



**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**

9:00 a.m.

Tuesday, June 12, 2018

Notice is hereby given that on Tuesday, June 12, 2018 the Planning Committee Meeting of the Board of Directors has been rescheduled from 9:15 a.m. to 9:00 a.m. The meeting will be held in the Training Resource Center of the Administration Building, 375 - 11th Street, Oakland, California.

Dated: June 7, 2018



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, June 12, 2018
9:00 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. Residential Backflow Program Update (Chan)
2. Microplastics in Wastewater (White)
3. North Interceptor Relief Sewer Construction (Buchanan, Page, and Virginia Streets, and Eastshore Highway Interceptor) (White)
4. Environmental Consultant for Renewal of Routine Maintenance Agreements (Briggs)

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: June 7, 2018

MEMO TO: Board of Directors

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

FROM: Michael R. Ambrose, Manager of Maintenance and Construction

SUBJECT: Residential Backflow Program Update

INTRODUCTION

The District has a comprehensive backflow prevention program to protect the public from cross-connections within private properties that could contaminate the water supply. In February 2017, a cross-connection incident related to a private irrigation well in Alamo prompted staff to review well records for Contra Costa and Alameda counties. This memo provides an update on the analysis of this data. This item will be presented at the June 12, 2018 Planning Committee meeting.

SUMMARY

California regulations require backflow devices to protect against potential cross-connections between non-potable systems that may contaminate the public water system. Irrigation wells on residential properties can be one source of contamination. The District's Regulations require the District pay for the installation, inspection, and maintenance of residential backflow devices. The recent review of Alameda and Contra Costa County records identified 4,408 residential wells that potentially have no backflow devices installed. Staff reviewed water quality complaint data at these locations and found no unusual water quality issues, which indicates no imminent concerns associated with these properties. Staff will develop a plan for surveying these locations and make recommendations on changes to the District's residential backflow program.

DISCUSSION

Title 17 of the California Code of Regulations requires water systems to implement a cross-connection control program to protect the public water supply from contamination. As part of the cross-connection control program, the District must evaluate potential health hazards which may be created due to conditions existing on a customer's premises. The evaluation considers the existence of cross-connections, the type of materials handled on the property, the likelihood of a backflow condition, and the potential for piping system modifications. Special consideration is given to premises with auxiliary water supplies such as wells.

For residential customers, a double check valve (DC) or a reduced pressure (RP) device is typically used depending on the level of risk. The District currently has 3,834 DC and 230 RP devices at residential accounts. The February 2017 cross-connection incident in Alamo prompted a review of well records in Alameda and Contra Costa counties which initially identified over 20,000 residential wells in the service area. A detailed review of those records reduced the number of potentially unprotected services to 4,408 (Attachment). Staff reviewed water quality complaint data and found no unusual water quality issues at these locations indicating no imminent concerns associated with these services.

In 1996, Section 26 of the District's Regulations Governing Water Service to Customers and Schedule C of the Rates and Charges were revised such that the District would be responsible for the costs related to the installation, inspection, and maintenance of residential backflow devices. This change was made to ensure protection of the water system under the assumption that residential owners would not comply with Title 17 requirements. On July 12, 2017, Section 26 and Schedule C were revised to require customers who limit District access to cross-connection inspections to bear the costs for the installation, inspection, and maintenance of RP devices. The District currently spends about \$61,000 per year to test residential backflow devices. The District is the only local agency to cover the costs associated with residential backflow protection.

FISCAL IMPACT

Purchasing and installing 4,408 residential backflow devices is estimated to cost approximately \$5.8 million and increase the annual testing costs by \$66,000. These costs are not included in the FY18/19 budget.

NEXT STEPS

Staff will send letters to the 4,408 accounts with potential wells in the next month and request the property owner to confirm the status of their wells. Staff will review the responses; develop a plan and budget to address potential cross-connections with residential wells; and recommend changes to Section 26 and Schedule C as appropriate.

ARC:MAR:sd

Attachment

Residential Well Data by City

City	Count	City	Count	City	Count
Alameda	142	Emeryville	90	Pleasant Hill	29
Alamo	376	Hayward	136	Richmond	200
Albany	16	Hercules	10	Rodeo	13
Berkeley	42	Kensington	3	San Leandro	664
Castro Valley	84	Lafayette	188	San Lorenzo	323
Crockett	4	Moraga	39	San Pablo	150
Danville	336	Oakland	1000	San Ramon	87
Diablo	13	Orinda	80	Walnut Creek	291
El Cerrito	26	Piedmont	15		
El Sobrante	27	Pinole	24		

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: June 7, 2018

MEMO TO: Board of Directors

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

FROM: Eileen M. White, Director of Wastewater *Eileen M. White*

SUBJECT: Microplastics in Wastewater

SUMMARY

Microplastics in San Francisco Bay (Bay) continue to be an emerging contaminant gaining attention from the public, regulators, and scientists. The San Francisco Estuary Institute (SFEI) is coordinating a study to develop baseline information on microplastics in the Bay and the adjacent National Marine Sanctuary. Science-based knowledge of microplastics is still in its infancy; however, policies and regulations are being developed and implemented to keep plastic pollution from entering the environment. Staff will provide an update on the current state of knowledge about microplastics to the Planning Committee on June 12, 2018.

BACKGROUND

While there is no globally-accepted definition for the term microplastics, it generally refers to solid particles smaller than five millimeters and made of polymers. The type of polymer that makes up the particles and their physical characteristics are used to trace their origin and to understand their impact on the environment.

Some published literature suggests that microplastics may be toxic or lethal to organisms, while other reports suggest that the actual concentration of microplastics in the environment, as opposed to the concentrations used in laboratory studies, indicates exposure rather than adverse effect. Among the scientists, regulators, and environmental groups involved in Bay Area microplastics-related work, there seems to be an understanding that it is better to prevent plastic from entering the domestic sewage stream rather than to attempt removal of microplastics once they reach the wastewater treatment plants.

DISCUSSION

Regional Monitoring Program

In 2017, with grant support from the Gordon and Betty Moore Foundation, SFEI, Regional Monitoring Plan (RMP) partners, and the 5 Gyres Institute, a non-profit focused on plastic pollution, initiated a baseline study of microplastics in the Bay and adjacent National Marine

Sanctuaries. Stormwater and wastewater were identified as pathways for microplastics to the Bay; therefore, samples were collected for study from these two sources. A large component of the study is devoted to developing proven analytical methods. This study is ongoing and preliminary results are expected to be released during a workshop planned for fall 2018.

Regulatory Developments

In 2015, California Assembly Bill 888 banned plastic microbeads from personal care products and raised awareness about microplastic pollution. Since then, local governing bodies have taken action to prevent plastic from entering the environment through various measures, such as banning single use plastic bags, requiring biodegradable containers for takeout food, and requiring vendors to take back Styrofoam packing materials used for shipping.

The California Ocean Protection Council and National Oceanic and Atmospheric Administration Marine Debris Program published the final draft of “California Ocean Litter Prevention Strategy” in April 2018. As the strategy intersects wastewater, the emphasis is on convening an expert workgroup to develop standard procedures for sample collection, sample processing, and microplastic characterization.

District Actions

The District continues to be actively engaged in microplastic-related studies and pollution prevention efforts. The District contributed samples to the 2015 preliminary SFEI study as well as the current baseline study.

In 2016, the District laboratory independently verified the method used by SFEI analytical partners for their 2015 study. One of the outcomes of this work was extensive recommendations for best practices to assure high quality data. These recommendations are now part of SFEI’s baseline study. The District laboratory also developed a semi-quantitative stain-based method to determine the existence of microplastics in wastewater effluent that could be routinely performed without the need for specialized instruments and training. The findings were presented at the Sixth Annual Marine Debris Conference in March 2018.

In 2017, the District contributed \$5,000 to SFEI to support efforts to develop educational and policy materials to inform the public, stakeholders, manufacturers, and regulators. The District also has conducted a multilingual “Wipes Clog Pipes” campaign which is designed to help keep microfibers from entering the sewer system.

At the invitation of the United States Environmental Protection Agency (EPA), District laboratory staff is on an EPA advisory panel for developing methods for microplastics measurement.

NEXT STEPS

Staff will continue to engage in the RMP’s effort to understand the source, pathways, and control strategies of microplastics through sound science and will support the EPA’s efforts to develop

Microplastics in Wastewater
Planning Committee
June 7, 2018
Page 3

analytical methods suitable for microplastics measurement. Staff will keep the Board updated on this issue.

ARC:EMW

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: June 7, 2018

MEMO TO: Board of Directors

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

FROM: Eileen M. White, Director of Wastewater *Eileen M. White*

SUBJECT: North Interceptor Relief Sewer Construction (Buchanan, Page, and Virginia Streets, and Eastshore Highway Interceptor)

INTRODUCTION

The East Bay Regional Wet Weather Consent Decree (Consent Decree), effective September 22, 2014, requires the District and its seven satellite agencies to reduce infiltration and inflow and to eliminate discharges from the District's three wet weather facilities (WWFs). The North Interceptor Relief Sewer Project is a key component of the District's plan to meet the reduction goals stipulated in the Consent Decree. Construction of this project was originally initiated under the Pump Station Q Force Main/Gravity Interceptor Reverse Flow Project in November 2016, but was terminated for convenience in August 2017 due to utility relocation delays and underground utility conflicts. The project was redesigned, resolving those issues, and the work was divided into two segments. The first segment, including construction at Buchanan and Page Streets and the Eastshore Highway Interceptor, was approved by the Board on February 27, 2018, and is currently in progress. The second segment is scheduled for Board consideration in August 2018 and construction in 2019. Staff will provide an update to the Planning Committee on June 12, 2018.

DISCUSSION

The North Interceptor Relief Sewer Project is intended to significantly reduce flows to the Point Isabel WWF; reducing Point Isabel WWF discharge frequency by 50 percent and reducing discharge volume by 68 percent. At completion, the existing Pump Station Q force main will be able to operate in reverse flow during the wet weather season, increasing sewer capacity and diverting excess flows to the Main Wastewater Treatment Plant.

The scope of the North Interceptor work includes construction of two intertie structures to connect the Pump Station Q force main to the existing North Interceptor, 1,950 feet of new 36-inch PVC sewer main along Eastshore Highway, and a relief structure and new sewer crossing to relieve an existing bottleneck located at Virginia Street in the City of Berkeley (City). See attached map for work sites.

Construction has already begun on three of the four project sites, specifically the two Pump Station Q force main intertie structures and the sewer main along Eastshore Highway. The

second contract, which encompasses work on the Virginia Street relief structure, is currently in the bid phase with construction scheduled for the 2019 dry weather season. An overview of the scope of work at the four project sites is:

- Buchanan Street Intertie Structure, City of Albany
Connects the North Interceptor and the north end of the 36-inch Pump Station Q force main, allowing the force main to be used as a gravity flow sewer in the reverse direction.
- Page Street Intertie Structure, City of Berkeley
Connects the south end of the 36-inch Pump Station Q force main to the new section of 36-inch PVC sewer along the Eastshore Highway.
- Eastshore Highway Interceptor, City of Berkeley
A new 1,950-foot section of 36-inch PVC sewer main along Eastshore Highway between Page Street and Virginia Street.
- Virginia Street Relief Structure, City of Berkeley
Connects the new section of 36-inch PVC sewer to the North Interceptor at Second Street and relieves an existing bottleneck using a five-foot wide by two-foot-high fiberglass reinforced section of pipe. This area is congested with existing utilities, including a four-inch high-pressure PG&E gas main and an eight-inch water line which will be relocated this summer.

City of Berkeley Outreach and Issues

The District is coordinating with the City to reduce impacts to a new homeless transitional facility located on Second Street, adjacent to the Virginia Street construction site. The transitional facility is scheduled to open on June 22, 2018. In response to the City's request, the District plans to begin work in the specified area after July 15. To reduce impacts to the transitional facility residents, District contractors will comply with an 8:00 AM start time at Virginia and Second Streets. At the City's request, the District added plans for a 14-foot-wide fire lane along Second Street during construction of the Virginia Street relief structure.

Staff has also been working with the City of Berkeley to address concerns about potential construction impacts to the City's storm drain in Virginia Street. Staff will continue to collaborate with the City to complete the project by the deadline required by the Consent Decree.

NEXT STEPS

A construction contract for the Virginia Street Relief Structure will be presented to the Board for consideration on August 14, 2018. The District will continue coordination and outreach efforts with the City.

ARC:EMW

Attachment

North Interceptor Relief Sewer Project Site Map

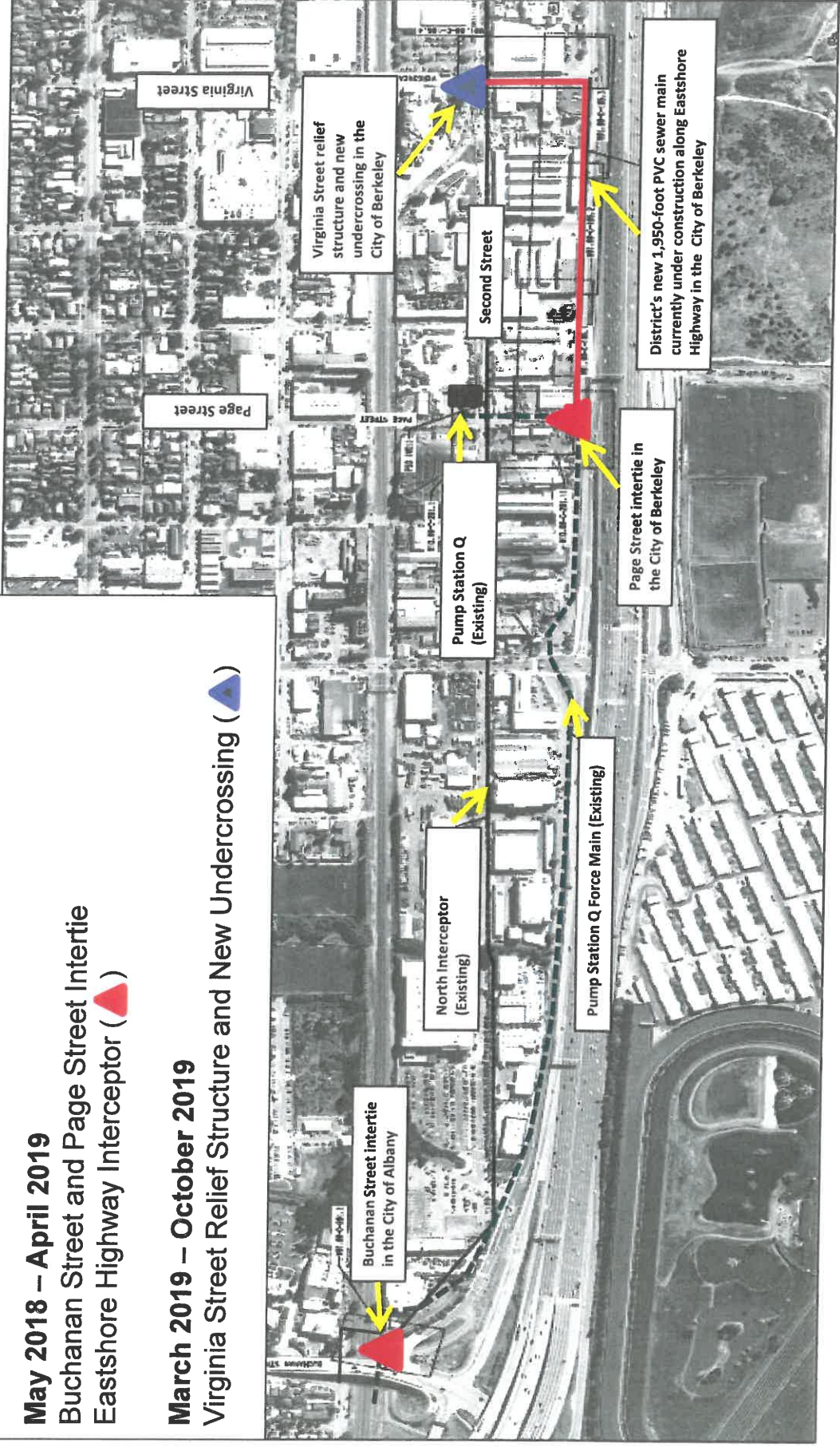
Project Elements and Construction Timing

May 2018 – April 2019

Buchanan Street and Page Street Intertie
Eastshore Highway Interceptor (▲)

March 2019 – October 2019

Virginia Street Relief Structure and New Undercrossing (▲)



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: June 7, 2018

MEMO TO: Board of Directors

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

FROM: David A. Briggs, Manager of Water Operations *B*

SUBJECT: Environmental Consultant for Renewal of Routine Maintenance Agreements

INTRODUCTION

The District routinely performs maintenance along the Mokelumne Aqueducts rights-of-way and within the Mokelumne Watershed surrounding Pardee and Camanche Reservoirs. Certain maintenance activities are monitored and permitted by the California Department of Fish and Wildlife (CDFW) through Routine Maintenance Agreements (RMAs) which are renewed every five years. Pursuant to new CDFW guidelines, RMA renewal now requires more extensive California Environmental Quality Act (CEQA) review. An update will be presented at the June 12, 2018 Planning Committee meeting.

DISCUSSION

The District performs routine maintenance on and around the Mokelumne Aqueducts and Mokelumne Watershed to protect and ensure operability of the District's assets. Common District activities include vegetation removal, road maintenance, culvert repair, and fence repair. Any work impacting a streambed requires a Streambed Alteration Agreement administered by CDFW through an RMA pursuant to Fish and Game Code Section 1602. The District presently has two RMAs for the Mokelumne Aqueducts, corresponding with the two CDFW regions spanned by the aqueducts. A third RMA is used for watershed properties.

In 2017, CDFW informed the District that RMA renewals require a Mitigated Negative Declaration. RMA renewals would no longer be granted by CDFW based on Categorical Exemptions or Notices of Exemption when listed species are within the range of work.

After determining that staff resources could not perform the CEQA work in the required timeframe, staff notified Locals 21 and 2019 on August 24, 2017 outlining the need for consultant support. At that time, the support was limited to the one RMA with the nearest expiration date (March 2019), while the other two with later expiration dates were to be prepared by District staff. Subsequent to the union notification, staff determined that the CEQA work for the other two RMAs could not be performed by District forces considering the renewal deadlines and the

Environmental Consultant for Renewal of Routine Maintenance Agreements
Planning Committee
June 7, 2018
Page 2

strategic benefit of completing work quickly to support extension of the Safe Harbor Agreement for state-listed species. Following this determination, staff notified Locals 21 and 2019 on May 7, 2018 of the need to include CEQA work for all three RMAs.

Staff met with Local 2019 on June 6, 2018 to address their concerns (no concerns were received from Local 21). Local 2019 expressed general concern over contracting out for CEQA work. Additional concerns were expressed over the contracting out scope expansion when compared to the original notification. Staff agreed with Local 2019 that certain specialized environmental review sections could be done with District forces, and that future renewals could be handled entirely in house.

Routine maintenance of District assets and property cannot be conducted without an RMA. Operating with an expired RMA is risky because the District would be vulnerable to significant regulatory enforcement if District activities impacted any listed species.

NEXT STEPS

A contract to perform the CEQA work will be brought to the Board for consideration at its June 26, 2018 meeting.

ARC:DAB:sd