



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

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

**AGENDA  
EBMUD/EBRPD LIAISON COMMITTEE  
Wednesday, March 29, 2017  
2:00 p.m.  
EBMUD Training Resource Center  
375 Eleventh Street  
Oakland, California**

**COMMITTEE MEMBERS:** EBMUD: Doug Linney and Frank Mellon, Andy Katz (Alternate)  
EBRPD: Dennis Waespi, Beverly Lane and Dee Rosario,  
Ellen Corbett (Alternate)

**ROLL CALL:**

**DISCUSSION:**

- 1. Chabot Dam Seismic Upgrade Project (EBMUD)
- 2. Upper San Leandro Reservoir Water Storage Management (EBMUD)
- 3. Update on San Leandro Creek Watershed Management Plan (EBMUD)
- 4. Update on East Bay Watershed Master Plan (EBMUD)
- 5. Redwood Canyon Public Golf Course Update (EBRPD)

**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.

Confirm Next Meeting

**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](http://www.ebmud.com).*



**CHABOT DAM SEISMIC UPGRADE PROJECT**  
**March 29, 2017**

**CURRENT STATUS**

Lake Chabot is one of five terminal storage reservoirs operated by the East Bay Municipal Utility District (EBMUD) in the San Francisco Bay Area, and is part of the Lake Chabot Regional Park operated by the East Bay Regional Park District (EBRPD). Based on a mandate from the California Division of Safety of Dams (DSOD), EBMUD is currently performing seismic upgrades to both the earth dam and the outlet works which control the flow of water from the reservoir. Construction began in May 2016. EBMUD successfully worked with EBRPD to place trail closure signs, and inform the public about the temporary trail closures associated with the project. The District continues to work with the contractor and EBRPD staff to notify trail users about the partial closure of the West Shore Trail that loops around Lake Chabot.

EBMUD and the contractor have successfully installed the cement deep soil mixing buttress and seepage collection trench across the downstream toe of the dam. The work continued despite high reservoir levels and on-going flows over the two spillways into San Leandro Creek below the dam. The contractor is actively demolishing the outlet works and preparing to place and compact earthfill at the toe of the dam.

**NEXT STEPS**

The contractor will complete the restoration of the earth dam and the retrofit of the outlet works in the next several months. While the project has encountered delays due to the wet winter, EBMUD expects construction, including repaving of the West Shore Trail, to be complete by November 2017. The project has required the temporary closure of both Chabot Park in San Leandro, and a portion of the West Shore Trail within Lake Chabot Regional Park. However, the project has not impacted the water levels within Lake Chabot, and so impacts to the recreational areas have been minimized. EBMUD will continue to work with the EBRPD to maintain the temporary trail closures and to provide public notifications. Staff also continues to work with and update the City of San Leandro, Alameda County, environmental groups, and the local community throughout the construction process.

ARC:XJI:btb



# UPPER SAN LEANDRO RESERVOIR WATER STORAGE MANAGEMENT

## March 29, 2017

### CURRENT STATUS

Upper San Leandro (USL) Reservoir is a drinking water supply reservoir that captures runoff from the 30-square-mile local watershed. EBMUD also has the ability to transfer water from its Mokelumne system to the reservoir. The current reservoir capacity totals 38,905 acre-feet (AF), with a 6,000 cubic feet per second (cfs) capacity spillway, and a spillway crest elevation of 460 feet. The reservoir's release outlet is through a 54-inch drain line that discharges into San Leandro Creek. The dam and outlet structures were last upgraded in 1972.

#### General Operating Criteria

USL Reservoir is operated within a broad range, primarily for water supply and some local runoff management. The operating range has an upper guideline to limit the chance of spilling and a lower guideline to help the system provide up to six months of local storage in the event of an emergency. During the rainy season (October through March), the reservoir is operated from two to ten feet below the spillway elevation for average rainfall conditions of approximately 28 total inches of precipitation. This year, the reservoir was approximately 10 feet below the spillway in early January. The 11.64 inches of precipitation received in January was 218 percent of average and led to spill. February saw 10.65 inches of precipitation, approximately 227 percent of average, leading to further spill.

USL releases are planned at no greater than 150 cfs at Redwood Road to maintain the creek within its banks at Redwood Canyon Golf Course. Releases are not made during periods of predicted precipitation so as to not add flow to the creek already receiving watershed runoff. The creek capacity is defined as the maximum flow that the creek can handle without water spilling over the creek banks. The San Leandro Creek capacity at the Redwood Canyon Golf Course is 150 cfs, as measured at the Redwood Road gauge. The rating for the Redwood Road gauge was developed in September 2011 and updated in February 2017.

#### USL Reservoir Spill Rate and Dates for 2017

USL Reservoir spilled from January 11 to 15, 2017, with all daily average spill less than 150 cfs. The reservoir spilled again from January 20 to March 8, 2017, with 16 days where the daily average spill was greater than 150 cfs. The maximum daily average spill was approximately 620 cfs.

#### Historical Record of USL Spilling

Prior to 2017, the last time USL Reservoir spilled was from March 26 to 29, 2011, with a maximum daily average of approximately 15 cfs. The reservoir spilled from March 28 to April 20, 2006, with a maximum daily average spill of approximately 150 cfs. The reservoir spilled from February 3 to March 1, 1998, with a maximum daily average spill of 490 cfs.

EBMUD notifies agencies and the public of spills using an automated email system, where participation is voluntary. The email system is used because spills are not planned, and, therefore, may occur during the night when telephone calls may be unwelcome.

**Upper San Leandro Reservoir Water Storage Management  
EBMUD/EBRPD Liaison Committee**

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USL Reservoir Planned Release Rates and Dates for 2017

In 2017, USL Reservoir planned releases during dry periods were at 100 cfs from January 13 to 18, 20 cfs from January 27 to February 1, 50 cfs from February 28 to March 3, 90 cfs from March 3 to March 8, and 130 cfs from March 8 to March 19, when EBMUD ceased releases at the request of the golf course.

Prior to 2017: History of Releases Made from USL since 2005

Prior to the recent four-year drought, planned releases from USL Reservoir occurred on an almost annual basis. Releases were made from USL Reservoir in January of 2013, and in April, May, and December of 2012. In 2011, releases were made in January, March, April, November, and December. In 2010, releases were made in November and December. In 2006, releases were made January through May. In 2005, releases were made in May and December.

EBMUD notifies agencies and the public of planned releases using an automated telephone system, where participation is voluntary and calls are made between the hours of 8:00 a.m. and 8:00 p.m. The telephone system can be used because the release is planned.

Chabot Reservoir Operation During Construction

Chabot Reservoir, located downstream of Redwood Canyon Golf Course, is undergoing a seismic retrofit construction project. As part of the construction, the outlet works is unavailable until May 2017. While the outlet is unavailable, the reservoir will naturally rise to the spillway elevation of 227.25 feet and spill over the spillway. The normal 0.2 cfs release will be made to San Leandro Creek through the outlet when it is returned to service in May.

**UPDATE ON SAN LEANDRO CREEK WATERSHED MANAGEMENT PLAN**  
**March 29, 2017**

**CURRENT STATUS**

As part of requirements of a California Department of Fish and Wildlife (CDFW) 1600 Permit for seismic upgrade projects at Chabot Dam and the Upper San Leandro (USL) Reservoir outlet tower, EBMUD is required to develop a San Leandro Creek watershed management plan with particular focus on fisheries. A stakeholder meeting for the San Leandro Creek Watershed is scheduled for April 4, 2017 and will provide an update on the development of an initial study plan. Representatives from Friends of San Leandro Creek and the East Bay Regional Park District are included on the invite list.

Based on plans and requirements for similar reservoirs in the Bay Area, the future management plan could include reservoir release requirements linked to precipitation water year types, a fisheries habitat enhancement program in the reach directly below Chabot Dam, and a feasibility study on fish passage at Chabot and USL dams. The schedule for completing the final San Leandro Creek Management Plan is December 2019.

**NEXT STEPS**

1. Prepare a draft study plan identifying what monitoring/data collection is needed for management plan completion (July 2017)
2. Present a draft study plan and initial proposal for interim flows to CDFW (August 2017)
3. Final study plan completed (December 2017)





## **UPDATE ON EAST BAY WATERSHED MASTER PLAN**

### **March 29, 2017**

#### **CURRENT STATUS**

The East Bay Watershed Master Plan (Master Plan) was first adopted by the EBMUD Board of Directors in 1996, and revised with minor changes in 1998. The current update process began in early 2015, and has produced a public review draft document that has received hundreds of comments from stakeholders. By far the subject of greatest interest has been whether bicyclists should have access to the trail system on the watershed, with strong views supporting and opposing. After a thorough review process, EBMUD is considering a limited opening of trails in the Pinole Valley and San Pablo watershed, which seeks a balance of some increased access while maintaining the master plan priorities of protecting water quality and biodiversity.

The proposed bike access consists of two trail sections: 1) Eagle's Nest, a 0.8-mile trail on a service road beginning at Nimitz Way, a paved path connecting Wildcat canyon and Tilden Regional Park, and descending to San Pablo Dam Road just north of the main entrance to the San Pablo Recreation Area; and 2) Pinole Valley on one of two options roughly 7.5 miles in length. Of the two Pinole Valley options, one is comprised of a portion of the Bay Area Ridge Trail currently limited to hiking and equestrian use. However, several parts of this trail are single-track with steep sections and/or poor lines of sight. An alternative route would use existing trails, which are not currently open to public use.

The other two areas of the draft updated Master Plan which received significant comment were fuel management activities in the wildland/urban interface and integrated pest management.

#### **NEXT STEPS**

EBMUD staff is preparing a Request for Proposals for an initial study under CEQA to determine the appropriate level of CEQA documentation for the draft Master Plan update. EBMUD is directly engaging with stakeholder groups on both sides of the bicycle access issue, and will seek concurrence on the trail access proposal to be implemented on a pilot basis over roughly two years.

ARC:RGS:DW



**REDWOOD CANYON PUBLIC GOLF COURSE UPDATE**  
**EBRPD**  
**March 29, 2017**

**CURRENT STATUS**

The Redwood Canyon Public Golf Course concession at Lake Chabot Regional Park experienced course flooding during this year's significant recent winter storms in January and February. Select parts of the course were briefly open, however continued rains and course flooding has now closed the course. A recovery plan to fully reopen the facility is being developed with the combined efforts of staff from EBMUD, EBRPD, and the course operator, Touchstone Golf, LLC. The preliminary plan to reopen the course involves debris removal of downed trees and silt, resetting bridges, repairs to bunkers, ramps, irrigation, car paths, seeding, and top-dressing. The initial clean up began immediately in January and will continue as the weather permits.

**NEXT STEPS**

Evaluations and inspections are in process and repairs will continue in phases, with a goal to open the course by mid-April. The driving range, bar/grill, and event center continue to be open every day and the Meadows Restaurant is open Friday and Saturday evenings.

