palmer noted that it would be good public awareness and education for South Livermore and Director Ramirez Holmes added for Pleasanton, too. There was discussion about the pamphlet attached to the agenda item and the Directors noted the web page listed on the flyer at FloodSAFE California: www.water.ca.gov/floodsafe/plan or www.water.ca.gov . Director Palmer moved approval of the resolution and Director Quigley seconded the motion. The motion passed with a voice vote of 7-0.

Resolution No. 14-4314 The Board resolved that Zone 7 will participate in California Flood Preparedness Week 2013 and expressed support for increased public awareness of flood threats, and encourage all Zone 7 residents to take action to know of flood threats and prepare appropriately. (Item 5d)

Director Figuers left the meeting at 7:05 p.m.

Director Ramirez Holmes referred to Clause No. 3, Financial Provisions (a) Costs of Services in Consent Item 5(e) that she had pulled. Director Ramirez Holmes asked if that means Zone 7 is not raising rates. Ms. Duerig explained that we do not currently provide flood protection

services to Dougherty Valley. The purpose of this section was to assure Contra Costa County that Zone 7 was not going to infringe upon the powers of or services provided or taxes collected by existing public agencies in Contra Costa County, it will be the same as everywhere else. Director Ramirez Holmes expressed concern that the language is unclear. Ms. Duerig said that it is a “Principles of Understanding.” At the time it was taken to Contra Costa, it was not proposed as anything but laying groundwork on how staff talks to staff. President Stevens said it outlines concepts, it is not a contract, and can be vague but the bottom line is it will not cost them any money.

Director Ramirez Holmes said in the introductory proposal issue it does not just say “flood” and on (d) Ballot Measures she does not understand the purpose for it because it will take away a voice if it is a freedom of speech issue. General Counsel David Aladjem clarified that public agencies don’t have freedom of speech like individuals do. Public agencies are very limited, particularly in the expenditure of funds, on any ballot measures that go before the voters and there are limitations on how you spend money. What Contra Costa County was looking for is for Zone 7 to not interfere with any activity they put on the ballot such as an increase in taxes, fees, assessments, etc. We can’t do that and this language acknowledges existing limitations rather than limiting free speech rights.

Director Palmer said that 2(b) (Contra Costa County Flood Control & Water Conservation District Services) addresses most issues. Director Quigley said he is uncomfortable with the way it is written, but since it doesn’t have any funding impacts and are just principles, he feels it should go forward.

Director Machaevich moved and Director Quigley seconded the motion to approve Resolution 14-4315. The motion passed by a voice vote of 6-0-1 with Director Figuers absent.

Resolution No. 14-4315	The Board authorized the General Manager to negotiate and execute the Principles in general conformance with the Draft Principles presented to the Zone 7 Board on this date and as an attachment to this agenda item. (Item 5e)
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Director Ramirez Holmes asked about the redlined items in the attachment to Consent Item 5(f) and is concerned that it says “The Board cannot represent or commit Zone 7 without action by the full board.” She re-read the Board Policy on Conducting Business and this is already in the policy because you cannot commit Zone 7 to anything. She thinks the word “represent” should be removed because the Directors represent Zone 7 all the time without authorization. After discussion by the Directors over the words “commit” and “represent,” Director Palmer suggested the wording should be “Cannot represent a position of the full board or commit Zone 7 without action by the full board.”

Director Palmer moved to accept the language as amended and Director Greci seconded the motion, which was passed by a voice vote of 6-0-1 with Director Figuers absent.

Resolution No. 14-4316	The Board approved the revised language amending the “Guiding Principles for Board Members” summarizing key principles in those policy documents. (Item 5f)
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Item 6 - Staffing Update

Ms. Duerig announced that Gerald DeWitt, Maintenance Manager, was chosen as the August 2013 Employee of the Month. Ms. Duerig noted his positive attitude and how he is always looking for better ways to operate and maintain the system. Because he has a T-5 and a D-5, plus maintenance experience, he is able to balance the needs of Maintenance and Operations. He has been recognized with several Zone 7 in-house awards. The Board applauded him in absentia.

Item 7 - Proposed 2014 Municipal and Industrial Water Connection Fee

Tom Hughes, Assistant General Manager, Administration, reminded the Board that the first reading for the Municipal and Industrial (M&I) Connection Fee was at the September Board meeting along with an explanation of the purpose of the connection fee. The basic fee is updated annually based on the Engineering News Record Construction Cost Index (ENR CCI) and has been re-evaluated every three years or sooner if needed. Reports and plans used in determining the fee are developed every five years. Staff recommends that the update interval be changed to every five years.

For the 2014 fees, staff recommends increasing the current fees by a 2.26% increase to keep pace with inflation and based on the change in the ENR CCI from September 2012 to September 2013.

Director Machaevich asked why the connection fees are different for the Zone 7 service area versus the Dougherty Valley service area. Ms. Duerig clarified that the developers purchased a big block of water rights so a lot of the water connection fee is based on acquiring new water but Dougherty Valley brought in their own allocation.

Director Greci moved for approval and Director Palmer seconded the motion. A roll call vote was taken and the motion was passed 6-0-1 with Director Figuers absent.

Resolution 14-4317 The maximum update interval for comprehensively evaluating the connection fee is changed from every three years to every five years. The Board amended the basic fee for a standard 5/8" meter within the Zone 7 service area to \$24,030 and within the Dougherty Valley Service Area to \$22,240, effective January 1, 2014, until the Board establishes a new basic fee for Zone 7. For meter types larger than the 5/8" basic meter, the basic charge shall be multiplied by a fee factor as described in Zone 7's Ordinance No. FC 0-91-68.

Item 8 - Environmental Compliance & Planning, As Needed Services

Ms. Duerig introduced Elke Rank, Associate Water Resources Planner in Integrated Planning. Ms. Rank explained that Zone 7 has a need for environmental compliance and planning support services to meet California Environmental Quality Act (CEQA) and regulatory requirements. Outside services are meant to supplement staff, provide additional support to meet regulatory deadlines or a biological restriction in order to get permits done, or if a particular expertise that is not available in-house is needed. CEQA, permitting, biological studies and surveys,

geomorphology and hydrology studies in support of particular projects, as well as monitoring and post-project reporting, are the categories needing additional support and services.

A Request for Proposals was sent to 14 consultants and staff reviewed the 9 that were submitted. Environmental Science Associates (ESA) was selected as the best qualified to provide the needed services.

Director Quigley discussed the opportunity for Zone 7 to partner with others like the Resource Conservation District (RCD). Ms. Rank explained that specific projects require employees with backgrounds with a lot of range and expertise, which ESA provides. She also said they are using RCD and NRCS for a current red-legged frog riparian habitat survey plus RCD does have some limitations such as they do not do mitigation monitoring.

Ms. Duerig added that there was an emergency project removing debris from a failed weir and for the first time an in-house person, Assistant Water Resources Planner Tami Church, was approved by the regulatory agency for biological monitoring. An emergency permit from the Army Corps of Engineers required resumes from qualified biologists. ESA submitted resumes, along with Zone 7 employee Tami Church's resume, and all were approved for working on the project.

Director Machaevich asked how the contingency fund is decided and if the same policies would be used to determine the use of funds. Ms. Rank replied that if there is an emergency, and it depends on what the project is, it has to be decided how it will be funded and the same policies would be used to make that decision.

Director Quigley moved and Director Machaevich seconded the motion to approve the contract with ESA. A roll call vote was taken and the vote was 6-0-1 with Director Figuers absent.

Resolution 14-4318 Authorized the General Manager to negotiate and execute a professional services contract with ESA for environmental compliance and planning services for FY 2013-14 for a not to exceed amount of \$215,000, with options for two annual renewals in amounts not to exceed \$215,000 annually, for a total 3-year amount of up to \$645,000.

Director Figuers returned at 8:10 p.m.

Item 9 - Chain of Lakes Preliminary Lake Use Evaluation and Related Issues

Ms. Duerig reported that a comment letter had been received from Marshall C. Wallace, of the law firm of Allen Matkins Leck Gamble Mallory & Natsis LLP, regarding the Chain of Lakes item on the agenda for this board meeting. The letter expressed a concern that at the recommendation of a member of the Water Resources Committee, recycled water storage had been tentatively shifted to primary use and Lakes F and G are the only two lakes that scored positively for this use. Mr. Wallace's client, The Pleasanton Gravel Co., objects to any use or storage of recycled water on or near their property.

Colleen Winey, Assistant Geologist in the Groundwater Section, presented a map of the Chain of Lakes' area and discussed the preliminary Lake Use Evaluation that refines the list of potential uses and the criteria of evaluation. She provided a summary for each lake rated by percentage

and identified it for primary uses (storage conveyance, groundwater recharge, stormwater detention, recycled water) or secondary uses (active recreation, passive recreation/education and habitat). A Lake Use Summary shows Cope Lake the highest rated for stormwater detention; Lake I rated the highest for groundwater recharge; Lake A rated the highest for education/passive recreation; Lake A rated the highest for habitat; and Lake F rated the highest for recycled water storage. The same information was given to the Water Resources Committee. Staff will come back to the Board in December with a draft plan for approval.

Director Palmer noted that these are scores for possible uses and not designating Lakes F and G for recycled water. President Stevens said that maybe by 2058 the water will be clean enough for storage and use for recycled water but the current method of cleaning recycled water now, and suggested it be a secondary not a primary use. Don Kahler said that the original agreement was for water storage and flood protection only and that recycled water storage is not an appropriate use for the Lakes. Director Quigley said we need to be aware of what other water districts are doing with cleansing and storing recycled water.

Director Machaevich said that if there is no place to store recycled water in the Chain of Lakes, then extra treatment and expensive storage tanks would be required. He is concerned about making recycled water use too expensive.

Ms. Duerig said recycled water is a critical component of the Valley's water portfolio and water recycling is how Zone 7 and the Retailers are going to meet the 20% by 2020 requirement of state law, along with water conservation, to reduce the per capita consumption of water. The MOU with DSRSD looks at opportunities for the storage of recycled water in the Chain of Lakes area but because Zone 7 is the groundwater manager, there is a balancing act involved with assuring groundwater quality is not impacted.

General Counsel David Aladjem said that hopefully in the next year or two, the Department of Public Health will develop standards and regulations for indirect potable reuse for recycled water, we will have the State's input and guidance on protecting the public's health, and we will be able to meet the 20% by 2020 standards.

Director Greci asked if the agreements with the mining quarries included recycled water. Ms. Duerig said the term "water" could be open to interpretation and could mean different types of water but we wouldn't do anything that didn't make sense for the groundwater basin.

Director Figuers said the transfer of the quarries to Zone 7 is the final reclamation under SMARA. Once it has been approved and accepted as final reclamation, the quarries are out of the picture but the contracts are separate. Don Kahler said if the lakes are not used, they get the property back. Ms. Duerig said each contract with the quarry owners is different but some contracts have reversionary clauses.

Director Quigley asked if all amendments ride on the original master mining agreement. There was a master mining agreement around 1976-77 with Mun Mar. Ms. Duerig clarified that a key document is the Specific Plan for the Livermore-Amador Valley Quarry Area Reclamation.

Margaret Tracy said you have to consider the future and the remarks she noted made by Herman Bouwer in the Zone 7 March Board meeting about contaminating groundwater with recycled water.

Ms. Winey discussed the Surface Mining Permits (SMP) that are subject to periodic reviews by Alameda County. SMP-23, issued to CEMEX, covers Lakes A and B. CEMEX has submitted an amendment to the SMP-23 plan which proposes modifications to both Lakes A and B. Zone 7 is assessing the impacts to our long-term operations and exploring options to address potential impacts could have on Zone 7 operations.

Director Palmer asked about the proposal to minimize the mining in Lake A and has it changed much since it was presented originally? Ms. Winey said they are not going to dig any deeper than their approved reclamation plan shows. Director Palmer expressed interest in getting more information on changes when Ms. Winey receives them.

President Stevens asked about compensation for going into the lower aquifer and, if it causes evaporation, receiving compensation. Ms. Winey said that under the current SMP, there isn't supposed to be mining into the lower aquifer.

Director Ramirez Holmes was focused on the outreach piece but did not see comments so she asked what the feedback was, specifically from the East Pleasanton Specific Plan Committee or the Retailers in response to criteria or uses. Ms. Winey said she has not received responses from the EPSP. Ms. Duerig said any comments received from the public are reflected in the minutes of the Water Resources Committee meeting and previous meetings but the three main categories of comments received are safety, flooding and DSRSD's concern to continue to evaluate opportunities for recycled water storage. Don Kahler said the Pleasanton City Council decided to do an EIR on the whole project and is not questioning trails, and that is possibly why they are not commenting.

Item 10 - Award of Contract for the DVWTP Caustic Soda Storage Tank Relining Project

Mr. Arends informed the Board that this project is part of a larger storage project that is being done by staff but this work needs to be done by a contractor. The work includes relining the caustic soda storage tank built in 1974 and as well as relining an alum tank that is no longer used so is being converted to a caustic soda storage tank. Both tanks will be cleaned and evaluated and the interior of the secondary containment structure will also be recoated. It is difficult to replace the tanks because of their location and it is more cost effective to reline and refurbish the existing tanks. The two tanks will double caustic soda storage and allow a longer time between chemical deliveries.

Two bids were received and the lowest bid was for \$215,500 from Picon FRP, Inc.

Director Greci asked if caustic soda can be stored outside and then pumped into the building. Mr. Arends replied that 50% caustic soda freezes at 55 degrees so it should be stored inside so the temperature can be controlled.

Director Palmer asked the projected lifespan of the tanks once refurbished. Mr. Arends replied it should add another 25 years and there will be a new shell built inside the tank so it is like a tank inside a tank.

Director Machaevich asked if that makes it easier for retrofitting in the future. Will it be easier in 25 years to retrofit again because of this design? Mr. Arends said the tanks' integrity will also be evaluated but this is an easier solution for these tanks for today.

Director Figuers asked about the concrete shell. Mr. Arends said they are pure fiberglass tanks with a concrete secondary structure so they will be coated as part of the hazardous materials requirements to withstand the chemical should there be a spill. Director Figuers inquired about the working life of a fiberglass tank. Mr. Arends said the tanks were put in 35 years ago and the caustic soda tank has reached the end of its design life. Ms. Duerig said that the alum tank and the caustic tank share a secondary containment but this is a win-win situation because Zone 7 is able to re-use a tank rather than eliminate it.

Director Machaevich asked about warranties on the tanks but was told the warranties are on workmanship. Is there a cost estimate to replace the tanks? Rhett Alzona, Senior Engineer, said the space is tight and the tanks would need to be cut up and probably new tanks made out of steel, which could quadruple the price over relining them.

Director Ramirez Holmes moved and Director Machaevich seconded the motion to award the contract to Picon FRP, Inc. A roll call vote was taken and the motion passed by 7-0.

Resolution 14-4319 The Board authorized the General Manager to negotiate and execute a contract with Picon FRP, Inc. in an amount not to exceed \$215,500 for the DVWTP Caustic Soda Storage Tank Relining Project along with change orders as needed in an amount not to exceed \$21,550.

Item 11 - Committees - Water Resources Committee, September 24, 2013 - notes
- Administrative Committee, October 10, 2013 - notes

Item 12 - Reports - Directors

- a. Verbal comments by President
- b. Written report by Director Quigley
- c. Other Directors' Verbal Reports

Director Palmer had a handout that she distributed regarding GRACast webinars. She also attended a meeting in Santa Clara on the Bay Delta Conservation Plan. Mark Cowin's main concern is to not have the reversal of river flows if the tunnels are put in the Delta.

Director Ramirez Holmes toured the Zone 7 demineralization facility on September 26 and the Stoneridge Drive Bridge construction and thanked Colter Andersen and Carol Mahoney for taking her on the tour. On October 2, she attended the Pleasanton Chamber of Commerce Barbeque for Elected Officials. On October 15, she attended a Pleasanton City Council meeting, which had the East Pleasanton Specific Plan EIR on the agenda. She thanked Colleen Winey for continuing to represent Zone 7 with this lengthy process. As Mr. Kahler mentioned, they are going to proceed with the EIR. No discussion around the limitations to the plans, trails and access to the lakes that are on the wish list but she said Zone 7's main focus is water.

Item 13 - Items for Future Agenda - Directors - none.

Item 14 - Staff Reports (Information items.)

- a. General Manager's Report
- b. Communications Outreach Activities
- c. Legislative Update
- d. Monthly Budget Report
- e. Verbal Reports

There were no verbal reports.

Director Ramirez Holmes referred to the Monthly Budget Report and said we are spending more than revenues in every fund except one and is this cause for concern? JaVia Green, Staff Analyst, explained it has to do with the seasonal aspect of revenues such as flood control maintenance, property tax revenue and water sales revenue.

Director Figuers asked about the Finance Committee on November 14th and why it was not listed as an upcoming meeting on the agenda and that it should be noted in the minutes. The meeting was scheduled after the agenda was finalized for the mailing prior to the October 16th board meeting.

The board went into closed session at 8:30 p.m.

Item 15 - Closed Session

- (a) Conference with Legal Counsel -- Significant exposure to litigation pursuant to Gov't Code Section 54956.9(d) (2): 1 case.
- (b) Conference with Legal Counsel -- Potential litigation pursuant to Gov't Code section 54956.9(d) (3): 2 cases.
- (c) Conference with Labor Negotiators:
Agency Negotiator: G.F. Duerig
Employee Organizations: Alameda County Management Employees Association;
Alameda County Building and Construction Trades Council, Local 342, AFL-CIO; International Federation of Professional and Technical Engineers, Local 21, AFL-CIO; Local 1021 of the Service Employees International Union, CTW; Unrepresented Management.
- (d) Conference with Real Property Negotiator:
Property: APN 946-1251-029-00.
Agency negotiator: G.F. Duerig
Negotiating party: Robert M. Krantz, Broker, North Pacific Coast Company
Under negotiation: Price and terms of payment.

Item 16 - Open Session and Report Out of Closed Session

The Board came out of Closed Session at 9:10 p.m. President Stevens stated there was no reportable action taken in closed session.

Director Palmer moved and Director Figuers seconded the motion to amend Appendix A, Footnotes to Salary Schedules, and it was approved by a voice vote of 7-0.

Resolution 14-4320 The Board approves the amendment to Appendix A, Footnotes to Salary Schedules Section 4.13 - Multiple Divisions (Assistant General Manager, Finance or Personnel) when assigned by the General Manager the responsibility to oversee more than one division shall receive 5 percent compensation below the total compensation of the Assistant General Manager, Engineering, including additional pay as provided in Section 4.12.

Item 17 - Adjournment

The meeting was adjourned at 9:12 p.m.



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

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ORIGINATING SECTION: ADMINISTRATION
CONTACT: JILL DUERIG

AGENDA DATE: November 20, 2013

ITEM NO. 5a

SUBJECT: ACWA OFFICER ELECTIONS AT ACWA FALL CONFERENCE

SUMMARY:

The Association of California Water Agencies (ACWA) is holding its Officer Elections for the upcoming 2014-2015 term. As in the past, ACWA requests that each member agency designate its voting representative.

This year, the ACWA Officer Nominating Committee has selected John Coleman of East Bay Municipal Utility District (EBMUD) as its candidate for President and Peer Swan of Irvine Ranch Water District as its candidate for Vice President. Floor nominations will be solicited for other candidates for both positions and a vote will take place.

Staff recommends naming a voting representative and endorsing John Coleman's candidacy for ACWA President. Draft resolutions have been prepared and are attached to:

1. Authorize Director Quigley, who serves on the ACWA Board, is familiar with the candidates and who is planning to attend the Fall Conference, to cast Zone 7's vote; and
2. Endorse EBMUD Director John Coleman's candidacy for president.

FINANCIAL:

There are no costs associated with this item since authorizing a director who is already attending the Fall Conference incurs no additional costs.

RECOMMENDED ACTION:

Adopt attached Resolutions.

ATTACHMENT:

Resolutions (2)

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO.

INTRODUCED BY
SECONDED BY

Designating Zone 7's Voting Member for ACWA's Officer Elections

WHEREAS, the Association of California Water Agencies (ACWA) has requested that each member agency designate a person to cast the agency's vote in its Officer Elections.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District designating Director Dick Quigley as its the Zone 7 Water Agency voting representative in the upcoming ACWA Officer Elections to be held at the 2013 ACWA Fall Conference.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on November 20, 2013.

By: _____
President, Board of Directors

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO.

INTRODUCED BY
SECONDED BY

Endorsing John Coleman's Candidacy for ACWA President 2014-15

WHEREAS, the Association of California Water Agencies (ACWA) is preparing for its 2014-15 Officer Elections at its 2013 Fall Conference; and

WHEREAS, John Coleman, member of the East Bay Municipal Utility District Board of Directors has been selected by the ACWA Nominating Committee to be placed on the recommended slate of officers as ACWA President for the term January 2014 through December 2015; and

WHEREAS, Zone 7 endorses Mr. Coleman's candidacy for ACWA President.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District hereby directs and authorizes Director Dick Quigley to cast the Zone 7 Water Agency vote for John Coleman as ACWA President and such other candidates as deemed appropriate at the time of voting.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on November 20, 2013.

By: _____
President, Board of Directors



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

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ORIGINATING SECTION: Operations

CONTACT: Colter Andersen

AGENDA DATE: November 20, 2013

ITEM NO. 5b

SUBJECT: Professional Services Contract for Water Treatment Support and Investigation

SUMMARY:

- During the summers of 2012 and 2013, filtration challenges were experienced at both the Del Valle Water Treatment Plant and the Patterson Pass Conventional Water Treatment Plant. These challenges resulted in frequent backwashes and reduced surface water production capacity resulting in more groundwater being used.
- Other treatment plants along the South Bay Aqueduct that utilize ozone as a preoxidant were able to manage the challenges much more easily than Zone 7's plants.
- Water Quality & Treatment Solutions, Inc. (WQTS) has conducted a number of water treatment studies for Zone 7 and is familiar with both our groundwater and our surface water treatment facilities. These studies have included:
 - A peer review on proposed Altamont Treatment Plant
 - A study of ozone alternatives for the two existing treatment plants
 - A study of chromium treatment alternatives and related costs (as part of a Water Research Foundation study)
- WQTS has also performed studies for other State Water Contractors and thus is very familiar with South Bay Aqueduct-specific source water challenges.
- To date, staff have been very satisfied with the services provided by WQTS.
- Given WQTS' knowledge of Zone 7's treatment facilities, the urgent need to identify solutions to the backwash-related challenges that have limited production at the Del Valle and Patterson Pass Water Treatment Plants' and WQTS' satisfactory performance to date, staff solicited a sole-source professional services proposal from WQTS. The resulting proposal is attached.
- Staff recommends authorizing the General Manager to negotiate and execute a one-year professional services contract with WQTS, for up to \$105,000, which covers the \$90,000 proposal plus a contingency of about 17%.

FUNDING:

Funding is available from Fund 110 – Water Enterprise.

RECOMMENDED ACTION:

Approve attached Resolution, authorizing the General Manager to negotiate and execute a professional services contract with Water Quality & Treatment Solutions, Inc., to provide professional services for up to \$105,000.

ATTACHMENTS: Resolution; Proposal

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS

RESOLUTION NO.

INTRODUCED BY
SECONDED BY

Professional Services Contract for Water Treatment Support and Investigation

BE IT RESOLVED that the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District does hereby accept the proposal from Water Quality & Treatment Solutions, Inc., to evaluate mitigation measures to improve filter performance at the Del Valle and Patterson Pass Water Treatment Plants; and

BE IT FURTHER RESOLVED that the General Manager is hereby authorized to negotiate and execute a contract with Water Quality & Treatment Solutions, Inc., to provide such professional services for the not-to-exceed amount of \$105,000.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on November 20, 2013.

By: _____
President, Board of Directors

November 7, 2013

Ms. Jill Duerig
General Manager
Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551

Subject: *Proposal to Evaluate Mitigation Measures to Improve Filter Performance at the Del Valle and Patterson Pass Water Treatment Plants*

Dear Ms. Duerig:

On behalf of Water Quality & Treatment Solutions, Inc. (WQTS), I am pleased to submit to you this proposal to work with Zone 7 staff on evaluating and implementing mitigation measures to improve filter performance at the Del Valle and Patterson Pass water treatment plants. This proposal includes the following:

1. Background & Objectives
2. Proposed Approach
3. Scope of Work
4. Schedule
5. Cost

1.0 BACKGROUND & OBJECTIVES

Zone 7 operates two surface water treatment plants: The Del Valle Water Treatment Plant (DVWTP) and the Patterson Pass Water Treatment Plant (PPWTP). DVWTP is a 44-MGD¹ conventional filtration plant with SuperPulsators® as pretreatment to filtration, followed by anthracite/sand media filters. Disinfection is achieved with chlorine before ammonia addition to form chloramine as water enters the distribution system. PPWTP has two parallel trains: one conventional 15-MGD² train that includes an upflow clarifier, followed by media filtration, chlorination, and ammonia addition. The second portion is a 9.5-MGD³ train that includes an upflow clarifier, followed by membrane ultrafiltration (UF), chlorination, and ammonia addition.

Both plants treat water that originates mostly from the Sacramento-San Joaquin Delta and transported to the plants via the South Bay Aqueduct (SBA). PPWTP draws water from Patterson Reservoir, which is virtually an impoundment on the SBA (see Figure 1), while DVWTP draws water directly from the SBA. However, as part of the State's water supply management, the Department of Water Resources (DWR) frequently releases water from Lake Del Valle into the SBA at a location

1 Production capacity of 40 MGD, plus 4 MGD of recycled washwater.

2 Production capacity of 13.5 MGD, plus 1.5 MGD of recycled washwater.

3 Production capacity of 9 MGD, plus 0.5 MGD of recycled washwater.

upstream of the DVWTP takeoff on the SBA. Therefore, influent water to DVWTP is either 100% Delta water, or a blend of Delta water and Lake Del Valle water. Lake Del Valle water represents a mix of SBA water pumped into the Lake during the rainy season, and local runoff water.

In 2011, DWR completed the construction of Dyer Reservoir, which is a 450 Acre-Foot (AF) storage reservoir adjacent to the SBA along Dyer Road (see Figure 2). The reservoir was built as an expansion to the SBA to help buffer diurnal fluctuations in water demand. Water is pumped from the SBA into Dyer Reservoir during off-peak hours (nighttime), and released into the SBA during daytime hours. Dyer Reservoir is upstream of both PPWTP and DVWTP along the SBA, and therefore, any water quality changes in SBA water caused by Dyer Reservoir affects both PPWTP and DVWTP.



Figure 1 – Patterson Reservoir



Figure 2 – Dyer Reservoir

In recent years, both PPWTP and DVWTP have experienced a significant decrease in media filter runtimes. During the summer of 2013, filter runtimes were so short that neither plant could produce sufficient water to meet the demand, forcing Zone 7 to rely heavily on its groundwater supply. Zone 7 operations staff indicated that the deterioration in filter performance appears to have begun when Dyer Reservoir was brought into operation, and may be due to the introduction of elevated levels of algae into the SBA. It is noted that Dyer reservoir is less than one mile from the Altamont Landfill, and a large number of birds congregating at the landfill also land in the reservoir in high numbers. It is not known if this significantly impacts the quality of water in the reservoir.

Downstream SBA users (i.e., ACWD and SCVWD) indicated that they too have been experiencing a decrease in filter runtimes, but the impact has been small. However, both agencies use ozone for peroxidation upstream of the media filters. PPWTP and DVWTP do not currently employ peroxidation of the influent water because the only oxidant available at both plants is chlorine, and its use as a preoxidant would cause an unacceptable increase in the levels of Disinfection By-Products (DBPs) in the distribution system. Zone 7 staff wants to identify and implement a non-chlorine preoxidation strategy at each treatment plant to avoid the same problem with short filter runtimes from occurring next summer when the water demand is high.

The objective of the effort proposed herein is two fold:

1. *Design and implement a monitoring program that helps validate the assumption that the deterioration in filter performance is caused by changes in the quality of the raw water entering each plant.*
2. *Identify and implement full-scale mitigation measures at both plants to help minimize the deterioration in filter performance.*

This proposal includes the planned approach, scope of work, and cost of WQTS' activities.

2.0 PROJECT APPROACH

WQTS proposes to conduct this project in two phases. During Phase 1, WQTS will analyze past performance data and develop a monitoring plan for 2014 that closely tracks plant performance. During Phase 1, WQTS will also evaluate three alternative mitigation measures, and recommend one or more for full-scale implementation in advance of Summer 2014. Phase 1 activities will be concluded by end of February 2014.

During Phase 2, Zone 7 will implement the monitoring plan and the mitigation measures identified under Phase 1 (assuming they are agreeable to Zone 7). During this Phase, WQTS will also receive and analyze the monitoring data collected by Zone 7 staff throughout 2014, and frequently meet with Zone 7 staff to discuss the monitoring results and take any corrective measures along the way. At the end of the monitoring effort, WQTS will then prepare a comprehensive report that documents the mitigation measures implemented and their impact on plant performance.

The following are more detailed discussions of the activities to be conducted and the three mitigation measures to be evaluated under Phase 1.

Document Filter Performance Challenges – Short filter runtimes can be caused by a number of factors such as increased headloss rise rate, early turbidity breakthrough, higher filtration rates during high demand periods. For this reason, comparing runtimes can be misleading, as it does not define the actual symptom encountered. WQTS proposes to obtain online data from the SCADA system at both plants and analyze the data within the context of identifying the specific symptom encountered during the period of short filter runtimes experienced over the last couple of years. The data will be normalized to the flowrate through the filters in order to allow for a comparison of the results under different flowrate conditions. The results of the analysis will be summarized in a Technical Memorandum.

Design and Implement a Monitoring Program – It is important to verify the hypothesis that filter performance challenges are caused by biological changes in SBA water caused by Dyer Reservoir. To achieve this objective, WQTS will design a biological monitoring program aimed at quantifying and typing the algal species upstream and downstream of Dyer Reservoir, as well as in the influent to the treatment plants and in their settled waters before chlorine addition. The reason for monitoring the settled waters at both plants is that algae may be growing to high numbers in the clarifiers since no chlorine is maintained through them. If this assumption is confirmed, then mitigation measures at the clarifiers may be implemented to help reduce the impact on the downstream filters.

Evaluate & Implement Mitigation Measures – Three primary alternative mitigation measures will be evaluated:

Alternative 1 – Add chlorine dioxide, ClO_2 , to the raw water as a preoxidant with the goal of inactivating algae cells in the water entering the treatment plant and preventing them from growing in the clarifiers. Aside from ozone, chlorine dioxide is a powerful oxidant that is used in drinking water treatment. The challenge with the use of ClO_2 is that it generates chlorite, ClO_2^- , as a by-product. Chlorite is a regulated by-product with a primary MCL of 1.0 mg/L. In general, for every 1 mg/L chlorine dioxide added to water, approximately 0.7 mg/L chlorite is formed. This basically limits the chlorine dioxide dose to a maximum of 1.0 mg/L in order to maintain the chlorite concentration comfortably below the MCL. Compliance with the chlorite MCL is required at the treatment plant effluent. CDPH classifies a violation of the chlorite MCL as a Tier 1 violation, which requires a 24-hr public notice. This is a substantial burden and a significant factor to consider when evaluating this alternative. On the other hand, the advantages of using chlorine dioxide are two fold: First, it is effective at algae control without forming THM or HAAs. Second, low levels of chlorite in chloraminated distribution systems has been shown to reduce the occurrence of nitrification. To that end, the use of chlorine dioxide at DVWTP or PPWTP should help reduce nitrification in the retail agencies' reservoirs and distribution systems. In addition, Zone 7 may be able to obtain disinfection credit with chlorine dioxide across the clarifiers if a residual is maintained through them. This can greatly increase the CT credit at the two plants and provide added flexibility with the chlorine CT.

Alternative 2 – Add copper sulfate, CuSO_4 , to the raw water entering the treatment plant. Similar to the use of CuSO_4 at water reservoir for algae control, adding CuSO_4 to the plant influent should suppress algae growth in the clarifiers and over the filters. The CuSO_4 dose needs to be above that required to control algae growth, but low enough to maintain Cu levels in the treated water well below the drinking water limit for Cu. It is important to also consider the impact of Cu on the wastewater agency. Many wastewater treatment plants have discharge limits for metals, including Cu, at levels well below drinking water limits.

Alternative 3 – Cover the clarifiers with floating balls. Floating balls, also referred to as bird balls or shade balls, are used in open water bodies for various reasons. They are commonly called bird balls because they are used on water bodies near airfields to prevent birds from nesting in the waters and become a hazard to airplanes. They are also used by the Los Angeles Department of Water & Power to cover their open finished water drinking reservoirs in order to prevent the formation of bromate caused by the interaction between sunlight, chlorine, and bromide. They are also used in industrial plants to prevent heat loss from open tanks. Finally, they are also used by some water agencies to cover a plant's forebay and prevent algae growth. The advantage of using these balls as a mitigation measure is that they no operational or maintenance needs such as the other measures. There is no chemical being added to the water, and no risk of forming any by-products.

3.0 SCOPE OF WORK

3.1 Phase 1 Scope of Work

The following tasks will be conducted during Phase 1:

Task 1.1 – Collect & Analyze Online Data from the two Plant's SCADA

Task 1.2 – Develop Monitoring Plan

Task 1.3 – Evaluate Chlorine Dioxide Alternative

Task 1.4 – Evaluate Copper Sulfate Alternative

Task 1.5 – Evaluate Floating Balls Alternative

Task 1.6 – Progress Meetings

The following are descriptions of the activities to be conducted under each of the tasks listed above.

Task 1.1 – Collect & Analyze Online Data. The objective of this task is to document the specific symptoms experienced during the short filter runtime episodes experienced during the last five years. Specifically, WQTS will work with Zone 7 staff to download comprehensive data on flowrate, chemical doses, headloss through individual filters, turbidity profiles in the effluents of individual filters, and similar information. The data will be analyzed within the context of identifying distinguishing characteristics between the times when the plant was operating with normal filter runtimes and when it was experiencing shorter-than-usual filter runtimes. WQTS will prepare a Technical Memorandum summarizing the outcome of the data analysis effort.

Task 1.2 – Develop Monitoring Plan. In this task, WQTS will develop a draft monitoring plan to be implemented by Zone 7 staff. The draft monitoring plant will include water quality sampling at multiple locations starting upstream of Dyer Reservoir and ending in the settled water at each of PPWTP and DVWTP. The Plan will identify the sampling locations, sampling frequency, and the analyses to be conducted on each sample. Upon receipt of comments from Zone 7 on the draft monitoring plan, WQTS will finalize the plan and submit it to Zone 7 for implementation.

Task 1.3 – Evaluate Chlorine Dioxide Alternative. In this task, WQTS will gather information on conventional and new ClO₂ generation technologies. Conventional ClO₂ generators use chlorine gas and sodium chlorite, NaClO₂, to generate chlorine dioxide. Other technologies generate chlorine dioxide with a combination sodium chlorate, NaClO₃, hydrogen peroxide, H₂O₂, and sulfuric acid, H₂SO₄. WQTS will gather information on these and other ClO₂ generation systems, their costs, and their implementation requirements. WQTS will also obtain raw water samples from either DVWTP or PPWTP and conduct bench-scale testing to determine the ClO₂ demand of the water. This test will help determine how long the chlorine dioxide will last in the water when applied at different doses, and how much chlorite will form at each dose. WQTS will then summarize the outcome of the analysis and the bench-scale testing in a Technical Memorandum and present them to Zone 7 staff in order to decide if the chlorine dioxide alternative will be carried forward for full-scale testing, and determine which of the generation systems will be tested.

Task 1.4 – Evaluate Copper Sulfate Alternative. In this task, WQTS will gather information on the use of copper sulfate, CuSO₄, for algae control in various applications. Zone 7 is familiar with the application of CuSO₄ for the control of algae blooms in raw water reservoirs. However, there is little information on its controlled and continue addition to water treatment systems to control algae growth. WQTS will search for information on such applications. From the drinking water side, the limit on copper at the consumer tap is 1.3 mg/L as defined by the Lead-and-Copper Rule (LCR). In addition, copper has a secondary MCL of 1.0 mg/L. Therefore, the copper dose anticipated is likely to be around 0.5 mg/L. WQTS will also evaluate the copper discharge limits for the City of Livermore's wastewater treatment plant and the Dublin San Ramon Services District (DSRSD) to determine if the addition of CuSO₄ to either PPWTP or DVWTP at the anticipated dose range has the potential to cause either wastewater system to exceed its discharge limit. WQTS will identify suppliers of NSF60-certified CuSO₄ and solicit cost information from them. WQTS will summarize its findings in a Technical Memorandum and present the information gathered to Zone 7 staff and determine if this alternative should be tested at full-scale, and how to configure it.

Task 1.5 – Evaluate Floating Balls Alternative. In 2007, WQTS obtained information on the use of shade balls in various applications and their cost. WQTS will update its supply and cost information for this effort. With the adoption of the Waterworks Standards, it is important to identify suppliers of NSF-61 shade balls. WQTS will also evaluate any limitations to the use of the shade balls in the clarifiers of either plant with specific emphasis on whether the balls will cause any hydraulic limitation on the operation of the clarifiers. WQTS will summarize the findings in a Technical Memorandum and present them to Zone 7 staff and discuss whether this alternative will be carried forward for full-scale evaluation at either plant.

Task 1.6 – Progress Meetings. Two meetings are anticipated in Phase 1. The first meeting will take place at the start of the project to discuss the planned alternatives with Zone 7 staff and plan the anticipated monitoring effort. The 2nd meeting will coincide with the completion of the individual alternatives evaluation tasks so that the outcome of each is presented to Zone 7 staff. During this 2nd meeting, WQTS and Zone 7 staffs will discuss and decide which alternative(s) to implement at DVWTP and PPWTP.

3.2 Phase 2 Scope of Work

The following tasks will be conducted during Phase 2:

Task 2.1 – Analyze Monitoring Results

Task 2.2 – Conduct Progress Meetings

Task 2.3 – Prepare Technical Report

Task 2.1 – Analyze Monitoring Results. As a placeholder, it is assumed that the monitoring will begin in January 2014 and continue through the summer season when the filter performance challenge is likely to be experienced. During the course of the monitoring effort, WQTS will receive the monitoring results on a monthly basis, consolidate them, and analyze them within the context of tracking water changes as the water travels to and through the treatment plants.

Task 2.2 – Progress Meetings. A total of three progress meetings are anticipated in Phase 2. The first meeting will coincide with the near completion of the installation of the mitigation measures at each plant. The 2nd meeting will take place in the middle of the challenge period (July – August), and the 3rd meeting will coincide with the completion of the draft Technical Report.

Task 2.3 – Prepare Technical Report. At the completion of Phase 2 tasks, WQTS will assemble all the data and information gathered during Phase 1, as well as the findings of any testing conducted during Phase 2, and present them in a Technical Report to Zone 7. The report will also include recommendations for permanent full-scale implementation of the most viable mitigation measure.

4.0 SCHEDULE

Figure 3 includes a projection of the anticipated schedule for both phases of the project. Assuming that Zone 7 will provide WQTS with a Notice-to-Proceed by the end of November, WQTS will begin Phase 1 work on December 1, 2013, and will complete all Phase 1 tasks by the 2nd half of February 2014. Task 1.1 (Online Data Analysis) will be completed in December 2013. Task 1.2 (Monitoring Plan) will be initiated by the middle of December, and the draft Plan will be submitted by the middle of January 2014. Assuming a two-week review period by Zone 7, the final Plan will be

completed by the middle of February. Tasks 1.3, 1.4, and 1.5 (Evaluation of the three alternatives) will be initiated in December 2013, and will be completed by the end of January 2014. At that time, the first progress meeting will be held. During that meeting a decision will be made on which mitigation measure to implement at each of the two plants.

Phase 2 will begin on March 1st, 2014, and will be completed by the end of December 2014 when the Final Project Report will be submitted to Zone 7. Task 2.1 (Monitoring) will begin in March 2014 and continue through October 2014. The draft technical report (Task 2.3) will be submitted to Zone 7 by the end of November 2014. A period of three months is allocated to the acquisition and installation of the mitigation measures, with the goal of having them operational by the middle of May 2014. The monitoring will continue through October 2014, which should span the anticipated challenge period of June through September 2014. After October 2014, WQTS will prepare the Technical Report summarizing all the findings and making recommendations for permanent full-scale implementation.

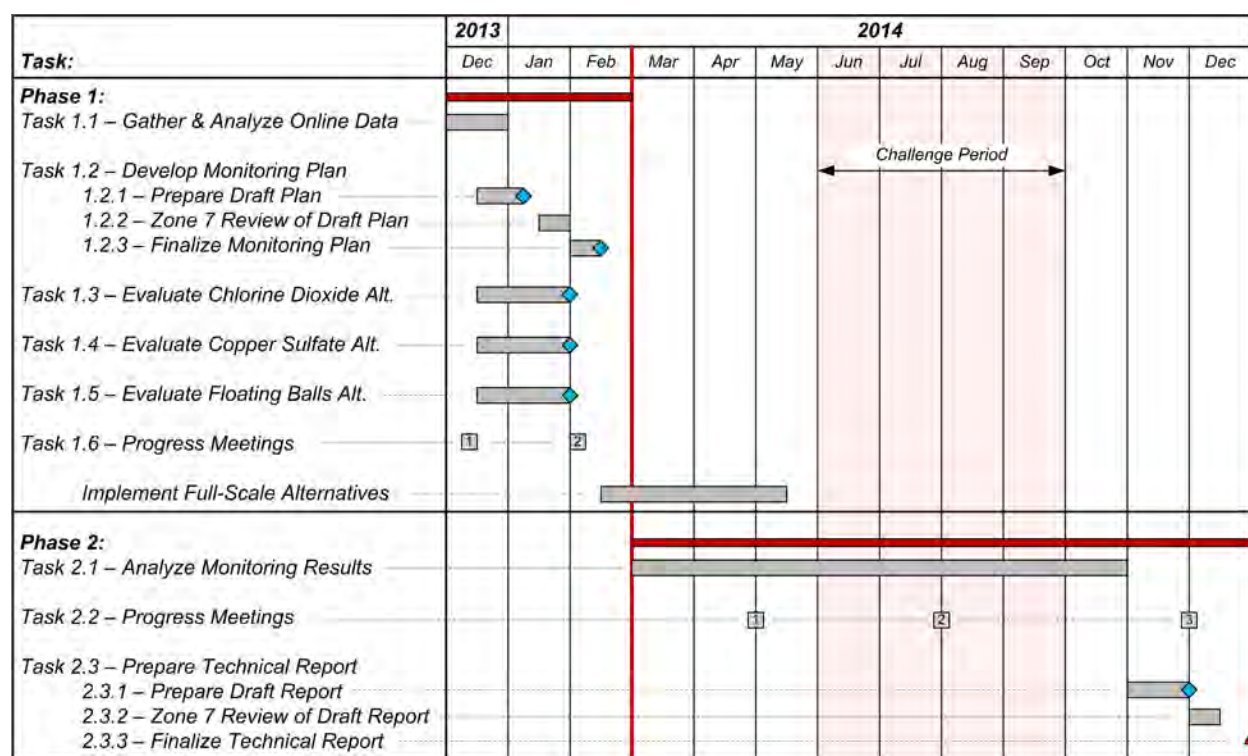


Figure 3 – Anticipated Project Schedule

5.0 COST

Table 1 presents a breakdown of the overall project cost, including all labor and non-labor costs anticipated over the duration of the project. WQTS proposes to bill its services on Time-and-Material basis. It is important to note that the WQTS cost does not include any analytical costs for samples collected by Zone 7 under the monitoring program. The total cost for Phase 1 tasks is projected at \$49,600, while the total cost for Phase 2 tasks is projected at \$40,400. The total cost of Phases 1 and 2 is projected at \$90,000.

Table 1 – Breakdown of Project Cost

Task	Labor Cost	Non-Labor Cost	Total Task Cost
PHASE 1 TASKS			
1.1 – Collect and Analyze Online Data	\$7,820	\$0	\$7,820
1.2 – Prepare Monitoring Plan	\$5,880	\$0	\$5,880
1.3 – Evaluate Chlorine Dioxide Alternative	\$13,640	\$2,200	\$15,840
1.4 – Evaluate Copper Sulfate Alternative	\$9,000	\$0	\$9,000
1.5 – Evaluate Floating Balls Alternative	\$7,040	\$0	\$7,040
1.6 – Progress Meetings	\$3,200	\$820	\$4,020
TOTAL FOR PHASE 1	\$46,580	\$3,020	\$49,600
PHASE 2 TASKS			
2.1 – Analyze Monitoring Results	\$13,800	\$0	\$13,800
2.2 – Progress Meetings	\$9,600	\$2,480	\$12,080
2.3 – Prepare Technical Report	\$14,520	\$0	\$14,520
TOTAL FOR PHASE 1	\$37,920	\$2,480	\$40,400
TOTAL FOR PHASES 1 & 2	\$84,500	\$5,500	\$90,000

We hope this proposal is acceptable to you, and we look forward to working with your staff on this effort. In the meantime, if you have any questions or need additional information, please do not hesitate to contact me.

Respectfully Yours,
WQTS, Inc.



Issam Najm, Ph.D., P.E.
President



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: Administrative Services

CONTACT: Tom Hughes

AGENDA DATE: November 20, 2013

ITEM NO. **6**

SUBJECT: September Employee of the Month Recognition

SUMMARY:

The Employee Recognition Program Nomination Committee met in October and selected the Employee of the Month for September 2013 according to the established Program Guidelines. The individual chosen out of the submitted nominations is then recommended to Management for approval and there is a subsequent announcement of the selection to all Agency employees.

Elena Scharnhorst, Employee Services Specialist, has been chosen from among those nominated as the September 2013 Employee of the Month. She works at the North Canyons office reporting to Tom Pico, Employee Services Manager.

Elena was nominated for the skills and knowledge she brings to Zone 7. Over the past few years, Elena has streamlined Employee Services processes to help save employees and managers time. She continually has built upon her knowledge and skills by acquiring the following: Professional in Human Resources Certification (PHR), State of California Department of Public Health, Water Treatment Operator Grade T2 certification and Water Distribution Operator D2 certification. The knowledge she brings to the Employee Services Section with these certifications has been a great asset to the Agency.

As noted in her recommendation, Elena is an outstanding employee for the Agency who has a positive “can do” attitude and is a pleasure to work with. Please join us in thanking Elena for her knowledge and skills on the job.

The committee seconded the recommendation and recognized Elena Scharnhorst as a valuable employee and asset to Zone 7, with management approving the selection.

RECOMMENDED ACTION:

It is recommended that the Zone 7 Board of Directors recognize and congratulate Elena Scharnhorst as September 2013 Employee of the Month.



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: WATER QUALITY
CONTACT: BRIAN KEIL/GURPAL DEOL

AGENDA DATE: November 20, 2013

ITEM NO. 7

SUBJECT: Renewal of Municipal Water Quality Investigations Program Agreement

SUMMARY:

- The Department of Water Resources (DWR) Municipal Water Quality Investigations (MWQI) Program and its predecessor, the Delta Heath Aspects Monitoring Program, have been funded by the State Water Project (SWP) Contractors since 1982.
- The MWQI program monitors the water quality of the delta and the water being delivered to the State Water Contractors.
- Zone 7 Water Agency benefits from this program due to its proximity to the source and the information provided by the program, and therefore has been an active participant in the program since it began.
- The MWQI program includes on-line water quality monitoring, routine sampling and analyses, and preparation of the SWP sanitary survey updates to meet regulatory requirements.
- The annual total costs of the MWQI program are not to exceed \$3.1 million for any program year. Zone 7's proportional share of funding under this agreement for the MWQI program costs in any program year is not to exceed \$88,187.
- The MWQI Specific Projects Committee (SPC) is funded with a portion of this \$3.1 million (up to \$400,000 a year). The SPC improves program efficiency and assists in the management of MWQI funds in the direction of special studies, hiring of consultants, and the purchase of goods and services necessary to carry out MWQI's mission.
- The attached Agreements give a detailed account of the proposed three-year (2014 through 2016) program. The agreements are an extension of the existing agreements between DWR, Zone 7, and other participating agencies.

FUNDING:

This program is funded from Fund 100 – Water Enterprise

RECOMMENDED ACTION:

Adopt attached resolution authorizing the General Manager to negotiate and execute MWQI Agreement with the Department of Water Resources and the Specific Project Agreement with State Water Project Contractors Authority to facilitate the implementation, repayment, and funding of the Municipal Water Quality Investigations Program for the calendar years 2014 through 2016 in an amount not-to-exceed \$88,187 per year.

ATTACHMENTS:

- Memo Providing Additional Background and Discussion of Agenda Item
- Resolution
- MWQI Program Agreement and Draft Specific Project Agreement

Interoffice Memo

Date: November 20, 2013
To: Jill Duerig, General Manager
From: Brian Keil, Junior Water Resources Planner
Subject: Renewal of Municipal Water Quality Investigations Program Agreement

The following provides additional background and discussion on the above-referenced agenda item:

BACKGROUND:

The Sacramento-San Joaquin Delta conveys drinking water to about two-thirds of the State's population. In 1981, a scientific advisory panel appointed by the Department of Water Resources (DWR) recommended that Delta water quality should be monitored and assessed to protect human health. DWR responded by forming the Interagency Delta Health Aspects Monitoring Program in 1982. This program was renamed the Municipal Water Quality Investigations (MWQI) Program in 1990. As the original name implies, the focus of the program has been on monitoring water quality parameters that may indirectly affect the ability of Municipal & Industrial (M&I) supplies to meet primary drinking water standards.

DISCUSSION:

The MWQI Program provides valuable information required for the State Water Project (SWP) M&I Contractors and the CALFED Program to insure the best available source water is pumped from the Delta, to efficiently operate the water storage and treatment facilities, and to plan for and design cost-effective drinking water improvement alternatives to meet future drinking water quality standards using water supplies conveyed through the Delta.

Some of the recent projects performed or planned by the MWQI Program are: SWP sanitary survey update, real-time water quality monitoring, water quality forecasting, continued development and expansion of real-time monitoring and forecasting capabilities in the SWP, routine sampling and laboratory analysis for key water quality constituents throughout the Delta and the SWP, emergency response to water quality events, and support and interaction with other agencies like CALFED, California Urban Water Agencies (CUWA), and the Central Valley Regional Water Quality Control Board (CVRWQCB) through various studies and programs.

The MWQI Program has a total not to exceed budget of \$3.1 million per year. There are two components that make up this total annual budget:

MWQI Annual Statements of Charges

One component of the funding for the Program is derived from the participating municipal contractors of the SWP per the Municipal Water Quality Agreement that was executed in 1994 and 1997. DWR charges the participating contractors through its Annual Statements of Charges (SOC) under the Transportation Minimum Operation, Maintenance, Power and Replacement (OMPR) component. The SOC charges are based on \$2.7 million per year (a portion of the \$3.1 million).

MWQI Specific Project Committee

The other component of the total annual budget is the supplemental services account administered separately by the State Water Contractors (SWC). This account was designed to increase flexibility for DWR to carry out the MWQI Program, allowing DWR to acquire staff resources and technical expertise to supplement DWR staff as necessary to enable all planned program activities to be successfully undertaken and completed. For 2014-2016, the total maximum amount in this supplemental services account is \$400,000 per year (a portion of the \$3.1 million budget). The 2014 fiscal year charge for this account will be \$200,000 as there is a sufficient carryover reserve in the current SPC account. The SPC will be subject to re-determination each successive year up to \$400,000 depending on the anticipated committee costs. As in previous years, the funds will only be released from the supplemental services account upon approval by the MWQI SPC, composed of program participants including Zone 7. Payment for this portion of the MWQI program will then be due by September 1st of each fiscal year.

The MWQI Agreement and Specific Project Agreement are attached. Under these Agreements, Zone 7's MWQI SOC will be included in the Annual Statement of Charges from DWR under the Transportation Minimum Operation, Maintenance, Power and Replacement (OMPR) component and SPC charges will be invoiced on a Program Year basis. Zone 7's total maximum commitment of approximately \$88,187 per year for this program is based on Zone 7's current "Table A" amount of 80,619 acre-feet. If participating contractors wish to renew this agreement for additional years following this three year agreement, the MWQI SPC will provide DWR with a letter of intent no later than April 1, 2015.

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO.

INTRODUCED BY
SECONDED BY

Renewal of Municipal Water Quality Investigations Program Agreement

BE IT RESOLVED that the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District does hereby authorize the General Manager to negotiate and execute the Municipal Water Quality Investigations Agreement with the Department of Water Resources for the calendar years 2014 through 2016; and

BE IT FURTHER RESOLVED that the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District does hereby authorize the General Manager to negotiate and execute the Specific Project Agreement with State Water Project Contractors Authority for the calendar years 2014 through 2016 for a combined amount not-to-exceed \$88,187 per year.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on November 20, 2013.

By _____
President, Board of Directors

**STATE OF CALIFORNIA
NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
MUNICIPAL WATER QUALITY INVESTIGATIONS
AGREEMENT**

**BETWEEN THE STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES,
STATE WATER PROJECT CONTRACTORS AUTHORITY AND
PARTICIPATING STATE WATER PROJECT CONTRACTORS
SWPAO NO. 13300**

THIS AGREEMENT is made this ____ day of _____, 2013, pursuant to the provisions of the California Water Resources Development Bond Act, the State Central Valley Project Act, and other applicable laws of the State of California, between the State of California, acting by and through the Department of Water Resources (DWR), the State Water Project Contractors Authority (Authority) and participating urban State Water Project (SWP) contractors located in the State of California (Urban SWP Contractors).

RECITALS

WHEREAS, DWR and the Urban SWP Contractors have entered into and subsequently amended long-term water supply contracts, herein referred to as the Water Supply Contracts, providing that DWR will supply certain quantities of water to the Urban SWP Contractors and providing that the Urban SWP Contractors shall make certain payments to DWR, and setting forth the terms and conditions of such supply and such payment;

WHEREAS, DWR conducts various studies and activities to protect and improve the quality of SWP drinking water supplies;

WHEREAS, DWR's Municipal Water Quality Investigations (MWQI) Program endeavors to evaluate, report and forecast water quality conditions and identify and evaluate the sources of contaminants that affect the municipal drinking water supplies of the Urban SWP Contractors;

WHEREAS, DWR must have a source of funding to repay the costs of the MWQI Program;

WHEREAS, the Urban SWP Contractors believe the MWQI Program is necessary to provide this important water quality information in a timely way to insure the best available source water is conveyed by the SWP, to efficiently operate their drinking water treatment facilities and to plan for and design cost effective drinking water treatment facilities to meet future drinking water quality standards;

WHEREAS, the Urban SWP Contractors desire an expansion of water quality monitoring in and upstream of the SWP System in the interest of establishing a comprehensive drinking water quality monitoring and forecasting program;

WHEREAS, DWR and the Urban SWP Contractors are endeavoring to increase the value that DWR provides to the contractors;

WHEREAS, the Authority, a public entity, is a Joint Powers Authority created in 2003 to assist DWR with improving SWP efficiency and reliability and is a signatory to this Agreement;

WHEREAS, this Agreement will allow the Authority to provide supplemental water-quality related services to the MWQI Program;

WHEREAS, the Authority has formed an MWQI Specific Project Committee (SPC) made up of many Authority members that are Urban SWP Contractors and are participants in the MWQI Program;

WHEREAS, the MWQI SPC will perform supplemental water quality-related services to the MWQI Program with the intent to offer sufficient flexibility to complete required activities;

WHEREAS, Urban SWP Contractors are willing to enter into this Agreement to pay their share of the MWQI Program costs and accordingly the Urban SWP Contractors will be included in decisions related to the budget, scope, schedule, and activities of the MWQI Program;

AGREEMENT

NOW THEREFORE, it is mutually agreed that the following terms, conditions, and procedures hereby apply to the implementation and funding of the MWQI Program:

1. **Definitions.** When used in this Agreement, the following definitions shall apply:
 - (a) **“Bond Act”** means the California Water Resources Development Bond Act, comprising Chapter 8, commencing at Section 12930, of Part 6 of Division 6 of the Water Code, as enacted in Chapter 1762 of the Statutes of 1959.
 - (b) **“Municipal Water Quality Investigations Program” or “MWQI Program”** means a program to determine and evaluate the sources of contaminants in the SWP system and evaluate their impacts on municipal drinking water supplies to Urban SWP Contractors. The Program will entail all work done by or under the direction of DWR and work done under the direction of the Authority’s MWQI SPC.
 - (c) **“MWQI SPC Charge”** means the charge to be collected by the Authority each fiscal year through invoices from the Authority to those Participating Contractors that have agreed in their MWQI Specific Project Agreement to pay a portion of the total MWQI Program costs into the MWQI Account for MWQI Program work that is performed by the MWQI SPC during the Program Year.
 - (d) **“MWQI Specific Project Agreement”** An agreement entered into by Urban SWP Contractors to permit the MWQI SPC to perform supplemental water quality related services as identified in Appendix 1 of the MWQI Work Plan in addition to the work performed by DWR.
 - (e) **“MWQI Specific Project Committee (SPC)”** consists of members of the Authority that have signed the MWQI Specific Project Agreement.
 - (f) **“MWQI Statements of Charges (SOC) Charge”** means the charge, based on projected costs, to be collected each calendar year by DWR through the Statements of Charges for MWQI Program work that is performed by DWR during the Program Year.
 - (g) **“MWQI Work Plan”** means a plan for work to be performed by DWR and the MWQI SPC during a given Program Year.

- (h) **“Participating Contractor”** means an Urban SWP Contractor that has executed this Agreement.
- (i) **“Program Year”** means the period July 1 through June 30 of the following year.
- (j) **“Project Management Plans”** means using the DWR accepted Project Management Body of Knowledge, or PMBOK standard for managing individual projects. This standard offers a general guide of using the basic processes of initiating, planning, executing, monitoring and controlling, and closing a project to better manage most special projects most of the time.
- (k) **“Statements of Charges (SOC)”** means the annual charges distributed to each Water Supply Contractor on July 1 of each year as defined in Article 29 of the Water Supply Contract.
- (l) **“SWP”** means the State Water Project.
- (m) **“SWP Project Interest Rate”** means the weighted average of the interest rates paid by the State on bonds issued under the Bond Act without regard to any premiums received on the sale thereof. Until bonds are issued and sold under the Bond Act, the project interest rate shall be four percent (4%) per annum, and after said bonds have been issued said rate shall be computed as a decimal fraction to five places.
- (n) **“Water Supply Contract”** means a long-term contract between the State of California and each Urban SWP Contractor for a water supply from the SWP of the type contained in DWR’s Bulletin 141 dated November 1965.
- (o) **“Water Supply Contractor”** means a public agency that has a current Water Supply Contract.

2. **MWQI Technical Advisory Committee (TAC).** The MWQI Technical Advisory Committee (TAC) shall be convened by DWR and shall consist of representatives from the Participating Contractors, DWR staff, and invited guests. The MWQI TAC will meet as needed to review, refine, and recommend changes to the Work Plan to DWR.

3. **Work Plan Development.**

- (a) DWR shall develop a proposed MWQI Work Plan and budget by March 30 of each year for the upcoming Program Year for presentation to, and to receive recommendations from, the MWQI TAC and for the concurrence of the MWQI SPC for work performed under the MWQI SPC Account.

DWR will hold monthly meetings/conference calls with the MWQI TAC and provide a report on the status and progress of the Work Plan with quarterly updates on expenditures. The final Work Plan shall be developed by June 15.

- (b) In developing the Work Plan each year, all comments and suggestions from the Participating Contractors will be processed through the MWQI SPC. The MWQI SPC will submit a unified set of comments to DWR.
- (c) The MWQI Work Plan shall, at a minimum, include:
 - (1) A description of the work to be accomplished, with projects broken down into individual program components as detailed in the project management plans;
 - (2) Descriptions of planned field and laboratory work;
 - (3) Specifications for deliverables related to individual program components; and
 - (4) Budget for each program component, along with a total budget.

4. MWQI Work Plan Implementation.

- (a) The Program shall be conducted in accordance with the Work Plan.
- (b) Adjustments to the MWQI Program may be made at any time in a Program Year through a decision of DWR with the concurrence of the MWQI TAC, and with the concurrence of the MWQI SPC for work performed under the MWQI SPC Account.
- (c) Reasonable program changes may be made as needed by DWR in response to conditions or opportunities that may arise. These changes will be submitted to the MWQI TAC and MWQI SPC at their next scheduled meeting.

5. Program Deliverables. At a minimum, DWR will provide the MWQI TAC the Program Deliverables listed below, subject to modification by decision of DWR, and with the concurrence of the MWQI TAC:

- (a) Monthly status reports the last week of the month or at the next scheduled MWQI TAC meeting. Quarterly, the status reports will include an assessment of recent MWQI Program expenditures in relation to the program budget.

- (b) All MWQI data collected will be made available through the Water Data Library or the California Data Exchange Center. All MWQI final reports will be posted on the MWQI website. DWR will analyze, or contract with a consultant to analyze, water quality data every five years as part of the submittal of the State Water Project Watershed Sanitary Survey.
- (c) Special study reports shall be completed in a timely manner given staffing and financial constraints.

6. MWQI SOC Charge.

- (a) DWR shall recover its costs for the MWQI Program through the MWQI SOC Charge. The MWQI SOC Charge shall recover costs incurred by DWR for the MWQI Program consistent with the annual MWQI Work Plan during the term of this Agreement. Each Participating Contractor's share of the annual MWQI SOC Charge for the term of the Agreement will be calculated each year based upon the annual MWQI SOC Charge multiplied by their proportionate share of the M&I Table A amount, except that of Kern County Water Agency. Kern County Water Agency shall be limited to 79,000 acre-feet and the remainder of the Participating Contractors' share shall increase proportionately, as shown in Table 1.
- (b) To facilitate billing on a calendar year basis, each Participating Contractor's share of the MWQI SOC Charge will be computed and included in the Participating Contractor's annual SOC under the Transportation Minimum OMP&R component, and, except as otherwise expressly provided in this Agreement, shall be collected under the same terms and conditions as charges are collected under that Water Supply Contract. The MWQI SOC Charge shall initially be based on projections of costs determined pursuant to development of the annual MWQI Work Plan. The MWQI SOC Charge shall then be subject to re-determination each year by DWR so that the charges may accurately reflect the increases or decreases in costs as compared to the projections of costs and all other factors that are determinative of such charges. Adjustments to the annual charges resulting from a re-determination shall be reflected in each Participating Contractor's share of the MWQI SOC Charge in the following calendar year with interest at the current SWP Project Interest Rate.
- (c) The MWQI SOC Charge plus the MWQI SPC Charge will not exceed \$3,100,000 for any Program Year.

7. Performance.

Implementation of the MWQI Program will require staff involvement of various organizational units within DWR. DWR will take steps to ensure sufficient staffing and coordination occurs consistent with the adopted MWQI Work Plan. From time to time due to other assigned duties, individual

staff assigned to the MWQI Program may devote less than 100 percent of their effort to identified tasks in the MWQI Work Plan. DWR will not bill Participating Contractors for staff efforts not included in the MWQI Work Plan.

8. **MWQI SPC Account.** Work to be completed by the MWQI SPC is identified in Appendix 1 of the MWQI Work Plan. Appendix 1 is developed by DWR and the MWQI TAC and submitted to the MWQI SPC for approval prior to any work being performed. Appendix 1 shall, at a minimum, include: a description of all professional services to be rendered; all equipment, supplies or services to be purchased; a description of the work to be accomplished, broken down into individual Work Plan components; descriptions of planned field and laboratory work; specifications for deliverables related to individual work elements; and, budgets for each work element, along with a total budget. The MWQI SPC Account costs for supplemental water quality related services will be collected through the MWQI SPC Charge. Payments from Contra Costa Water District (CCWD) for its participation in the MWQI Program activities may be used to offset the MWQI SPC Charge as necessary. The MWQI SPC Charge shall not exceed \$400,000 annually. The MWQI SPC will obtain the necessary goods and services using funds from the MWQI SPC Account to accomplish its share of the MWQI Work Plan.
9. **MWQI SPC Charge.** Each year as necessary, the Authority shall invoice Participating Contractors to collect funds for the MWQI Account. Each Participating Contractor's share of the annual MWQI SPC Charge for the term of the Agreement will be calculated each year based on the annual MWQI SPC Charge multiplied by their proportionate share of the M&I Table A amount except that of Kern County Water Agency. Kern County Water Agency shall be limited to 79,000 acre-feet and the remainder of the Participating Contractors' share shall increase proportionately, as shown in Table 2. The MWQI Account shall be used to implement the MWQI SPC activities identified in the annual MWQI Work Plan. The MWQI SPC Charge shall initially be based on projections of costs determined pursuant to development of the MWQI Work Plan. The MWQI SPC Charge shall then be subject to re-determination each year by the MWQI SPC so that the charges may accurately reflect the increases or decreases in costs as compared to the projections of costs and all other factors that are determinative of such charges. Adjustments to the annual charges resulting from a re-determination shall be reflected in each Participating Contractor's share of the MWQI SPC Charge in the following calendar year with interest at the current SWP Project Interest Rate.

Disposition of Property and Equipment. Any property or equipment obtained by the Authority through the MWQI Account may, at the discretion of the MWQI SPC, be given to DWR "as is." DWR, at its sole discretion, may choose to accept such property or equipment. Upon acceptance, such property or equipment shall become the property of the State of California, and neither the Authority nor any Water Supply Contractor shall have any further responsibility or liability for such property or equipment. The Authority does not and shall not

provide any express or implied warranties for any property or equipment given to and accepted by DWR. However, to the extent permitted, the Authority will transfer to DWR any warranties provided by the manufacturer or other third parties for such property or equipment.

10. **Services Provided by the MWQI SPC on State Property.** With the approval of DWR for specific activities, the Authority on the recommendation or approval of the MWQI SPC may provide for services to be completed on State property as part of the Work Plan in Appendix 1. The Authority shall hold the State harmless for any litigation resulting from any claims that may arise from the participating vendor, contracted by the Authority, providing the services.
11. **Water Supply Contract.** Except as specified in this Agreement, the provisions of the Participating Contractor's Water Supply Contract shall be applicable to this Agreement.
12. **State Law.** This Agreement is made under and shall be construed in accordance with the laws of the State of California.
13. **MWQI Staff Out-of-State Travel.** If requested by the MWQI SPC, MWQI staff may be required to attend out of state scientific conferences to ensure that the MWQI Program provides the best available water quality information to the MWQI SPC and ensures that scientific studies are designed in the most innovative, cost-effective manner possible to meet future drinking water quality standards. Travel expenses will come out of DWR's MWQI Program Budget.
14. **Adjustment of Table 2 Proportionate Factors.** Table 2 Proportionate Use Factors are based upon the best information available of Participating Contractors that will be paying into the MWQI SPC Charge at the time this Agreement is executed. These Proportionate Use Factors may be adjusted if a Participating Contractor requests not to pay into the MWQI Account and the request is approved by the MWQI SPC. The total of the Participating Contractors Table A Amount in Table 2 shall not be less than 2,500,000 acre-feet. Any Participating Contractor not paying into the MWQI SPC Account through the MWQI SPC Charge will still be subject to Paragraph 16, the Final Program Accounting.
15. **Final Program Accounting.**
 - (a) At the end of the Agreement, DWR and the Authority will work together to summarize all Participating Contractor's MWQI SOC Charges, MWQI SPC Charges and those MWQI Account costs paid for by the payments from CCWD and all actual MWQI Program costs incurred during the term of this Agreement. This Final Program Accounting will determine if each Participating Contractor has paid its proportionate share of the total actual MWQI Program costs through its payments to both the MWQI SOC Charge and the MWQI SPC Charge during the term of the Agreement.

Each Participating Contractor's proportionate share of the total MWQI Program costs will be in the same proportion as its M&I Table A Amount shown in Table 1 bears to the total of all Participating Contractor's M&I Table A Amounts shown in Table 1.

- (b) If a new MWQI Agreement, similar to this MWQI Agreement, is implemented effective January 1, 2017, DWR will account for each Participating Contractor's Final Program Accounting over and under payment to the MWQI SOC Charge in the 2018 MWQI SOC Charge. If a new MWQI Agreement, similar to this MWQI Agreement is not implemented, DWR will invoice each Participating Contractor for its Final Program Accounting over or under payment in the 2018 SOC.
- (c) If a new MWQI Agreement, similar to this MWQI Agreement is implemented effective January 1, 2017, the Authority will provide for each Participating Contractor's Final Program Accounting over and under payment to the MWQI SPC Charges for the Program Year 2017 - 2018 MWQI SPC Charge. If a new MWQI Agreement, similar to this MWQI Agreement is not implemented, the Authority will issue either a check or invoice to each Participating Contractor for its Final Program Accounting over or under payment by July 1, 2017. Payments for the second half of Program Year 2016 - 2017 will also be refunded July 1, 2017.

17. Term of Agreement. This Agreement shall take effect on January 1, 2014, only if this MWQI Agreement is executed by the Participating Contractors that together have M&I Table A Amounts totaling at least 2,300,000 acre-feet. This Agreement shall terminate on December 31, 2016, except for payments or credits found through re-determination pursuant to Paragraph 16 of this Agreement. This Agreement may be terminated by any party with a twelve months written notice. Written notice of termination shall be delivered by certified mail with receipt for delivery returned to the sender. If any party provides notice of termination, the Authority and DWR will renegotiate the budget for the time remaining in the twelve month period. DWR shall perform such work as is necessary for the orderly completion of work scheduled for the twelve month period. The cost of such work shall not exceed the budget for that twelve month period. If the Participating Contractors decide to continue to fund the MWQI Program starting January 1, 2017, the MWQI SPC will provide DWR with a Letter of Intent no later than April 1, 2015, of that intent. This will allow DWR time to prepare the preliminary estimates for the 2017 SOC.

18. Agreement Execution. This Agreement may be executed in counterpart, each will be deemed to be an original and all of which together will be deemed to be the same document. Each entity certifies that the person signing below on the respective entity's behalf has the authority to bind that entity to the covenants made in this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.

APPROVED AS TO LEGAL FORM
AND SUFFICIENCY

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Cathy Crothers
Chief Counsel

Date _____

ALAMEDA COUNTY FLOOD CONTROL AND
WATER CONSERVATION DISTRICT, ZONE 7

G.F. Duerig
General Manager

Date _____

ANTELOPE VALLEY-EAST KERN
WATER AGENCY

Dan Flory
General Manager

Date _____

CENTRAL COAST WATER AUTHORITY

William Brennan
Executive Director

Date _____

KERN COUNTY WATER AGENCY

James Beck
General Manager

Date _____

Dean F. Messer, Chief
Division of Environmental Services

Date _____

ALAMEDA COUNTY WATER DISTRICT

Walt Wadlow
General Manager

Date _____

CASTAIC LAKE WATER AGENCY

Dan Masnada
General Manager

Date _____

CRESTLINE-LAKE ARROWHEAD
WATER AGENCY

Roxanne Holmes
General Manager

Date _____

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Devendra Upadhyay, Group Manager
Water Resource Management

Date _____

MOJAVE WATER AGENCY

NAPA COUNTY FLOOD CONTROL AND
WATER CONSERVATION DISTRICT

Kirby Brill
General Manager

Phillip Miller
~~Deputy~~ Director of Public Works

Date _____

Date _____

PALMDALE WATER DISTRICT

SAN BERNARDINO VALLEY
MUNICIPAL WATER DISTRICT

Dennis LaMoreaux
General Manager

Douglas Headrick
General Manager

Date _____

Date _____

SAN GORGONIO PASS WATER AGENCY

SAN LUIS OBISPO COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

Jeff Davis, P.E.
General Manager and Chief Engineer

Paavo Ogren
Public Works Director

Date _____

Date _____

SANTA CLARA VALLEY WATER DISTRICT

SOLANO COUNTY WATER AGENCY

Beau Goldie
Chief Executive Officer

David Okita
General Manager

Date _____

Date: _____

STATE WATER PROJECT
CONTRACTORS AUTHORITY

Mary Lou Cotton
General Manager
Date

STATEMENT OF CHARGES ALLOCATION FACTORS
TABLE 1

Participating Contractors	M&I Table A (acre-feet)	Proportionate Share
ALAMEDA CO FC&WCD - ZONE 7	80,619	0.02841469
ALAMEDA COUNTY WD	42,000	0.01480317
ANTELOPE VALLEY-EAST KERN WA	144,844	0.05105120
CASTAIC LAKE WA	95,200	0.03355385
CENTRAL COAST WATER AUTH.	45,486	0.01603183
CRESTLINE-LAKE ARROWHEAD WA	5,800	0.00204425
KERN COUNTY WATER AGENCY	79,000 ¹	0.02784406
METROPOLITAN WD OF SC	1,911,500	0.67372050
MOJAVE WATER AGENCY	89,800	0.03165059
NAPA COUNTY FC&WCD	29,025	0.01023005
PALMDALE WD	21,300	0.00750732
SAN BERNARDINO VALLEY MWD	102,600	0.03616203
SAN GORGONIO PASS WA	17,300	0.00609750
SAN LUIS OBISPO CO. FC&WCD	25,000	0.00881141
SANTA CLARA VALLEY WD	100,000	0.03524564
SOLANO COUNTY WA	47,756	0.01683191
TOTAL	2,837,230	1.00000000

¹ This value represents M&I amounts for Kern County Water Agency Improvement District No. 4 and Tejon-Castac Water District.

MWQI SPECIFIC PROJECT COMMITTEE CHARGE FACTORS
TABLE 2

Participating Contractors	M&I Table A (acre-feet)	Proportionate Share
ALAMEDA CO FC&WCD - ZONE 7	80,619	0.02866729
ALAMEDA COUNTY WD	42,000	0.01493477
ANTELOPE VALLEY-EAST KERN WA	144,844	0.05150503
CASTAIC LAKE WA	95,200	0.03385214
CENTRAL COAST WATER AUTH.	45,486	0.01617435
CRESTLINE-LAKE ARROWHEAD WA	5,800	0.00206242
KERN COUNTY WATER AGENCY	79,000 ²	0.02809159
METROPOLITAN WD OF SC	1,911,500	0.67970970
MOJAVE WATER AGENCY	89,800	0.03193195
NAPA COUNTY FC&WCD	29,025	0.01032099
PALMDALE WD	21,300	0.00757406
SAN BERNARDINO VALLEY MWD	102,600	0.03648350
SAN GORGONIO PASS WA	17,300	0.00615170
SANTA CLARA VALLEY WD	100,000	0.03555897
SOLANO COUNTY WA	47,756	0.01698154
TOTAL	2,837,230	1.00000000

² This value represents M&I amounts for Kern County Water Agency Improvement District No. 4 and Tejon-Castac Water District.

STATE WATER PROJECT CONTRACTORS AUTHORITY

MWQI PROGRAM

SPECIFIC PROJECT AGREEMENT

Recitals

WHEREAS, the parties to this Specific Project Agreement (“Specific Project Agreement”) are among the members of the State Water Project Contractors Authority (“Authority”) by virtue of their individual executions of the Joint Powers Agreement (“JPA Agreement”) for the State Water Project Contractors Authority;

WHEREAS, State Water Project water quality issues are of considerable importance to the parties;

WHEREAS, Section 4.3 (“Specific Projects”) of the JPA Agreement provides that specific project agreements may be entered into pursuant to which the Authority may undertake tasks as described in such specific project agreements;

WHEREAS, the parties to this Specific Project Agreement (“Specific Project Members”) will execute an agreement (“MWQI Agreement”) with the Department of Water Resources (DWR) providing for the parties’ participation in the Municipal Water Quality Investigations (MWQI) Program for the period January 1, 2014 through December 31, 2016;

WHEREAS, the MWQI Agreement established an MWQI Account, not to exceed \$400,000 annually whereby the MWQI Specific Project Committee can use these funds to perform supplemental water quality related services for the MWQI Program to ensure that work is completed in a timely and cost-effective manner and to provide additional value to the MWQI Program.

NOW, THEREFORE, it is agreed by and between the Parties as follows:

1. This Specific Project Agreement, upon execution, hereby supersedes and replaces in total all previous MWQI Program Specific Project Agreements.
2. This Agreement shall become effective upon receipt of signatures of those Specific Project Members whose combined Maximum M&I Table A amounts, as identified in Table 1, total 2.3 million acre-feet. This Specific Project Agreement shall terminate on December 31, 2016, except for payments or credits found through re-determination pursuant to Paragraph 16 of the MWQI Agreement entered into between the Department of Water Resources, the State Water Project Contractors Authority, and the Specific Project Members for the period January 1, 2014 through December 31, 2016.
3. The Specific Project Members hereby form the MWQI Specific Project Committee (“Committee”). Each Specific Project Member shall appoint a representative to the Committee to exercise the Member’s voting rights, and may appoint an alternate, to the Committee. In the representative’s absence, the alternate shall function as the representative.

4. The Committee anticipates that DWR will request the Authority General Manager to perform certain water quality related services through the MWQI SPC Account.
5. On behalf of the Authority, the Committee shall each year review and approve the MWQI Work Plan Appendix 1 items and budget and authorize the Authority General Manager to perform supplemental water quality related services as specified in the MWQI Agreement.
6. In accordance with the JPA Agreement and on behalf of the Authority, the Committee shall (a) select, pursuant to a competitive process, direct and receive work performed by consultants; (b) direct the Authority General Manager's administration of consultant contracts; and (c) undertake any ancillary work related thereto.
7. Individual Specific Project Member voting rights as a percentage of all voting rights shall be allocated in the same percentages as costs are allocated in Table 1 – MWQI SPA. Committee actions shall only be effective if approved by a majority of the Specific Project Members and by a majority of the Members' voting rights.
8. If the Committee seeks approval of a special project outside of the annual MWQI SPC \$400,000 limit allowed under the MWQI Agreement, the Committee shall direct the Authority General Manager to carry out such work only after it establishes a scope of work, schedule, and budget and notifies each agency in writing of its cost sharing proportion of the proposed Special Project. Any agency may choose to "opt in" participation for this Special Project by providing written notice within ten working days of notification. Each participating agency's cost share of the proposed Special Project shall be allocated based upon its Table 1 value in proportion to all agencies' Table 1 values that "opt-in" to the proposed Special Project or as otherwise agreed to amongst the participating agencies. The General Manager shall, as soon as practicable, invoice only the participating Specific Project Members for the resulting costs incurred by the Authority.
9. The Committee recognizes that the Committee shall incur administrative costs resulting from, but not limited to, participation in meetings, negotiations, analysis and general operational overhead administrative costs not to exceed \$50,000 per year. Administrative charges shall be billed to the MWQI Work Plan Appendix 1 or assessed to the Specific Project Members as appropriate if work is done on Special Projects under Paragraph 8, depending upon the direct or indirect nature of the charges.
10. Specific Project Members may from time to time provide direct services to the Committee through use of their facilities and staff. Prior to carrying out such work, the Specific Project Member shall provide an estimate to the Committee for their review and approval. Such services shall be administered by the Authority in the same manner as other consultant services, following the same procedures and limitations. The Authority shall compensate Specific Project Members for such services and recover the costs in accordance with Paragraphs 4 or 8 of this Specific Project Agreement as appropriate.
11. The Committee shall elect a Chairperson, and Vice Chairperson, and such other officers, with titles and duties as determined by the Committee.

12. A Specific Project Member may terminate its participation in this Specific Project Agreement upon 30 days notice to the Authority General Manager. Any terminating Member shall only be responsible for its share of any and all costs incurred or committed by the Authority prior to the notice.
13. This Specific Project Agreement shall not be considered to be a precedent.
14. Notwithstanding the provisions of Section 15.8 (Limitations on Liability) of the Joint Powers Agreement, as between themselves, the Specific Project Members agree to severally assume any liability of the Authority resulting from this Specific Project Agreement in proportion to their respective shares of costs. Each Specific Project Member agrees that all members of the Authority that are not participating in this Specific Project Agreement shall incur no liability as a result of the Authority undertaking the work provided for by this Specific Project Agreement.
15. All provisions of the JPA Agreement are incorporated by reference and remain in full force and effect.
16. This Specific Project Agreement may be executed in counterparts.
17. The terms and conditions of the MWQI Agreement are incorporated by reference in this Specific Project Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Specific Project Agreement by authorized officials thereof on the dates indicated below.

Date: _____

By: _____
Member and Authorized Representative

Table 1 - MQWI SPA

Participating SWP Contractor	Maximum Table A (acre-feet)*	Cost Allocation*
Alameda County Flood Control and Water Conservation District, Zone 7	80,619	0.02866729
Alameda County Water District	42,000	0.01493477
Antelope Valley-East Kern Water Agency	144,844	0.05150503
Castaic Lake Water Agency	95,200	0.03385214
Central Coast Water Authority	45,486	0.01617435
Crestline-Lake Arrowhead Water Agency	5,800	0.00206242
Kern County Water Agency	79,000	0.02809159
Metropolitan Water District of Southern California	1,911,500	0.67970970
Mojave Water Agency	89,800	0.03193195
Napa County Flood Control and Water Conservation District	29,025	0.01032099
Palmdale Water District	21,300	0.00757406
San Bernardino Valley Municipal Water District	102,600	0.03648350
San Geronio Pass Water Agency	17,300	0.00615170
Santa Clara Valley Water District	100,000	0.03555897
Solano County Water Agency	47,756	0.01698154
Total:	2,812,230	1.00000000

* Cost allocation is based on SWP contract Maximum Table A amounts (KCWA amount is based on Municipal and Industrial use for two member units).

Water Resources Committee

Summary Notes

Meeting Date: Oct. 21, 2013

Start Time: 5:00 p.m.

Directors Present: John Greci
Bill Stevens
AJ Machaevich

Staff Present: T. Rooze, M. Katen,
K. Arends, J. Duerig,
J. Chahal

1. Public Comment on Items Not on the Agenda

None.

2. Salt Management Plan Update

Staff gave a presentation and answered questions from the committee.

Summary of Presentation

Staff summarized the history of the 2004 Salt Management Plan (SMP), its implementation, the desire for an update to include nutrients due to the 2009 State Board's Recycled Water Policy, current salt and nutrient loading assumptions, results from salt management strategies, conclusions, and recommendations. Based on the input received from the retailers through various meetings held throughout the year, staff recommended "Scenario G" for salt management. Scenario G assumes the entire Chain-of-Lakes (COLs) to be online in 2060, includes a pipeline connecting Lake A to Lakes H and I (to convey water around the unavailable lakes for recharge in lakes owned and operated by Zone 7) and the construction of a Second Demineralization Plant in 2030. This strategy optimizes the available recharge facilities and groundwater demineralization plant through 2030 to stabilize the Basin's average Total Dissolved Solids (TDS). Then when the Delta Fix comes online (projected by 2027), Scenario G includes increasing recharge with low TDS water, increasing groundwater pumping, and adding a second Demineralization plant in 2030. With this strategy the Main Basin TDS is projected to eventually decrease to the basin objective (500 mg/L) and continue to decline in the long-term.

As for Nutrients, the basin-wide average nitrate concentration is below the drinking water standard and the Basin Plan Objective (both 45 mg/L) except for a few hot spots, the majority of which are in the eastern and northern portions of the Valley. Preliminary estimates indicate that there is currently no overall net nitrogen loading to the Basin, and none projected for the future, therefore the basin-wide average concentration should decrease over time. Staff suggested that the existing Best Management Practices (BMPs) and policies, with some project-specific measures near the nitrate hot spots, would be sufficient to keep the overall nutrient loading in the Basin in check.

Staff also plans to include a recommendation for continued monitoring for salts and nutrients as already conducted as part of Zone 7's Groundwater Management Program. Monitoring for constituents of emerging concern (CEC) is not required at this time since the planned recycled water use in the Basin is limited to irrigation projects only.

Committee Comments and Questions

The Water Resources Committee (Committee) complemented the good work by staff and emphasized the need for protecting the groundwater basin water quality and the importance of groundwater storage for Zone 7.

The Committee asked specific questions regarding the Delta Fix, COLs coming online in 2058, major sources of salts for the Basin, nitrate hot spots in the eastern portion of the Valley, nitrates in the deep aquifer, and CEC monitoring, as follows:

Delta Fix

The Committee asked how the Delta fix benefits salt loading. Zone 7 staff answered that the Delta fix improves imported water quality (lower TDS) from the State Water Project and makes the supplies more reliable, both of which will improve Zone 7's capability to recharge with more, lower TDS water.

Chain-of-Lakes

The Committee asked if the salt management strategies assume the transfer of all COLs to be delayed until 2058. Staff indicated that at this time the assumption is that Lakes B through G will be delayed until 2058 but through negotiations with the gravel mining companies, some lakes such as A may come to Zone 7 earlier if the mining operations by CEMEX end earlier than 2058.

Sources of salt for the groundwater basin

The Committee asked what the major source of salt inflow is for the groundwater basin. Staff explained that potable water irrigation and artificial recharge with untreated water are the main sources of salt loading to the groundwater basin.

Nitrate plumes in the eastern portion of the Valley

The Committee asked about the sources of nitrate plumes in the eastern portions of the Valley shown on the map and discussed the sewer options for Buena Vista area residential properties. Staff explained that septic systems are ongoing sources for the plume near Buena Vista area; old chicken farms are the potential sources for the plume near Tesla Road and Greenville Road; and the former wastewater sludge handling is likely the potential source for the plume near the Livermore Wastewater Plant. Staff indicated that although the existing BMP's might be sufficient for overall nitrate management in the Main Basin, the RWQCB shares staff's concerns about localized hot spots, and will likely want to control nitrate loading through site-specific measures such as exploring the possibility of connecting septic systems to sewer lines whenever possible and adding other conditions for septic tank approvals. Staff also indicated that there is a plan to give a similar presentation to the Alameda County Planning Department to educate them about the existing nitrate hot spots and the potential mitigation measures being explored.

Nitrates making it to the deep aquifer

The Committee commented on how some of the nitrates make it to the deep aquifers. Staff explained that the majority of the deep aquifer not only meets but is significantly below the drinking water standard except for a few wells in the eastern portion of the Valley which are near the plumes discussed above; the cause, in part, may be the minimal confining layer separating the shallow aquifer from the deep aquifer in that area.

Monitoring for CECs

The committee asked why CEC monitoring is not required. Staff explained that CEC monitoring is required only for groundwater basins where recycled water is being actively recharged using either injection or surface spreading. Since neither is planned for the Valley, CEC monitoring is not required. Dr. Tom Hall, EOA, speaking as a member of public, explained how the State Board established a panel of experts a few years ago to come up with CEC monitoring recommendations as part of the State's Recycled Water Policy.

3. Verbal Reports

None.

4. Adjournment

Meeting was adjourned at 6:05 p.m.

11 /20/13 Board Written/narrative Comments by Dick Quigley

October 19 Attended Zone 7 - City of Livermore Living Arroyos grand opening event. Walked the length of the Stanley Mocho Reach from Isabelle to Murrieta and back. I was impressed with the people in attendance planting, and their interest. Mayor John Marchand spoke eloquently about the integrated community benefits. Zone 7 Staff did a great job, specifically, Carol Mahoney, Tom Pico and new staff member Tami Church. It was a very family-friendly event and I look forward to more!

November 7 Participated in an ACWA Teleconference Region Chair/Vice Chair meeting to recommend ACWA Committee Members to the President.

I am pleased to report the following Zone 7 Staff and Board Members who have expressed a desire to serve on an ACWA committee: Jill Duerig, Tom Pico, Kurt Arends, Sandy Figuers and me.

November 5 & 14 Participated in an ACWA teleconference: [To ensure we're all on the same page with content, below is the list of speakers and the topics to be covered.](#) I am program Chair for this program on Thursday, December 5, 9:30 - 11 a.m. at the Fall ACWA Conference.

Program Description: "With today's heightened focus on conservation, it's important to be careful how we use water for non-consumption uses. Recycled water, grey water, and black water can be used in a variety of ways that don't take from our drinking water supply. At this program, learn how using creative water recycling methods can extend the water supply and help maintain a healthy water source."

Speaker Information:

Moderator: Carl Guardino, President & CEO, Silicon Valley Leadership Group

Panelists: Josiah Cain, Director of Innovation, Sherwood Design Engineers
Celeste Cantu, General Manager, Santa Ana Watershed Project Authority
Paula Kehoe, Director of Water Resources, San Francisco PUC
Andy Lipkis, President, Tree People

November 15 I will be attending Regions 1 & 5 Statewide Water Action Plan (SWAP) informational briefing 9:30 - 11:30 a.m., at East Bay Municipal Utility District in Oakland, and may offer verbal comments.

Please let me know if you have any questions or suggestions.

Thanks,
DQ



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: ADMINISTRATION

CONTACT: Jill Duerig

AGENDA DATE: November 20, 2013

ITEM NO. 11a

SUBJECT: GENERAL MANAGER'S REPORT

SUMMARY: The following highlights a few of the key activities which occurred during October. Also attached is a list of the General Manager (GM) contract(s) executed during the month.

Engineering and Flood Control:

- An emergency permit was secured from the US Army Corps of Engineers to complete the Castlewood concrete debris-removal project. In-stream work to remove the rubble that could block stream flows was commenced by Zone 7's contractor on October 1st. Removal of the concrete debris from the failed weir structure at Castlewood was completed during the 11th hour of the summer maintenance program (permits are only valid until October 15th). Hydroseeding was completed later in the month. Castlewood will be invoiced for this work.
- Staff met with the Camp Parks developer to discuss the status of their project which includes providing regional stormwater detention. The developer indicated that, if possible, they would like to break ground in Spring 2014. Zone 7 staff are now working with the developer's consultant to verify benefits during a hundred-year storm as the basis for discussing potential partnering opportunities.
- Staff met with Hansen Aggregates and their geotechnical consultant for a site survey and assessment of the erosion-related damage along the south slope of Lake I to identify repair alternatives. The goal will be to stabilize the slope before the rains begin but this work is still under warranty so any further damage would also have to be addressed by Hansen.

Environmental & External Affairs:

- Saturday, October 19th was the kick-off event for the Living Arroyos program. This public-private partnership (Zone 7-Livermore-Urban Creeks Council) has its own website providing more details about this and other events, <http://livingarroyos.org/>.
- The same day was the "Mow no Mo!" workshop. This water use efficiency program is facilitated by Bringing Back the Natives Gardening and sponsored by Zone 7 (see http://www.zone7water.com/images/pdf_docs/conservation/10-19-13_sheetmulch-wrkshp.pdf).
- Kennedy-Jenks is beginning a review of Zone 7's conservation program. This study will be an update of the earlier K-J study that has been providing guidance to Zone 7 on best

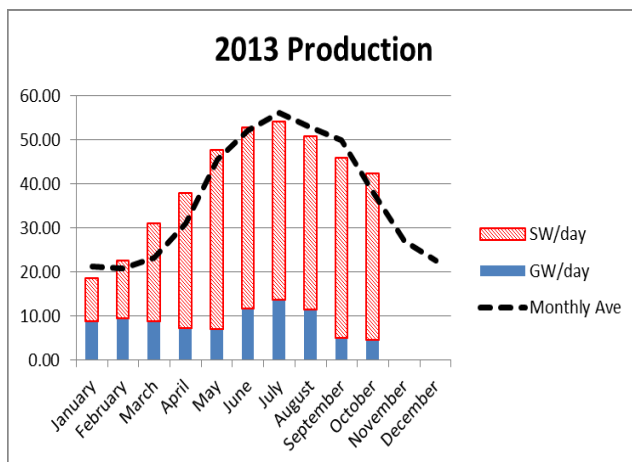
conservation investments for the Livermore-Amador Valley. The current program components will be reviewed in light of new laws, plumbing codes, technology and other factors. A final report should be available by Spring 2014, in time for consideration as part of the 14/15 budget effort.

Finance & Administration

- The Department of Water Resources announced that continuing delays in tying up the loose ends of the South Bay Aqueduct Enlargement and Improvement Project have added another \$8.6 million to the project thus far this calendar year; Zone 7's share of this is close to \$6 million.
- Zone 7 continues to leverage its research dollars by participating in Water Research Foundation studies. A funding agreement was signed with WaterRF to provide \$20K over the next two fiscal years for two potable water reuse-related research projects. This is a joint effort with five other water utilities which will provide a combined total of \$240K in direct funding for the research. WaterRF will provide \$360K in matching funds. The projects are "Assessment of Techniques for Evaluating and Demonstrating Safety of Direct Potable Reuse Product Water" (\$275K) and "Blending Requirements for Water from Direct Potable Reuse Treatment Facilities" (\$325K). Both will inform decisions regarding future water recycling opportunities in the Valley.

Operations and Maintenance:

- High winds caused a power outage at Patterson Pass Water Treatment Plant on October 3rd; startup of both plants (conventional and Ultra-Filtration/UF) was hampered by mechanical failures. The Conventional Plant's clarifier mixer failed to restart (with either generator power or PG&E) and the UF's hypochlorite carrier water booster pump failed to restart. Staff were able to quickly resolve both issues.
- On October 8th, staff completed a management debriefing with the retailers for the June 27th SBA shutdown that was caused by a failure of the SBA pipeline in Milpitas; feedback was generally positive. The following day, there was another operational emergency response exercise to consider a new scenario.
- October demands were slightly higher than average but still less than September, consistent with the cooling Autumn weather.



Monthly List of GM Contracts

October 2013

Contracts:

Eurofins Eaton Analytical	\$14,000	Analytical Services for Regulatory Compliance Purposes
ESA	20,800	Castlewood Concrete Structure Removal
John Ford & Associates	5,000	Management Coaching Services
Kennedy/Jenks Consultants	40,000	Water Conservation Study - Update
JDH Corrosion Consultants, Inc.	14,500	Corrosion Engineering Design for DVWTP Steel Clearwell
Total October 2013	\$94,300	



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: Administrative Services

CONTACT: Boni Brewer/Mike Wallace

AGENDA DATE: November 20, 2013

ITEM NO. **11b**

SUBJECT: Communications Outreach Activities

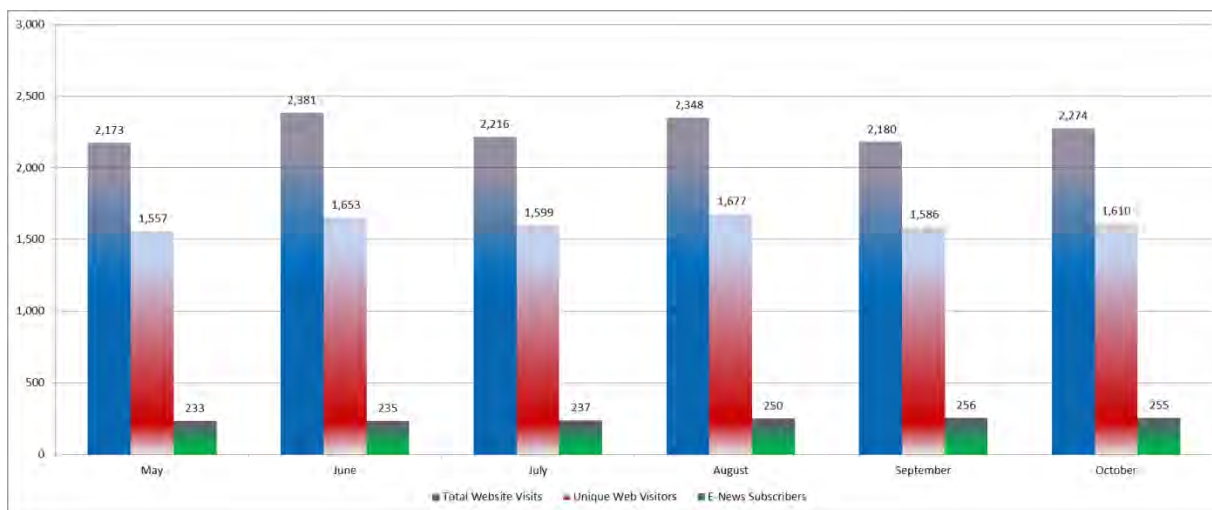
Home & Garden Show, October 4th-6th

During this annual event at the Alameda County Fairgrounds in Pleasanton, Zone 7 displayed its pyramid of 144 one-gallon jugs depicting the typical water use by each person each day here in our service area. In an adjacent space, we again shared an informational booth with the Alameda County Flood Control and Water Conservation District's Clean Water Program. The focus was on stormwater pollution prevention to keep our creeks and bay clean and healthy.

E-newsletter, October 17th and October 31st

The October 17th e-newsletter highlighted the kickoff of the "Living Arroyos" program, provided information on the Salt Management Plan update, and promoted a Zone 7-sponsored lawn removal workshop. The October 31st e-newsletter reminded subscribers to turn off their sprinklers and prepare for upcoming winter storms and potential flooding, and promoted November 4-9 as being California Flood Preparedness Week. The e-newsletters remain posted with other archived newsletters on Zone 7's website, www.zone7water.com/news/enewsletter-a-signups.

Website & E-news Subscription Activity





ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

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ORIGINATING SECTION: Administration
CONTACT: Tom Pico/Tim Hunt

AGENDA DATE: November 20, 2013

ITEM NO. 11c

SUBJECT: Legislative Update

SUMMARY:

- Zone 7 staff, with the support of the Agency's lobbying firm, The Gualco Group, Inc., and the Agency's legislative support consultant, Tim Hunt, monitors legislation that is being considered in Sacramento, as well as other political activities of interest to the Agency.
- On October 13, Governor Brown finished his work on the bills sent to his desk by the Legislature. Among the bills he signed were four that dealt with improving access to clean drinking water for disadvantaged communities. It is likely that a new water bond proposal that will be considered next year (the second of the two-year Legislative session) will also include provisions to improve water systems serving disadvantaged, small communities. Although two proposed bond measures are technically dead for the year because of the two-thirds requirement to put a measure on the ballot, they can be brought back at any time during the two-year session.
- The Brown Administration released its California Water Action Plan that identifies actions to be taken over the next one to five years to move the state on a path to a sustainable water supply. Comments are now being accepted, with the final plan expected next month. A key part of the plan is increasing local and regional self-reliance to reduce future demand on the Delta and other imported water sources.
- The Division of Boating and Waterways established a new emergency regulation on October 10 to implement a program to control potential infestations of Quagga and Zebra mussels. The regulation includes a fee to pay for the control program as well as grants to pay for inspection and control programs.

RECOMMENDED ACTION: Information only

ATTACHMENT: Executive Summary



EXECUTIVE SUMMARY State Legislation



Prepared for the Zone 7 Water Agency, Eastern Alameda County
by The Gualco Group, Inc.
November 20, 2013

Bill	Topic	Synopsis	Staff Recommendation	Status of the Bill/Comments as of 11/5/13
Water Transfer AB 426 (Salas)	Water: water transfers: water rights decrees	Under current law, any water right determined under a court decree issued after January 1, 1981, is transferable as specified. This bill eliminates the requirement that a court decree be issued after January 1, 1981.	Watch	Chaptered by the Secretary of State – Chapter 634, Statutes of 2013
Water Recycling AB 803 (Hueso)	Water Recycling Act of 2013	This bill changes reporting requirements for the discharge of treated sewage effluent when defined as recycled water. It also would authorize compliance with effluent limitations for the release or discharge of recycled water determined to be suitable for direct potable reuse or surface water augmentation.	Watch	Chaptered by the Secretary of State – Chapter 635, Statutes of 2013
AB 1200 (Levine)	Recycled water: agricultural irrigation impoundments: pilot project	This bill would have permitted the San Francisco Bay Regional Water Quality Board to authorize a voluntary pilot project for the purposes of investigating potential water quality impacts associated with supplementing agricultural irrigation impoundments with disinfected tertiary treated recycled water, if the regional board had found that the proposed pilot project satisfies specified criteria. This bill would have required the pilot project to include a stakeholder advisory group, composed as prescribed, to review and provide input on pilot project design, implementation, and data analysis. This bill would have sunset on January 1, 2018.	Watch	Vetoed

Groundwater/Hydraulic Fracturing

SB 620 (Wright)	Water Replenishment Districts	Current law, the Water Replenishment District Act, generally authorizes a water replenishment district to establish an annual reserve fund in an amount not to exceed \$10,000,000 commencing with the 2000-01 fiscal year, and thereafter, as that amount is adjusted annually. The act requires a minimum of 80% of the reserve fund to be expended for water purchases. Until the 2019-20 fiscal year, this bill eliminates the requirement that at least 80% of the reserve fund be expended for water purchases.	Watch	Chaptered by the Secretary of State – Chapter 638, Statutes of 2013
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Drinking Water

AB 21 (Alejo)	Safe Drinking Water Small Community Emergency Grant Fund	This bill authorizes the Department of Public Health to assess a specified annual charge in lieu of interest on loans for water projects made pursuant to the Safe Drinking Water State Revolving Fund, and deposits that money into the Safe Drinking Water Small Community Emergency Grant Fund.	Watch	Chaptered by the Secretary of State – Chapter 628, Statutes of 2013
AB 115 (Perea)	Safe Drinking Water State Revolving Fund	This bill authorizes a legal entity to apply for grant funding on behalf of one or more public water systems serving disadvantaged or severely disadvantaged communities if specified requirements are met, including having a signed agreement with each public water system for which it is apply for funding.	Watch	Chaptered by the Secretary of State – Chapter 630, Statutes of 2013
AB 118 (ASM ES&TM)	Safe Drinking Water State Revolving Fund	This bill limits loans and grants from the Safe Drinking Water State Revolving Fund for planning and preliminary engineering studies, project design & construction costs to those incurred by community and not-for-profit non-community public water systems and specifies that a small community water system or non-transient non-community water system that is owned by a public agency or a private not-for-profit water company and serves a severely disadvantaged community, is deemed to have no ability to repay a loan.	Watch	Chaptered by the Secretary of State – Chapter 631, Statutes of 2013



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING DIVISION: ADMINISTRATIVE SERVICES

CONTACT PERSON: JAVIA GREEN

AGENDA DATE: November 20, 2013

ITEM NO. 11d

SUBJECT: Monthly Budget Report

SUMMARY:

A new financial software system (New World) was implemented on July 1, 2013, starting with fiscal year 2013/14. New World allows us to provide monthly updates on both revenue and expenses. This report provides a summary of budget performance and an explanation of any major variances. The following bullet points provide explanations and additional details to assist in reading this report:

- For all the funds except for Fund 100, expenses currently exceed revenue. This is due to the timing difference of revenues and expenses. For example, Fund 110 - State Water Project receives the bulk of property tax revenue in November and April, while the majority of payments to the Department of Water Resources (DWR) are processed monthly. Until property tax revenue is received, expenses will likely continue to exceed revenue. The financial data reported for Fund 130 – Expansion is another example of a revenue and expense timing difference. Most connection fee revenue is received in the spring and summer, but the majority of non-discretionary expenses (i.e., SBA Enlargement and Cawelo Groundwater Banking Program) are incurred in the late summer and late winter.
- Year-to-date (YTD) payroll expenses for all funds are reported through the pay period ending 9/27/13. Payroll costs are not automatically captured by New World. Instead, labor is imported from a separate system.
- The capital project funds are Funds 120,130 and 210. On the attached Annual Budget by Account Classification Report, please note that the budgets for the capital project funds are reported in account 669 only. Actual project expenses are reported in the appropriate expense accounts as incurred.
- The information in the following tables summarizes, by fund, the attached Annual Budget by Account Classification Report (produced in New World) and includes FY Unaudited Actuals from the former financial system (Fundware).
- The Annual Budget by Account Classification report provides the FY 12/13 Budget for comparison purposes. FY 12/13 Actuals are not included in this report because the data is not available in the new financial system. The FY 13/14 Budget shown is the adopted budget plus any transfers or carryovers.

Water Enterprise Fund – Fund 100 (formerly Fund 52)

Category	12/13 Unaudited Actual	13/14 Budget	13/14 YTD Actual	% Used/Received
Revenue	\$ 39,469,514	\$ 41,823,474	\$ 13,345,464	31.9%
Expenses	\$ 35,262,653	\$ 41,843,048	\$ 10,375,009	24.8%

This fund provides financing for the acquisition and conveyance of raw water, treatment and delivery to the Zone 7 service area. The primary source of revenue for this fund is treated water sales. YTD revenue includes the sale of 13,278-acre feet of treated water through September 2013, 884 acre-feet less than the projection for the same time frame of 14,162. October water sales revenue is not reported because the meter reading data that generates the monthly water billing was not available at the time of this report. Revenue also includes proceeds from the State of California Prop 84 Water Conservation Grant and refunds from DWR. YTD expenses reflect labor, payments to DWR for the monthly variable water charge, and other water production related expenses (i.e., chemicals, utilities and maintenance).

State Water Facilities Fund – Fund 110 (formerly Fund 51)

Category	12/13 Unaudited Actual	13/14 Budget	13/14 YTD Actual	% Used/Received
Revenue	\$ 12,040,842	\$ 14,118,181	\$ 414,013	2.9%
Expenses	\$ 14,002,380	\$ 14,118,181	\$ 7,113,641	50.4%

This is a pass-through fund for fixed charges associated with the State Water Project, assessed as a property tax override. \$0.3M of the revenue received is from unsecured property taxes. These taxes are assessments on personal property such as airplanes or boats and are due on August 31. Property tax revenue from secured property is yet to be posted; this is because first installments are due November 1. YTD expenses reflect payments to DWR for fixed costs.

Water Renewal/Replacement & System-wide Improvements – Fund 120 (formerly Fund 72)

Category	12/13 Unaudited Actual	13/14 Budget	13/14 YTD Actual	% Used/Received
Revenue	\$ 7,347,879	\$ 14,920,377	\$ 2,301,440	15.4%
Expenses	\$ 4,100,242	\$ 22,147,261	\$ 5,628,421	25.4%

This fund pays for capital projects addressing the replacement and improvement of the current water treatment and delivery system. The primary source of funding is a transfer from Fund 100 – Water Enterprise of \$8.5M. Additionally, use of reserves (\$6M) is budgeted as revenue to achieve a balanced budget. YTD revenue includes Dougherty Valley Facility Use Fees and also the quarterly transfer from Fund 100. Expenses reflect labor for capital projects, the North Canyons lease payment, laboratory equipment, and watershed investments.

Water Expansion – Fund 130 (formerly Fund 73)

Category	12/13 Unaudited Actual	13/14 Budget	13/14 YTD Actual	% Used/Received
Revenue	\$ 29,176,830	\$ 52,528,015	\$ 2,181,802	4.2%
Expenses	\$ 18,814,437	\$ 53,211,501	\$ 11,090,522	20.8%

This fund is intended to provide funding for new facilities and supplies to meet the demands of new development. The primary source of revenue is connection fees. Additionally, use of reserves (\$31.6M) is budgeted as revenue to achieve a balanced budget. The YTD connection fee amount reported in the October report included prior year revenue of \$2.4M. YTD revenue has been adjusted to reflect FY 13/14 actual revenue (July 2013 – September 2013) of \$4.6 M. This is slightly less than projection for the same time frame of \$4.7M.

A total of 31 connection fee credits were used totaling another \$1M, while 642 credits remain outstanding, valued at \$15M at the 2013 connection fee level (see Chart 1 attached). Expenses reflect payments to DWR, the North Canyons lease payment, interest on the ISA, watershed investments, SBA Enlargement, and Cawelo debt payments. Based on YTD and projected revenue and expenses, staff anticipates sufficient funding to pay off the ISA by January 1, 2014.

Flood Protection Operations – Fund 200 (formerly Fund 50)

<i>Category</i>	<i>12/13 Unaudited Actual</i>	<i>13/14 Budget</i>	<i>13/14 YTD Actual</i>	<i>% Used/Received</i>
Revenue	\$ 6,151,496	\$ 22,230,365	\$ 441,295	1.99%
Expenses	\$ 5,355,914	\$ 24,270,134	\$ 11,866,977	48.90%

This fund provides funding for general administration and the maintenance and improvement of the existing flood protection system. The primary source of revenue is property tax revenue (\$6M), additionally, reserves of (\$16M) are budgeted as revenue to achieve a balanced budget. Similar to Fund 110 - State Water Facilities Fund, secured property tax revenue is yet to be posted because it is received in the winter and spring. Of the revenue that has been posted, \$0.28M is from unsecured property tax revenue. Expenses include labor, the North Canyons lease payment, watershed investments, and the summer flood control maintenance program.

Flood Protection and Stormwater Drainage – Fund 210 (formerly Fund 76)

<i>Category</i>	<i>12/13 Unaudited Actual</i>	<i>13/14 Budget</i>	<i>13/14 YTD Actual</i>	<i>% Used/Received</i>
Revenue	\$ 5,180,104	\$ 5,962,539	\$ 880,089	14.8%
Expenses	\$ 1,227,729	\$ 6,522,656	\$ 3,245,537	49.8%

This fund provides funding for flood protection facilities required for new development. YTD revenue is primarily from development impact fees. Similar to connection fees, roughly 40% of impact fee revenue is received during the fall/winter, with the remaining 60% occurring in the spring/early summer. Expenses also include the North Canyons lease payment, flood protection projects and watershed investments.

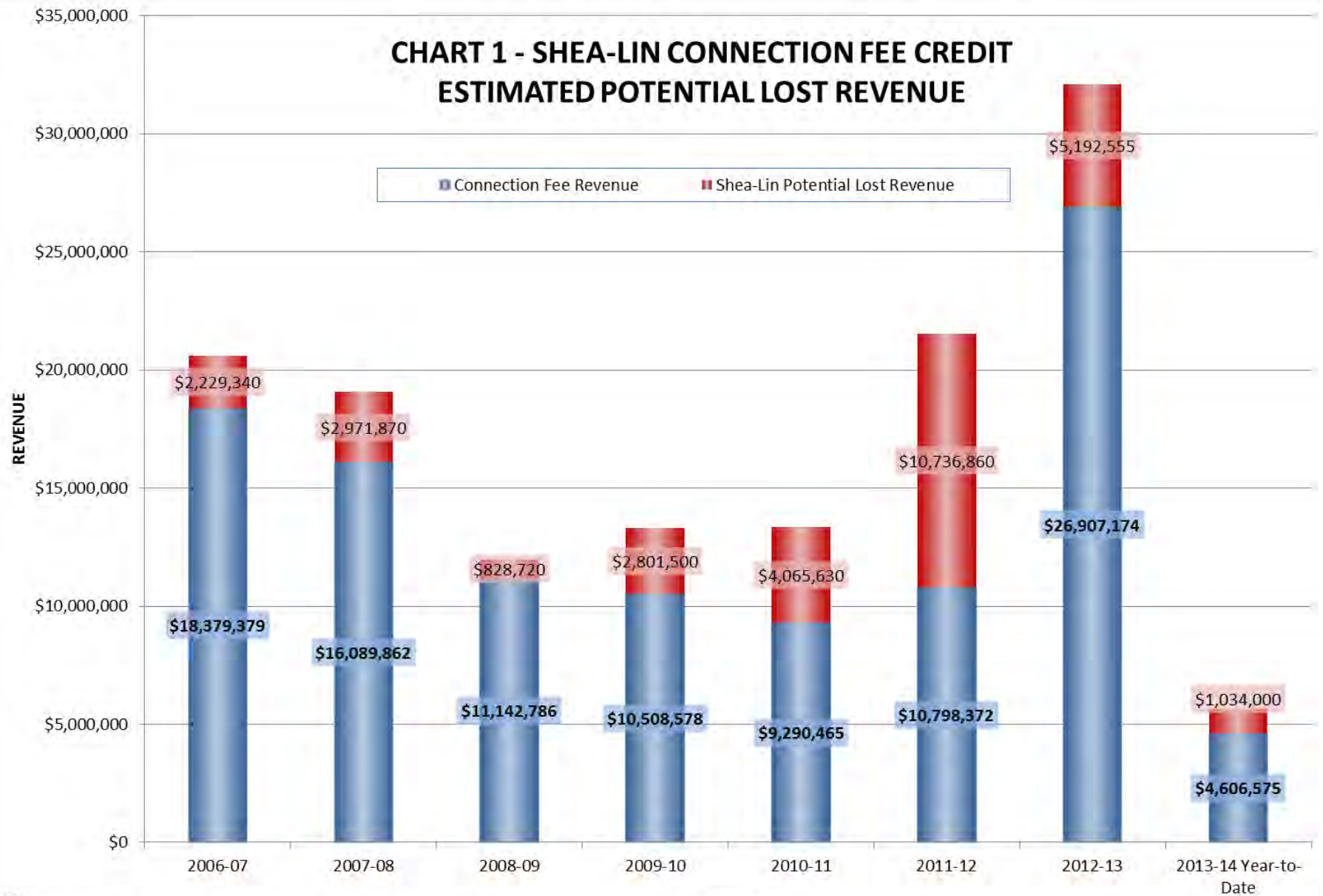
RECOMMENDED ACTION:

Information only.

ATTACHMENTS:

CHART 1 – Shea-Lin Connection Fee Credit Estimated Potential Lost Revenue
Zone 7 Water Agency Annual Budget by Account Classification Report

CHART 1 - SHEA-LIN CONNECTION FEE CREDIT ESTIMATED POTENTIAL LOST REVENUE



NOTES:
 Shea-Lin Credit Data - as of 10-31-2013, 1393 Redeemed & 642 Remaining.
 Revenue as of 09-31-13 for DSRSD, Pleasanton, & Livermore
 Initial Payment of \$10,000,000 for Credits is Not Reflected in This Graph

Fiscal Year

ZONE 7 WATER AGENCY

Annual Budget by Account Classification Report

Budget Summary

	FY 12/13 Budget	FY 13/14 Budget	FY 13/14 YTD Actual	% Used/Rec
FUND: 100 Water Enterprise Operations				
Revenue				
411 - Water Sales & Service	\$37,085,455.00	\$37,664,745.00	\$13,145,097.90	34.9%
452 - Aid from Governmental Agencies - State	\$700.00	\$700.00	\$92,670.00	13238.6%
461 - Investment Earnings	\$95,000.00	\$95,000.00	\$0.00	0.0%
462 - Rents and Royalties	\$31,000.00	\$31,000.00	\$4,971.20	16.0%
464 - Fines and Penalties	\$0.00	\$0.00	\$34.10	-
481 - Other Revenue	\$93,300.00	\$93,300.00	\$102,690.75	110.1%
499 - Use of Reserves	\$0.00	\$3,938,729.00	\$0.00	0.0%
Revenue Totals	\$37,305,455.00	\$41,823,474.00	\$13,345,463.95	31.9%
Expenditures				
511 - Personal Services - Salaries and Wages ¹	\$12,979,972.00	\$13,325,249.00	\$2,470,724.08	18.5%
512 - Personal Services - Overtime ¹	\$204,410.00	\$206,778.00	\$26,144.12	12.6%
513 - Personal Services - Benefits ¹	\$5,935,795.00	\$6,388,757.00	\$1,386,832.93	21.7%
600 - Labor & Overhead Distributed ²	(\$7,587,903.00)	(\$7,803,870.00)	(\$975,127.57)	12.5%
611 - Purchased Services	\$3,458,839.00	\$4,094,011.00	\$651,913.67	15.9%
621 - Water	\$5,327,008.00	\$6,878,235.00	\$2,401,037.20	34.9%
631 - Chemicals	\$3,490,885.00	\$2,841,522.00	\$629,766.04	22.2%
641 - Utilities	\$1,664,556.00	\$1,822,126.00	\$622,387.61	34.2%
643 - Communications	\$227,508.00	\$174,755.00	\$36,103.91	20.7%
651 - Cleaning Services	\$64,196.00	\$48,835.00	\$10,728.30	22.0%
652 - Repairs and Maintenance	\$2,955,100.00	\$2,381,514.00	\$417,621.28	17.5%
653 - Rental Services	\$113,200.00	\$108,650.00	\$17,555.34	16.2%
661 - General Office Services/ Supplies	\$904,375.00	\$584,385.00	\$75,904.13	13.0%
662 - Organizational Membership/ Participation	\$452,323.00	\$519,283.00	\$259,161.78	49.9%
665 - Other Services/ Supplies	\$726,440.00	\$769,206.00	\$80,730.20	10.5%
667 - Training and Travel	\$424,296.00	\$395,220.00	\$31,721.67	8.0%
669 - Special Departmental Expense	\$826,500.00	\$586,392.00	\$96,305.01	16.4%
671 - Equipment, Furniture and Vehicles	\$37,000.00	\$22,000.00	\$10,498.81	47.7%
691 - Transfers	\$0.00	\$8,500,000.00	\$2,125,000.00	25.0%
Expenditure Totals	\$32,204,500.00	\$41,843,048.00	\$10,375,008.51	24.8%
FUND Total: Water Enterprise Operations	\$5,100,955.00	(\$19,574.00)	\$2,970,455.44	
FUND: 110 State Water Facilities				
Revenue				
411 - Water Sales & Service	\$1,314,313.00	\$1,299,710.00	\$0.00	0.0%
421 - Property Taxes	\$10,150,000.00	\$11,247,000.00	\$320,544.04	2.9%
452 - Aid from Governmental Agencies - State	\$45,000.00	\$45,000.00	\$0.00	0.0%
453 - Aid from Governmental Agencies - Local	\$505.00	\$611.00	\$620.58	101.6%
461 - Investment Earnings	\$25,750.00	\$16,522.00	\$0.00	0.0%
464 - Fines and Penalties	\$0.00	\$0.00	\$4.65	-
481 - Other Revenue	\$1,065,403.00	\$1,189,542.00	\$92,844.00	7.8%
499 - Use of Reserves	\$0.00	\$319,796.00	\$0.00	0.0%
Revenue Totals	\$12,600,971.00	\$14,118,181.00	\$414,013.27	2.9%
Expenditures				
621 - Water	\$13,974,125.00	\$14,118,181.00	\$7,113,641.16	50.4%
Expenditure Totals	\$13,974,125.00	\$14,118,181.00	\$7,113,641.16	50.4%
FUND Total: State Water Facilities	(\$1,373,154.00)	\$0.00	(\$6,699,627.89)	

ZONE 7 WATER AGENCY

Annual Budget by Account Classification Report

Budget Summary

	FY 12/13 Budget	FY 13/14 Budget	FY 13/14 YTD Actual	% Used/Rec
FUND: 120 Water Enterprise Capital IR&R				
Revenue				
431 - Development Fees	\$26,550.00	\$250,000.00	\$176,290.00	70.5%
441 - Charges for Services	\$0.00	\$7,500.00	\$150.00	2.0%
461 - Investment Earnings	\$141,703.00	\$74,462.00	\$0.00	0.0%
499 - Transfers and Use of Reserves	\$6,600,000.00	\$14,588,415.00	\$2,125,000.00	14.6%
Revenue Totals	\$6,768,253.00	\$14,920,377.00	\$2,301,440.00	15.4%
Expenditures				
600 - Labor & Overhead Distributed	\$0.00	\$0.00	\$271,962.62	-
611 - Purchased Services	\$0.00	\$0.00	\$36,050.14	-
643 - Communications	\$0.00	\$0.00	\$41.72	-
653 - Rental Services	\$0.00	\$0.00	\$177,990.00	-
661 - General Office Services/ Supplies	\$0.00	\$0.00	\$293.17	-
665 - Other Services/ Supplies	\$0.00	\$0.00	\$1,185.80	-
669 - Special Departmental Expense ³	\$12,023,062.00	\$22,147,261.00	\$0.00	-
671 - Equipment, Furniture and Vehicles	\$0.00	\$0.00	\$67,076.59	-
672 - Land and Facility Improvements	\$0.00	\$0.00	\$5,073,820.62	-
Expenditure Totals	\$12,023,062.00	\$22,147,261.00	\$5,628,420.66	25.4%
FUND Total: Water Enterprise Capital IR&R	(\$5,254,809.00)	(\$7,226,884.00)	(\$3,326,980.66)	
FUND: 130 Water Enterprise Cap Expansion				
Revenue				
431 - Development Fees	\$12,382,587.00	\$18,400,000.00	\$4,606,575.00	25.0%
461 - Investment Earnings	\$89,885.00	\$166,565.00	\$0.00	0.0%
481 - Other Revenue	\$2,539,000.00	\$2,381,600.00	\$0.00	0.0%
499 - Use of Reserves	\$0.00	\$31,579,850.00	\$0.00	0.0%
Revenue Totals	\$15,011,472.00	\$52,528,015.00	\$4,606,575.00	8.8%
Expenditures				
600 - Labor & Overhead Distributed	\$0.00	\$0.00	\$105,435.64	-
611 - Purchased Services	\$0.00	\$0.00	\$13,154.50	-
621 - Water	\$19,021,116.00	\$18,654,187.00	\$10,326,172.55	55.4%
653 - Rental Services	\$0.00	\$0.00	\$138,436.68	-
662 - Organizational Membership/ Participation	\$0.00	\$0.00	\$16,335.00	-
665 - Other Services/ Supplies	\$0.00	\$0.00	\$342.70	-
669 - Special Departmental Expense ³	\$3,434,263.00	\$3,803,833.00	\$8,038.58	0.2%
671 - Equipment, Furniture and Vehicles	\$0.00	\$0.00	\$14,538.19	-
672 - Land and Facility Improvements	\$0.00	\$0.00	\$422,365.22	-
675 - Debt Service	\$0.00	\$30,753,481.00	\$45,703.25	0.1%
Expenditure Totals	\$22,455,379.00	\$53,211,501.00	\$11,090,522.31	20.8%
FUND Total: Water Enterprise Cap Expansion	(\$7,443,907.00)	(\$683,486.00)	(\$6,483,947.31)	

ZONE 7 WATER AGENCY

Annual Budget by Account Classification Report

Budget Summary

	FY 12/13 Budget	FY 13/14 Budget	FY 13/14 YTD Actual	% Used/Rec
FUND: 200 Flood Protection Operations				
Revenue				
421 - Property Taxes	\$5,873,310.00	\$5,979,557.00	\$277,497.74	4.6%
441 - Charges for Services	\$3,000.00	\$3,000.00	\$6,380.35	212.7%
452 - Aid from Governmental Agencies - State	\$54,000.00	\$54,000.00	\$0.00	0.0%
453 - Aid from Governmental Agencies - Local	\$690.00	\$690.00	\$697.88	101.1%
461 - Investment Earnings	\$112,619.00	\$110,600.00	\$0.00	0.0%
462 - Rents and Royalties	\$17,500.00	\$17,500.00	\$17,274.69	98.7%
464 - Fines and Penalties	\$0.00	\$0.00	\$4.03	-
481 - Other Revenue	\$35,000.00	\$35,000.00	\$139,440.00	398.4%
499 - Use of Reserves	\$0.00	\$16,030,018.00	\$0.00	0.0%
Revenue Totals	\$6,096,119.00	\$22,230,365.00	\$441,294.69	2.0%
Expenditures				
600 - Labor & Overhead Distributed	\$1,218,073.00	\$2,100,065.00	\$491,679.48	23.4%
611 - Purchased Services	\$1,396,975.00	\$2,362,182.00	\$87,007.16	3.7%
643 - Communications	\$3,000.00	\$2,200.00	\$464.18	21.1%
651 - Cleaning Services	\$6,000.00	\$10,000.00	\$1,086.00	10.9%
652 - Repairs and Maintenance	\$2,795,000.00	\$5,291,743.00	\$564,445.20	10.7%
653 - Rental Services	\$25,000.00	\$145,500.00	\$52,804.70	36.3%
661 - General Office Services/ Supplies	\$64,100.00	\$19,550.00	\$2,805.20	14.3%
662 - Organizational Membership/ Participation	\$77,000.00	\$123,500.00	\$930.00	0.8%
665 - Other Services/ Supplies	\$22,000.00	\$28,400.00	\$204.78	0.7%
667 - Training and Travel	\$18,500.00	\$30,900.00	\$2,205.80	7.1%
669 - Special Departmental Expense	\$25,000.00	\$13,333.00	\$3,333.33	25.0%
672 - Land and Facility Improvements	\$0.00	\$14,142,761.00	\$10,660,011.17	75.4%
Revenue Totals:	\$6,096,119.00	\$22,230,365.00	\$441,294.69	2.0%
Expenditure Totals	\$5,654,148.00	\$24,270,134.00	\$11,866,977.00	48.9%
FUND Total: Flood Protection Operations	\$441,971.00	(\$2,039,769.00)	(\$11,425,682.31)	
FUND: 210 Flood Protection/Drainage DIF				
Revenue				
431 - Development Fees	\$1,872,436.00	\$2,500,000.00	\$851,529.20	34.1%
461 - Investment Earnings	\$154,894.00	\$132,000.00	\$0.00	0.0%
481 - Other Revenue	\$0.00	\$0.00	\$28,560.00	-
499 - Use of Reserves	\$0.00	\$3,330,539.00	\$0.00	0.0%
Revenue Totals	\$2,027,330.00	\$5,962,539.00	\$880,089.20	14.8%
Expenditures				
600 - Labor & Overhead Distributed	\$0.00	\$0.00	\$106,049.83	-
611 - Purchased Services	\$0.00	\$0.00	\$20,657.39	-
653 - Rental Services	\$0.00	\$0.00	\$39,553.32	-
669 - Special Departmental Expense ³	\$3,347,956.00	\$6,522,656.00	\$0.00	-
672 - Land and Facility Improvements	\$0.00	\$0.00	\$3,079,276.23	-
Expenditure Totals	\$3,347,956.00	\$6,522,656.00	\$3,245,536.77	49.8%
FUND Total: Flood Protection/Drainage DIF	(\$1,320,626.00)	(\$560,117.00)	(\$2,365,447.57)	
Revenue Grand Totals:	\$79,809,600.00	\$151,582,951.00	\$21,988,876.11	14.5%
Expenditure Grand Totals:	\$89,659,170.00	\$162,112,781.00	\$49,320,106.41	30.4%
Net Grand Totals:	(\$9,849,570.00)	(\$10,529,830.00)	(\$27,331,230.30)	

Notes:

1. Agency-wide salaries, wages, overtime and benefits are budgeted in Fund 100.
2. This is a credit to Fund 100 for salaries, wages, overtime and benefits charged to other funds.
3. Budgets for capital projects are reported in account 669 only. Actual project expenses are reported in the appropriate expense account.



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: Engineering, Operations and Maintenance

CONTACT: Kurt Arends

AGENDA DATE: November 20, 2013

ITEM NO. **11e**

SUBJECT: Update Related to the Bay Delta Conservation Plan

BACKGROUND:

The Bay Delta Conservation Plan (BDCP), which has the co-equal goals of achieving water supply reliability while improving the ecosystem, is a voluntary effort to obtain long-term, incidental take permits for the operations and infrastructure improvements of the State Water Project (SWP) and the Central Valley Project (CVP) through development of a comprehensive Habitat Conservation Plan (HCP) under the federal Endangered Species Act, and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The BDCP is a mechanism for improving the ecological conditions to provide multi-species regulatory protection for 57 different wildlife and plant species in the Delta. Zone 7's interest is securing the regulatory protection for SWP operations, restoring water supply reliability lost to recent regulation and court actions and improving the ecosystem through a long-term multi-species habitat conservation agreement.

The Delta Habitat Conservation and Conveyance Program (DHCCP) is the associated effort to do enough preliminary engineering to analyze the proposed actions in the BDCP under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) and to prepare the related environmental impact documents (both a federal Environmental Impact Statement and a state Environmental Impact Report, known as an EIR/EIS, collectively). This effort also includes development of preliminary engineering designs, geotechnical field studies and analysis, and other necessary feasibility information for Delta water conveyance improvement projects and related habitat conservation measures under the BDCP.

DISCUSSION:

BDCP – Over the past seven years, hundreds of public meetings along with continuous coordination with stakeholders has helped to shape the BDCP. The plan has evolved over time and continues to evolve today to attempt to balance competing interests. Most recently the water facilities and conveyance operations being proposed have been further refined to address concerns and further reduce disruption and disturbance in the Delta. Balancing these concerns with cost and engineering design, changes include shifting construction impacts from private to public lands, shrinking the intermediate forebay by over 90%, shortening the main tunnel by almost five miles, and reducing the amount of private land impacted by construction. (See attached brochures for more information about the changes being proposed.)

While state and federal agencies have been diligently working to prepare the public draft of the BDCP, the recent shutdown of the federal government and associated staff furloughs have delayed the development, review, and ultimately the release of the Public Draft BDCP and EIR/EIS. **The Public Draft BDCP and EIR/EIS are now scheduled for release on December 13, 2013 for 120 days of formal review.**

During the formal public review period, which will run from December 13, 2013 to April 14, 2014, the public, agencies, and other interested parties will be able to access copies of the document online, in repositories throughout the state, and request copies for review. The State and Federal lead agencies also will hold a series of public meetings during January and February 2014 to provide information about the project and accept formal comments. Formal written comments on the Public Review Draft BDCP and EIR/EIS will be accepted during the official comment period and all significant environmental issues raised in comments received during the public review period will be addressed in the Final EIR/EIS.

Water Action Plan - On Friday, November 1, 2013, the California Natural Resources Agency, California Environmental Protection Agency and the California Department of Food and Agriculture released a public review draft California Water Action Plan. Aimed at providing the foundation for sustainable Statewide water resource management, the Plan will be implemented over the next five years in close collaboration with state, federal and local governments, as well as regional agencies, Native American tribes and the public. The proposed actions are based on broad objectives: more reliable water supplies, the restoration of important species and habitat, and a more resilient, sustainably-managed water system that can better withstand inevitable pressures in the coming decades. Many of the proposed state actions in the draft plan parallel Zone 7's local Strategic Planning Priorities, just updated at the October 16, 2013 board meeting.

The California Water Action Plan includes:

- Make Conservation a California Way of Life
- Increase Local and Regional Self-Reliance
- Achieve Co-Equal Goals for the Delta
- Protect and Restore Important Ecosystems
- Manage and Prepare for Dry Periods
- Expand Water Storage Capacity
- Provide Safe Drinking Water for All Communities
- Improve Flood Protection
- Increase Operational and Regulatory Efficiency
- Identify Sustainable and Integrated Financing Opportunities

The BDCP is one component, among many, of the Water Action Plan. In its efforts to achieve the co-equal goals of water supply reliability and ecosystem restoration, the BDCP, a component of the Delta Stewardship Council's Delta Plan, seeks to protect dozens of species of fish and wildlife in the Delta while also securing reliable water deliveries for two-thirds of California. The California Water Action Plan recognizes that all Californians have a stake in the future of our state's water resources, and that a series of actions are needed to comprehensively address the water issues before us. A copy of the Water Action Plan can be found at <http://resources.ca.gov/>.

BDCP: Expanding Sandhill Crane Habitat

August 2013

The Bay Delta Conservation Plan (BDCP) includes conservation actions for 57 plant and wildlife species, including the greater sandhill crane, believed to be one of the world's oldest bird species. Thousands of sandhill cranes winter in the Delta, roosting in shallow wetlands and foraging on nearby farmlands. Because the cranes forage almost entirely on privately-owned agricultural lands, expanded efforts to protect these lands are essential to ensure that suitable habitat remains available in the Delta.

The BDCP seeks to restore and protect approximately 145,000 acres of habitat during its 50-year term. These restoration efforts include biological goals and objectives to address the needs of migratory birds, including the greater sandhill crane.

The BDCP Biological Goals and Objectives for greater sandhill crane have been updated based on proposed project refinements to include higher habitat targets than those appearing in previous drafts of the Biological Goals and Objectives.

Additionally, avoidance and minimization measures are included in the BDCP to reduce indirect effects, including:

- Maintaining flooded corn fields and optimizing management of lands in the vicinity of indirectly affected crane roosting/foraging habitat, prior to and during construction, to encourage cranes to remain in the vicinity.
- Restricting the timing and location of construction-related activities in the vicinity of roost sites during the winter, when cranes are present.
- Placing barriers between construction activities and crane roost sites to reduce both noise and visual effects.
- Locating power lines and other facilities to minimize effects on cranes.

New Tunnel Route: Preserving Crane Habitat

Proposed refinements to the water conveyance facilities and tunnel alignment have been introduced based on a comprehensive review and analysis to balance costs, engineering design, and ease of construction while minimizing local dislocation and disturbance. The combined actions of realigning the conveyance tunnels and moving the intermediate forebay create additional restoration opportunities.

The refined water conveyance alignment includes an overall reduction of approximately 330 acres in the loss of permanent and temporary sandhill crane roosting/foraging habitat compared with the previous proposed alignment. BDCP implementation will result in a net permanent gain of 504 acres of roosting/foraging habitat, with at least 180 acres of new habitat in the Stone Lakes National Wildlife Refuge Project Boundary. While BDCP will result in a 4 percent permanent loss in crane foraging habitat, the value of crane foraging habitat on protected lands is expected to increase substantially. The net increase in roosting habitat, and the increase in area and value of protected foraging habitat are expected to protect and expand crane populations within their winter range in the Plan area.

In coordination with local Delta landowners and stakeholders, additional refinements will continue to be considered to avoid and minimize impacts to crane habitat.

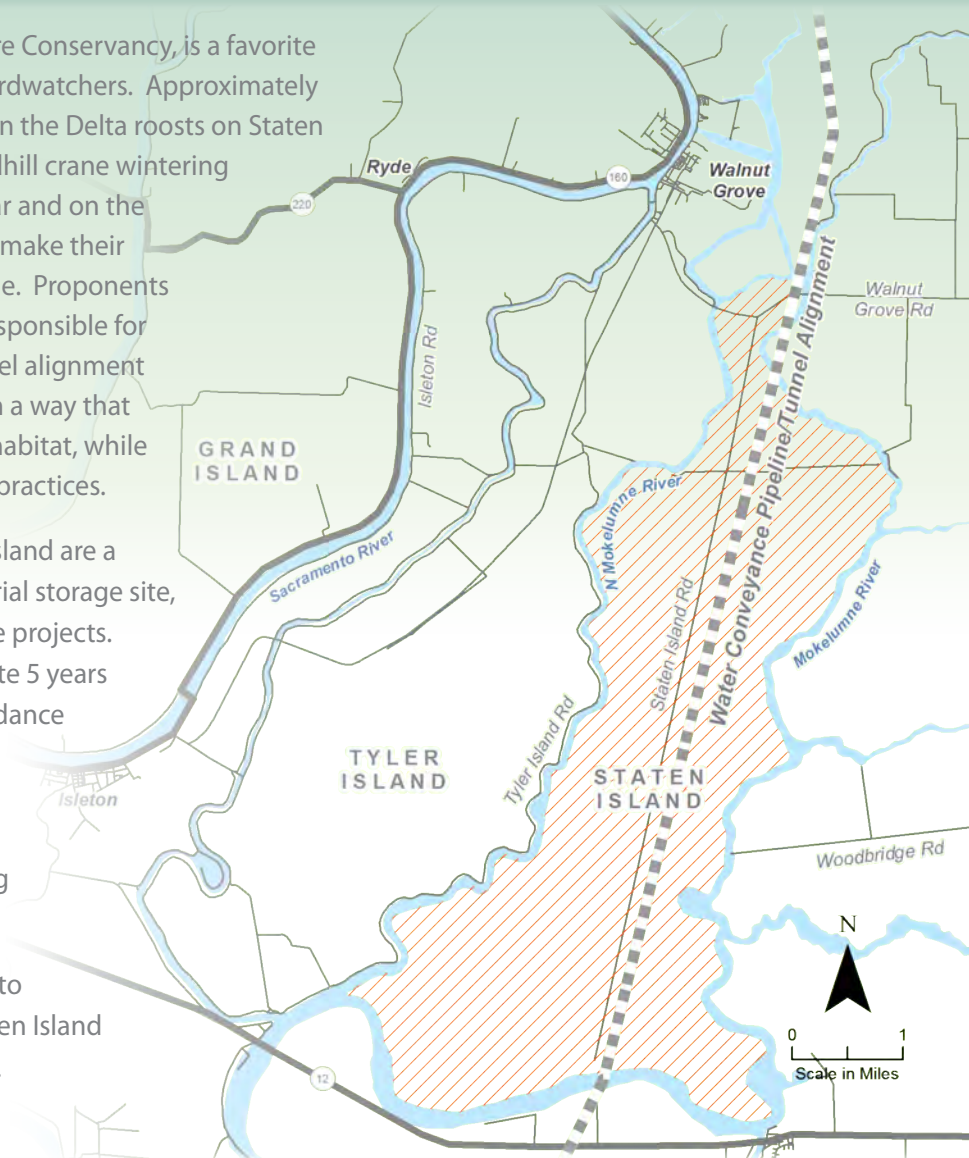


Staten Island: Protecting a Special Place

Staten Island, owned and managed by The Nature Conservancy, is a favorite stop for sandhill cranes and a popular spot for birdwatchers. Approximately 20 percent of the crane population that winters in the Delta roosts on Staten Island, making it one of the most important sandhill crane wintering sites in the North Delta. The public roadways near and on the island are popular spots for watching the cranes make their daily return to nests from fields where they forage. Proponents of the BDCP intend to work closely with those responsible for the welfare of Staten Island to create a final tunnel alignment plan and manage construction and operations in a way that minimizes disruptions to roosting and foraging habitat, while protecting and enhancing bird-friendly farming practices.

Among the potential project impacts to Staten Island are a construction shaft and a 1,274-acre tunnel material storage site, which could be reduced through proposed reuse projects. While construction impacts are expected to create 5 years of temporary disruption to existing habitat, avoidance and minimization efforts and expanded habitat included in the BDCP's habitat restoration conservation measures are expected to result in a long-term net benefit to sandhill crane roosting habitat.

Additionally, BDCP is working with stakeholders to identify potential roadway modifications on Staten Island to enhance public access to crane-viewing areas.



No final decisions can be made on BDCP prior to the completion of environmental review and public input. Final alignment will be based on further stakeholder input to maximize agriculture productivity and minimize impact to migratory bird habitat, including sandhill crane habitat.

August 2013

BDCP Refinements Respond to Community and Statewide Needs

Proposed refinements have been developed to address comments and concerns gathered throughout the BDCP planning process.

Over 7 years, hundreds of public meetings, and ongoing coordination with stakeholders, a comprehensive plan to address the ecosystem and water supply challenges in the Sacramento-San Joaquin Delta has taken shape. The Bay Delta Conservation Plan (BDCP) has continued to evolve since the enactment of the 2009 Delta Reform Act. The water facility and conveyance operations proposed as part of the BDCP have changed significantly in ways that reduce disruption and disturbance in the Delta. Changes previously announced include:

- Underground tunnels, instead of a surface canal, could be used for water transport.
- The number of new Sacramento River intakes has been reduced from five to three, and capacity has decreased from 15,000 cubic feet per second (cfs) to 9,000 cfs.

Newly proposed changes include:

- A shift of construction activities associated with intermediate forebay and reusable tunnel material area away from north Delta communities.
- A shift of some permanent and temporary construction impacts from private to public lands.
- A shrinking of the intermediate forebay surface acreage from 750 acres to 40 acres.
- A reduction in the number of main tunnel shaft locations from seven to five.
- Shortening of the main tunnel length from 35 miles to approximately 30 miles.
- A reduction in the amount of private land subject to permanent and temporary impacts due to construction of water conveyance infrastructure.

These project refinements balance costs, engineering design, and ease of construction while minimizing local dislocation and disturbance.

Efforts will continue to ensure that the project is developed under the best management practices possible, and with the most current science available. The plan seeks to achieve the co-equal goals of a more reliable water supply for California and enhancement of the Delta ecosystem, while also preserving the unique communities and agricultural productivity of the Delta.



No final decisions on the BDCP can be made prior to the completion of environmental review and public input. The elements described here have been identified for the purpose of further analysis pursuant to the California Environmental Quality Act, the National Environmental Policy Act, the Endangered Species Act, the Natural Community Conservation Planning Act, and other applicable statutes.

Highlights of Changes to Proposed Water Facility Construction

Recent tunnel alignment refinements based on local input and ongoing evaluation have been recommended to improve efficiency, reduce impacts to local Delta communities, and minimize environmental impacts. These changes will be reflected in the BDCP Measure 1 and evaluated in the Public Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) planned for release in 2013.

Reduced Impacts of Recent Project Refinements¹

	Consultant Administrative Draft EIR/EIS	2013 Project Refinements (Environmental Review Pending)
CM 1 Facility Footprint ²	3,654 acres	1,851 acres
Intermediate Forebay Size (Surface Acreage)	750 acres	40 acres
Private Property Impacts – Permanent and Temporary	5,965 acres	5,557 acres
Public Lands Utilized	240 acres	657 acres ³
Number of Main Tunnel Launch and Retrieval Shaft Locations ⁴	7	5
Agricultural Impacts ⁵	6,105 acres	6,033 acres

¹ All acreages listed are approximate. Final acreages will be determined after the Record of Decision/Notice of Determination. Environmental review documents are meant to disclose impacts. As such, the worst-case scenario impacts are included. Opportunities to further reduce and mitigate impacts will be evaluated as the project progresses.

² Conservation Measure 1 - All permanent surface facility footprint acreage. Does not include reusable tunnel material acreage.

³ 2013 Project Refinements utilize more publicly-owned acres.

⁴ A "Shaft Location" is defined as a location with one or more launch or retrieval shafts. Includes locations for the main tunnel, which is the dual-bore tunnels between the intermediate forebay and Clifton Court Forebay.

⁵ Agricultural impacts were identified using the County Land Use data, which includes the following categories: Alfalfa, Corn, Fallow and Idle, Grain, Grapes, Non-irrigated, Deciduous Fruits and Nuts, Field Crops, Truck (Nursery and Berry), Pasture, Rice, Semi-Agricultural, and Tomatoes.

Uses More Public Lands – The refined alignment utilizes 657 acres of state- and publicly-owned property to minimize impacts to productive farmland and beneficial habitat. The Department of Water Resources property south of the town of Hood will be used as a construction staging area, and due to its proximity to town, a 1,200-foot noise buffer will be provided (included in the EIR/EIS as a mitigation measure).

Reduces Roadway Impacts – Input from the local residents of Hood and Courtland identified several temporary road alternatives for Highway 160 that preliminarily meet Caltrans requirements and impacts fewer residences, other structures, and farmland. DWR will continue its consultations with Caltrans to further refine the road designs to address community concerns, including the accommodation of emergency response vehicles, agricultural vehicles, and other commercial vehicles. The refined alignment also reduces or eliminates impacts to bridges and roads including the Snodgrass Slough Bridge at Twin Cities Road and Highway 4.

Reduces the Impact of the Intermediate Forebay – Operational changes to gravity flow conveyance and modification at Clifton Court Forebay allow for the reduction in size of the Intermediate Forebay surface storage and spillway from more than 1,000 acres to less than 250 acres (with surface acreage reduced from approximately 750 acres to 40 acres). Relocating the smaller forebay away from the towns of Hood and Courtland and closer to Interstate 5 on the Glanville Tract also lessens the impacts to roads and bridges, creates conservation opportunities with the Stone Lakes National Wildlife Refuge, and makes it possible to utilize more publicly-owned land.

Creates Reusable Tunnel Material – The refined tunnel alignment includes the potential for reuse of excavated tunnel material. Lessons learned on a nearby San Francisco Public Utilities Commission tunnel project suggest that as much as 98 percent of the material will be reusable for construction, habitat restoration, and other reuses. The EIR/EIS assumes that all of the excavated tunnel material will need to be stored; however, with modern sorting and processing techniques using biodegradable additives, the majority of the material is expected to be reused during and after the construction of the project.

Eliminates Borrow Pit Area Near Intakes – Proposed borrow pits in the area near the intakes (between River Road and Snodgrass Slough) have been removed. Due to concerns about drainage and irrigation impacts on farmland, activities in this area will be limited to staging for construction. Overall acreage of the staging area will be reduced in half from more than 400 to approximately 200 acres.

Reduces Height of Pumping Plants – Design refinements allow for the reduction of the height of the pumping plants at the intake facilities along the Sacramento River from 60 feet to approximately 30 feet.

Reduces Above-Ground Impacts to Hood – Replacing the proposed cut and cover (surface) pipeline with a conveyance tunnel reduces impacts to the town of Hood, including the Hood fire station, homes, farmland, and related structures.

Increases Habitat Restoration Opportunities – The combined actions of realigning the conveyance tunnels and moving the intermediate forebay creates new restoration opportunities. Excavated reusable tunnel material creates the opportunity to work with landowners and stakeholders to improve and preserve habitat at potential locations like Staten Island both for sandhill cranes and other species.

Reduces Impacts in South and Central Delta – The tunnel realignment has reduced the number of tunnel reaches and the number of launch sites. Some islands no longer have direct impacts, including Venice, Andrus, and Tyler islands. Impacts elsewhere have been reduced significantly.

Modifies Clifton Court Forebay – Clifton Court Forebay will be redesigned to improve overall operations for both north and south Delta conveyance. The existing forebay will be dredged, divided, and expanded to the south. Proposed north Delta conveyance facilities will supply water to the northern portion of the forebay, while existing south Delta facilities will supply the southern portion. The new pipeline-tunnel will terminate at the north end of the forebay. Additionally, opportunities have been identified to expand recreation facilities and accessibility at Clifton Court.

Refined Alignment (2013)
Previous Alignment (2012)

No final decision can be made prior to the completion of environmental review and public input. Final alignment will be based on further stakeholder input to minimize impacts.

Counties, cities, and other local governments depend, in part, on property taxes paid by private property owners. Typically, when land is acquired by a public agency, those payments stop. To ensure that these important revenues remain, the BDCP will pay the replacement cost of those property taxes to local governments.

Moving Forward: Ongoing Community Coordination and Adaptation

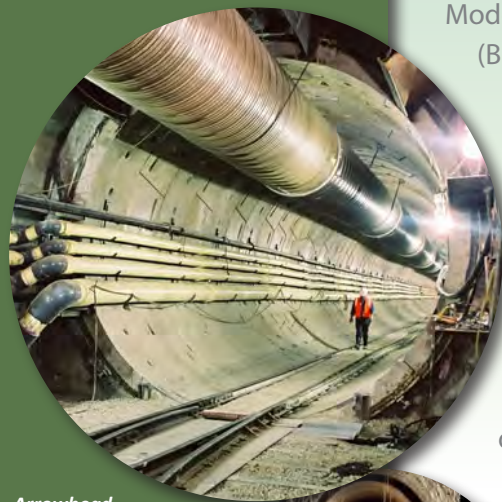
The State of California is committed to an open and transparent process throughout the development of the BDCP, as reflected by refinements made to BDCP's water and ecosystem strategies over the past several years. Opportunities for public involvement continue, with the Public Draft BDCP and EIR/EIS scheduled for release in 2013.

Delta Landowners may contact DWR Delta Landowner Liaison Lauren Bisnett at (916) 653-7564 or lauren.bisnett@water.ca.gov with questions about the Consultant Administrative Draft environmental documents, now available online at www.BayDeltaConservationPlan.com.



August 2013

Incorporating Proven Tunnel Technology and Reuse of Excavated Material



*Arrowhead
Inland Feeder*



*Hetch-Hetchy/
San Francisco Bay Tunnel*

Modern tunnels, such as those proposed for the Bay Delta Conservation Plan (BDCP), rely on highly advanced technology. This advanced technology has proven successful in the design, construction, and operation of tunnels in the United Kingdom, France, Japan, China, Mexico, New York, and California. Currently, the State Water Project (SWP) operates more than 15 miles of tunnels in California.

Proposed Delta tunnels would be excavated using a circular cutterhead that mines through the soil at approximately 150 feet below the surface. While no two tunnel projects are exactly alike, BDCP tunnels, and the specialized contractors building them, would utilize modern technologies developed from past projects with similar features, such as length, depth, diameter, and construction conditions. Water and biodegradable, eco-friendly soil conditioners are mixed with the soils to create a toothpaste-like material that is easily transported to the surface via conveyor belt or rail car. This excavated material will be tested and evaluated to determine suitability for various reuse options. "Reusable tunnel material" can then be transported to the opportune reuse location and use.

BDCP is evaluating numerous options for the reuse of excavated tunnel material to reduce local impacts from the proposed construction of water conveyance facilities, and would put the excavated material to beneficial use. Material excavated during construction, often referred to as "tunnel muck" (currently identified as reusable tunnel material), has been identified for many possible reuses, including strengthening levees, raising subsiding Delta islands, and restoring natural habitats, among other uses. While tunnel material has been successfully reused for various purposes around the world, the California Department of Water Resources (DWR) is currently performing tests to ensure the feasibility and safety of reusing this excavated material.

No final decisions on the BDCP can be made prior to the completion of environmental review and public input. The elements described here have been identified for the purpose of further analysis pursuant to the California Environmental Quality Act, the National Environmental Policy Act, the Endangered Species Act, the Natural Community Conservation Planning Act, and other applicable statutes.

Uses and Location of Reusable Tunnel Materials

Reuse of excavated tunnel material is expected to reduce impacts to locations within Delta communities previously identified as “tunnel muck disposal sites.” Reuse of tunnel material will be evaluated in the Public Draft Environmental Impact Report/Environmental Impact Statement (to be released in 2013). As part of the analysis of the refined project, potential reuses and locations have been identified. DWR is currently conducting laboratory tests and studies to ensure the suitability of excavated tunnel material for the reuses listed below:

- **Habitat Restoration** – Reuse of excavated tunnel material for habitat projects will contribute to the approximately 145,000 acres of habitat restoration and protection identified in the BDCP. Tunnel material may be used to reverse Delta island surface subsidence and to create conditions beneficial to migratory birds, including greater sandhill cranes.
- **Levee Improvements/Flood Mitigation** – Tunnel material could be used to strengthen Delta levees identified for maintenance and repair.
- **Structural Fill** – Materials have potential use as structural fill for construction of conveyance facilities.

Case Study – San Francisco Public Utilities Commission

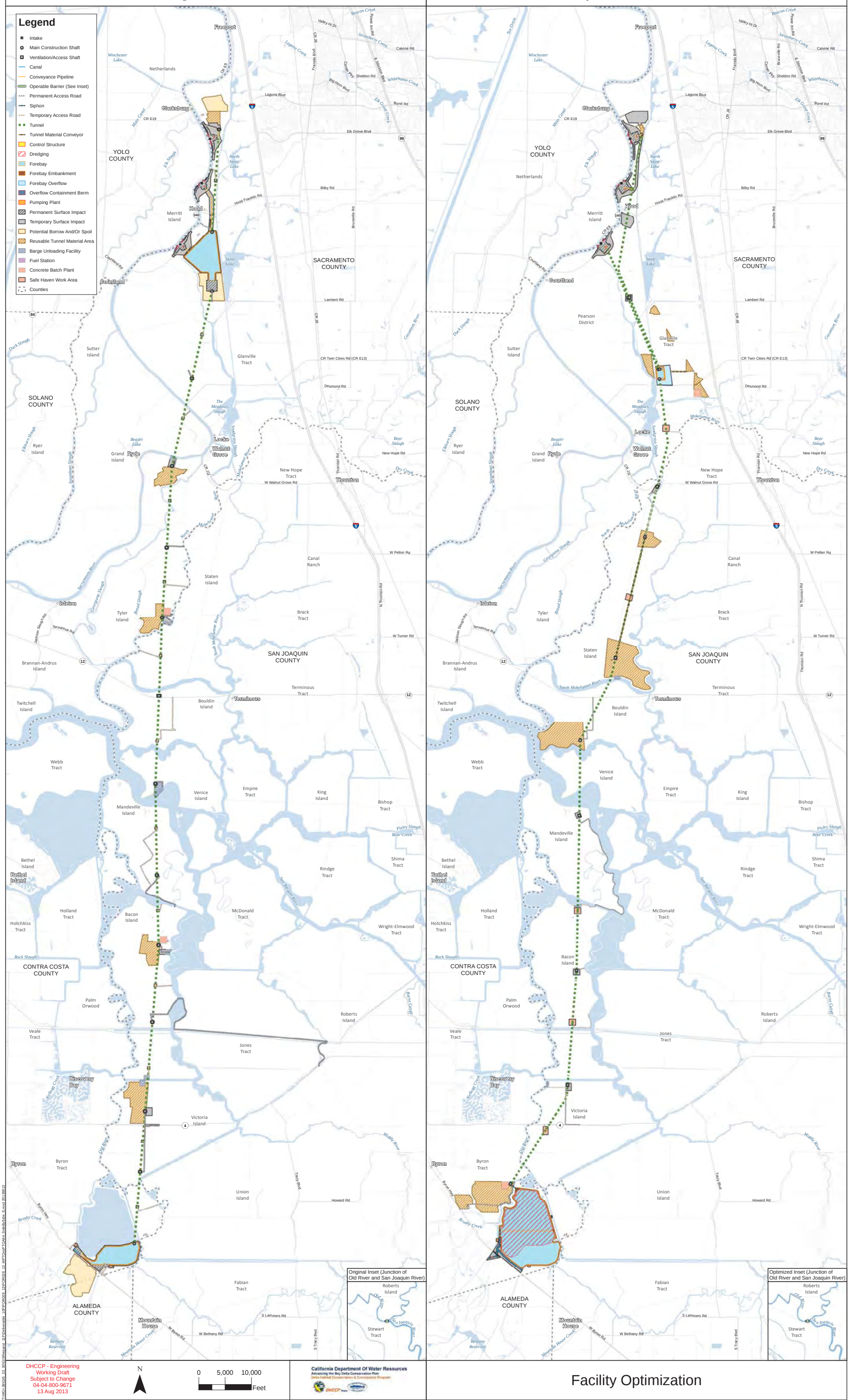
As part of a broad Water System Improvement Program, a 5-mile-long tunnel is under construction beneath the San Francisco Bay to update aging infrastructure transporting water to San Francisco and other parts of the Bay Area. The San Francisco Public Utilities Commission began construction of the tunnel in 2010 with a 15-foot-diameter tunnel boring machine. Of the nearly quarter-million cubic yards of excavated material, more than 98 percent has been reused for restoration of nearby sites, including the United States Fish and Wildlife Service’s Bair Island Restoration and restoration of a private quarry site. Tunnel excavation was completed in early 2013, approximately 6 months ahead of schedule, and no excavated material remains at the staging area near the Dumbarton Bridge.



Photo courtesy of San Francisco Public Utilities Commission, Bay Tunnel project.

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Facility Optimization