Leland Reservoir Replacement Project

Community Meeting #1 (August 3, 2016)
Questions & Answers

Prepared: August 2016

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Updated answers are in bold italics.

Q: Why can't the new 36-inch-diameter transmission pipeline be installed in the same location as the existing alignment? Wouldn't it cost less to place the pipeline in Old Tunnel Road or through the existing reservoir site?

A: The 36-inch-diameter transmission main is a critical pipeline that supplies water from East Bay Municipal Utility District's (EBMUD's) Lafayette Water Treatment Plant (WTP) to Leland Reservoir, which serves the cities of Lafayette, Walnut Creek, and Pleasant Hill. The existing 36-inch-diameter pipeline is over 60 years old and is not currently accessible for maintenance or repair due to its location underneath the existing Leland Reservoir and portions of the reservoir's 40-foot-tall embankments.

The existing 36-inch pipeline must remain in service until a new pipeline is installed to allow water to continue to be distributed between the Lafayette WTP and the water distribution system. Installing a new 36-inch transmission main in Windsor Drive, Condit Road, and Leland Drive will allow EBMUD to safely take the existing reservoir and 36-inch pipeline underneath the reservoir out of service to construct the new tanks without impacting water service to existing customers. EBMUD will be able to better operate and maintain the new critical 36-inch pipeline in the future once it is under standard cover (three to five feet) in the traveled public right-of-way.

Placement of the new 36-inch pipeline in the existing alignment (through the reservoir site) would put the existing critical 36-inch pipeline, which must remain in service until a new pipeline is installed, at high risk of damage during construction activities. Construction over the existing 36-inch pipeline during demolition of the existing reservoir, installation of the new 36-inch pipeline, and construction of the new concrete tanks would be extremely difficult and was, therefore, not selected despite being less costly than the proposed alignment in Windsor Drive and Condit Road.

Alternative alignments, including construction of the new pipeline in Old Tunnel Road and Leland Drive, and through the existing reservoir site, were also evaluated. Alignments in Old Tunnel Road or through the site are not feasible using standard cut-and-cover construction techniques, as the elevation of Old Tunnel Road is located above the top of the existing reservoir and would require tunneling resulting in deeply-buried pipelines (approximately 20 to 40 feet deep), thus creating future operations and maintenance challenges. Due to the tunneling and/or jack-and-bore construction in Old Tunnel Road or through the Leland Reservoir site, these alternative pipeline alignments are more costly than the proposed longer pipeline constructed using standard cut-and-cover methods in Windsor Drive and Condit Road.

Q: Why are the tanks not being replaced with the same capacity as the existing reservoir?

A: The existing Leland Reservoir, constructed in 1955, has a capacity of 18 million gallons (MG). The reservoir is oversized for the area that it serves. The two new concrete tanks that will replace the existing Leland Reservoir will have a combined capacity of 16 MG which, based on future water demand projections for the area, is the appropriate size.

Q: Are the new reservoirs sized to account for population growth in the area?

A: Yes, the two 8-MG concrete tanks are sized to meet the future growth in the area. EBMUD's projected future water demands are based on the latest city and county land use plans to forecast water demands in EBMUD's service area out to 2040. Only minor increases in water demand are projected for the area that the Leland Reservoir serves. The majority of growth in the area is expected to be moderate and mostly from infill development.

Q: If the existing Leland Reservoir is oversized, are there current water quality issues?

A: The existing Leland Reservoir, even though it is oversized, does not have water quality issues, because it receives its water directly from the Lafayette WTP. Generally, when reservoirs are oversized, water quality may be degraded as the water age in the reservoir increases due to not being turned over on a regular basis, which may cause taste and odor issues.

Q: Given recent and future droughts, does it make sense to downsize any reservoirs?

A: EBMUD is not decreasing its water supply. EBMUD has two distinct water systems, the untreated water supply system and the treated (potable) water distribution system. EBMUD's water supply reservoirs are Pardee Reservoir, located in the Sierra foothills, and San Pablo, Briones, and Upper San Leandro Reservoirs located in the East Bay. These water supply reservoirs are used to capture seasonal runoff for the year. Leland Reservoir is a water distribution reservoir, which contains treated potable water and is currently oversized for its current and projected future demands. The 16-MG replacement for Leland Reservoir is sized to meet the projected future demands, which are currently developed out to the year 2040.

Q: Where will the contractor stage its equipment and materials during the pipeline installation in Windsor Drive, Condit Road, and Leland Drive?

A: Pipeline installation contractors typically stage equipment and materials along the pipeline alignment route adjacent to where the pipeline will be placed in the ground. Some equipment and materials can also be stored on the existing Leland Reservoir site.

Q: What is the cost difference between Alternative 1 and Alternative 2? What is the difference in truck trips for each alternative?

A: ***During the project scoping phase, two reservoir design alternatives were presented. Alternative 1 proposed partially backfilling the new concrete tanks within the existing reservoir basin with excavated soil and demolition debris from the demolition of the existing Leland Reservoir. Alternative 2 proposed completely backfilling the new concrete tanks with the excavated soil and demolition material.***

Alternative 2 was not considered in the Draft EIR because it was not considered to be feasible as there is almost no level terrain on the site, and the areas with minimal slope that are suitable for soil stockpiles are limited to the areas north and south of the existing access road. Since Alternative 2 was not feasible due to the site's soil storage limitation, no cost estimate was developed nor was construction truck trips analyzed for this alternative. Alterative 1 maximized reusing the excavated soil and demolition material that could be stored on site to partially backfill around the concrete tanks. Alternative 1 was chosen as the preferred project and the Draft EIR will analyze the construction truck traffic impacts for the preferred project. The cost estimate for the Project is approximately $30 million.

Q: What is the anticipated construction truck route to and from the site?

A: ***Typically, the construction contractor would choose their preferred truck route. The proposed construction routes to be analyzed in the EIR have the most direct access to the proposed pipeline and reservoir sites; therefore, the Old Tunnel and/or Condit Road routes would likely be the preferred truck routes for the construction contractor. The EIR will include a detailed traffic study that will identify impacts to traffic from construction for the proposed construction routes. If necessary, mitigation measures would be identified to minimize traffic impacts.***

Q: What are the anticipated construction hours?

A: ***Construction would typically occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, with afterhours or weekend construction activity limited to unplanned/unexpected occurrences or critical shutdowns and emergencies. Construction trucks and personnel could report to the site at 7:00 am for minor tasks and meetings, but no construction work that generates noise over 90 decibels (dBA) would occur until 8:00 am. Nighttime work would likely be required for the tie-ins of the new pipeline to the existing distribution system.***

Q: How will EBMUD assess and repair damage to existing sewer laterals in Windsor Drive, Condit Road, or Leland Drive due to construction work and/or truck traffic?

A: ***As specified in EBMUD's standard construction specifications, the contractor would be required to ensure that no damage occurs to existing utilities in the roadway, including sewer lines and existing water lines. If, during pipeline installation or reservoir construction-related activities, sewer lines, sewer laterals, or other utilities are impacted, EBMUD would coordinate with the appropriate utility owner to repair or replace the damaged utility line(s).***

Q: Will rodents on site be displaced due to construction activity? If so, how will the displacement be handled?

A: ***EBMUD has not had an issue with rodent displacement on past construction projects. Construction activities on the Leland Reservoir site will impact approximately 4 to 5 acres. The project site is approximately 14.5 acres, so any displacement of resident wildlife would likely be to a different location within the Leland Reservoir site as it is a large area. However, if nearby residents experience an increase of rodents onto their property during project construction activities and believe that the increase is attributed to the project, a claim can be filed with EBMUD pursuant to standard EBMUD practice. All claims will be evaluated on a case by case basis.***

Q: Will EBMUD repave the roads that will be impacted by construction activity and truck traffic after construction is completed?

A: EBMUD will document the road pavement conditions for all routes that would be used by construction vehicles both before and after project construction. Roads found to have been damaged by construction vehicles would be repaired to the level at which they existed prior to project construction. ***For the sections of roadway where the pipeline would be installed, EBMUD would do a T-cut repair, which means a replacement of the roadway to one foot beyond the edge of the trench. Where the edge of the trench is within two feet of a gutter lip or the edge of pavement, the pavement between the trench cut and the gutter lip or edge of pavement will be removed and replaced. The permanent replacement paving would be installed towards the end of the Project, so initially residents will see temporary asphalt in the trench area.***

Q: How long will it take to complete all of the pipeline work on Windsor Drive and Condit Road?

A: ***Pipelines are typically installed at a rate of 80 to 200 feet per day. For the approximately 2,700 feet of pipeline installation required in Windsor Drive and Condit Road, the pipeline is estimated to take approximately 16 weeks of active construction, including approximately two weeks for the pipeline connections at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. Active construction time does not include down-time, submittal review, material procurement, or fabrication inspection and approval.***

Q: Will the top of the reservoir be flush with the ground, or will it be visible?

A: The new tanks will not be flush with the ground; the top of the new tanks will be approximately five feet higher than the existing reservoir. Aesthetic impacts will be evaluated in the EIR, and the EIR will address screening of the tanks using plantings and site grading.

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