Initial Study/Negative Declaration

Water Distribution Facilities
Dingee Pressure Zone Improvements Project

East Bay Municipal Utility District
October 2007

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1. Summary

1.1 Introduction

Section 15603 of the Guidelines for Implementation of the California Environmental Quality Act (CEQA) requires a Lead Agency to conduct an Initial Study to determine if a project may have significant environmental effects. The purposes of an Initial Study are: a) to provide the Lead Agency with information to use as the basis for determining the appropriate CEQA documentation; b) to enable the Lead Agency to modify a project and/or incorporate measures c) to assist in the preparation of an Environmental Impact Report (EIR), if required, by focusing the scope to be addressed (CEQA Guidelines Sections 15163 (c)).

This initial study provides an assessment of the environmental effects associated with the planning, design and construction of water storage and pumping plant storage in the Dingee Pressure Zones which serves the Oakland/Piedmont area.

1.2 Project Overview

Dingee Pressure Zone has distribution system issues that are being addressed as part of the greater Central Oakland Hills Cascade (COHC) Pressure Zone Improvement project designed to improve water quality and increase system reliability (and operating efficiency) by removing excess or inefficient storage and aging facilities requiring major rehabilitation or replacement. Figure 1 identifies the 15 pressure zones in the cascade and also the proposed Estates and Dingee reservoir projects documented herein, located in the northern portion of the cascade, just east of Piedmont. Figure 2 shows the close proximity of the Dingee and Estates Reservoir sites, both located in Oakland sites.

1.3 Project Summary

The Dingee Pressure Zone Improvements are discussed below.

Estates Reservoir –

- Demolish and remove the existing open-cut reservoir roof and lining system and install two new 2.75-million gallon (MG) tanks within the existing basin.
- Install or refurbish the existing drain line and connect it into the existing site drainage system. See Figure 3.

Dingee Reservoir –

- Demolish and remove the existing open-cut reservoir roof and lining system.
- Install or refurbish the existing drain line and connect it into the existing site drainage system. See Figure 4.

1.4 Project Purpose

Principal storage in the Dingee Pressure Zone is contained in Dingee and Estates Reservoirs with a service elevation between 500 feet and 675 feet; both reservoirs are located in the City of Oakland.

The proposed improvements address long-term issues: water quality and seismic safety of open-cut reservoir embankments. Each is discussed separately below.

Poor water quality occurs in the Dingee Pressure Zone due to the large storage volume versus low water demands which results in water aging combined with the disinfectant dissipating. This poor water quality is also exasperated in the 11 pressure zones located above Dingee PZ as a result of continued water aging. Removal of excess water storage within Dingee Pressure Zone by downsizing the reservoirs will improve water quality within Dingee Pressure Zone and the other 11 pressure zones.

Estates Reservoir embankment does not meet the State of California Division of Safety of Dams' (DSOD) recommended seismic requirements. As a result, Estates Reservoir is operating at a reduced capacity of about 13.4 million gallons (MG). Dingee Reservoir is not under DSOD jurisdiction but will be in need of new roofing and lining improvements in several years. In addition, the existing roof structures of Estates and Dingee Reservoirs do not meet current seismic standards.

1.5 Summary of Environmental Effects

Short-term effects: will occur during the construction period and will consist primarily of increased noise, traffic/safety effects, and dust and air pollution, related to off hauling construction debris resulting from the demolition of both existing open cut roofs and the construction of new tanks within the existing reservoir basin.

Long-term effects: as part of the project design, visual impacts related to the demolition of the two reservoir roofs and lining will be addressed through architectural landscape design and site-sensitive earthwork.

At Estates Reservoir, a combination of landscape and hardscape will help improve the general aesthetics of the site and also screen the tanks from direct views from residences located to the east and south. The landscape plan will ensure that visual and aesthetic impacts associated with the project will be reduced to a level of insignificance over a five year period. When landscaping matures, the tanks will be mostly screened from neighboring street and residential views. ***{to be updated upon finalizing conceptual drawings}***

Where feasible, construction material in the existing Estates reservoir roof and concrete lining will be incorporated into the proposed landscape, hardscape and foundation arrangement, thus minimizing truck trips related to both off-hauling and importing materials. ***{to be updated upon finalizing conceptual drawings}***

2. Project Characteristics

2.1 Regional Setting

Dingee and Estates Reservoirs are both located in Oakland Hills west of Highway 13 and south of Moraga Avenue and northwest of Park Boulevard. The reservoirs are located within one-quarter of a mile from each other and can be accessed from Highway 13 via the Moraga Avenue or Park Boulevard exits (see Figure 2). The sites can also be accessed from the west via Oakland Avenue (Oakland Avenue to Highland Way to Blair Avenue). The Hayward Fault zone lies approximately 1,000 feet to the east of Estates Reservoir and approximately 2,500 feet to the East of Dingee Reservoir.

2.2 Site Location

Estates Reservoir is located at 6317 Estates Drive in Oakland. Dingee Reservoir is located at the intersection of Estates Drive and Bullard Drive, in Oakland.

2.3 Environmental Settings

Estates Reservoir is located on a 6.7 acre parcel of land, Figure 5. The reservoir itself is situated on the western slope of the Oakland Hills west of Highway 13. The view to the southwest overlooks the San Francisco Bay. The eastern portion of the ridgeline rises approximately 40 feet above the reservoirs. About a dozen residences overlook or see the top of the reservoir. Numerous pine trees, eucalyptus trees, and shrubbery line Estates Drive, thus shielding the reservoir roof from the adjacent neighbors. Redwood trees creating a park-like setting are located beneath the reservoir embankment which is located on the western portion of the property.

Dingee Reservoir is located on a 2.1 acre parcel of land, Figure 6. The reservoir is situated atop a shallow sloped plateau along the western slope of Oakland Hills west of Highway 13. The view to the west overlooks the San Francisco Bay. The north easterly portion of the ridgeline rises approximately 60 feet above the reservoirs. About 10 residences overlook the setting of the reservoir. Pine trees, coastal live oaks, deodar cedars, and shrubbery are interspersed along the property boundary.

2.4 Description of Existing Facility

Estates Reservoir - The reservoir was originally constructed in 1903 and raised to its present height in 1938. The reservoir was formed by excavating a basin at the head of a small ravine into the existing bedrock and constructing an earth fill dam at the west side. A concrete liner and roof was installed in 1968. The roof system is supported by concrete columns and timber frames. Architectural elements were incorporated into the roof that includes terraces, two large water fountains and one planter box.

Dingee Reservoir - The reservoir was originally constructed in 1894 and was modified twice, once for the construction of a new roof and lining (1931), and again for the construction a new curb which now parallels Estates Drive (1939). The dam is made up of fill, and cut into existing bed-rock material. No other major improvements have been performed since 1939.

3. Project Description

3.1 Estates Reservoir

The existing Estates Reservoir roof and lining system will be demolished; however, existing structural elements such as the pre-cast concrete columns, floor panels and glulam girders will be recycled and incorporated into the landscaping and grading plan for the new tank layout.

The proposed replacement project will consist of two above-ground circular concrete tanks. Both tanks will be painted a standard District semi-gloss green which will be compatible with proposed landscaping. The tanks will be designed to be the same size (two at 2.75 MG) for symmetry, expeditious design and construction, and operational purposes. Overflow and bottom elevation of both tanks will be 770 feet and 740 feet, respectively, to maintain the same level of service within the Dingee Pressure Zone. Each tank will be 130 feet in diameter and approximately 33 feet in height to accommodate water sloshing and a flat roof slab. Tanks will be cut into the existing southern, eastern and western portion of embankment. A portion of the tank will be situated over fill deposits and concrete piers will be required to support the vertical load of the tank. Approximately ten feet of backfill material will be placed around both tanks to reduce visual impact of the tank height as well as to develop a more efficient earthquake design system. The fill will be borrowed from the existing embankment which will result in lowering the embankment by approximately 7 to 9 feet.

Associated features such as a valve pit structure will serve both tanks and will be located on the western side of the tanks. An access road will be installed on the existing embankment leading down to the valve pit structure and tanks. Subject to DSOD approval, the existing embankment shall be breached with drainage piping to prevent water ponding in the existing basin.

Design duration will last one year and commence in 2009. Construction duration will last from 1 1/2 to 2 years and to commence in about 2012.

Landscape Design - A preliminary Landscape Plan has been prepare for the project. This landscape plans a critical element of the proposed project design and is intended to address potential visual/aesthetic impact associated with construction of the proposed facilities.

The tree planting design is intended to screen the facilities from potential direct and indirect views. Thus planting is directed to the north east of the tanks to shield views from homeowners adjacent located between 6178 to 6301 Estates Drive; and to the South to screen views of the tank by one homeowner. More description to come after the completion of landscape renderings Figure 7.

3.2 Dingee Reservoir

The project includes:

The existing Dingee Reservoir roof will be demolished and removed. Elements of the existing roof system such beams, columns, and roofing material will not be recycled on site because the site will be surplused shortly after the reservoir is demolished.

Landscaping: More description to come after the completion of landscape renderings. Figure 8

The embankment will be breached with drainage piping to prevent water ponding and accumulating in the existing basin.

Design is to last 9 months and start in about 2014. Construction duration is anticipated to last 6-9 months and to start about 2015.

1 Initial Study

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Dingee Pressure Zone Improvements

2. Lead Agency Name and Address: East Bay Municipal Utility District
Water Distribution Planning Division -MS 701
375 11th Street
Oakland, CA 94607

3. Contact Person: Tim Fuette, Associate Civil Engineer

4. Project Location:

Both project sites are located in the City of Oakland.

4.1. Estates Reservoir is located at 6317 Estates Drive, Oakland
4.2. Dingee Reservoir is located at the intersection of Estates Drive and Bullard Drive, Oakland

5. Project Sponsor's Name and Address: East Bay Municipal Utility District
Water Distribution Planning Division -MS 701
375 11th Street
Oakland, CA 94607

6. General Plan Designation:
Estates Reservoir Hillside Residential
Dingee Reservoir Hillside Residential

7. Zoning:
Estates Reservoir: R-30 (single family residential)
Dingee Reservoir: R-30 (single family residential)

8. Description of Project *(Describe the whole action involved, including, but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)*

Refer to Section 1.2 Project Overview and 1.3 Project Summary, page 1

9. Surrounding land uses and setting *(briefly describe project's surroundings)*:
Estates Reservoir: R-30 (single family residential)
Dingee Reservoir: R-30 (single family residential)

10. Other public agencies whose approval is required *(e.g., permits, financing approval, or participation agreement)*:

Encroachment Permits – None required

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Hazards/Hazardous Materials		Hydrology/Water Quality		Land Use/Planning
	Mineral Resources	☒	Noise		Population/Housing
	Public Services		Recreation	☒	Transportation/Traffic
	Utilities/Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Printed Name For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (D). Earlier analyses are discussed in Section XVII at the end of the checklist.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different ones.

9. The analysis of each issue should identify:

    a) the significance criteria or threshold used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance

ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				☒
b) Damage scenic resources, including, but not limited to, trees, rock outcropping, and historic buildings within a state scenic highway?				☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		☒		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				☒

a) The project sites are not within a designated scenic vista.
b) The project sites are not located within a state scenic highway and no impacts to trees, rock outcrops or historic buildings would result from the project.
c) At Estates reservoir, the visual character will change due to the removal of the existing reservoir roof which has a 2.8 acre surface area and replaced with two new tanks with a total roof surface area of 0.6 acres. The views from the streets and surrounding residences will be softened by planting trees and low shrubs as well as partially burying the reservoirs with 10 to 15 feet of backfill material from the existing embankment.
At Dingee reservoir, the visual character will change due to the removal of the existing reservoir roof and lining system. The site will be restored to a more natural setting, however maintaining the existing basin-shaped geometry. Landscape on the northern embankment will be kept to a because the District may eventually surplus this property.
d) No external lighting will be installed as part of this project.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
II. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use? (The Farmland Mapping and Monitoring Program in the California Resources Agency, Dept. of Conservation, maintains detailed maps of these and other categories of farmland.)				☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				☒
c) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?				☒

a) The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
b) The project site is not currently zoned for agricultural use nor is it under a Williamson Act contract for agricultural preservation.
c) See a) above

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?				☒
b) Violate any stationary source air quality standard or contribute to an existing or projected air quality violation?			☒	
c) Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			☒	
d) Expose sensitive receptors to substantial pollutant concentrations?			☒	
e) Create objectionable odors affecting a substantial number of people?				☒

a) The project would not conflict with the implementation of an air quality plan.

b&d) Potential criteria air pollutants that could be generated during construction include particulate (dust) related to, earth movement, demolition and debris, and to a lesser extent, carbon monoxide, hydrocarbons, nitrogen oxides and sulfur dioxides associated with combustion emissions from construction equipment and trucks.

Short-term construction related impact will be mitigated with dust and emission control measures, which will be part of the construction specifications for the project. Key measures include:

- Sprinkling water on exposed soil on the construction site to prevent airborne dust from leaving the site:
- Covering or daily spraying of stockpile areas
- Dust producing material shall be covered while being hauled;
- Washing the wheels of hauling trucks when exiting project sites (to prevent tracking excessive dirt on nearby roadways)
- Construction equipment shall not idle in place for more than one-half hour.

c) The project will not result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

e) Neither construction nor operation of the proposed project is expected to generate objectionable odors.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse impact, either directly or through habitat modifications on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Dept. of Fish & Game or U.S. Fish & Wildlife Service?				☒
b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Dept. of Fish & Game or U.S. Fish & Wildlife Service?				☒
c) Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?				☒
d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?				☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				☒

a) The project site does not contain habitat for species identified as a candidate, sensitive or special status plant or animal.

b) The project site is not located in the vicinity of a riparian habitat or other sensitive natural community and no impacts would result.

c) No wetland conditions are present at the project site and no impacts to wetlands are expected to result from the project.

d) The project site is fenced and does not serve as a wildlife dispersal or migration corridor.

e) The project does not conflict with any local ordinances protecting biological resources. The project landscape plant will introduce ornamental tree cover on the site.

f) There is no Habitat Conservation Plan or other similar approve plan affecting the site.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5				☒
b) Cause a substantial adverse change in the significance of a unique archaeological resource as defined in section 15064.5				☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				☒
d) Disturb any human remains, including those interred outside of formal cemeteries?				☒

a) The project sites are not listed on the Federal or California Register of Historic Places.

b-d) The two project sites are located on developed land that has been subject to extensive prior excavation and disturbance. All project work will occur in areas that have been previously disturbed. It is unlikely that unique archeological, paleontology resources or human remains exist at these three sites.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?				☒
ii) Strong seismic ground shaking?				☒
iii) Seismic-related ground failure, including liquefaction?				☒
iv) Landslides)				☒
b) Would the project result in substantial soil erosion or the loss of topsoil?				☒
c) Is the project located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				☒
d) Is the project located on expansive soil creating substantial risks to life or property?				☒
e) Where sewers are not available for the disposal of wastewater, is the soil capable of supporting the				☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
use of septic tanks or alternative wastewater disposal systems?				

a) (i to iv) The two project sites are located in a highly seismic area. Both reservoir sites are located within one-half mile of the Hayward Fault. The San Andreas Fault is located approximately 20 miles to the West and the Calaveras 15 miles to the East. All existing roof structures and reservoir embankment will likely suffer heavy damage due to a major nearby earthquake. By implementing this project, new facilities will be built to current industry standards that will enable the facility to better withstand damage resulting from a nearby major earthquake.

b) The project will not produce substantial erosion or loss of topsoil. The waterside of the existing reservoir embankments will be exposed upon removal of the roof and lining. This material is not highly erodible. If any erosion does occur it will be contained within the existing basin.

c) The existing embankments are subject to potential lateral spreading, subsidence and localized liquefaction resulting from a nearby major earthquake on the Hayward or San Andreas Fault. The proposed project will dewater the existing reservoirs thus eliminating these hazards.

d) The shrink-swell potential of these soils is low and does not pose substantial risks to life or property.

e) Municipal sewers currently serve the reservoir sites. Impacts from septic systems do not apply to this project.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?			☒	
c) Reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				☒
d) Is the project located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?				☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or				☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
working in the project area?				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				☒
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				☒

a) No unregulated hazardous substances will be used or present when all project components are in service. The existing roof structure contains wood preservatives. Material containing wood preservative will transported and disposed of in accordance with state and federal regulations. **(*WH&S –some timber contains creosote and pentachlorophenol as a wood preservative treatment. Is there any regulation that prevents the re-use of this salvaged material by a contractor?)***

b) Routine maintenance of distribution facilities entails dechlorination of potable water from reservoirs prior to release into the sewer or storm water system. For reservoir outages, sediment from tanks is containerized and disposed of in compliance with state and federal regulations.

c) There is no existing or proposed school within one-quarter mile of any project site. The project does not involve or generate hazardous waste (see response to a and b above).

d) None of the project sites are listed on a hazardous materials site listed, compelled pursuant to Government Code Section 65962.5. **(*WHS please confirm, Vista Search?)***

e) None of the project sites are located within an airport land-use plan, or within two miles of a public airport, public use airport or private airstrip.

f) See response for e above.

g) The project would not affect the implementation of any emergency response or evacuation plan.

h) The proposed project would be not expose people to risk of loss, injury or death involving wildland fires.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
VIII. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate Regional Water Quality Control Board water quality standards or waste discharge requirements?				☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?				☒
c) Substantially after the existing drainage pattern of the site area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to control?				☒
f) Otherwise substantially degrade water quality?				☒
g) Place housing within a 100-year flood plain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				☒
h) Place within a 100-year flood plain structures which would impede or redirect flood flows?				☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				☒
j) Inundation by seiche, tsunami, or mudflow?				☒

a) The EBMUD water distribution system/facilities are designed, constructed, operated and maintained to conform to state and federal requirements for water treatment and discharge.

b) The project would have minimal, if any potential to deplete groundwater supplies or recharge. No drinking water wells are located in the vicinity of the project site and impact to groundwater would not affect the use of groundwater.

c) There are no natural drainage ways at the project site; hence there will be no alteration of the course of a stream or river.

d) Existing drainage patterns will be utilized.

e&f) The project will not increase the storm water run-off. New and modified drainage located within the reservoir basin will tie into the existing storm drainage located at both sites, thus the project will not substantially degrade water quality.

g&j) The project sites are not located within a 100-year flood plain. The project would eliminate flooding as a result of the failure of a dam.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
IX. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				☒
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				☒

a) The project site is already developed and will not physically divide an established community. .

b) EBMUD is not subject to the land use and zoning ordinance of local jurisdiction for projects involving the storage of water (refer to section 53091 of California State Planning, Development, and Zoning regulations.

c) Refer to item g) in the Biological Resources section above.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
X. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?				☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				☒

a) Demolition of the existing reservoir and construction of new facilities will occur on previously disturbed areas and will not expose or disturb valuable or locally important mineral resources.

b) See response a above.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
XI. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			☒	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			☒	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				☒

a&d) Normal operation of the reservoirs would not generate noise that exceeds ambient noise levels.

Construction activities associated with the project will elevate noise levels for short/intermittent period during the construction period which is anticipated to endure between 18 to 24 months. For example, trucks are anticipated to arrive every ½ hour for concrete pours on the new tanks, trucks. Back-up alarms on the trucks generate noise levels of approximately 75 dBA-weighted decibels at 200 feet away. Elevated noise level is dependent on the number and pieces of equipment to be used and the intensity of the activities. Although EBMUD is not subject to local jurisdiction zoning ordinance for projects involving the storage of water (refer to section 53091 of California State Planning, Development, and Zoning regulations), the District strives to comply with local sound and noise ordinance during construction.

The District limits construction activities during the hours 7:00AM to 6:00PM and work is restricted to hours per day.

Weekend work and overtime requires prior approval of the District thus limiting

Construction related truck-trips would increase noise along haul routes to the sites, but these would only be significant for the sites within existing communities. These trips should occur during work hours and during the workweek; therefore this impact is considered less than significant because of its short-term nature.

b) The project would not involve pile driving and would not generate ground borne vibration or ground borne noise.

c) Normal operation of the reservoirs would not generate noise that exceeds ambient noise levels.

e&f) None of the project sites is located within an airport land use plan, within two miles of a public airport, or a private airstrip; therefore, construction noise would not expose people to excessive noise levels.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
XII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				☒

a) The project will not induce population growth. The project refurbishes and replaces existing facilities to improve reliability of the existing system that currently serves customers in the City of Piedmont and Oakland. Only planned growth, approved and permitted by these two cities will be served by these improved facilities.

b) No housing presently exists at the project site; therefore, the proposed project would not displace any housing.

c) The project would not displace people or housing from the site and no relocation would be required.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
XIII. PUBLIC SERVICES. a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				☒
Police protection?				☒
Schools?				☒
Parks?				☒
Other public facilities?				☒

a) The project replaces existing facilities only. The project would not generate additional need for fire protection, police protection, schools, parks, and other public facilities.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
XIV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				☒

a) The project will not generate or attract additional population, as associated with residential, commercial or industrial uses; therefore it would not affect demand for recreational facilities.

b) There are no existing or proposed recreational facilities within the vicinity of this site.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
XV. TRANSPORTATION/TRAFFIC Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)??			☒	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				☒
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				☒
e) Result in inadequate emergency access?				☒
f) Result in inadequate parking capacity?				☒
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				☒

a, b& e) The project would generate vehicle trips during project construction, temporarily contributing to increase traffic on local roadways. Truck trips would be associated with hauling materials, debris and equipment to and from the site. Construction employees would also contribute to vehicle trips.
Vehicles traveling to the site from Hwy 13 will be using either Park Boulevard or Moraga Avenue exit. During project operation, vehicle trips would be few and infrequent, occurring only for routine maintenance activities.

c) The project would not affect air traffic and no impacts related to air traffic or safety would result.

d) The project would not result in any permanent changes to traffic design features.

e) The project would not impact emergency access because contract specification will require the contractor to maintain roadway access at all times.

f) Parking needs generated by the construction of the project will be located on District Property and immediately adjacent to District property along Estates Drive. Routine construction and maintenance would not generate the need for offsite parking.

g) Post construction, and during normal operations, the project would generate fewer than five vehicle trips per day per site. Therefore it would not affect policies supporting alternative transportation.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Issues (and Supporting Information Sources):				
XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				☒
d) Are sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				☒
e) Has the wastewater treatment provider which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			☒	
g) Comply with federal, state, and local statures and regulations related to solid waste.			☒	

a, b, c& e) The project does not include any wastewater facilities.

d) The project would not result in the need for new additional water supply.

f & g) Solid waste generated in the form of construction debris at the project site would be disposed of at appropriate receiving locations identified by the contractor in response to standard EBMUD construction specification regarding material off-haul and disposal. On site recycling of some wood members and concrete will also reduce the amount of construction debris off-hauled from the site. Solid waste generation would be a less than significant construction related impact of the project. Operation of the reservoirs would not alter the need for solid waste facilities.

ENVIRONMENTAL IMPACT CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Issues (and Supporting Information Sources):				
XVII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				☒
c) Does the project have environmental effects which will cause substantial adverse effects				☒

	Potentially Significant Impact	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
on human beings, either directly or indirectly?				

a) The project includes the downsizing in size and capacity of water storage facilities. The project will not significantly impact and adversely impact sensitive environmental resource.

b) None of the potential environmental impacts of the project are significant after mitigation and no cumulative significant impacts would occur.

c) The project would not result in adverse effect on human beings or their environment.

5. Mitigation Monitoring Program

Table 1 summarizes potential impacts, implementation procedure, reporting action, responsible work group to carry out the reporting action, and reporting schedule.

CEQA (Mitigation Monitoring) and Reporting Program
Dingee Pressure Zone Improvements

Environmental Factor	Impact	Implementation Procedure	Reporting Action	Responsibility	Reporting Schedule
I. Aesthetics	1 c) Removal of existing reservoir roof will substantially alter visual character of site.	Incorporate conceptual design provided in MND into construction documents.	Review construction documents to verify inclusion of conceptual upgrade.	EBMUD –Planning & Design	10% & 90% review of construction contract.
II. Agricultural Resources	None	----------	----------	----------	----------
III. Air Quality	1d) Expose sensitive receptor to substantial pollutant concentration during construction.	1. Include dust control measures in construction specification 2. Perform inspection to verify compliance.	1. Review construction specifications to verify inclusion of dust control measures. 2. Add to inspection Report	EBMUD – Design/Regulatory Compliance EBMUD Construction	Prior to approval of construction contract During construction
IV. Biological Resources	No impacts to date. 1a) Ensure that construction activities do not cause a substantial adverse impact to sensitive or special status species	Perform biological survey during design and construction.	Perform biological survey by qualified biologist prior to Approval of Construction Contract. During Construction period, prior to nesting season of sensitive migratory wildlife.	EBMUD – Design EBMUD - Construction	Prior to approval of construction contract. Prior to nesting season.
V. Cultural Resources	None	----------	----------	----------	----------
VI. Geology/Soils	None	----------	----------	----------	----------
VII. Hazards & Hazardous Materials	Construction Activity requires removal of timber roof structure containing preservatives pentachlorophenol).	Include measure for removal of timber material in construction specification.	1. Review construction specifications to verify inclusion of material disposal. 2. Submittal required. Add to inspection Report	EBMUD – Design/Regulatory Compliance EBMUD Construction	Prior to approval of construction contract Review and approve submittal prior to demolishing reservoir roof.
VIII Hydrology/Water Quality	None	----------	----------	----------	----------
IX Land Use Planning	None	----------	----------	----------	----------
X. Mineral Resources	None	----------	----------	----------	----------

CEQA (Mitigation Monitoring) and Reporting Program
Dingee Pressure Zone Improvements

Environmental Factor	Impact	Implementation Procedure	Reporting Action	Responsibility	Reporting Schedule
XI Noise	Noise associated with construction activities	1. *Include construction noise ordinances in construction contract specification.* 2. Inspect construction sites to verify that contractor conforms to construction documents.	1. Review construction specification to verify inclusion 2. Add inspection report to District files	EBMUD Design/Planning Add inspection report to District files	Prior to approval of construction documents Weekly during construction
XII Population/Housing	None	----------	----------	----------	----------
XIII Public Service	None	----------	----------	----------	----------
XIV Recreation	None	----------	----------	----------	----------
XV Transportation	Construction Activity increases traffic on local roadways.	Start work between 7:00 to 7:30AM to avoid 7:45 to 8:30 AM peak traffic on local roadways.	Review construction specification to allow early start-time of construction work (After 7:00AM before 7:30 AM) Add inspection report to District files	EBMUD Design/Planning Add inspection report to District files.	Prior to approval of construction documents Work start-time recorded in Inspector's report on a daily work basis.
XVI Utilities/Service	None	----------	----------	----------	----------
XVII Mandatory Findings	None	----------	----------	----------	----------

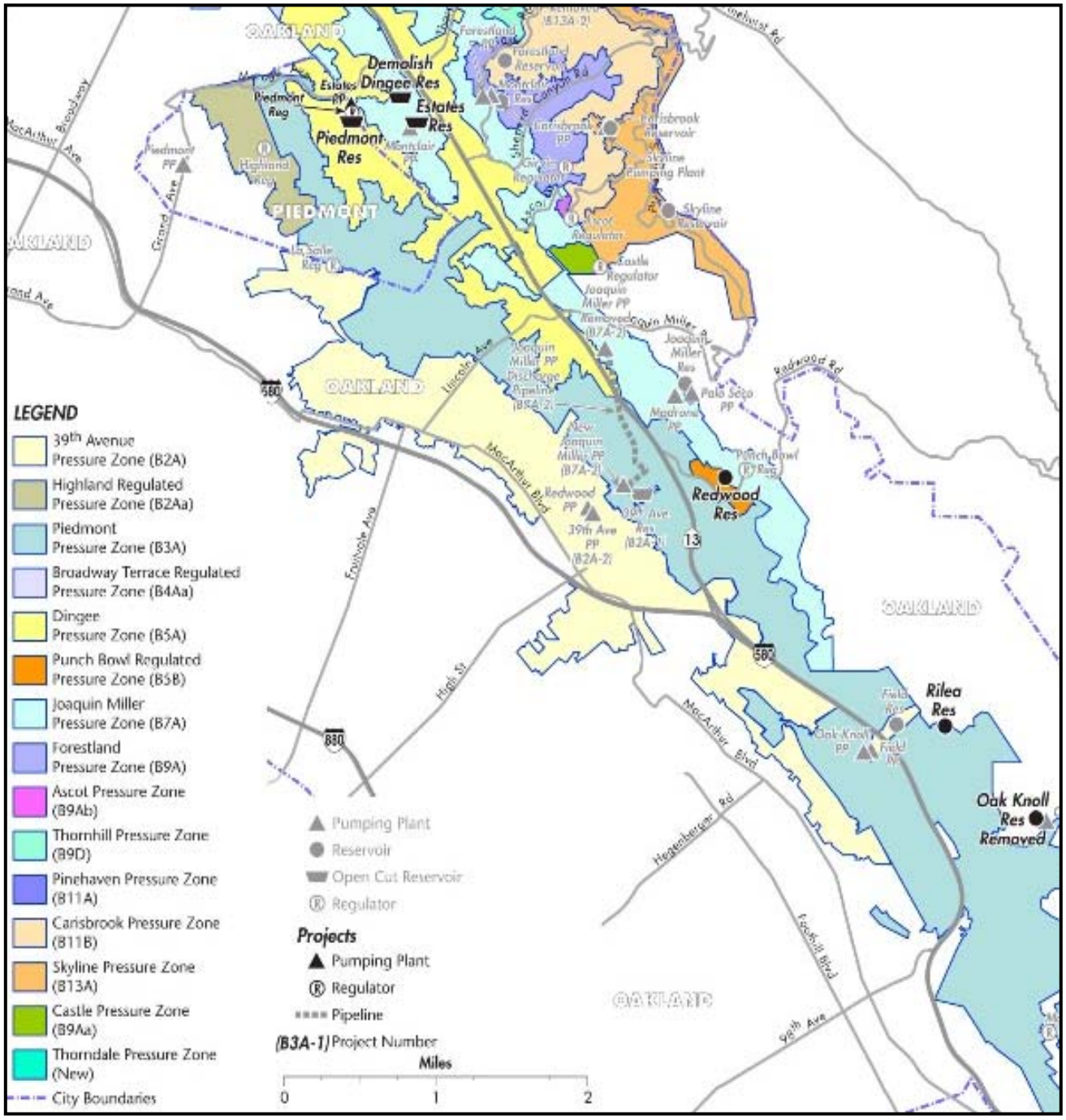

Figure 1
Central Oakland Hills Cascade Project
Dingee Pressure Zones Improvements

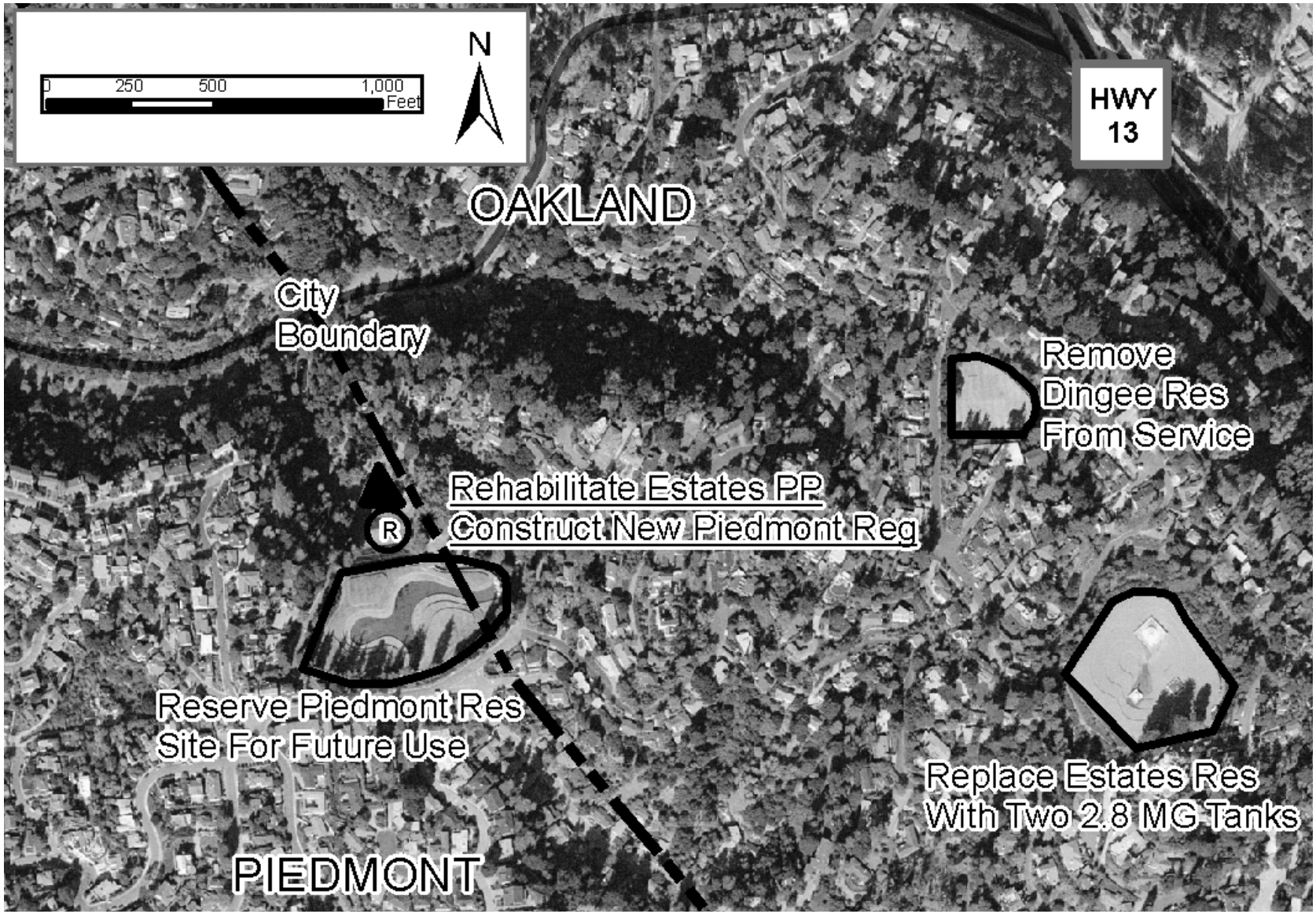

Figure 2
Site Location of Estates and Dingee Reservoirs

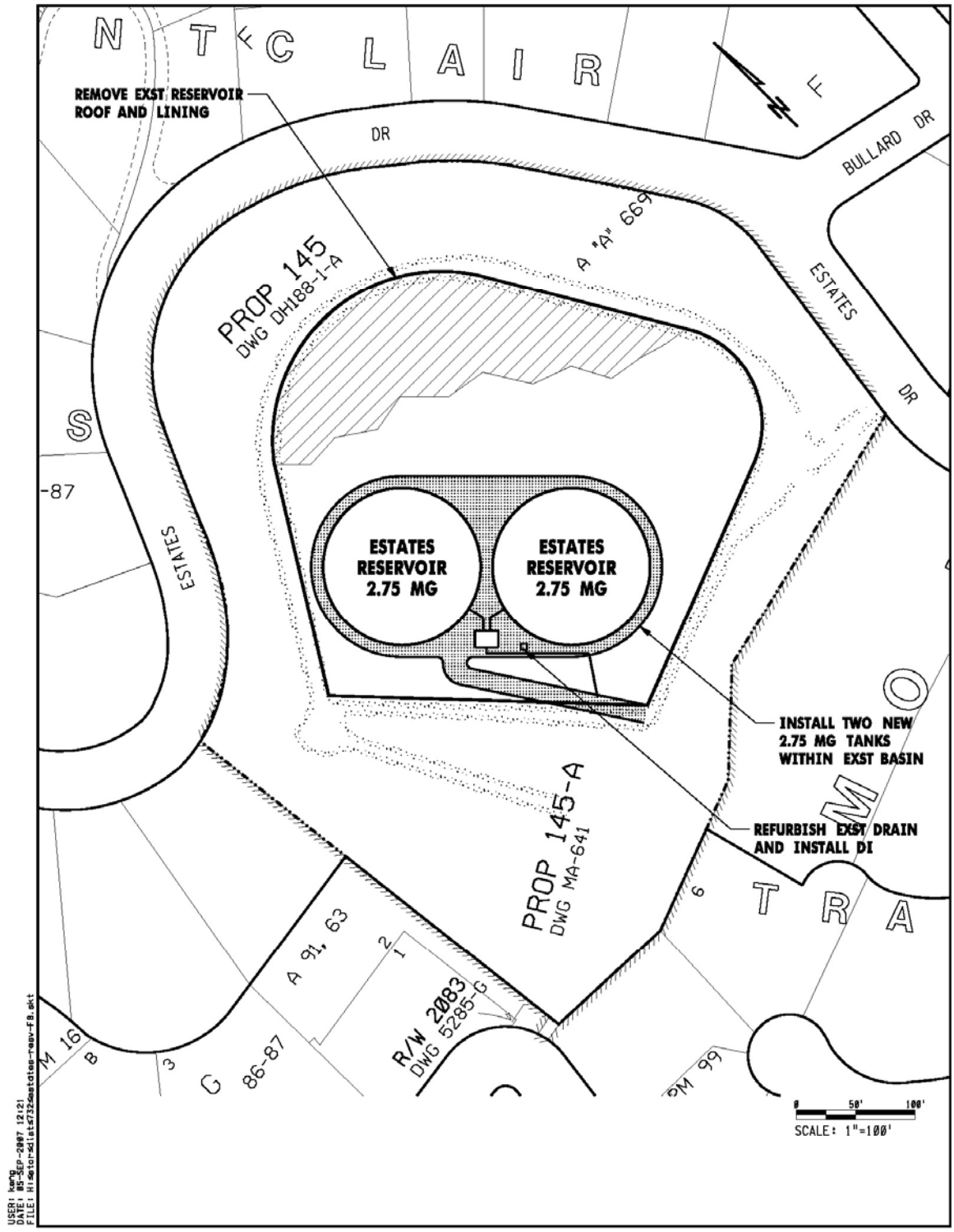

Figure 3
Proposed Improvements at Estates Reservoir

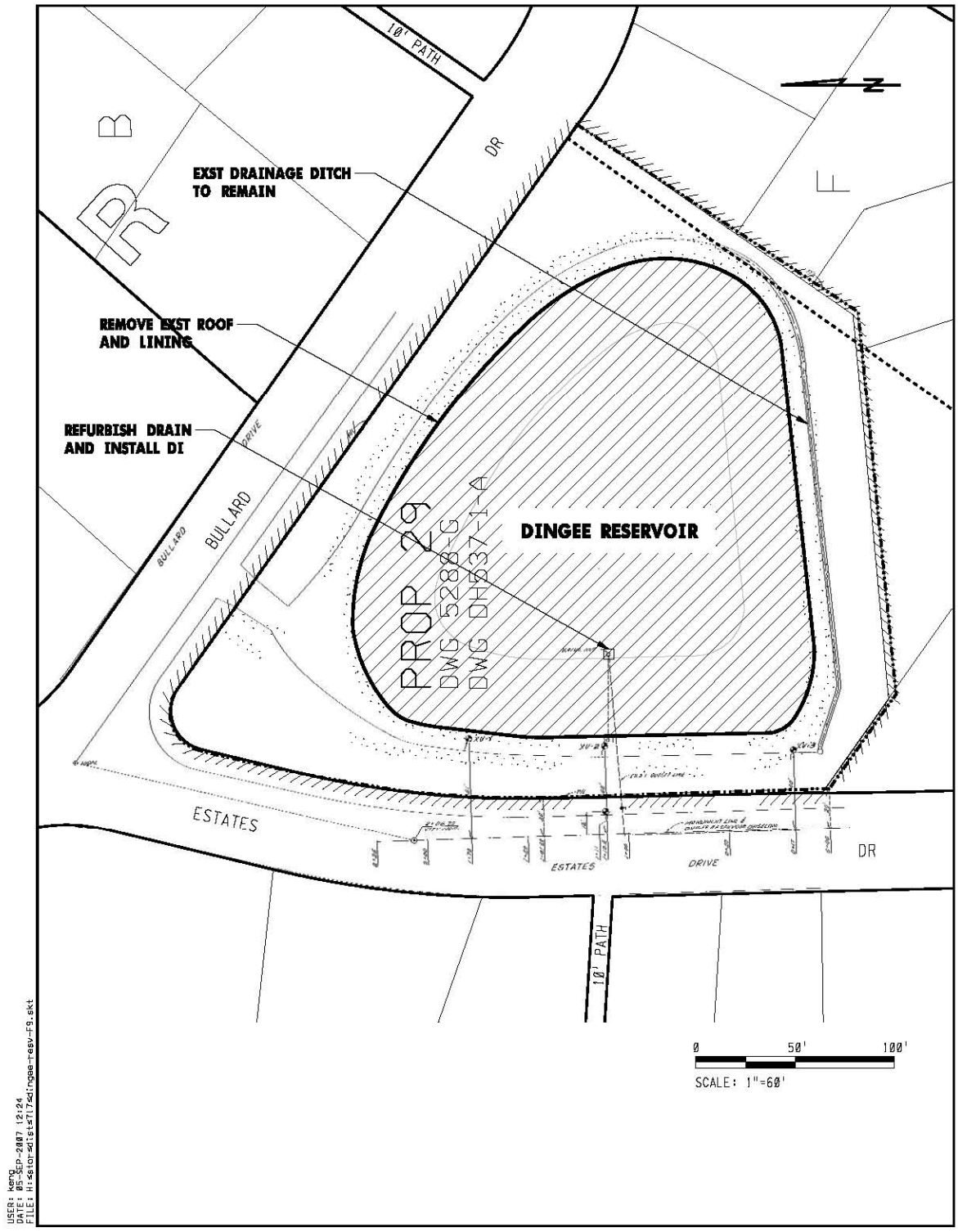

Figure 4
Proposed Improvements at Dingee Reservoir

Figure 5
Environmental Setting at Estates Reservoir

Figure 6
Environmental Setting at Dingee Reservoir