REGULAR BOARD MEETING
SEPTEMBER 20, 2016
MEETING NOTICE

THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE STOCKTON EAST WATER DISTRICT WILL BE HELD AT NOON, TUESDAY, SEPTEMBER 20, 2016 AT THE DISTRICT OFFICE, 6767 EAST MAIN STREET STOCKTON, CALIFORNIA 95215

Assistance for the Disabled: If you are disabled in any way and need accommodation to participate in the meeting, please contact Kristin Lopez, Administrative Services Manager (209) 948-0333 at least 48 hours in advance for assistance so the necessary arrangements can be made.

Agendas and minutes are located on our website at www.sewd.net.

AGENDA

A. Pledge of Allegiance (Director Cortopassi) & Roll Call

B. Consent Calendar (None)

C. Public Comment (Non-Agenda Items)

D. Scheduled Presentations and Agenda Items
   1. Minutes 09/13/16 Regular Meeting 01
   2. Warrants – California Public Employees’ Retirement System 07
   3. 2016 Irrigation Season Dam Removal Schedule 09
   4. Stockton East Water District – Electronic Motor Control Center (MCC-4M System) Replacement Project 11
   5. Dr. Joe Waidhofer Water Treatment Plant – Security Door Replacement Proposal 13

E. Committee Reports
   1. Sustainable Groundwater Management Act Work Group, 09/14/16 23
   2. Stockton Area Water Suppliers Meeting, 09/19/16 25

F. Report of the General Manager
   1. Water Supply Report as of 09/12/16 27
2. Information Items
   a. Material Included, but Bound Separately from Agenda Packet:
      1. Board Seeks Lower Expenses And Ways To Bring In More Water, The
         Linden Herald, 09/01/16
      2. Statement On The Upcoming Release Of Proposed Flow Standards For
         Tributaries To The San Joaquin River, The California Farm Water
         Coalition, 09/13/16
      3. Delta Tunnels Proposal A Muddled Gamble, The Sacramento Bee,
         09/09/16
      4. La Niña No Longer Seen As Likely This Winter, The San Francisco
         Gate, 09/08/16
      5. Drones Growing As A Tool On California Farms, The San Francisco
         Chronicle, 09/08/16
      6. New Online Tool Released To Track Projects In The Delta, ACWA
         News, 09/07/16

3. Report on General Manager Activities
   a. Stockton East Water District & City of Stockton Finance Group
      Meeting, 09/19/16

G. Director Reports
   1. Greater Stockton Chamber of Commerce – 52nd Annual Industrial
      Technology Barbeque, 09/14/16

H. Communications
   1. East Bay Municipal District’s 23rd Annual Pardee BBQ, 10/07/16

I. Agenda Planning/Upcoming Events
   1. San Joaquin County Flood Control and Water Conservation District Advisory
      Water Commission Meeting, 1:00 p.m., 09/21/16

J. Report of the Counsel
   1. Closed Session: REAL PROPERTY – GOVERNMENT CODE
      SECTION 54956.9 – Property: Water Rights
      Agency Negotiator: Scot A. Moody / Karna E. Harrigfeld
      Negotiating Parties: Oakdale Irrigation District/South San Joaquin
      Irrigation District
      Under Negotiation: Water Transfer

   2. Closed Session - Potential Litigation
      Government Code 54956.9 (c) – two cases
K. Adjournment

Certification of Posting

I hereby certify that on September 15, 2016 I posted a copy of the foregoing agenda in the outside display case at the District Office, 6767 East Main Street, Stockton, California, said time being at least 72 hours in advance of the meeting of the Board of Directors of the Stockton East Water District (Government Code Section 54954.2). Executed at Stockton, California on September 15, 2016.

[Signature]

Kristin Lopez, Administrative Services Manager
Stockton East Water District

Any materials related to items on this agenda distributed to the Board of Directors of Stockton East Water District less than 72 hours before the public meeting are available for public inspection at the District’s office located at the following address: 6767 East Main Street, Stockton, CA 95215. Upon request, these materials may be available in an alternative format to persons with disabilities.
THE REGULAR MEETING OF THE BOARD OF DIRECTORS
OF STOCKTON EAST WATER DISTRICT WAS HELD AT THE DISTRICT OFFICE
6767 EAST MAIN STREET, STOCKTON, CA
ON TUESDAY, SEPTEMBER 13, 2016 AT 12:00 NOON

A. PLEDGE OF ALLEGIANCE AND ROLL CALL
President Sanguinetti called the regular meeting to order at 12:32 p.m., and Director McGurk led the
Pledge of Allegiance.

Present at roll call were Directors Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti and Watkins.
Director Atkins was absent. Also present were Manager Moody, District Engineer Lee, Finance Director
Naray, Administrative Services Manager Lopez, Administrative Clerk Curtis and Legal Counsel Zolezzi.

B. CONSENT CALENDAR (None)

C. PUBLIC COMMENT (None)

D. SCHEDULED PRESENTATIONS AND AGENDA ITEMS
1. Minutes 09/06/16 Regular Meeting

Director McGurk made the following correction to the minutes:
➢ Page 2, section D-3, 9th paragraph, 1st sentence – strike “automatically”.

A motion was moved and seconded to approve the September 6, 2016 Regular Meeting Minutes, as
amended.

Roll Call:
Ayes: Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins
Nayes: None
Abstain: None
Absent: Atkins

2. Warrants
   a. Fund 68 – Municipal & Industrial Groundwater Fund
   b. Fund 70 – Administration Fund
   c. Fund 71 – Water Supply Fund
   d. Fund 91 – Vehicle Fund
   e. Fund 94 – Municipal & Industrial Fund
   f. Payroll
   g. Summary
   h. Short Names/Acronym List
   i. SEWD Vehicles & Heavy Equipment

Manager Moody reported on the expense description on page 16, line item 26 for Lovotti Inc., in the
amount of $542.70 will be replaced with the correct location; adding, the occurrence was an oversight
and will be corrected on future warrants.

Director Cortopassi inquired on the expense on page 16, line item 40 for Water Quality & Treatment
Solutions, Inc., for Watershed Sanitary Survey update 2016 thru Aug 5, 2016 in the amount of
$34,645.26. Manager Moody reported the Board approved the work with Water Quality & Treatment
Solutions at the February 16, 2016 Board Meeting. Manager Moody reported the Watershed Sanitary Survey is conducted every 5-years.

Director Cortopassi inquired on the payment frequency of the expenses on page 7, line items 1 & 2 for the Bank of Stockton for principal payment Bozzano property purchase quarterly payment October 2016 in the amount of $31,333.30 & quarterly interest payment October 2016 in the amount of $25,598.22. Finance Director Naray replied these are quarterly payments.

Director Cortopassi inquired on the expenses on page 9, line items 14 & 15 for San Joaquin Valley Air Pollution Control District for Air Pollution Control Permit to Operate No. 100116-033117, in the amount of $2,191.50 & pre-payment of Permit to Operate No. 040117-093017 in the amount of $2,191.50. Manager Moody replied these fees are for the District’s diesel and burn permits.

Director Cortopassi inquired on the expense on page 11, line item 17 for San Joaquin County Office of Education (SJCOE) for trimming of trees at Bellota in the amount of $5,797.40. Manager Moody replied this is an Agreement between the District and SJCOE for the San Joaquin County Regional Conservation Corps Program that provides the District with temporary staffing service, which offers a better rate than hiring a company to complete the work. District Engineer Lee added this Program is designed to train adults between ages 18-22, to help attain a skill for future work.

President Sanguinetti inquired on the expense on page 13, line item 6 for Clutch and Brake Xchange, Inc., for hydraulic fittings for repairs to rental backhoe in the amount of $21.25. Manager Moody replied staff will research this item and repair work needed.

Manager Moody provided a report to the Board on the repair of the District’s backhoe equipment. Manager Moody stated there were a number of welds that were re-ground and weld due to cracking and to the support welds on the carriage structure for both the front and back end of the backhoe in order to be fixed.

A motion was moved and seconded to approve the September 13, 2016 Warrants, as presented.

Roll Call:
Ayes: Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins
Nayes: None
Abstain: None
Absent: Atkins

3. Business Consultant Agreements 10/01/16 – 03/31/17
a. Anthony Barkett

A motion was moved and seconded to approve Business Consultant Agreement with Anthony M. Barkett for a six-month period from October 1, 2016 through March 31, 2017.

Roll Call:
Ayes: Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins
Nayes: None
Abstain: None
Absent: Atkins

Board Meeting – 09/13/16
Draft
b. Doyce Boesch

A motion was moved and seconded to approve Business Consultant Agreement with Doyce Boesch for a six-month period from October 1, 2016 through March 31, 2017.

Roll Call:
Ayes: Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins
Nayes: None
Abstain: None
Absent: Atkins

4. 2016 South San Joaquin Irrigation District Water Purchase & Usage Update
Manager Moody provided the Board with information on the 2016 South San Joaquin Irrigation District (SSJID) Water Purchase usage. Manager Moody reported the figures reported are the final numbers. If the Board approves, staff will forward the final information to SSJID, so a final invoice can be generated for the District.

A motion was moved and seconded to approve the 2016 South San Joaquin Irrigation District Water Purchase & Usage report as presented.

Roll Call:
Ayes: Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins
Nayes: None
Abstain: None
Absent: Atkins

E. COMMITTEE REPORTS
1. San Joaquin County & Delta Water Quality Coalition Meeting, 09/12/16
Director Cortopassi attended the September 12, 2016 San Joaquin County & Delta Water Quality Coalition Meeting. Director Cortopassi reported discussion focused on Program Manager’s Report, Grower Meetings and Nitrogen Self Certification classes. Director Cortopassi reported an update was provided on the Management Practices Effectiveness Program (MPEP), noting the Coalition submitted this Program to the State of California Regional Water Quality Control Board (RWQCB) for approval. Director Cortopassi reported the recent test results reported hits of chlorpyrifos at Mormon Slough and Jack Tone.

Julianne Phillips, San Joaquin Farm Bureau Federation reported on the toxic algae created from decomposing hyacinth becoming a public health hazard; adding the County is working on this problem. Ms. Phillips also reported the Coalition is working with growers to complete their Sediment and Erosion Control Plans before wet weather begins, as it will complicate plans. Ms. Phillips reported other than the chlorpyrifos, there have been no deviations from water quality standards. The Coalition sent out 100 surveys to growers, some of whom have not responded. The Coalition needs 100% compliance because they were targeted surveys; and will assist to develop their Groundwater Management Plan. The next meeting is scheduled for October 10, 2016.

F. REPORT OF GENERAL MANAGER
1. Water Supply Report as of 09/05/16
Staff provided a handout of the Water Supply Report that included storage, release, and production data collected from various sources as of midnight last night.
President Sanguinetti reported there is 86,494 AF in storage at New Hogan Reservoir. Current releases are set at 194 cfs. There is 536,832 AF in storage at New Melones Reservoir. Current release at Goodwin Dam to Stanislaus River are set at 151 cfs and release to all water users are set at 861 cfs. The water treatment plant is currently processing 30 mgd. The City of Stockton’s water treatment plant is currently processing 23 mgd.

President Sanguinetti reported there are 14 irrigators on the New Hogan system and there are no irrigators pumping on New Melones system.

2. Information Items:
   Manager Moody noted items: F2a-1, F2a-2, F2a-3, F2a-4, F2a-5, F2a-6 and F2a-7.

3. Report on General Manager Activities

Manager Moody reported staff contacted the Calaveras County Water District (CCWD) inquiring on their interest in participating in a cost-share with the District for the Agricultural Water Management Plan (AWMP). CCWD advised they are not required to submit an AWMP as they only serve nine (9) customers and the combined acreage is less than the requirement. Director Watkins inquired if Oakdale Irrigation District or South San Joaquin Irrigation District would be interested in participating in a cost-share for development of this plan. Manager Moody advised staff will contact to inquire on participation.

Manager Moody reported staff contacted Yuba City Steel regarding steel tanks for the T-2 Alum Tank replacement. Yuba City Steel is not National Science Foundation (NSF) Certified, however staff will send them a bid document when it is developed in the event they choose to become NSF Certified.

G. DIRECTOR REPORTS (None)

H. COMMUNICATIONS

1. Stockton East Water District Board of Directors – November 8, 2016 District General Election Certification
   Manager Moody provided the Board with information on the Stockton East Water District Board of Directors – November 8, 2016 District General Election Certification.
   Manager Moody reported Director Atkins, Division 1; Director Cortopassi, Division 3 and Director Panizza, Division 4 will be appointed to the District Board by the San Joaquin County Board of Supervisors in November as they were uncontested. Director McGaughey congratulated Directors Atkins, Cortopassi and Panizza on their re-appointment.

I. AGENDA PLANNING/UPCOMING EVENTS

1. Eastern San Joaquin County Groundwater Banking Authority Board Meeting, 9:30 a.m., 09/14/16
   [This meeting was Cancelled]

2. Sustainable Groundwater Management Act Workgroup, 10:00 a.m., 09/14/16
   [This meeting start time has been changed to 9:30 a.m., 09/17/16]

3. ACWA Groundwater Committee Meeting, 10:00 a.m., 09/14/16

4. Greater Stockton Chamber of Commerce – 52nd Annual Industrial Technology Barbeque, 5:00 p.m., 09/14/16
5. Stockton Area Water Suppliers Meeting, 3:30 p.m., 09/19/16

6. Linden Peters Chamber of Commerce Meeting, 7:00 p.m., 09/19/16

J. REPORT OF THE COUNSEL
1. Closed Session - Potential Litigation
   Government Code 54956.9 (c) – one case

   President Sanguinetti adjourned the meeting to closed session at 1:03 p.m. to discuss closed session agenda items. The regular meeting reconvened at 1:33 p.m., with no reportable action.

J. ADJOURNMENT
   President Sanguinetti adjourned the meeting at 1:34 p.m.

Respectfully submitted,

Scot A. Moody
Secretary of the Board

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## STOCKTON EAST WATER DISTRICT

**INVOICES FOR BOARD PACKAGE**

**CALPERS SPECIAL CHECK REQUEST**

**SEPTEMBER 20, 2016**

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2016 Irrigation Season Dam Removal Schedule

Releases from New Hogan Reservoir to the Calaveras River will be reduced to 25 cubic feet per second (cfs) starting October 14th. Diversion dams will be drained ending the 2016 Irrigation Season with a detailed schedule below. Calaveras River flow will remain at 25 cfs, and adjusted as necessary for the water treatment plant needs. Removal of diversion dams from Old Calaveras River channel, Mosher and Potter Creeks will occur as time permits, but before it rains. The District appreciates your cooperation and assistance in our water supply operations.

2016 PRELIMINARY DAM REMOVAL SCHEDULE – as of 09/13/2016

October 14th – New Hogan releases will be reduced down to 25 cfs.

October 18th – Irrigation season ends. Irrigation water left behind all diversion dams is available to pump as needed. Bellota Weir will be removed and the 2-foot winter weir and fish ladder will be installed. Diversion dam drainage will start upstream on Mormon Slough and Potter Creek, then the Old Calaveras River and Mosher Slough.

October 23rd – Dam removal will be completed on Mormon Slough. Removal on Calaveras River, Mosher Slough, and Potter Creek will continue.
September 20, 2016

Ms. Mitra Emami
Acting Chief Engineer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room LL40
Sacramento, CA 95821-6308

Email: Mitra.Emami@water.ca.gov

Subject: Mormon Slough Irrigation Dams – Bellota Dam, Permits # 5597-A

Dear Ms. Emami:

The Central Valley Flood Protection Board permits for the above referenced dam requires removal prior to October 10. The current dry conditions and mild summer have caused a demand for an extended irrigation season. The District requests permission to delay the removal of the dams until October 18, 2016, weather permitting. If you are willing to recommend this variance to our permit, please sign at the bottom of this letter and return it to us by email (kcarido@sewd.net).

New Hogan Reservoir, which protects Bellota from flood flows, is currently storing about 86,450 acre-feet. The present allowable (flood control) storage is 317,100 acre-feet. The USACE strategy for operating New Hogan Reservoir for flood control is to allow a 7-½ to 15% encroachment of flood control storage. Storms sufficient to create an inflow of even half of the minimum of 230,650 acre-feet between today and October 18, 2016 are unlikely to occur in view of current forecasting. In the event of such a storm(s), the Water District has the ability to remove this dam in a timely manner to assure no interference with any flood operations.

The Water District understands it is responsible for levee and floodway damage resulting from your approval of this variance, and we further understand you as Acting Chief Engineer reserve the right to revoke this variance based on change in weather and New Hogan Reservoir conditions.

If you have further questions, please call Cathy Lee, District Engineer or myself at (209) 948-0333. Thank you for your timely consideration of this request.

Sincerely,

Scot A. Moody
General Manager

Mitra Emami, Acting Chief Engineer
Central Valley Flood Protection Board

Date
Memorandum

To: Scot Moody – General Manager
From: Cathy Lee – District Engineer
Date: 09/20/2016
Re: Contract Approval – MCC-4M System Project

BACKGROUND

On May 1, 2015, the Board approved a contract with Mars Burnside Engineering to design the replacement of the MCC-4M, ATS, affected circuit breakers, wiring, and any associated components.

As previously submitted to the Board, the motor control center (MCC)-4M was installed when the Dr. Joe Waidhofer Water Treatment Plant (plant) was completed and has been determined to be beyond its useful life. The automatic transfer switch (ATS) that feeds portions of the MCC-4M circuits is a temporary installation and needed to be upgraded and relocated to an outdoor location such that it can serve the entire load of the control center. The generator supplying emergency power to the MCC-4M main circuit breaker will have to be upsized to the allowable rating along with any other components in order to supply maximum available emergency power to the MCC-4M System. Mars Burnside prepared the bidding documents, including plans and specifications.

BID RESULTS

The Board authorized staff to advertise and accept bids at its July 19, 2016 meeting. The bidding period began on August 1, 2016 through September 07, 2016 when the bids were publicly opened and read at 3:05 pm. Two (2) bids were received at the District office and bid prices were $247,900, and $321,000. A copy of the Bid Summary Sheet is attached. Staff conducted a review of both bids for accuracy and responsiveness and concluded that contract should be awarded to Pacific Metro Electric, Inc. of Stockton, California in the amount of $247,900 as it is the most responsive low bidder.

RECOMMENDATION

Staff recommends the Board to approve a contract with Pacific Metro Electric, Inc. in the amount of $247,900. As soon as the contract is approved, the work will begin and it is anticipated the project would be completed at the end of the District’s physical year.
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**Bid Opening For:** MCC-4M SYSTEM REPLACEMENT PROJECT

**DATE:** September 07, 2016

**TIME:** 3:05 PM

**STAFF:**

**VISITORS:**
Operations Building Entrance Doors Upgrade

The Safety Committee has expressed interest in upgrading the entrance doors for the Operation Building. The existing doors do not have a 3 point locking system installed on each door with panic egress (crash bars), but are an older design that has a dead bolt that must be turned to lock one door top and bottom, and extend the bolt into the center of the opposing door. (One door on the East side has an aftermarket externally mounted crash bar, but it does not function correctly) So the existing doors do not meet contemporary code requirements.

In addition to that, since both doors do not have a 3 point locking system installed, the doors have an excessive amount of free play when locked, and have the potential of being forced open. There has been at least one incident where intruders on site have approached the locked doors at night on the West side of Operations, and have severely shaken the doors in an attempt to gain entrance. The operators do not consider the existing doors adequate protection when they are alone on site at night.

I have obtained 2 proposals to upgrade the doors on each entrance so that they meet contemporary code requirements and provide additional safety:

One company, Vortex, proposes to replace our existing doors on the East and West side of the Operations Building with new doors that will fit into the existing frame, and have the correct hardware built into the door, similar to the doors at the Administration Building. The side lights and existing frame would remain. In addition, I have requested that the doors use laminated glass instead of tempered glass. Laminated glass has the ability to provide greater security. It is similar in construction to the front windshields of automobiles. The glass can be broken, but it is difficult to break through, since the glass is really two pieces of glass bonded in the center with polyvinyl butyral. The new doors would be bronze anodized finished frames (that will likely be a close but not an exact match to the existing bronze frame), and furnished with bronze tinted laminated glass.

$13,560 @ prevailing wage.

The second company, BC Glass, cannot furnish replacement doors the same height as our existing doors (7' 11''), but proposes instead to replace both the doors and the sidelights and frames with new 7 foot doors. The door glass would be bronze laminated glass, while the new sidelight glass would be bronze laminated glass on tempered glass (double insulated). All door frame and sidelight frames would be bronze anodized frames.

$15,980 @ prevailing wage.

My recommendation is to use Vortex. We have done business with them once before to install new closures on one set of the Operations Building doors, and they seemed to be competent. The company is a larger company and can supply original sized replacements whereas BC Glass cannot. This eliminates the need to replace all of the sidelights and saves $2400.
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan
(September 15, 2016)

Introduction
The San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) is a critical crossroads in the state’s water supply system as well as an ecosystem in crisis. The Delta, at the confluence of the Sacramento and San Joaquin Rivers, was once a vibrant tidal marsh teeming with fish and wildlife, including several iconic species, such as Chinook salmon, many of which are threatened, endangered, and some of which still support a commercial fishery. Reclamation of farmland in the Delta and diversions upstream and through the Delta led to vibrant farming and urban development within the Delta and in Central and Southern California. Those factors have played a significant role in fish and wildlife species plummeting because of the extent of water diverted out of the rivers and Delta.

Over the past 47 years, since the passage of California’s Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and with subsequent passage of the federal Clean Water Act and the federal and state endangered species acts, state and federal agencies have taken steps to improve conditions for fish and wildlife while protecting other water uses. Yet on balance, Californians continue to take more water out of the Delta and its tributaries than the species can withstand.

Many state and federal agencies are working on multiple fronts to protect, restore, and enhance the Bay-Delta while balancing those efforts with water supply for farmers and cities that rely on water pumped from the Bay-Delta. The State Water Resources Control Board (State Water Board) has a unique role with respect to the Bay-Delta because it establishes water right and water quality requirements to protect human, fish, and wildlife uses of the Bay-Delta’s waters. Evidence amassed over the last 10 years by researchers, the Legislature, the State Water Board, and state and federal fisheries agencies shows a crucial need to update these requirements for the benefit of people and fish.

On September 15, 2016, the State Water Board staff released a draft proposal to update water quality requirements for salinity in the southern Delta and water flows in major tributaries to the San Joaquin River (the Stanislaus, Tuolumne, and Merced Rivers), which drain into the southern Delta. The refined salinity requirements reflect updated scientific information about salt levels that reasonably protect farming in the southern Delta. The new flow requirements for the San Joaquin River’s major tributaries recognize the vital role upstream water flows provide for habitat and migratory signals for threatened and endangered salmon and steelhead. In sum, the draft proposes increasing flows for fish and wildlife and adjusts the salinity requirements to a slightly higher level to reflect updated scientific knowledge.

While the proposal focuses on the southern Delta and tributaries of the San Joaquin River, the effort is one of myriad actions completed and underway related to water quality, habitat restoration, and flows in the Bay-Delta. A draft science report related to the Sacramento River and the Delta will follow in a few weeks, with a draft plan to follow next year.
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan

What is the Bay-Delta?
The Bay-Delta includes the Sacramento–San Joaquin Delta, Suisun Marsh, and San Francisco Bay. California’s two largest rivers, the Sacramento and the San Joaquin, converge in the Delta and meet incoming seawater from the Pacific Ocean in San Francisco Bay. The Delta is a critically important natural resource for California and the nation. It is both the hub of California’s water supply system and the most valuable estuary and wetlands system on the west coast, serving cities, farms, fishing communities, boaters, fish, and wildlife.

Why is the State Water Board Updating the Bay-Delta Water Quality Control Plan Now?
Under the Porter-Cologne Act, the State Water Board has authority to establish water quality requirements to protect beneficial uses of water. The State Water Board is proposing changes to water quality requirements related to (1) salinity levels for the protection of farming in the southern Delta, and (2) critical flows in the San Joaquin River system to provide habitat for fish and wildlife upstream of the Delta. More than ten years ago, the State Water Board identified these water quality issues as priority updates in the 2006 Water Quality Control Plan for the Bay-Delta (Bay-Delta Plan) in an effort to develop adequate information to protect the beneficial uses of the Delta. Failure to address these priorities now could result in more draconian actions under the state or federal Endangered Species Act or federal action to establish water quality standards for the Bay-Delta. On the other hand, addressing these issues now will provide a platform for responding to future droughts, adapting to climate change, and improving water resource management.

Both changes would be incorporated into the Bay-Delta Plan, which establishes water quality requirements for the Bay-Delta. The Bay-Delta Plan lays out water quality protections to ensure the various water uses—drinking, irrigation, fisheries, and more—are protected. In establishing the water quality requirements, the State Water Board must consider all beneficial uses of water in determining how to reasonably protect particular uses. Rather than “choose” one beneficial use over others, the State Water Board must balance the needs in order to “maximize” support all of the uses.

In the last ten years, the continuing decline of the Bay-Delta ecosystem’s health has reinforced the need for action. Several species of fish have been listed as protected species under the state or federal Endangered Species Act. Water diversions from the San Joaquin River and its tributaries have surpassed the rivers’ ability to support a healthy fishery. The proposed update would address factors contributing to the decline of key fishery species, incorporate new science in the State Water Board’s planning processes, and provide a framework for accepting voluntary agreements with alternative methods for enhancing fish and wildlife in the tributaries.

As part of the 2009 Delta Reform Act, the Legislature directed the State Water Board to develop flow criteria for the Delta ecosystem necessary to protect public trust uses. In keeping with the narrow focus of the legislation, the State Water Board’s 2010 Delta Flow Criteria Report only presents a technical assessment of flow and operational requirements to provide fishery protection under existing conditions. The report does not do the analysis to inform the
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan

consideration of competing uses of water that is required by the California Water Code. The Delta Flow Criteria Report determined that 60 percent of the unimpaired San Joaquin River inflow from February-June was necessary to preserve the attributes of a natural, variable system to which native species are adapted. It also pointed to the need for flows on all three major San Joaquin River tributaries that reflect a more natural frequency, duration, timing and rate of change to provide adequate conditions for spawning and rearing of juvenile salmon as well as for essential migration. Looking only at inflows to the Delta is insufficient. Instead, the report recognized the need for flow contributions upstream of the Delta from each tributary, and throughout the habitat range of key species, such as salmonids.

Presently, the Bay-Delta Plan specifies a combined requirement for flow at a single point upstream of the southern Delta on the San Joaquin River below the confluence of the tributaries. There is no existing requirement for the flows in the major tributaries to sustain fish in the tributaries or to contribute to the flow at this compliance point. The draft update to the Bay-Delta Plan proposes to provide the necessary flow on all three tributaries, in dry years as well as wetter ones, to ensure suitable habitat and migratory pathways upstream of the Bay-Delta to support native fish.

The 2010 Delta Flow Criteria Report reviews the scientific basis for modifying flow regimes on the three tributaries, but it was not designed to look, nor did it look, at the effect that this increased level of unimpaired flow would have on other competing uses of water or the environment. The update of the Bay-Delta Plan includes this analysis in a comprehensive staff report, known as the Substitute Environmental Document (SED). The SED weighs recommendations for new salinity and flow standards with the costs, impacts, and benefits of the proposals.

Proposed Change #1 – An Improved Approach to Setting Flow Objectives
The State Water Board is updating and re-tooling its Bay-Delta Plan to better account for ecosystem needs and to better address the balancing of instream and consumptive human uses. Most notably, new flow objectives proposed for the San Joaquin River and its tributaries would enhance water flows upstream of the Delta to support the migratory and spawning habitat of native fish.

As recommended in the Delta Flow Criteria Report, the new flow objectives would be based on percentages of unimpaired flows at locations on each tributary. Unimpaired flow is the rate and volume of water flow that would be produced by the rain and snow accumulating in a watershed absent any diversion, storage, or use of water. An unimpaired flow approach generally mimics the natural variability of California’s river flows that support native fish like salmon and steelhead and for which they have evolved.

The proposal does not contemplate flow requirements equal to natural, pre-development conditions or even the 60 percent threshold identified in the Delta Flow Criteria Report. Instead, the draft proposes narrative and numeric flow objectives, expressed as a range from 30 to 50% of unimpaired flow, for February through June for the Stanislaus, Tuolumne, and Merced Rivers through to the San Joaquin River near Vernalis.
The proposal recommends a 30 to 50 percent adaptive flow range, with a starting point of 40 percent, because the State Water Board’s analysis shows that range will provide reasonable protection of fish and wildlife while moderating impacts to water supply for drinking water and agriculture. Historical median February–June flows from 1984–2009 in the Merced, Tuolumne, and Stanislaus Rivers were, respectively, 26, 21, and 40 percent of unimpaired flow. This means that flows in the tributaries were less than this amount half the time. Observed flows are far lower than unimpaired flows even in years of above normal unimpaired flow, like 2010. The Sacramento River, in contrast, already contributes to the Delta, on average, about 50 percent of Sacramento River unimpaired flow from April through June.

Adaptive Management

The unimpaired flow proposal does not require rigid adherence to a fixed percent of unimpaired flow, but can be thought of as a water budget. The draft proposes a block of water that can be “shaped” or shifted in time to best align instream flows with the needs of fish and wildlife throughout the year. As such, the flow proposal accommodates an adaptive implementation process that allows the magnitude and timing of flows to be adjusted, within a prescribed range, provided that such changes protect the fishery. Moreover, a key element of successful adaptive management is the implementation of non-flow measures that could reduce the flows needed, within the adaptive range, to achieve reasonable fish and wildlife protection goals, such as restoration of gravel spawning beds, suppression of habitat beneficial to predatory fish, and enhancement of habitat beneficial to native species.

The proposal contemplates that biological goals (to assess improvements to fish resulting from flow and other actions) will be among the tools that inform future State Water Board decisions on whether to adjust the unimpaired flow percentage within the 30 to 50 percent range. Put another way, adaptive management will optimize the balance between fishery and human uses, while rewarding actual improvements in biological conditions that support native fish. Adaptive implementation of flows will also allow a nimble response to changing information and changing conditions while minimizing unintended impacts.

What are the Ecosystem Benefits of the Flow Proposal?

In most instances the proposed flow objectives will provide more instream flow than existing baseline conditions, restoring the pattern and some limited magnitude of flow to levels that are
more closely aligned to the flow conditions to which native species adapted. Average annual instream flow between February and June would increase by 288 thousand acre feet (TAF), or 26 percent, under the 40 percent unimpaired flow. The effects would be more pronounced at the 50 percent unimpaired flow level (485 TAF) and more attenuated at the 30 percent unimpaired flow level (174 TAF), with the biggest benefits in dry years.

Nearly every feature of habitat that affects fish and other aquatic life is influenced by flow, including temperature, water chemistry, and physical habitat availability. These habitat features, in turn, affect the risk of disease and predation, reproductive success, growth, migration, feeding behavior, and other ecological factors that determine the viability of native fish. As discussed earlier, adding compliance locations on the tributaries helps ensure all these benefits for native fish extend further into the watersheds and along migratory routes.

The State Water Board has quantified the effect of the flow proposal on key components of habitat to assess the ecosystem benefits of providing additional instream flow. The State Water Board’s analysis demonstrates that implementation of the flow proposal would significantly improve water temperature conditions conducive for salmonids, with the largest benefits occurring in dry years, particularly in the Tuolumne and Merced Rivers. With 40 percent of unimpaired flow, May salmon rearing temperature thresholds are met twice as frequently in critically dry years. Overall, temperature targets that are protective of salmonids are attained more frequently than under baseline for all life stages from February through June under 30, 40 and 50 percent of unimpaired flow.

Higher instream flows will also result in increased floodplain inundation. Floodplain inundation is important because it enhances the spawning and rearing success of salmonids. This is so because floodplain habitat provides abundant food and a safer environment for growing fish. The State Water Board’s analysis shows an overall 35 percent increase in floodplain inundation at 40 percent of unimpaired flow.

There are many other benefits of a more natural flow regime during the springtime, including the reduced abundance of nonnative fishes and nonnative aquatic vegetation. Additionally, it is expected that large flow pulses during the spring will help juvenile salmonids migrate
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan

successfully to the Delta as a result of increased velocities, increased turbidity pulses, and increased volumes of water, all of which can reduce predation vulnerability.

What are the Impacts of the Flow Proposal?
The San Joaquin River Watershed does not produce enough water to both meet existing human demands and support a healthy ecosystem. Requiring more water to remain instream for the reasonable protection of fish and wildlife will reduce the quantity of surface water available for consumptive human uses, and will make water conservation and other tools like groundwater banking even more important than they already are, especially during drier years. The reduced water supply would primarily affect agriculture, but would also affect drinking water supplies and hydropower generation.

Implementing the flow proposal is expected to result in a 7 to 23 percent reduction in water available for human consumptive use, depending on the flow within the 30-50 percent adaptive flow range. During wet years, there will be almost no impacts on diversions for human use because of the abundance of flow to share. The most significant impact on diversions for human use will occur in the driest years.

As surface water availability declines, dependence on groundwater will grow, which in turn could cause or exacerbate groundwater overdraft. The State Water Board’s analysis indicates that implementing the 40 percent flow proposal could result in an average increase in groundwater pumping of 105 thousand acre feet per year (TAF/yr). Given that there is an existing 45 TAF/yr deficit in current groundwater supplies, the unmet agricultural water demand has the potential to increase by 137 TAF/yr to 182 TAF/yr in the plan area. Overall agricultural water supply deficits have the potential to increase over time as pumpers must come into compliance with the Sustainable Groundwater Management Act. Water users can take many actions such as improved irrigation efficiency and enhanced groundwater recharge to reduce these water supply effects. While the SED does not require such mitigation at a programmatic level, it nonetheless identifies the actions that stakeholders can take to address and lessen effects on groundwater supplies.

The potential negative effects on agricultural economic output increase with the volume of flow retained instream. A 40 percent of unimpaired flow requirement is projected to result in an average annual decrease in economic output of $64 million. This represents a 2.5 percent reduction from baseline annual average agricultural economic sector output of $2.6 billion. The
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan

impact would be lower at 30 percent of unimpaired flow and higher at 50 percent. Again, these impacts do not assume implementation of mitigation that water users would likely employ.

Unless water users agree to voluntary reductions to implement an updated Bay-Delta Plan, the State Water Board would determine in subsequent regulatory proceedings the reductions necessary by specific water users to implement the updated Bay-Delta Plan. The effect of the flow proposal on specific individual water rights is unknown. In general, flow objectives that would be implemented through water right actions would follow the water right priority system and other legal requirements.

Reducing Water Supply Impacts while Maintaining or Increasing Environmental Benefits
Enhanced flows are the principal means proposed to implement the updated objectives. However, the proposal recognizes that throughout the watershed a number of other factors degrade conditions for native fish, such as non-native species, predation, high water temperatures, barriers to fish passage, and habitat loss. As a result, the proposal allows for and encourages the development of non-flow measures to complement the objectives. Implementation of additional non-flow measures that meet certain criteria can reduce the need for flows within the prescribed 30-50 percent range.

The State Water Board recognizes that voluntary agreements can help inform and expedite implementation of water quality objectives and can provide durable solutions in the Delta watershed. In addition, the State Water Board believes that suitable voluntary agreements can provide reasonable protections for fish and wildlife and provide a faster and more durable implementation route if done correctly. As a result, the Board encourages stakeholders to work together to reach voluntary agreements incorporating a mix of flow and non-flow measures that meet or exceed the proposed objectives and protect fish and wildlife uses.

The State Water Board will consider a voluntary agreement as part of its proceedings to implement the plan. In evaluating any proposal, the Board will consider whether the agreement will help achieve the water quality objectives, help protect the beneficial use, and be enforceable through Board action. The Board will also need to make any independent findings required by law in connection with the proceedings to implement the plan.

Depending upon the strength of the voluntary agreement components and success in meeting the specified goals, the State Water Board could reduce the unimpaired flow requirement to as low as 30 percent.

Proposed Change #2 - Updated Salinity Water Quality Objectives
The proposal also includes a new salinity water quality objective for the southern Delta. The existing salinity objective was established at four southern Delta locations to protect agriculture.

Analysis of southern Delta water quality and crop salinity requirements shows that existing salinity conditions in the southern Delta are suitable for all crops and that the existing April through August salinity objective is actually lower than what is needed to reasonably protect
Summary of Proposed Updates to the Bay-Delta Water Quality Control Plan

agriculture. Accordingly, the State Water Board staff proposes to increase the southern Delta salinity objective to better reflect the current condition, which is sufficient to protect agriculture. The current salinity objectives are 0.7 decisiemens per meter (dS/m) April through August and 1.0 dS/m September through March. The update proposes a year round objective of 1.0 dS/m.

While the proposal will update southern Delta salinity objectives, the Bureau of Reclamation’s water right permits would maintain existing salinity requirements at Vernalis in order to implement the proposed salinity objectives in the southern Delta, and maintain the current condition. Within the southern Delta, the proposal would specify channel segments as compliance points so that compliance with the salinity objectives can be monitored in a manner that better reflects the overall salinity levels and protection of the agricultural beneficial use.

The SJR flow element of the proposal complements the southern Delta salinity element by augmenting flow in the southern delta, particularly in February through June. Increased flows under the flow alternatives would have the incidental benefit of flushing of salts early in the irrigation season, and providing better salinity conditions during Spring germination of crops, which is generally the most salt sensitive time.

Next Steps
To finish this part of the Bay-Delta update for San Joaquin River flows and salinity, the State Water Board must complete two key components – the finalization of the environmental documentation (SED) and the Bay-Delta Plan’s amendments. Comments on both the plan amendments and the SED are due on November 15, 2016, and a public hearing will be held on November 2 and November 10, 2016 in Sacramento, and November 4, 2016 in the Modesto area, to receive additional oral comments.

Staff will prepare written responses to issues raised in the comments received during the written comment period and will respond in writing or orally to comments made during the public hearing. Staff will prepare a draft final SED for consideration by the State Water Board’s members. The Board members will consider the draft final SED before approving the project, and the SED will become final upon project approval. The Board will consider approving the proposed Bay-Delta Plan amendments at a public meeting that will be held in early 2017.

Simultaneously, the State Water Board is moving forward with updating other elements of the Bay-Delta Plan. These other elements include update of flows on the Sacramento River and outflow from the Delta. A draft science report will be issued in a few weeks, followed by proposed updates in a process similar to what is being proposed for the San Joaquin. As noted elsewhere, the Board will allocate responsibility for meeting flow standards through water right proceedings separately.
MEETING NOTICE
SGMA WORK GROUP

Wednesday, September 14, 2016
9:30 a.m. – 12:00 p.m.

San Joaquin County – Robert J. Cabral Agricultural Center
2101 E. Earhart Avenue – Assembly Room #1, Stockton, California

Safety Announcement

Approval of Minutes for the Meeting of August 10, 2016

SCHEDULED ITEMS
Discussion:
   a. SGMA Activities and Roadmap Discussion
   b. Presentation of the GSP Program Guide – Brandon Nakagawa
   c. Progress on Attorney’s Drafting Committee – Downey Brand
   d. Roundtable on GSA status “Which GSA will your agency be a part of and have other agencies decided to join?”: All SGMA Work Group Members

Public Comment:

Next Regular Meeting
October 12, 2016, at 10:00 a.m.
San Joaquin County - Robert J. Cabral Agricultural Center
2101 E. Earhart Ave., Assembly Rm. #1, Stockton, California

Action may be taken on any item

Agendas and Minutes may also be found at http://www.sjwater.org
Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact San Joaquin County Public Works Water Resources Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting.
1) Water Conservation
   a. Outreach Efforts

2) Water Shortage Contingency Plans
   a. 2016 Operating Plan Projections

3) Contract Discussion
   a. TOC/DBP Reduction Efforts
   b. Amendment Status

4) Groundwater Banking
   a. DREAM Project

5) UC’s Operations Update

6) GSA Discussion

7) Next Meeting – October 17 or 24, 2016?
# Weekly Water Report

**New Hogan (NHG) TOC**

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**Projected Storage in October 2016**

~75,000

**New Melones (NML) Allocation**

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<td><strong>Sept. 19, 2016</strong></td>
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<td>Net Storage change:</td>
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<tr>
<td>Inflow:</td>
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<td>Release:</td>
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## Goodwin Diversion (GDW)

**Inflow (Tulloch Dam):**

752 CFS

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<td>Release to OID (JT Main):</td>
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<td>Release to SSJID (SO Main):</td>
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<td>Release to SEWD:</td>
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<tr>
<td>Total Release</td>
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## Farmington Dam (FRM)

**Diverted to SEWD:**

0 CFS

**Diverted to CSJWCD:**

0 CFS

**Source: USACE WCDS Hourly Report**

## Surface Water Used

<table>
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<tr>
<td>Irrigators on New Hogan:</td>
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<tr>
<td>Irrigators on New Melones:</td>
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<tr>
<td>DJWTP Production:</td>
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<td>City of Stockton DWSP Production:</td>
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## District Ground Water Extraction

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<tr>
<td>74-01</td>
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<td>74-02</td>
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<tr>
<td>North</td>
</tr>
<tr>
<td>South</td>
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<tr>
<td>Extraction Well # 1</td>
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<td>Total Well Water Extraction</td>
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52ND ANNUAL
GREATER STOCKTON CHAMBER OF COMMERCE

INDUSTRIAL TECHNOLOGY BARBECUE

Honoring New and Expanded San Joaquin County Companies

Wednesday,
September 14, 2016
University Plaza Waterfront Hotel

FOUNDING SPONSORS
Please join us for the 23rd Annual Pardee BBQ on Friday, October 7, from 11:30 a.m. - 2:00 p.m.

Each year we gather together in a relaxed, informal setting overlooking Pardee Reservoir to celebrate our many partnerships and to discuss ongoing projects and current events. Our theme this year is Working Together for Our Watersheds and Our Communities. Our speakers will also cover a variety of topics including: drought recovery, regional collaboration and an update on fisheries. The 5th Annual Frank Beeler Award will be presented at the BBQ. We look forward to celebrating with you.

Speakers
- Keynote Speaker Randy Moore, Regional Forester for the U.S. Forest Service
- Board President Frank Mellon
- General Manager Alexander R. Coate
- Director of Water and Natural Resources Richard G. Sykes

Please RSVP by September 23rd in one of these three ways
- Email us at PardeeRSVP@ebmud.com
- Use the RSVP reply card below
- Call 510-287-0151

Directions to Pardee Center

From Jackson:
- From Highway 49 take Hoffman Street/Stony Creek Road
- Continue on Stony Creek Road, turn left on Pardee Dam Road and cross the dam and spillway
- Continue on Pardee Dam Road/Sandretto Road and turn left at the south gate of Pardee Center
- Continue up the driveway to the parking area

From Valley Springs:
- At the intersection of Highways 12 and 26, turn north on Laurel Street
- Take the first right onto Daphne Street
- Continue onto Paloma Road
- Take a slight left onto Watertown Road
- Turn right onto Campo Seco Road
- Make a quick left turn onto Sandretto Road
- Continue 2.9 miles to the south gate of Pardee Center and turn right
- Continue up the driveway to the parking area

Printed on 100% post-consumer waste recycled paper.