



BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

Notice of Time Change

**PLANNING COMMITTEE
MEETING**

10:00 a.m.

Tuesday, July 11, 2017

Notice is hereby given that on Tuesday, July 11, 2017 the Planning Committee Meeting of the Board of Directors has been rescheduled from 9:15 a.m. to 10:00 a.m. The meeting will be held in the Training Resource Center of the Administration Building, 375 - 11th Street, Oakland, California.

Dated: July 6, 2017

A handwritten signature in blue ink that reads "Rischa S. Cole".

Rischa S. Cole
Secretary of the District



**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 – 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

AGENDA

**Planning Committee
Tuesday, July 11, 2017
10:00 a.m.
Training Resource Center**

(Committee Members: Directors Mellon {Chair}, Linney and Young)

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

1. Lead Sampling at K-12 Schools (Wallis)
2. DREAM Project Update (Sykes)
3. Work Management Systems Replacement Project (N. Irias)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this Agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 6, 2017

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Michael J. Wallis, Director of Operations and Maintenance *MJW*

SUBJECT: Lead Sampling at K-12 Schools

INTRODUCTION

On December 20, 2016, the State Water Resources Control Board, Division of Drinking Water (DDW) issued the District a water supply permit amendment requiring the District perform no-cost lead sampling at Kindergarten to 12th grade (K-12) schools within its service area that request the testing, until November 2019. Under the water supply permit, schools must submit a written request for lead sampling assistance and the District has 90 days to complete the initial lead sampling. Follow up sampling may be required depending on the results. The District has identified 520 K-12 schools in its service area. This memo describes the District's plan to outreach to all the school districts to determine interest; and complete the sampling, analysis, and reporting for all the schools in its service area. The plan will be presented at the July 11 Planning Committee meeting.

RECOMMENDATIONS

Develop and implement an outreach plan to inform all service area public and private school districts of the K-12 Schools lead sampling initiative.

Contract out the remaining work for lead sampling at K-12 Schools to complete this one-time requirement over the next two years.

DISCUSSION

In February 2017, Walnut Creek School District, Orinda Union School District, and Acalanes Union High School District – requested lead sampling for a total of 17 schools. The District completed lead sampling at 81 individual taps from these 17 sites on May 17, 2017. The school lead sampling results ranged from <0.04 µg/L to 2.9 µg/L. These results are well below the Environment Protection Agency's lead action level of 15 µg/L and are consistent with the District's Lead and Copper Rule compliance results.

Lead Sampling at K-12 Schools

July 6, 2017

Page 2

Each school district collected information about their individual schools and made recommendations for the five busiest taps at each school. District staff first provided guidance as the school district collected the necessary information, and then met with each school district representative. At the meeting, the District and the school district representative reviewed and discussed the individual school information and sample tap recommendations, and then jointly developed the final sampling plans.

Sampling protocols require that the water remain undisturbed in the pipe for at least six hours before sampling. School sampling was scheduled before 7:00 a.m. so that sampling occurred before school staff reported to school and began using water.

Each school required approximately 20 hours for planning, coordination, meetings, sampling, and following up. None of the schools required any additional sampling. Therefore, the estimated resources to complete the program for all the schools in the service area would total 10,400 hours and cannot be accomplished with District staff. In addition, the testing requirements could exceed 2,650 samples with limited scheduling ability, which exceeds the District laboratory's capacity.

In March and April, two additional school districts, West Contra Costa Unified School District and San Lorenzo Unified School District, requested lead sampling for a total of 70 schools. In May 2017, the District requested from DDW a modified schedule for all school district requests received between March 23, 2017 and September 30, 2017. Instead of allowing 90 days from the request for the initial lead sampling, the District's modified schedule requires these initial lead samplings to be completed by December 31, 2017.

To complete the lead sampling of all interested public and private school district sites within the service area to meet the water supply permit requirements, staff will send a letter to all service area schools explaining the K-12 Schools lead sampling initiative. School districts will be asked to notify the District if they wish to participate in the program. The District would also develop a Lead Sampling for Schools Request for Proposals, in order to seek a consultant contract to complete this one-time sampling effort. A Limited Term Water Distribution Supervisor will be hired in FY18 to manage the K-12 Schools lead sampling initiative and contract.

FISCAL IMPACT

The FY 18/19 budget includes \$3 million that covers the estimated cost of this program.

NEXT STEPS

Staff will develop a school district outreach plan and Lead Sampling for Schools Request for Proposals by August 2017, so that the K-12 lead sampling initiative can be completed by November 2019.

ARC:MJW:ss

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 6, 2017

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Richard G. Sykes, Director of Water and Natural Resources *Richard G. Sykes*

SUBJECT: DREAM Project Update *Wallace*

SUMMARY

On April 11, 2017, a significant milestone was reached when San Joaquin County (County) issued the groundwater export permit for the Demonstration Recharge Extraction and Aquifer Management (DREAM) Project. EBMUD, the County, and North San Joaquin Water Conservation District (NSJWCD) are finalizing the project Operations and Funding Agreements with the intent to begin detailed design and construction later this year. Staff will provide an update at the Planning Committee meeting on July 11, 2017.

DISCUSSION

Background

Years of discussion with the County and other stakeholders led to the development of the DREAM Project, a demonstration project to pilot groundwater banking in San Joaquin County. Under the terms of the DREAM Project, EBMUD would provide 1,000 acre-feet (AF) of Mokelumne River surface water to farmers who are currently pumping groundwater. In exchange, EBMUD would receive up to 500 AF of groundwater for export to its customers.

The NSJWCD intake and South Distribution System will be used to convey the Mokelumne River water to farmers who will use it for irrigation in lieu of pumped groundwater. During one or more dry years, EBMUD will then be able to export groundwater. The extracted water will be pumped from an existing groundwater well located on the same farm where the recharge occurred and will travel through a new 12-inch pipeline to EBMUD's Mokelumne Aqueducts.

On April 11, 2017, the County issued the groundwater export permit for the project. The permit sets conditions for when and how groundwater can be extracted, in keeping with the County's Groundwater Export Ordinance. EBMUD is allowed to extract no more than 50 percent of the amount of water that has been recharged, and that amount is further reduced by an additional five percent per year after the time of recharge. EBMUD is limited to extracting during the non-irrigation season, defined as October 1 through March 31. The permit also requires the establishment of a DREAM Project Monitoring Committee that will be responsible for reviewing project operations to ensure compliance with permit conditions and make certain there are no

adverse effects from groundwater pumping. The Committee will be required to review operating records of recharge and recovery activities at least annually. Committee members will include representatives from the NSJWCD, the County, and the Eastern Water Alliance. EBMUD will also have a representative on the Committee serving as an Ex-Officio member who can advise and discuss but not vote on matters concerning the committee.

DREAM Project Agreements

Now that the groundwater export permit has been approved, EBMUD is working with the County and NSJWCD to negotiate two agreements that will govern project implementation, a Funding Agreement and an Operations Agreement. Staff plans to bring final agreements to the Board for consideration later this summer.

The Funding Agreement spells out mechanisms for tracking and reimbursement of project costs. EBMUD has agreed to pay a total of \$4 million to the County for costs associated with the demonstration project, of which \$1.75 million must be used to improve the NSJWCD South System. The remaining \$2.25 million would be used to design, construct, and operate the project components.

The Operations Agreement details which agency has responsibility for the design, construction, and operation of the various project components. EBMUD is principally responsible for the tie-in to the Mokelumne Aqueduct. The Operations Agreement also discusses water rights. In order to divert Mokelumne River water to the project, EBMUD will need to petition the State Water Resources Control Board (SWRCB) to make changes to its water right Permit 10478.

NEXT STEPS

Staff is working with NSJWCD and the County to finalize the project Funding and Operations Agreements, which will be brought to the Board later this year. Following execution of the agreements, the project partners will move to final design and construction of the project facilities. Following execution of the agreement, EBMUD will also need to petition the SWRCB to make changes to its water rights Permit 10478 to allow diversion of Mokelumne River water to the project.

RGS:MTT:AET:acr

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: July 6, 2017

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Nicholas J. Irias, Manager of Information Systems *P.C. for Nick Irias*

SUBJECT: Work Management Systems Replacement Project

SUMMARY

The District has deployed more than a dozen software and database systems over the past two decades that provide work management and asset management functionality. Most of these systems were developed in-house and are over 15 years old. As part of the Work Management Systems Replacement Project, the District plans to replace or consolidate these work management systems where feasible, with systems that support current and future business needs. Integrating these various systems requires significant investigation into existing systems, workflows, shared data, staff collaborations, and future efficiencies. This item will be discussed by the Planning Committee on July 11, 2017.

DISCUSSION

As technology has advanced, the District developed various software systems to create efficiencies in tracking elements of maintenance and operations work. This included a system to track general work orders for maintenance, painting, valve and service line replacement, and other maintenance needs, separate systems for paving and concrete projects, as well as systems for inventory and asset tracking. Many of these programs were developed on now obsolete technology and are not able to fully communicate with each other. Further, these systems were not developed to allow access on mobile devices, nor to track and coordinate work and assets between workgroups. The replacement and consolidation of these systems will improve efficiency and functionality, and take advantage of advancements in technology. Replacing these systems is consistent with the District's Strategic Plan goals for Long-Term Infrastructure Investment as well as the Information Technology Master Plan.

The Work Management Systems Replacement Project seeks to replace and consolidate these numerous systems into newer and simpler architecture that can deliver the full range of needed functionality. To accomplish the project goals within a favorable timeline, and minimize risks related to incompatibilities, staff will need to develop a project roadmap prior to the implementation phase.

Though these systems have previously been developed internally by staff, full integration of the various existing systems is a significant and time-consuming task. Additionally, work management systems have evolved with technology and current marketplace platforms may more easily accommodate the District's needs with limited customization. To resolve these challenges, staff is seeking to contract with a specialized firm with knowledge of the current work management system marketplace. If approved, this contractor would work closely with knowledgeable staff both on the software system and workflow side of the existing applications. Specialized knowledge of the current work management systems marketplace and recent implementations of currently available solutions will be essential to the development of a viable, cost effective project roadmap for the District.

Local 21 and Local 2019 were notified of this agreement on May 2, 2017, and Local 21 did not raise any specific issues. The District and Local 2019 met on June 6, 2017 to further discuss the contract. While Local 2019 has opined that this work should be performed by District forces, based on prior similar projects, staff has determined that proceeding without independent expert review is not prudent for a project of this scale and complexity. Staff is therefore recommending that the project roadmap be developed with the assistance of Westin Engineering, Inc. Using the project roadmap as a guide, the District will gather business requirements, identify and select the software solution, and implement the solution through programming support and integration with other business systems. This effort will require dedicated staff from various departments and approximately three years to complete.

FISCAL IMPACT

Funding for this item is included in the FY17 capital budget for the Work Management Systems Replacement Project. This project includes funding to evaluate replacement alternatives. The full cost of effort required for the replacement project is estimated to be \$5-10 million. The \$100,000 cost to have Westin Engineering, Inc. perform the analysis and to recommend a project roadmap based on their expertise in the field, will help the District maximize the value derived from the modernization efforts.

NEXT STEPS

The Board will consider a contract with Westin Engineering, Inc. at its Regular Business meeting later today. If approved, staff will initiate the process of gathering information for the project roadmap.

NJI:AJL:jmj