



**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, October 14, 2014
9:15 a.m.
Training Resource Center**

(Committee Members: Directors Foulkes {Chair}, Linney and McIntosh)

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. | Security Standards and Tree Management Practices | (Wallis) |
| 2. | Water Distribution System Chloramine Boosting | (Wallis) |
| 3. | Orinda Water Treatment Plant Shutdown Project | (X. Irias) |
| 4. | Public Engagement and Social Media | (Farr) |
| 5. | Water Recycling Program Update | (Sykes) |
| 6. | Annual Watershed and Recreation Report | (Sykes) |

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.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

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

SUBJECT: Security Standards and Tree Management Practices

INTRODUCTION

Two neighbors of the Summit South Reservoir provided public comment on the security fence and tree trimming at the September 10 and September 23, 2014 Regular Board meetings. This memo describes the District's security standards and tree management practices. This information will be discussed at the October 14, 2014 Planning Committee meeting.

DISCUSSION

Physical Security Standards

The District's Security Program is guided by Policy 7.13, Security. Part of that program is to use capital facilities and equipment to enhance the District's ability to deter, detect, delay, and assess potential criminal actions. These efforts are guided by the Security Vulnerability Assessment, water/wastewater industry experience, actual experience at District facilities, and industry standards/guidelines.

The type of physical security features installed at any specific facility are based on the facility's criticality, environmental features (e.g., proximity to public surveillance), type of facility (e.g., reservoir or pumping plant), and potential threats.

A security fence is required at most District facilities to delineate District property, provide employee security, and prevent or mitigate loss of District property or impacts to operations. The purposes of fencing and perimeter walls are to establish a legal demarcation by defining the perimeter boundaries of a facility, and create a barrier against unauthorized access and intrusion.

The standard District fence is an 8-foot high chain link. The chain link fabric has a mesh pattern with a 1-inch opening versus a 2-inch opening for a standard fence. The fence is topped with three strands of barbed wire clipped to an arm. There is a bottom rail and a top spring wire. These details are based on industry standards which make the fence difficult to climb, crawl under, or cut. All components of the fence and gates, including the fabric, rails, posts, barbed

wire, and all fittings and accessories, are galvanized prior to application of a black polyvinyl chloride coating for corrosion resistance and aesthetics.

The Summit South Reservoir was recently rehabilitated. The original 6-foot galvanized chain link fence topped with barbed wire was removed and replaced where it was originally located. The new fence meets the District's current standard for security.

District Tree Management Practices

The District maintains trees and other landscaping at properties containing reservoirs, pumping plants, maintenance centers, and administrative facilities. Trees on District properties are maintained to provide for public and worker safety, reduce fire hazards, prevent damage to facilities, and ensure reasonable access for operation and maintenance of District infrastructure.

The District removes, cuts, or trims trees that are dead, decayed, or diseased, or that overhang onto adjacent properties. Tree trimming and removal costs have averaged \$130,000 per year over the past three years. Trees posing a threat to property are removed promptly. Trees showing stress are monitored for disease or decay, and removed when found to create a hazardous condition. If tree removal will cause a significant public concern, appropriate federal, state and local agencies, and affected community members are notified prior to tree removal.

Occasionally, the District receives a request to remove or trim a tree based on a neighbor's desire for view improvement. These requests are allowed if the party requesting trimming for view improvement performs the following activities:

- Contacts affected neighbors along with the District to discuss the tree trimming or removal plan and addresses neighbors' concerns;
- Retains and pays a licensed and insured tree contractor, approved by the District, to perform the work in accordance with the standards of the International Society of Arboriculture; and
- Obtains a permit from the District to access District property and adheres to permit conditions which include requirements related to indemnification, work hours, and applicable District rules, policies and procedures.

ARC:MJW:ss

Attachment

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 2, 2014
MEMO TO: Board of Directors
THROUGH: Alexander R. Coate, General Manager *ARC*
FROM: Michael J. Wallis, Director of Operations and Maintenance *MJW*
SUBJECT: Security Standards and Tree Management Practices

At the September 10 and 23, 2014 Regular Board meetings, two neighbors of the Summit South Reservoir provided public comment on the security fence and tree trimming. Security standards and tree management practices will be discussed at the October 14, 2014 Planning Committee meeting.

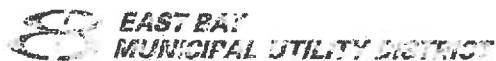
The attached letter to Ms. Faye Baron is in response to her request at the Board meetings to have trees on District property trimmed at District expense. In addition, staff have confirmed the height of the fence and inspected the trees on the property and found them not requiring maintenance. While at the site, staff met with Ms. Baron to review her concerns and our practice of allowing neighbors to have trees trimmed at their expense.

The transcript of Ms. Baron's statements at the September 10, 2014 Regular Board meeting is also attached.

ARC:MJW:ss

Attachments

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MANAGER OF WATER OPERATIONS
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October 2, 2014

Ms. Faye Baron
38 Spyglass Hill
Oakland, CA 94618

RE: The District's Summit South Reservoir

Dear Ms. Baron:

This letter is in response to your comments made during the East Bay Municipal Utility District Board of Directors' meetings on September 10, and September 23, 2014. Your comments were related to the District's Summit South Reservoir located near your home. Specifically, you raised concerns about the security fence and trees on District property.

The District is a public entity that must provide a safe, reliable water supply at reasonable rates. Summit South is a drinking water reservoir and the District must take steps to secure the facility for protection of water quality, provision of sufficient water quantity, and protection of public health and safety. The District's standard practice is to install a security fence at its reservoirs.

Summit South Reservoir has had a 6-foot galvanized chain link fence topped with three strands of barbed wire installed around the perimeter of the reservoir since it was constructed in the 1960's. The fence was in poor condition and had plants growing in it. When the facility was recently rehabilitated, the existing fence was replaced in its existing location with the District's current standard security fence (8-foot black vinyl coated chain link fence topped with three strands of barbed wire).

The District maintains trees for public and worker safety, to reduce fire hazards, prevent damage to facilities, and ensure reasonable access. District staff have inspected the property and trees, and determined no maintenance is required.

The District has an established practice of allowing requestors to have their contractors trim trees on District property, in accordance with a District-approved plan, and at the requestor's expense. I understand that staff reviewed this practice with you in the field. The District is willing to work with you on trimming the trees and can provide access for your contractor to do some trimming based on a plan the District approves. As a public entity, the District cannot fund tree trimming to improve views.

Ms. Faye Baron
October 2, 2014
Page 2

If you have additional questions or concerns, please contact me at (510) 287-1615.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J. Vallis". The signature is fluid and cursive, with the first name "Michael" and last name "Vallis" clearly distinguishable.

Michael J. Vallis
Director of Operations and Maintenance

MJW:ss

cc: Board of Directors
A. Coate

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Transcription of Ms. Barron of September 10, 2014

Public Comment:

President Katz: One item for public comment, Ms. Barron. Please use the mic and you have three minutes.

Ms. Barron: My name is Faye Barron, and my address is 38 Spy Glass Hill, Oakland, and we have problem with East Bay MUD, my condo facing the East Bay MUD, when I go on the balcony facing your property in that area and there are two things that is really bothering me about East Bay MUD and I tried to call them many, many times and I never get the result, uh they never answer the e-mail, they never tell you what to do, and uh, I'm very frustrated – so anyway finally this year I got a hold of Mr. Chan and he referred me – as usual – like a football to another person – Mr. Steve Frew, am I pronouncing it right? F R E W – to take care of my problem—and my problem is: two problems – number 1 is the security fence that they put on the roof. Before it was much more lower and was aligned to the water tank and even though we had the problem that ivy used to grow on it, but East Bay MUD trim it down and it was ok but now this summer when they changed the security fence they put the very the something -- eye sore – very long and tall and black and covering half of my city view and so one request I have to please remove that, and put the one that you had in before. So that's just half of my view is gone. And the trees is my other half of the view. My view – I had a view of the Golden Gate and Alcatraz and now I have zero view, and this tree been growing since 1991, and nobody take care of it. When I talk and discuss with Mr. Chan he says well you have to pay, well I cannot afford to pay every year to trim those trees and those

– even according to the law and because of the fire, it has to be trimmed much more lower. I'm not asking for removal – I know some trees you can't remove it, but this tree has to be trimmed and this is my second problem I have. So right now my view of my balcony that I got this for my retirement—my husband's retirement – is uhm pretty blocked by East Bay MUD trees and the fence.

President Katz: Thank you for coming to Board to raise your concerns. This is a new issue for the Board and we're limited to a brief response. Our staff will provide a memo with additional information and is there anybody on site that can work with the customer? Thank you. So, uh yea, please talk with Mr. Wallis, he's our department head who is responsible for Operations and Maintenance.

Ms. Barron: Thanks very much for your time.

Transcribed by Susan Bell, Administrative Clerk, Secretary's Office/9/24/2014

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

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

SUBJECT: Water Distribution System Chloramine Boosting

INTRODUCTION

This memo summarizes the District's effort to improve the chloramine residual in the water distribution system using strategically located chloramine boosting stations. This information will be discussed at the October 14, 2014 Planning Committee meeting.

BACKGROUND

A number of the District's distribution reservoirs experience chronically low chlorine residuals due to water age and other factors such as nitrification. This was discussed as part of the Semi-Annual Water Quality Update at the September 10, 2014 Planning Committee meeting. In order to maintain the chlorine residual, District staff periodically treat problematic reservoirs with free chlorine. However, treatment with free chlorine requires significant staff time and can result in the formation of disinfection byproducts (DBPs). Chloramine is a more stable disinfectant than chlorine, maintains a disinfectant residual longer in the distribution system, and minimizes the formation of DBPs.

DISCUSSION

Earlier this year, staff investigated a commercially available chloramine boosting system. The Tank Shark system developed by Process Solutions Inc. (PSI) was identified as a promising product, and had been successfully tested by the San Jose Water Company. The PSI system is modular and includes an enclosed trailer and a mixing system with chemical injection. The mixing system is installed inside the reservoir. The system generates the chloramine on site using ammonia and sodium hypochlorite. The sodium hypochlorite is generated onsite from a brine solution and the ammonia solution is low concentration. Both chemicals are stored in a double containment system within the trailer.

The District conducted a pilot study of the system at Tice Reservoir in Walnut Creek for three months beginning on July 1, 2014. During the pilot, the PSI system was able to maintain a

consistent chlorine residual with no nitrification, and did not experience any problems. In addition, the system improved the disinfection residual in two distribution tanks in the pressure zones above Tice Reservoir.

Staff are also conducting studies and analyses to better understand the loss of chlorine residual and nitrification in the distribution system. This includes increased sampling, treatment changes, data analysis, and a literature search. In addition, the District is preparing a grant application with the Water Research Foundation to characterize the microbial community in the distribution system and its impact on water quality and the infrastructure to help guide control strategies.

FISCAL IMPACT

Funds are available in the capital budget to purchase and install four chloramination boosting units.

NEXT STEPS

This District will file a Notice of Exemption and required business plan with Contra Costa County and proceed to purchase the first unit which will be installed at Tice Reservoir. In FY15-16, up to three additional units will be purchased and installed at reservoirs with low chlorine residual. Staff will evaluate the performance of these first four systems and decide whether to install additional units in the future.

ARC:MJW:ss

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

FROM: Xavier J. Irias, Director of Engineering and Construction *XJI*

SUBJECT: Orinda Water Treatment Plant Shutdown Project

INTRODUCTION

The year-round operation of the Orinda Water Treatment Plant (WTP) provides nearly half of the District's treatment capacity to approximately 60 percent of the District's customers. The Orinda WTP will be taken out of service in the winter of 2015/16 and 2016/17 to conduct repairs and maintenance on critical systems. San Pablo WTP, which has been out of service since the completion of the Claremont Tunnel Project in 2006, will be placed into service to support this outage. See attached map for the location of these water treatment plants. The purpose of this project is to increase the reliability of the Orinda WTP. The project is currently in its design phase. Staff will provide an update at the October 14, 2014 Planning Committee meeting.

DISCUSSION

Background

The Orinda WTP, constructed in 1935, was expanded in 1961 and upgraded between 1994 and 1997. The permitted capacity of the plant per the California Department of Public Health is 200 million gallons per day (MGD), and the plant has a sustained operating capacity of 150 to 175 MGD. It is the largest of the District's five operating water treatment plants and any shutdowns must be carefully planned.

Project Scope

The Orinda WTP Shutdown Project includes two major elements.

1. Implement all the outage mitigations necessary to support an Orinda WTP outage.
2. Perform certain critical upgrades and maintenance on Orinda WTP that can only be done during a plant outage.

Outage Mitigations

The outage plan is similar to the plan used during the Claremont Tunnel Project which was successfully implemented in 2004. A major element of that plan was placing San Pablo WTP in service, which as a standby plant is generally offline. Since the Claremont Tunnel Project, the plant has received only minimal upkeep and maintenance. The work required to place the plant back in service consists of restoring electrical and mechanical equipment, making the controls system operational and performing structural repairs to the basins. Most of the work is being performed by District forces.

In addition, a portable pump will be deployed at the Road 20 rate control station and the Aqueduct Pumping Plant will be placed in service to maintain uninterrupted water service to the central service area. The surrounding community will be notified early next year before the plant is placed in service to inform them of the work taking place and the potential noise impacts.

Orinda WTP Shutdown Projects

The Orinda WTP will be out of service for three to five weeks during each winter of 2015/16 and 2016/17. The length of each outage is dependent on demand trends. The major projects planned for the first outage include replacing backwash pumps, a rapid mixer, the bulkhead in the Diversion Works building, and the blind flange at the end of one of the treated water outlet pipelines, inspecting the outlet channels and pipelines and improving the chemical feed systems.

The scope of work for the second outage will be defined after the first outage work is completed and is likely to include major work on the treated water outlet system as well as remedial items identified during the first outage.

FISCAL IMPACT

The estimated cost for this project is approximately \$2.7 million.

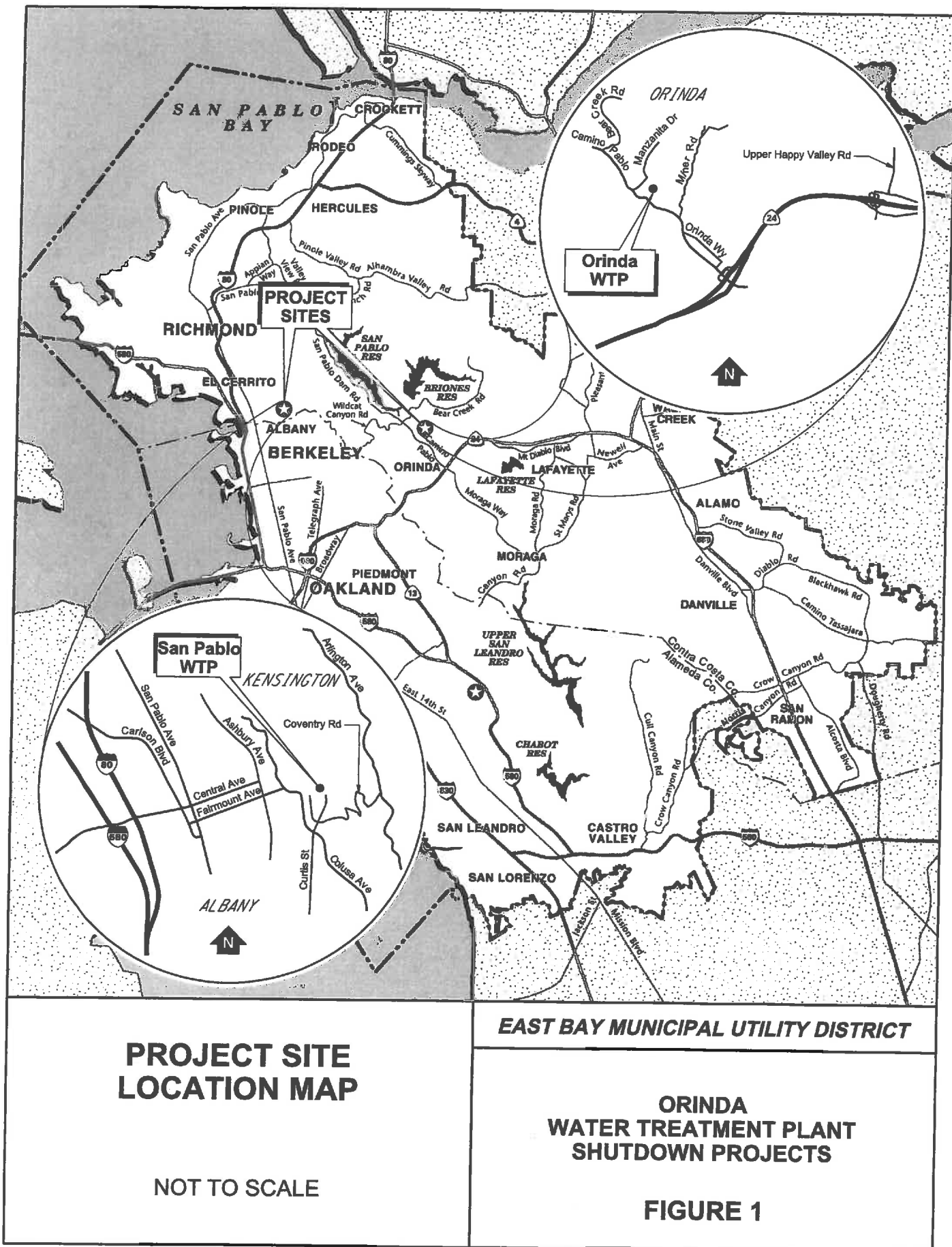
NEXT STEPS

- Continue preparing for the Orinda WTP outage.
- Complete design for all Orinda WTP improvement projects by June 2016.

ARC:XJI:cdc

I:\SEC\2014 Board Related Items\10-14-14 Planning Items\E&C Orinda WTP Shutdown Project

Attachment



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

FROM: Cheryl A. Farr, Special Assistant to the General Manager *Chief*

SUBJECT: Public Engagement and Social Media

SUMMARY

The advent of social media has changed the way public entities and members of the public communicate. Social media engagement is helping utilities meet changing public expectations for more interactive communication, build community resilience by improving disaster response, and increase public knowledge and understanding of issues. Social media also may help utilities identify potential operational, reputational and regulatory compliance risks by providing data from more observers in the field. At the same time, social media offers new ways for individuals and groups to air gripes and grievances, organize opposition to potential programs and services, and to intentionally or unintentionally spread misinformation and create misperceptions. A lack of a social media presence does not prevent a utility from being the subject of social media conversations and a lack of presence can make it difficult to address questions and concerns.

To guide EBMUD's communications with the public, the media and other stakeholders that occurs at meetings, via social media and through use of other communication tools, staff recommends that the Board establish a policy on public engagement to provide direction to staff that will be supported by procedures and guidelines. Staff will provide a presentation on the benefits and challenges of social media engagement and concepts for a public engagement policy to the Planning Committee on October 14, 2014.

DISCUSSION

People create social media content using easily accessed mobile and internet-based publishing tools. These tools make it possible for people to quickly form groups around common interests or concerns, to share content and to engage in and/or observe others engaging in online conversations. Social media channels change constantly, but the most frequently used by public utilities are LinkedIn, Facebook, Twitter and YouTube.

At this time, EBMUD has a modest presence on LinkedIn for employee recruitment purposes, with more than 2,000 followers and almost 1,000 individual LinkedIn members self-identifying as working or having worked for EBMUD. EBMUD has reserved the EBMUD name on Twitter and Facebook and without a single post to either site has 738 Twitter followers and 89 people who have "liked" EBMUD on Facebook. On YouTube, a search for "EBMUD" brings up more than 800 results that have been posted over the last five years and viewed as few as 2 times and

as many as 4,659 times (the winner: “EBMUD biodiesel made from trap grease”). EBMUD does not have an official YouTube channel, and the posted videos range from technical information to media reports to employee-posted material that uses EBMUD as a key word.

An informal survey of other large water and wastewater utilities showed that EBMUD’s presence on social media is minimal compared to peer agencies. EBMUD’s hiring freeze coincided with the period when investments in these areas were made by other agencies. All organizations are devoting resources to social media and report that the benefits to their agencies include better crisis communications, an improved ability to reach diverse audiences, and a good mechanism to push water quality, drought and infrastructure messages. Some agencies also report that social media engagement has improved media relations and employee relations.

Despite the positives of social media participation, there are limitations and challenges. Like the public comment period at Board meetings, social media enables individuals to publicly state a question or concern and provides limited opportunities for the District to correct misperceptions and inaccuracies. Key differences between public comment at a meeting and comments made to or about EBMUD on social media are that social media users tend to expect immediate response, web-posted comments can spread around the globe at remarkable speed and continue to be readily accessible long after an issue is resolved, and one comment can spawn numerous independent conversations. The culture of social media is to publish as soon as possible and clean up errors and omissions later—or not at all. Water and wastewater utilities, whose mission is to protect public health, public safety and the environment, have a culture of making decisions based on detailed research, careful analysis and accurate data. These differing approaches can make public engagement through social media particularly frustrating to those who work for water and wastewater utilities.

EBMUD already has a social media presence as a result of actions by customers, stakeholders and employees without an intentional decision to use social media to provide information and resources to the public. A policy on public engagement and communications is intended to allow staff to address questions or concerns customers are reporting via social media and be better prepared to keep customers and other stakeholders up to date during water quality or water service emergencies. A policy also would provide guidance to District employees about the official use of social media and increase EBMUD’s transparency.

Recommended Approach

Establishing an effective presence requires careful consideration of the District’s goals and objectives, developing a plan for managing social media engagement, and implementing that plan thoughtfully to ensure EBMUD takes the best possible path through the legal forest of protected rights that exist within the social media community.

Create an EBMUD policy on public engagement. There is no existing District policy on public engagement and District communication providing overall guidance on the District’s public engagement goals, although there are District procedures that provide direction to staff on community relations, media relations, publications management and public records management, and District practices on managing public participation at Board meetings. After reviewing the District’s existing procedures and guidelines and approaches used by other agencies, staff

recommends that the Board establish a policy on public engagement. In addition to providing guidance for the District's development of a social media presence, the policy also can be used to publicly document the Board's practices with regard to public engagement at meetings.

Staff has developed a conceptual outline for a public engagement policy (see attached). The outline seeks to define communication goals and identify areas where it is important to clarify expectations for the public and for employees. Staff proposes to support the implementation of the new policy by updating the existing policies on community relations, media relations and publications management, establishing a procedure governing social media management and developing detailed guidelines for each social media channel EBMUD uses. The procedures will provide details on staff roles and responsibilities across the District and the guidelines will explain, for each social media channel, how authorized publishers should handle their communication responsibilities on behalf of the District.

Phase-in growth of EBMUD's social media presence. As we develop a District social media presence, it will be important to evaluate its usefulness in achieving District communications goals, the resources required to manage social media, and the District's experience with legal and management issues that may arise. Staff consequently proposes to focus initially on enhancing the use of LinkedIn for employee recruitment and establishing a Twitter presence for time-sensitive news and information sharing. Additional social media channels will be considered following an assessment of the benefits and costs to the District of the initial phase.

FISCAL IMPACT

Existing staff resources will be used during FY15 to develop management tools for a phased social media launch and to publish and monitor social media sites.

NEXT STEPS

After receiving input on the policy concepts, staff will complete a draft policy consistent with the District's standard process (the draft policy will be reviewed by departments and unions and then reviewed by the Finance/Administration Committee prior to being placed on the Board agenda for the Board's consideration).

Staff also will work on developing/updating procedures and guidelines, creating graphic designs for LinkedIn and Twitter EBMUD sites, developing editorial calendars of topics to cover, and drafting potential social media postings based on both information EBMUD would like to deliver and information to respond to potentially problematic postings by others. Our goal is to complete the development of the policy and management tools by the end of 2014 and to expand our social media presence in early 2015. Staff will continue to keep the Board apprised of our progress.

ARC:CAF:caf

PUBLIC ENGAGEMENT POLICY CONCEPTS

POLICY GOAL STATEMENT

It is the policy of the East Bay Municipal Utility District to promote and encourage communications between the District and its customers, stakeholders, employees and the public in a manner that supports public engagement and meaningful discussion with an emphasis on transparency and responsiveness, within the confines of the law.

POLICY IMPLEMENTATION DIRECTION TO STAFF

Take actions to engage a diverse public. Actions would include

- using understandable terms and avoiding the use of technical jargon,
- translating important information in commonly spoken non-English languages, and
- providing reasonable accommodation, where requested, to facilitate receipt and understanding of public information.

Take actions to ensure compliance with relevant laws that include but are not limited to

- Ethics Policy of the EBMUD Board of Directors,
- California Public Records Act,
- California Fair Political Practices Regulations,
- Confidentiality-related regulations affecting customer and employee information (e.g., Health Insurance Portability and Accountability protections and personally identifiable information) and affecting facility and system security,
- First amendment rights,
- Equal Employment Opportunity, and
- Brown Act and open meeting laws.

Take actions to encourage a civil dialogue at public meetings and on EBMUD social media channels. Actions would include

- At public meetings, set a time limit on speakers and encourage speakers to be respectful and courteous, and
- To the extent possible and permissible, minimize and remove from District-managed social media channels content that contains:
 - profanity or discriminatory comments,
 - statements that encourage illegal activity,
 - spam or links to other sites,
 - commercial content,
 - political campaign or ballot-measure related content,
 - infringement on copyrights, and
 - information that may compromise the safety, security or proceedings of public systems or any criminal or civil investigations.

Clarify roles and responsibilities of EBMUD management and employees. Actions would include

- clarifying which staff have responsibility and authority for public communications, and
- stating an expectation that employees communicate in a manner that supports engagement while understanding that only authorized employees may represent themselves as an official District spokesperson.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

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

SUBJECT: Water Recycling Program Update

SUMMARY

In accordance with the District's water recycling goal established by the Water Supply Management Program 2040 and the implementation specified in the Urban Water Management Plan, staff is continuing to expand the water recycling program. Highlighted in this memo are a number of recycling efforts that are underway. An update of the water recycling program will be provided to the Planning Committee on October 14, 2014.

DISCUSSION

East Bayshore Recycled Water Project

The East Bayshore Recycled Water Project currently delivers about 0.2 million gallons per day (MGD) of recycled water to portions of Oakland and south Emeryville. The next phase of the project will expand recycled water service to north Emeryville by an additional 40,000 gallons per day (GPD). On October 14, 2014, the Board will be asked to consider approving the local project sponsor (LPS) agreement between the Association of Bay Area Governments (ABAG) and the District. The State awarded a \$1 million grant through ABAG's application on behalf of the District for construction of the Emeryville pipeline segment. The LPS agreement specifies the terms and conditions related to the grant. The project is currently at 90% design and construction will begin in 2015.

At buildout, the East Bayshore project would provide 2.3 MGD of recycled water. However, as the project service area is being redeveloped, there is a need to conduct an expansion study to maximize the use of recycled water produced by the East Bayshore recycled water treatment plant. Staff initiated the expansion study in September 2014. The study will evaluate existing demands and new developments, determine distribution system routing, and update the hydraulic model. As part of this study, staff anticipates bringing a consultant contract to the Board for consideration by early 2015 to determine suitable water quality for indoor applications and additional treatment needs. This study will be completed in 2015.

North Richmond/RARE Water Projects

The North Richmond Water Recycling Plant (NRWRP) and Richmond Advanced Recycled Expansion (RARE) Water Project have the combined capability to deliver about 7 to 7.5 MGD of recycled water to the Chevron Richmond Refinery. Chevron and the District are interested in

evaluating expansion options at NRWPR and the RARE Water Project. This study will evaluate options to expand the RARE Water Project from 3.5 MGD to possibly 5.0 MGD to further offset the use of potable water for boiler feedwater application at the refinery and also evaluate options to improve and expand the NRWPR to further offset the use of potable water for cooling towers at the refinery. The NRWPR currently provides an annual average of approximately 4.0 MGD of recycled water and may be expanded by an additional 1.0 MGD in the future. Staff anticipates bringing a consultant contract to the Board for consideration in November 2014. The study will be completed by mid-2015.

San Ramon Valley Recycled Water Project

The San Ramon Valley Recycled Water Project currently delivers about 0.7 MGD of recycled water to EBMUD customers in San Ramon. The next phase of the project is an expansion of the distribution system to serve the Bishop Ranch business park area. An additional 0.4 MGD of recycled water delivery is anticipated. This distribution system expansion project is currently at 60% design and construction will begin in 2015. The State recently indicated that they will award a \$4 million grant through ABAG's application on behalf of DERWA for construction of recycled water pipeline expansions in Dublin and San Ramon, of which \$2 million will be allocated to the expansion in the Bishop Ranch area.

As the District continues to expand the San Ramon Valley recycled water distribution system, customer sites will be retrofitted and connected to the recycled water system. The site retrofit construction occurs on the customer's system and on the customer's property downstream of the District's meter. Staff currently anticipates bringing this construction contract to the Board for consideration toward the end of this calendar year. The next phase of the retrofit work is anticipated to occur in 2015-2016.

Potable Reuse Evaluation

The District is participating through the Water Research Foundation (WRF) in studies to evaluate direct potable reuse in California. WRF and WaterReuse are partnering on multiple year studies to evaluate the treatment, regulations, and public outreach needed to allow for direct potable reuse in California. The District's current recycling goal is solely based on nonpotable reuse. As more information on the viability of potable reuse (direct and indirect) becomes available, staff will review the data and keep the Board informed.

NEXT STEPS

There will be a presentation to the Board Planning Committee on October 14, 2014. The Board is scheduled to consider authorizing the LPS agreement with ABAG for a water recycling grant at its October 14, 2014 Board meeting and to consider awarding the North Richmond/RARE expansion study contract in November, 2014. An overall recycled water program update will be provided to the Board in spring 2015 at the next Long-Term Water Supply Workshop.

RGS:MTT:LHH:acr

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 9, 2014

MEMO TO: Board of Directors

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

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

SUBJECT: Annual Watershed and Recreation Report

INTRODUCTION

This memo provides an update on recreation activities in EBMUD's Watershed during the past year and reports on performance indicators established for recreation in the Mokelumne Watershed Master Plan (2008) and subsequent Mokelumne Recreation Management Plan (2010). This update includes both Mokelumne and East Bay recreation programs. A presentation on this information will be made to the Planning Committee on October 14, 2014.

SUMMARY

EBMUD's watershed receives over 1.5 million visitors per year. Visitation is predominantly at the developed recreation areas with most visitors at Lafayette and Camanche Reservoirs. Visitation in 2013 was fairly stable overall compared to the previous year, but up 42 percent over 2012 levels for the watershed trails. Cost recovery targets were met at five of the six recreation areas. Public safety and customer satisfaction key performance indicators (KPIs) continue to be near or above established targets. Significant activities in 2013/14 include:

- The completion of the Mokelumne Coast to Crest Trail river access spur trails in the Middle Bar area;
- Initiation of a new Recreation Focus Group component of the Camanche Regional Park Advisory Board; and
- The number and popularity of special events on the trails and recreation areas in the East Bay continues to increase, thereby expanding the public's positive perception of District facilities.

Mokelumne Watershed Recreation

The Mokelumne Watershed Master Plan and subsequent management plans establish a number of KPIs for evaluating recreational services based on financial performance, public safety and customer satisfaction levels. Table 1 shows annual visitation for the Mokelumne Area recreation venues and Tables 2 through 4 show performance results based on the KPIs.

Table 1 – Annual Visitation at Mokelumne Recreation Venues (Visitor Days)

Location	CY 2010	CY 2011	CY 2012	CY 2013
Camanche North Shore	211,541	202,320	194,689	187,152
Camanche South Shore	193,416	188,662	181,250	186,522
Pardee Recreation Area	93,965	92,501	77,611	70,404
Mokelumne River Day Use	44,023	38,108	44,889	58,247
Camanche Hills Hunting Preserve	11,520	10,222	12,252	12,962
Watershed Trails	5,816	6,658	6,783	7,838
Total	560,281	538,471	517,474	523,125

Table 2 – KPI Performance: Percent Cost Recovery

Location	Goal (% Cost Recovery)	Results FY 2011	Results FY 2012	Results FY 2013	Results FY 2014
Pardee Recreation Management Area	40%	33%	26%	41%	40%
Camanche North Shore Recreation Management Area	45%	46%	64%	66%	66%
Camanche South Shore Recreation Management Area	45%	34%	58%	64%	64%
Camanche Hills Hunting Preserve	100%	76%	100%	96%	93%

Table 3 – KPI Performance: Public Safety

KPI	Goal	Results CY 2010	Results CY 2011	Results CY 2012	Results CY 2013
Boating Accidents (# of accidents per boating day)	.01%	.013% 4 accidents 30,918 vessels	.014% 4 accidents 29,612 vessels	.015% 4 accidents 27,267 vessels	.019% 5 Accidents 26,713 vessels
Visitor Incidents (# of visitor incidents per visitor day)	.2%	.13% 705 incidents 542,761 visitors	.10% 528 incidents 538,472 visitors	.07% 363 incidents 488,063 visitors	.12% 634 incidents 523,121 visitors

Table 4 – KPI Performance: Visitor Satisfaction Survey

Location	Goal	Results CY 2012	Results CY 2013
Pardee Recreation Area	80% "Good" or "Excellent"	98%	87%
Camanche North Shore	80% "Good" or "Excellent"	98%	89%
Camanche South Shore	80% "Good" or "Excellent"	86%	87%
Camanche Hills Hunting Preserve	80% "Good" or "Excellent"	100%	100%

Table 1 shows slight declines in visitation at the Camanche and Pardee venues and a modest increase at the Mokelumne River Day Use and Mokelumne Trails. Overall cost recovery improved in FY13 due to increased user fees, lower District labor expenditures and fewer significant operations and maintenance expenditures. Safety and customer satisfaction were good and very good, respectively during 2013.

In 2013/14, a number of infrastructure projects progressed:

- The dilapidated 40+ year-old dock at Camanche North Shore was removed and a design was initiated to construct and install a replacement in 2014. Construction is underway;
- Planning and design work are underway for road paving, an ADA access ramp and a new restroom at Camanche as well as the complete rebuilding of the Pardee RV Park ; and
- Multiple substandard mobile homes were removed or repaired to meet state regulations, and for the first time in many years two brand new manufactured homes were added in the Camanche Mobilehome Parks.

For 2014 and beyond, staff will continue to focus on the successful completion of the multiple infrastructure replacement projects. Additionally, as proposed in the Mokelumne Recreation Management Plan 2010, staff has begun an effort to re-examine the role of the Camanche Regional Park Advisory Board (CRPAB). Currently the CRPAB is in the middle of a one year trial period designed to reinvigorate the participation of the public in examining and shaping how recreation is provided in the Mokelumne Area.

East Bay Watershed Recreation

The development of KPIs for the East Bay Recreation program is now the same as those for the Mokelumne Area. However, there is no KPI for boating safety in the East Bay as there have been virtually no boating accidents because of the infrequent use and the speed restrictions in San Pablo Reservoir. Customer satisfaction surveys were distributed in the East Bay for the first time in 2013 and reported results are depicted below.

Table 5 – Recreation Visitation at East Bay Recreation Venues (Visitor Days)

Location	CY 2010	CY 2011	CY 2012	CY 2013
Lafayette Recreation Area	953,674	*950,000	940,960	907,000
San Pablo Recreation Area	68,421	85,500	127,351	130,941
East Bay Trails	40,520	44,020	47,720	52,160
Total	1,062,615	1,079,520	1,116,031	1,090,101

*Estimated value – annual pass automated gate malfunction for approximately 45 days.

Table 6 – KPI Performance: Percent Cost Recovery

Location	Goal (% Cost Recovery)	Results FY2012	Results FY2013	Results FY2014
Lafayette Recreation Management Area	65%	83%	78%	84%
San Pablo Recreation Management Area	40%	*N/A	*N/A	54%

*Final data not available at this time.

Table 7 – KPI Performance: Public Safety

KPI	Goal	Results CY 2012	Results CY 2013
Visitor Incidents (number of documented visitor incidents per visitor day)	.2%	.02% 268 incidents 1,200,000 visitors	.02% 278 incidents 1,116,031 visitors

Table 8 – KPI Performance: Visitor Satisfaction Surveys

Location	Goal	Results CY 2013
All East Bay Recreation Areas	80% “Good” or “Excellent”	89%

Attendance data show relatively stable visitation at Lafayette Recreation Area and significant increased use of the trail system. There has been a continuing increase in visitation at the San Pablo Recreation Area coinciding with the new concession contractor's investment in the fleet of boats. Special events including trail races, rowing events at the reservoirs and summer camps have attracted additional visitors by the thousands. Cost recovery at Lafayette Recreation Area is at its historic highest level due to reduced District staffing at the facility and few unplanned operation and maintenance expenses. Recreation safety in the East Bay continues to be very good. There were no major accidents or reported public safety related events in 2013. The first year of customer satisfaction surveys show an 89% rate of "Good" and "Excellent".

NEXT STEPS

For 2014, staff continues to focus on the replacement of the sewage lift station and the potable water storage tank at the San Pablo Recreation Area. Resurfacing of paved hiking trails and replacement of self-contained restroom facilities at Lafayette Reservoir will continue in 2014/15. Additionally, staff is working on an updated and improved East Bay trail system map which will show all of EBMUD's trails plus the linkages to adjacent and interconnecting trails like those of the East Bay Regional Park District. The map is expected to be available in 2014.

ARC:RGS:smc

