

Administrative Draft

EAST BAY WATERSHED MASTER PLAN UPDATE

Initial Study

Prepared for
East Bay Municipal Utility District

December 15, 2017



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Attachment

East Bay Watershed Master Plan Update

ENVIRONMENTAL CHECKLIST

Initial Study

1. **Project Title:** East Bay Watershed Master Plan Update
2. **Lead Agency Name and Address:** East Bay Municipal Utility District
500 San Pablo Dam Road
Orinda, CA 94563
3. **Contact Person and Phone Number:** Douglas Wallace
Environmental Affairs Officer
510-287-1370
4. **Project Location:** East Bay Municipal Utility District Watershed
District lands
5. **Project Sponsor's Name and Address:** East Bay Municipal Utility District
500 San Pablo Dam Road
Orinda, CA 94563
6. **General Plan Designation(s):** Watershed
7. **Zoning:** Watershed

8. Description of Project:

The East Bay Watershed Master Plan (EBWMP) was first adopted by East Bay Municipal Utility District's (EBMUD) Board of Directors (Board) in 1996. The primary goals of the EBWMP are to protect water quality and biodiversity on EBMUD's 29,000 acres of local watershed while administering programs for natural resources, community use, and asset management. To reflect land management experience and actions taken since EBWMP adoption, and to acknowledge changing management challenges, EBMUD initiated an update of the EBWMP (Update). The proposed key changes in the Update comprise the Project.

9. Surrounding Land Uses and Setting.

Surrounding land uses include East Bay Regional Park District park lands; residential; open space and other recreational areas and agriculture.

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

None

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

No California Native American tribes have contacted the Lead Agency regarding this Project area. Tribal contact efforts are discussed in the Tribal Cultural Resources section of this Initial Study.

1.0 Project Description

1.1 Introduction

The East Bay Watershed Master Plan (EBWMP) was first adopted by East Bay Municipal Utility District's (EBMUD) Board of Directors (Board) in 1996, with minor revisions approved in 1999. A Program Environmental Impact Report (PEIR), which evaluated potential environmental impacts of the EBWMP in accordance with the California Environmental Quality Act (CEQA), was prepared pursuant to CEQA Guidelines Section 15168 prior to the adoption of the EBWMP.

EBMUD now proposes to update the EBWMP ("Update" or "Project") to reflect land management experience and actions taken since the EBWMP adoption, and to acknowledge changing management challenges. EBMUD, serving as the Lead Agency under CEQA for the Project has prepared this Initial Study to determine:

- Whether subsequent or supplemental environmental review is allowed [see Public Resources Codes Section (PRC) 21166 and CEQA Guidelines Section 15162] because:
 - The Project entails substantial changes to the EBWMP which will require major revisions of the PEIR, or
 - Substantial changes have occurred with respect to the circumstances under which the Project is being undertaken which will require major revisions in the PEIR, or
 - New information, which was not known and could not have been known at the time the PEIR was certified as complete, has become available and shows the Project will have significant effects not discussed in the PEIR; and
- Whether the Project is consistent with the EBWMP and local land use plans and zoning [see PRC 21094(b)]; and
- Whether the Project may cause significant effects on the environment that were not examined in the PEIR [see PRC 21094(c) and Guideline Section 15168(c)].

1.2 Report Organization

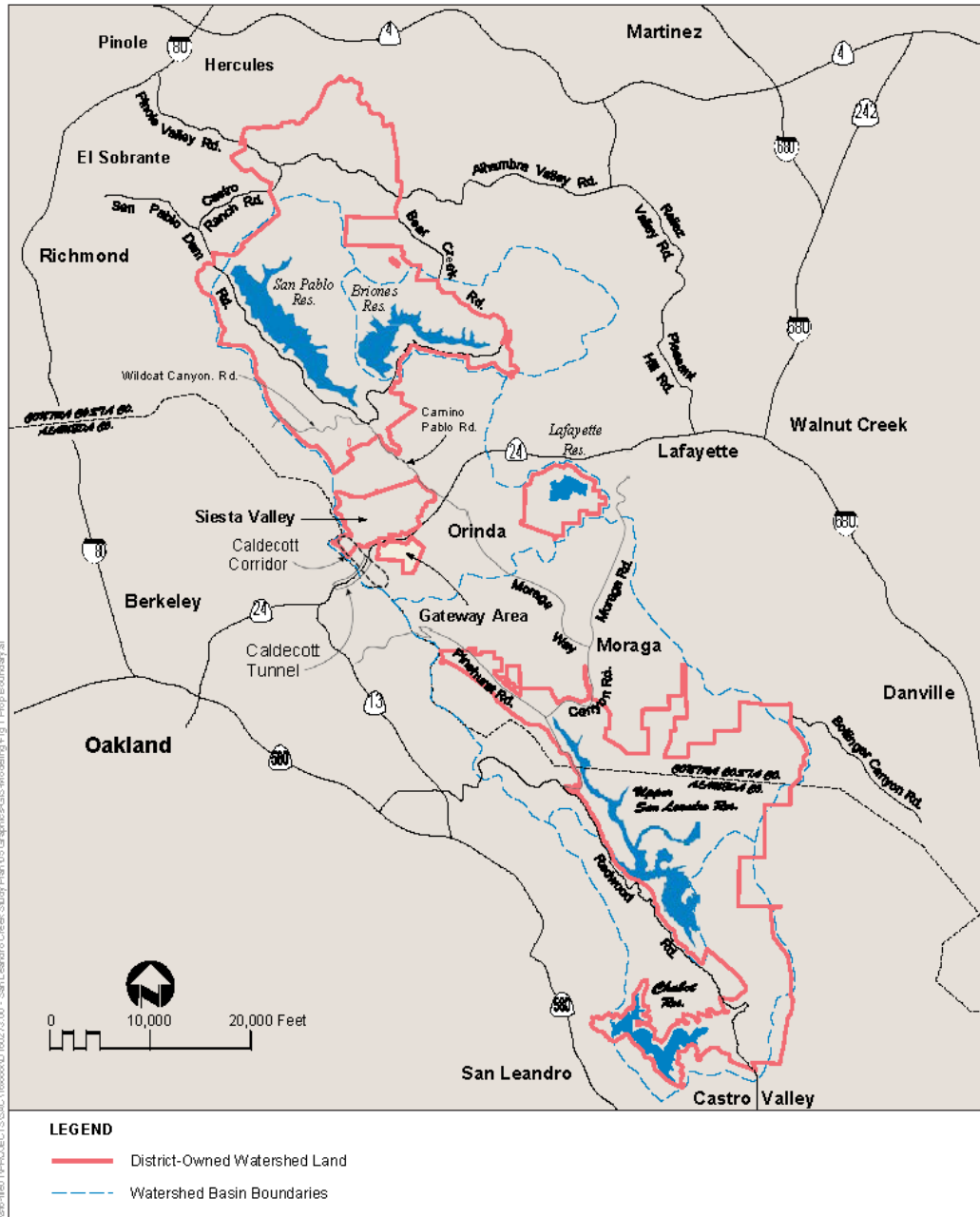
This report is organized as follows:

Section 1, Project Description, provides an introduction to the proposed project with project background and discusses the proposed improvements.

Section 2, Environmental Checklist Form, presents the CEQA Initial Study Environmental Checklist, and analyzes environmental impacts resulting from the project and describes the mitigation measures that would be incorporated into the proposed project to avoid or reduce impacts to less-than-significant levels.

1.3 Project Location

The East Bay Municipal Utility District (District) owns and manages approximately 29,000 acres of land and water surface in the East Bay area (**Figure 1**). These lands surround five reservoirs (Briones, San Pablo, Upper San Leandro, Chabot, and Lafayette), and one drainage basin area that drains to San Pablo Bay, that does not contain a reservoir (Pinole Valley). The District’s reservoirs store high-quality drinking water and emergency water supplies for approximately 1.42 million water users in Alameda and Contra Costa Counties.



SOURCE: EBMUD

East Bay Municipal Utility District Watershed Management Plan Update

Figure 1 District Watershed Map

1.4 Project Background and Need for the Project

The District is committed to preserving and protecting the natural resources that exist on its lands and its reservoirs. Because these lands have been largely protected from development and human disturbance, they support important and high-quality habitats and resources for a wide variety of plant and animal species. Watershed management and use is guided by EBMUD's Policy 9.04, which provides the following directive:

It is the policy of the East Bay Municipal Utility District to: Acquire, protect, and manage watershed land surrounding District reservoirs in accordance with the District's primary objective of providing high quality drinking water and in a manner which protects source water quality, water supply and natural resources, consistent with District's sustainability policy (EBMUD, 2016).

The primary goals of the EBWMP are to protect water quality and biodiversity on EBMUD's 29,000 acres of local watershed while administering programs for natural resources, community use, and asset management. For more than twenty years, the EBWMP has provided the guidance for successful management of the watershed, as well as the basis for tiered plans addressing grazing and fire/fuels management, and a Low-Effect Habitat Conservation Plan (HCP) approved by the U.S. Fish and Wildlife Service (USFWS) in 2008.

At the time the EBWMP was adopted in 1996, the purpose was “to establish long-term management direction for District-owned lands and reservoirs that will ensure the protection of the District's water resources and preserve environmental resources” (EBMUD, 1996). As described above, a PEIR was prepared under Section 15168 of the State CEQA Guidelines for the EBWMP. The PEIR evaluated five alternatives for managing the District's East Bay watershed lands. It was anticipated that the PEIR would provide adequate CEQA documentation for some specific watershed activities, and that some specific programs or projects may require additional CEQA evaluations before they could be implemented. To reflect land management experience and actions taken since EBWMP adoption, and to acknowledge changing management challenges, EBMUD initiated the Update in early 2015. The proposed updated EBWMP can be found in **Appendix A**. This Initial Study evaluates the potential impacts of the proposed Update. The Project Description provided here summarizes the proposed changes to the EBWMP which focus on the following:

- “Emerging challenges”, identifying a range of concerns and actions to address climate change, invasive species and pathogens, adaptive management, and sustainability;
- Integrated Pest Management in East Bay Watershed;
- Proposed changes to trail access policy;
- Proposed factual updates;
- References to previously approved plans

The proposed changes to the EBWMP are described in more detail below and summarized in **Table 1**.

1.5 Proposed Key Changes in the EBWMP Update

Emerging Challenges

This section in the Update identifies and discusses a range of new developments and issues that have arisen since the adoption of the EBWMP in 1996. These include climate change, newly invasive species and pathogens (such as Sudden Oak Death), and contaminants such as mercury that have been detected in the tissues of sport fish in the watershed reservoirs. While climate change is an extremely complex global phenomenon, effects on local conditions are anticipated, chiefly related to hydrology. As a programmatic document, the EBMWP is meant to provide general guidance on managing the watershed, but does not necessarily specify detailed practices. The discussion of climate change in the Update is intended to acknowledge an issue that is expected to intensify, and give a greater emphasis on adaptive management to respond appropriately as conditions change.

Adaptive management could similarly play a role in responding to other challenges such as invasive species. For example, EBMUD has instituted a boat inspection program to prevent the introduction of quagga and zebra (*Dreissenid*) mussels into San Pablo Reservoir. In this instance, the Update acknowledges a problem that is currently being addressed, consistent with the existing EBWMP.

Sustainability is also identified as both a critical challenge and a goal for watershed management. EBMUD generates trench soils as a result of pipeline construction and repair projects throughout its services area. Clean trench soils are stockpiled at Briones and Miller Road with the intent that they are periodically off-hauled for reuse, recycling, or disposal. The sites are currently approaching full capacity and removal of material will create space, allowing EBMUD to continue to temporarily store trench soils resulting from ongoing construction and repair projects. Removal of material will also help EBMUD to manage the erosion and runoff from the stockpiles into adjacent reservoirs, which provide drinking water to EBMUD's customers. The Update recognizes that their capacity is limited even as the production of trench soils is expected to increase as pipeline replacement accelerates. However, there are no new activities related to storing trench soils proposed under this Update.

Integrated Pest Management in the East Bay Watershed

In the Biodiversity section of the EBWMP, guideline BIO.18 states: "Apply integrated pest management (IPM) strategies that have negligible impacts on water quality, biodiversity, and other resources and do not increase fire risk." Through EBMUD's public process for consideration of the EBWMP update, members of the public expressed concerns about the use of glyphosate herbicide (commonly known as Roundup) on the watershed, and potential impacts of glyphosate on human health, citing a 2015 World Health Organization (WHO) determination that glyphosate is a "probable human carcinogen." The WHO, however, later reversed this determination. In a 2016 report, the WHO and the Food and Agriculture Organization of the United Nations (FAO) jointly concluded that "glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet."

(<http://www.who.int/foodsafety/jmprsummary2016.pdf>, p. 2.) Also, the European Food and

Safety Authority in 2017 permitted a 10-year relicensing of the herbicide on the grounds that it did not pose a carcinogenic risk.

Recognizing that hand and mechanical removal of noxious and invasive weeds is not always feasible, EBMUD is not proposing a strict ban on such pesticides, but proposes the following revision to the guideline: “Apply integrated pest management (IPM) strategies, eliminating pesticides where feasible, ensuring negligible impacts on water quality, biodiversity, and other resources and without increasing fire risk.”

Changes to Access Policy for the Watershed Trail System

As adopted by the Board, the EBWMP provided for continued use of the EBMUD 83-mile trail system by permit holders for hiking and equestrian use, which has been allowed on the watershed since it was first opened to the public in 1973. Approximately 1,400 permits have been issued each year for the past five years and there is currently no limit on the number of permits issued. It also maintained the existing prohibition on “recreational use of conveyances with wheels, tracks, or skids on unpaved roads or trails except in those portions of the Lake Chabot watershed that are leased to EBRPD [East Bay Regional Parks District] or as required under the ADA [Americans with Disabilities Act]” (EBWMP, 1996). The EBWMP Programmatic EIR included (in the discussion of Alternative 5 [“Recreation Emphasis”], which was not adopted) analysis of the potential for opening additional trails on EBMUD land to bicycle use.

The District is concerned about the long-term effects on the watershed of allowing bicycle access on watershed trails to a large and growing population of recreationists. Trail use on District-owned property has historically been low intensity, and user numbers have been relatively small (there are cumulatively nearly 8,000 permit holders in 2017). The current level of recreation use and facilities operation is acceptable given the District’s emphasis on its natural resource management programs. Expanding recreational opportunities would require the District to devote additional resources for operation and maintenance of recreation facilities and management and administration of trails; these resources could otherwise be used to support higher priority programs that directly benefit water quality, watershed protection, and water supply (EBMUD, 1996).

However, since the adoption of the EBWMP in 1996, members of the community have continued to advocate for access to the watershed trail system for bicycle use. When the update for the EBWMP was initiated in 2015, EBMUD staff began studying alternatives that would address the community request for trail access while maintaining EBMUD’s management priorities of water quality and biodiversity protection, bearing in mind the PEIR’s existing impact analysis regarding bicycle use of trails on EBMUD land.

The Bay Area Ridge Trail is a planned, 550-mile trail system circumscribing the San Francisco Bay, of which 367 miles are already open and available for public use. The Bay Area Ridge Trail Council advocates for the completion of the Ridge Trail by working with land owners and managers to identify routes for the remaining approximately 180 miles, and supports including multi-use where possible. EBMUD evaluated several different trail segments of the Ridge Trail alignment on EBMUD land for suitability to multi-use, including bicycle access, which could

contribute to further completion of the full Bay Area Ridge Trail. To protect the watershed values of water quality and biodiversity, staff recommended trail segments with lower potential for impacts on sensitive biota or habitat, or erosion into a reservoir over other trail segments.

Perimeter trails offering connectivity to existing regional trail systems were also given preference. It should be noted that the existing recreational usage in the Pinole Valley is low intensity, with approximately 2-3 registered users per week.

Trail segments meeting the aforementioned criteria were moved forward for consideration. Based on this review, EBMUD proposes to open the following trails for the potential use of mountain bikes:

Pinole Valley Multi-Use Trail, a 6.7-mile trail consisting in the eastern section of fire roads not currently open to the public. The trail would begin at the Pinole Valley Staging Area at the intersection of Pereira and Alhambra Valley roads and heads west along the edge of a firebreak parallel to Alhambra Valley Road for 0.75 miles to Bar X fire road. It continues for another 0.75 miles along the valley bottom up to the intersection of Sludge Road. The trail continues west through the valley bottom 0.50 miles to the intersection with Simas Road, and then northward 0.25 miles, then forks at Ridge Road, crossing the creek, and continuing up the valley. At about 1.5 miles from the junction of Sludge and Simas Road, Ridge Road forks and continues to the east, and then Goat Road proceeds north up the wooded canyon, at which point the trail joins the existing Bay Area Ridge Trail. From there the trail climbs 0.75 miles to the ridge and the intersection with the trail on Fernandez Ranch (owned by the Muir Land Trust), and continues downhill on Goat Road, Simas Road, and Windmill Road to intersect at the “Y” on Alhambra Valley Road, again with some sections that are steep (**Figure 2**).

Eagle’s Nest Multi-Use Trail, a 0.8-mile trail on a service road beginning at Nimitz Way, a paved path in the East Bay Regional Parks District that allows bikes and connects 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 (**Figure 3**).

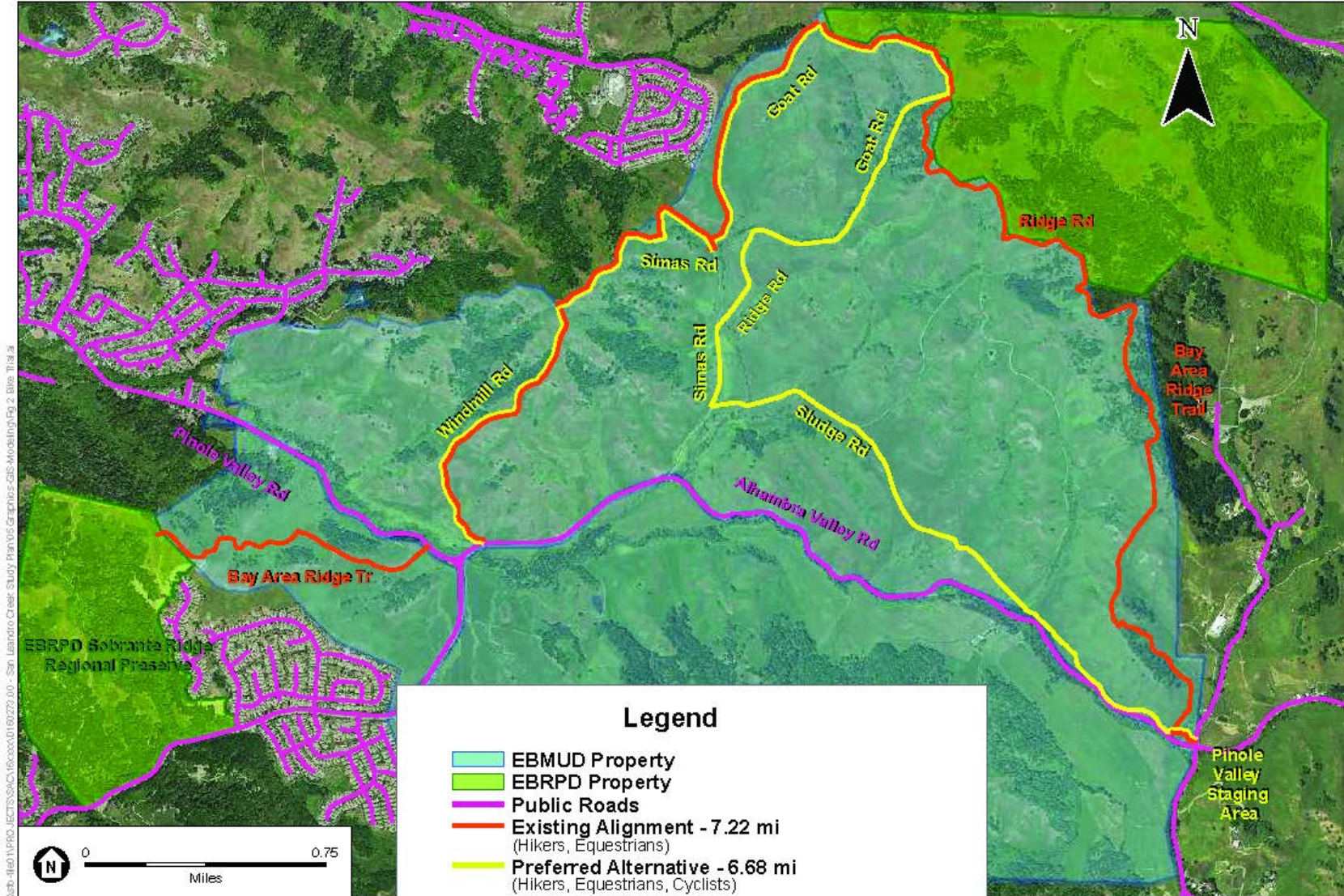
The proposed trail segments selected for evaluation in this Initial Study are composed of fire roads and a disced firebreak that would require no redesign to address safety concerns other than signage. No heavy equipment would be required for construction of trails – a tractor would be used to compact the edge of the 0.75-mile firebreak edge for the Pinole Valley trail – and no new maintenance operations beyond the existing annual grading of fire roads and discing of the firebreak would be introduced. No single-track mountain bike trails would be allowed under this proposal. However, the proposed Pinole Valley Multi-Use trail traverses designated critical habitat for the California red-legged frog and the Alameda whipsnake (**Figure 4**). EBMUD’s Low-Effect HCP was negotiated under the existing EBWMP and trail access regulations; therefore, a change in trail use may require HCP amendments. If approved, these trail segments would be managed consistent with the EBWMP’s management directions and guidelines designed to limit impacts of recreational activities on EBMUD’s watershed lands. In particular, these trail segments would be managed consistent with the EBWMP’s Management Direction to “[e]nsure that currently permitted or new recreational activities do not increase the potential for additional soil erosion, landscape modification, or pollutant loading, or adversely affect other

watershed or reservoir resources.” Pursuant to this Management Direction, these trail segments would also be managed consistent with the Plan’s General Recreation and Trails Guideline DRT.3’s requirement to “[m]onitor use levels and modify as necessary,” and General Recreation and Trails Guideline DRT.4’s requirement to “[c]lose recreational facilities and trails as needed” to protect biological resources and address public safety concerns. To ensure consistency with these EBWMP components, EBMUD would implement the following:

- **Characterizing trail conditions:** EBMUD will continue to collect information regarding the types of use and frequency based on observations and conditions of the Pinole Valley Ridge Trail and Eagle’s Nest Trail, including unauthorized bicycle use. This information will be used to characterize trail conditions prior to opening of the proposed trail segments to bicycle use.
- **Stakeholder Involvement:** The District will convene a meeting of interested stakeholders on a periodic basis to review and assess the change in trail access policy. To the extent practicable, the District will provide trail survey data, staff reports, and other information to support the stakeholder process.
- **Signage and Barriers:** Signs will be posted at appropriate locations regarding trail etiquette and to promote a “tread lightly” message. Along the bicycle trail route caution markers and control signs will be installed where necessary. Additional signage will be posted at trailheads, junctions with non-public access roads and trails, and other areas to direct trail users to approved trails. Physical barriers may be installed to maintain compliance with trail access rules.
- **Monitoring and Enforcement:** As with existing trail users, a permit will be required of all cyclists on the trail system. Section XIV of the Watershed Rules and Regulations will be amended to include new provisions regarding bicycle access to specified trails. Watershed Rules and Regulations will be enforced by EBMUD Rangers and EBRPD Police Officers. The Pinole Valley Ridge Trail and Eagle’s Nest Trail will be added to the patrol route for the EBRPD Police, as a part of the existing contract between the agencies. EBMUD will also institute an online trail incident reporting tool for permit holders as an element of the monitoring and enforcement protocols. Signage at the trails will reflect this reporting tool and will call upon all trail users to assist with monitoring and reporting to help ensure a safe, enjoyable recreation experience for all trail users. If warranted, EBMUD will consider using volunteer patrols comprised of various trail user groups to educate and inform other trail users.
- **Fines:** The Watershed Rules and Regulations provide that any violation is an infraction punishable by (1) a fine not exceeding \$50 for a first violation; (2) a fine not exceeding \$100 for a second violation of the same ordinance within one year; and (3) a fine not exceeding \$250 for each additional violation of the same ordinance within one year.
- **Maintenance and Control Measures:** If environmental damage or user conflicts occur, then physical control measures will be implemented to ensure bicycle access does not increase soil erosion, landscape modification, or pollutant loading, or adversely affect other watershed or

reservoir resources. Control measures will focus on minimizing user conflicts, reducing resource impacts, and enhancing user satisfaction. Control measures could include additional fences, gates, and/or other barriers. The appearance of unauthorized trails and/or other incidents of violation of the Watershed Rules and Regulations (see Section 12.02) may constitute grounds for suspension of access to portions of the watershed trail system.

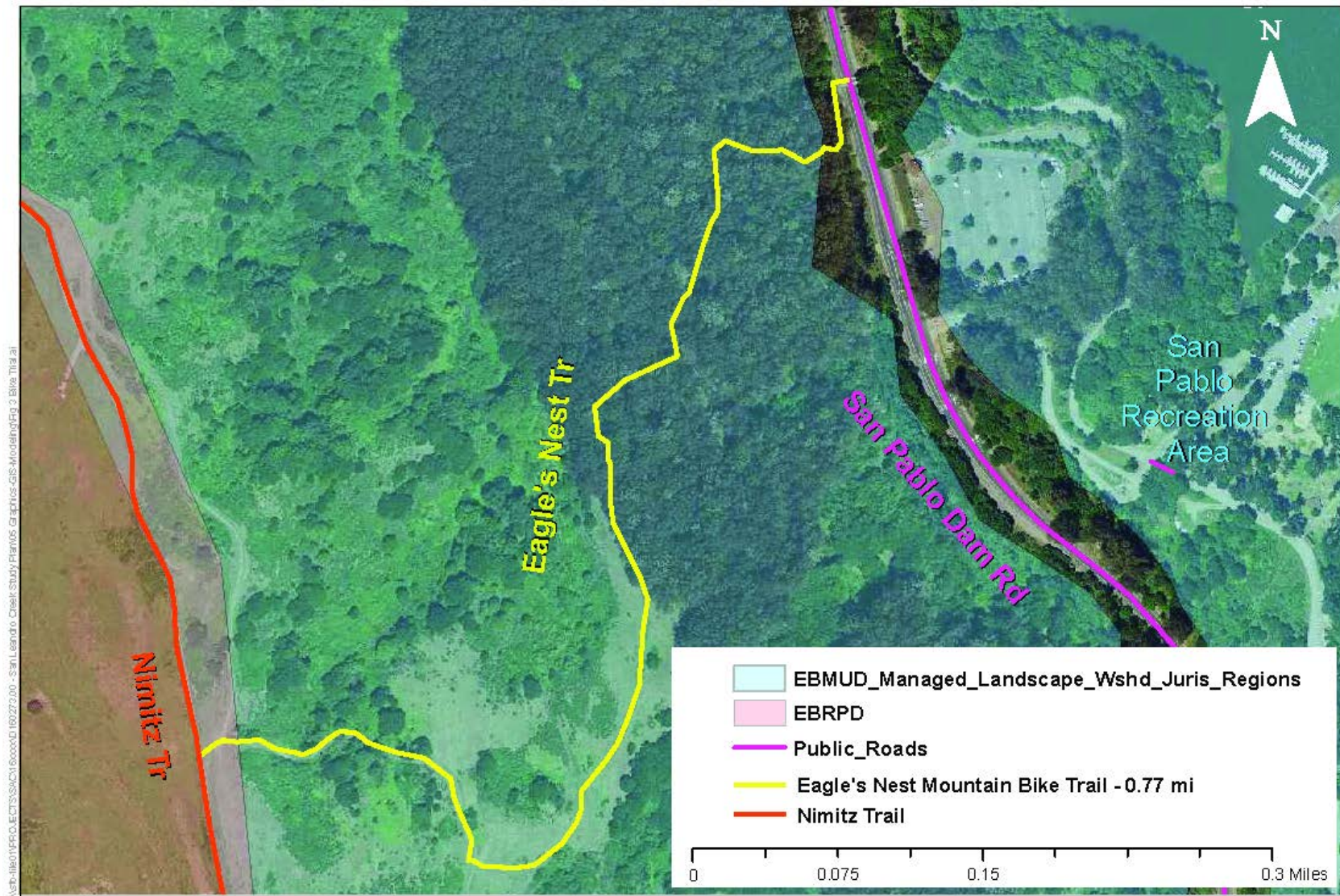
- Trail Closures: Safety, user conflicts, and resource impacts (i.e., increased soil erosion, landscape modification, or pollutant loading, or adverse effects on other watershed or reservoir resources) will be considered when deciding whether a trail should be closed. In some cases, temporary or seasonal restrictions may be imposed. The rationale for closures will be posted at trailheads to inform and educate trail users, and prevent damage to the trail(s) in question.



SOURCE: EBMUD

East Bay Municipal Utility District Watershed Management Plan Update

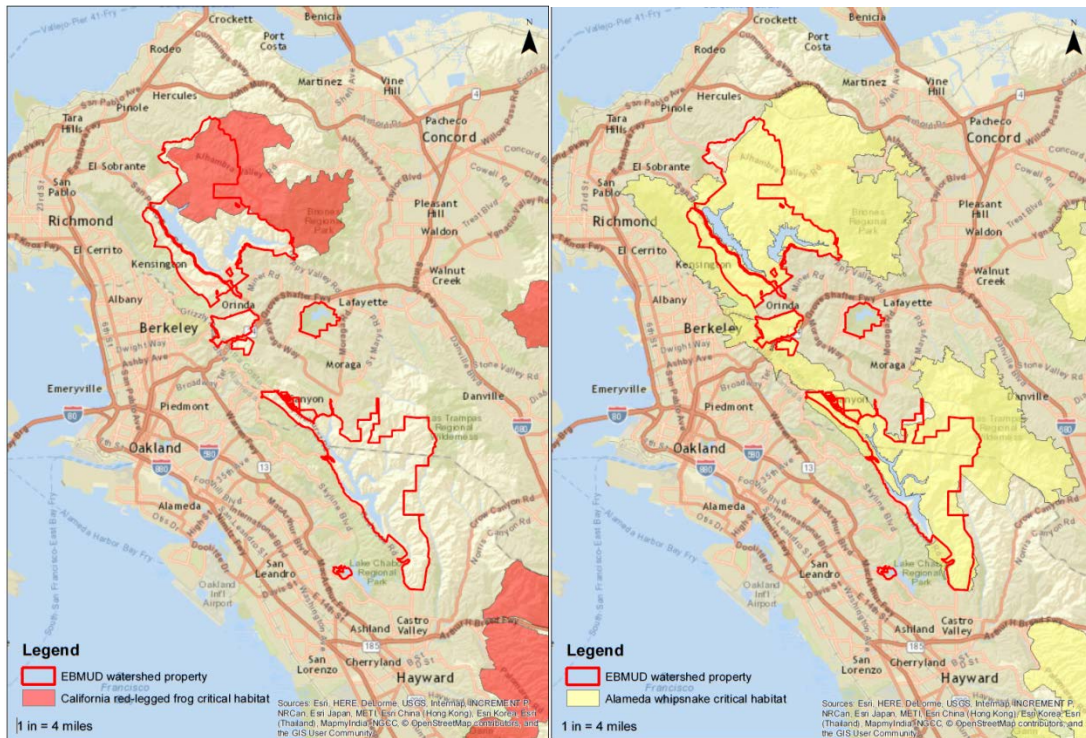
Figure 2 Proposed Pinole Valley Multi-Use Trail



SOURCE: EBMUD

East Bay Municipal Utility District Watershed Management Plan Update

Figure 3 Proposed Eagle's Nest Multi-Use Trail



SOURCE: EBMUD

East Bay Municipal Utility District Watershed Masterplan Update

Figure 4 EBMUD Watershed Property and Critical Habitat

Proposed Factual Updates

Numerous sections in the Update were edited to provide current factual information to improve the usefulness of the EBWMP as a resource to manage the watershed. These sections are discussed below:

- **Description of Watershed Resources:** This section now includes a discussion of the Freepoint Regional Water Project, on which construction was completed in 2010. It incorporates 20 additional years of data on local runoff contributions to the five watershed reservoirs in Table 2-1 in Appendix A, and briefly describes both the adoption of chloramine water treatment and the ban on two-stroke boat motors in San Pablo Reservoir in 1998. Additional detail is provided on the specific characteristics of individual reservoirs.
- **Seep and spring wetlands:** The Clean Water Act and California Department of Fish and Wildlife (CDFW) code requirements for the management of watershed wetlands are noted in new text.
- **Special Status Species:** This section is updated with current information on how the federal and state endangered species statutes govern the management of special status species on the watershed; discusses EBMUD’s adoption of the East Bay Low Effect Habitat Conservation Plan; and describes compliance with the Migratory Bird Treaty Act.

- **Definitions of Watershed Planning Zones (deleted):** Terms such as “Developed watershed interface” and their definitions are deleted in the Update as they did not prove useful when implementing the EBWMP.
- **Special Status Plant and Animal Species, Table 2-3 in Appendix A:** This table is updated to provide new occurrence information and to update specific changes in species’ federal or state listing status. Sixty-seven plant species, one invertebrate species, six mammal species, one bird species and one fish species are added to the table. Nine bird species and one mammal species are removed from the table due to changes in listing status. The existing provisions in the EBWMP and Low-Effect HCP address all regulatory requirements for managing these species.
- **Throughout General Management Direction chapter,** cross-reference summaries to other sections are deleted as this was not a useful feature for implementing the EBWMP.
- **Water Quality:** Changes proposed in this section reflect the completion in 2012 of the watershed runoff monitoring program. This program succeeded in demonstrating that the grazing practices had no measurable impact on runoff water quality. Other changes include the 1998 prohibition of two-stroke boat motors on reservoirs, and actions to prevent the introduction of invasive species into the reservoirs.
- **Biodiversity:** A new objective is added to allow opportunities to develop mitigation banks, manage grazing to protect growth of new trees, and include references to the East Bay Low Effect HCP and CDFW Lake and Streambed Alteration Agreements.
- **Forestry:** This section includes editorial clarifications in the introductory discussion, and updated references to standard practices and BMPs to reflect completion and ongoing implementation. The management guideline for the management of special-status species in non-native forest areas now includes a reference to the HCP.
- **Livestock Grazing:** The introductory section has updated language referencing the Range Resource Management Plan and its guidance for reducing grazing impacts. The prohibition on sheep grazing is deleted because research has shown that the presence of sheep does not pose a risk greater than other livestock. While sheep may be used on a limited basis to target certain vegetation in limited areas, it is not expected that this change would result in increases in grazing pressure on the watershed because of the ability for controlled grazing. In addition, EBMUD’s goals for water quality and resource protection would remain a priority for the watershed.
- **Fire and Fuels:** Several references to the Fire Management Plan are added, replacing previous guidance on fire management. The management guidelines are also updated to reflect adoption of the Fire Management Plan, which superseded the previous directive, and discussion of a fire danger rating system to reflect completion and ongoing utilization.
- **Developed Recreation and Trails:** Language is added in the Objectives discussion to “prioritize protection of the interior watershed areas that serve as a refuge for plants and animals.” The management guidelines are modified to allow consideration of increased budget for staff and maintenance for new recreational uses, and to reflect changes consistent with the new trail access proposal described above.

- **Environmental Education:** An objective designating acreage in the watershed as Sensitive Habitat is superseded by the HCP, and another to formalize ongoing environmental education programs is deleted as it has been accomplished.
- **Visual Resources:** The management guidelines for facility design standards and native plant restoration are simplified to remove unneeded detail on design standards for purposes of implementing the EBWMP.

Since adoption of the EBWMP in 1996, the District has utilized the entitlements program outlined in Section 3 of the Plan to authorize and manage use of District watershed lands by other entities, for appropriate activities. The District considers authorizing use of watershed lands by other entities through issuance of land use permits, or entry into lease agreements or other formal agreements, but only where the proposed activity is consistent with watershed land management programs and complies with District priorities to maintain reservoir water quality and protect sensitive natural resources. Consistent with the entitlements program, and in recognition of the preexisting potential for the development of renewable energy facilities on watershed lands, the District proposes adding a new guideline to the EBWMP (VR.10) explicitly recognizing that, as with other potential uses of watershed lands, renewable energy facilities will only be considered if they are consistent with the District's Strategic Plan and the overall management direction of the EBWMP, which prioritizes maintaining water quality and biodiversity. Consistency with the EBWMP would be assessed in the project-level CEQA document for any such facility.

- **The Geographic Information System section** is deleted as this has become a widely used planning tool needing no discussion in the Update.
- **Watershed Management Area Direction:** The Introduction section is revised to provide an updated general description of the five reservoirs and Pinole Watershed. In the detailed discussion of each area (except Lafayette), a provision is also added regarding watershed monitoring and habitat restoration pertinent to the HCP.
- **San Pablo Reservoir Watershed:** Portions of the guidelines are updated to reflect the adoption of the Fire Management Plan, and other provisions regarding Fire and Fuels were modified accordingly. The guidelines are also modified to require coordination with the county to maintain postings regarding any health risks posed by consumption of fish caught in the reservoirs, or body contact with the water.
- **Briones Reservoir:** A management guideline addressing water quality and supply concerns at the UC Berkeley Russell Reservation was deleted due to the removal of structures at the site. Other edits to the guidelines reflect a prior transfer of vegetation management responsibility to EBMUD Operations, and completion of a land use review with the Cities of Orinda and Lafayette.
- **Upper San Leandro Reservoir Watershed:** A management guideline regarding runoff monitoring is deleted due to the completion of the monitoring program that demonstrated no significant threat to water quality from historic quarries.
- **Chabot Reservoir Watershed:** A new guideline is added regarding collaboration with EBRPD to address concerns of algal toxins in the reservoir. Another guideline is edited to specify future terms for lease renewals with the City of San Leandro for Chabot Park to improve consistency with the EBWMP.

- **Lafayette Reservoir:** New guidelines require the District to address concerns of algal toxins in the reservoir, and coordination with the county to maintain postings regarding any health risks posed by consumption of fish caught in the reservoir or body contact with the water.
- **Pinole Watershed:** A new guideline provides for use of the watershed for mitigation projects/banks.
- **Management Direction for Interjurisdictional Coordination, Adjacent Basin Lands:** Text changes related to Larch Avenue, Orinda, and El Toyonal provide updated status information based on land use decisions by local governments since the 1996 adoption of the EBWMP. Discussions of the Gateway Property and Bear Creek Property are deleted as the issues of concern no longer exist. The fruition of the Wilder Development and subsequent zoning changes with the City of Orinda effectively resolved potential land use concerns. The Willow Park Golf Course has been renamed the Redwood Canyon Golf Course, and updated information is provided.
- **Area-Specific Management Direction:** The discussion of the California Shakespeare Festival facility is deleted as the lease has been reviewed and renewed.

Key Issues Analyzed in this Initial Study

The following table summarizes the key Update components for which this Initial Study will assess whether the relevant changes to the EBWMP or relevant facts or circumstances are substantial and will require major revisions to the PEIR or will have significant effects not discussed in the PEIR. The implementation strategy or action of these issues would not require any construction (i.e., activities requiring heavy trucks or equipment). Therefore, the subsequent analysis will examine the other effects that any of these changes could have on the environment. The remaining factual updates described above are not considered substantial changes to the EBWMP and would not result in potential environmental effects and therefore are not included in this table or evaluated further.

**TABLE 1
EBWMP UPDATE COMPONENTS ANALYZED IN THIS INITIAL STUDY**

Key Issue	Key Issue Concern	Implementation Strategy or Action (project component analyzed in Initial Study)
Emerging Challenges	<ul style="list-style-type: none"> • Climate change • Invasive species • Pathogens (e.g., Sudden Oak Death) • Contaminants • Limited capacity for trench soils 	<ul style="list-style-type: none"> • Adaptive management • Boat inspection to prevent spread of quagga and zebra mussels
Integrated Pest Management (IPM) in the East Bay Watershed	<ul style="list-style-type: none"> • Public concern with glyphosate herbicides 	<ul style="list-style-type: none"> • Revise guideline on IPM to eliminate pesticides where feasible
Changes to Access Policy for Watershed Trail System	<ul style="list-style-type: none"> • Public interest in watershed trail access for bicycle use • Bay Area Ridge Trail advocates for multi-use trails and opening segments to contribute to completion of full Bay Area Ridge Trail 	<ul style="list-style-type: none"> • Proposed Pinole Valley Multi-Use Trail • Proposed Eagle's Nest Multi-Use Trail

Proposed References to Previously Approved Plans

The Update also references several plans that were approved subsequent to the adoption of the EBWMP in 1996. These include:

- Fire Management Plan, adopted in October 2000 analyzed in a CEQA Negative Declaration;
- Range Resource Management Plan, adopted in December 2001 analyzed in a CEQA Mitigated Negative Declaration;
- Oursan Ridge Conservation Bank, approved by the EBMUD Board of Directors in October 2016, and analyzed in an addendum to the EBWMP PEIR; and East Bay Low Effect Habitat Conservation Plan, adopted in June 2008, to improve habitat conditions for sensitive species on watershed lands managed pursuant to the EBWMP and meet other EBWMP goals such as protecting water quality by managing the watershed for high biodiversity.

1.6 Potential Permits or Approvals Required

The project area encompasses the East Bay Municipal Utility District watershed boundary. For the purpose of the Initial Study, EBMUD is the Lead Agency responsible for approval of the Initial Study as well as any other planning approvals. No additional permits would be required, although amendments to the HCP may be needed.

1.7 References

EBMUD, 1996. Final Programmatic Environmental Impact Report for the East Bay Watershed Master Plan. February 29, 1996.

EBMUD, 2016. Policy 9.04 Watershed Management and Use. As amended by Resolution No. 34080-16, April 26, 2016.

1.8 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.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems |
| | | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

- 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 project proponent. 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” impact 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

December 15, 2017

Date

Richard G. Sykes, Director of Water and Natural Resources

2.0 Environmental Checklist

2.1 Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

The visual environment of the District's East Bay watershed lands is defined primarily by the five reservoirs and the surrounding uplands, which provide the central visual element in each reservoir watershed. Visual resources are distinguished by the valley floor and its surrounding uplands. Watershed lands are primarily steep to rolling hillsides that contrast sharply with the level water surfaces of the reservoirs themselves. The expanse of these lands including the adjoining open space lands is visually impressive, and forms a unified, high-quality visual landscape.

The EBWMP contains guidelines that limit the amount of landscape and vegetation disturbance that is permitted on District-owned watershed. Visual resource guidelines are provided to ensure that management activities are consistent with objectives to maintain and enhance visual resources in the watershed areas.

The key issues proposed in the Update that could impact aesthetics include: emerging issues and the proposed change in access policy for watershed trail system.

a, b, c) **Less than Significant.** Scenic vistas in the watershed lands are an important feature that the EBWMP seeks to protect. In addition, California State Highway 24 is a state scenic highway within the District's property boundaries. Both of these visual resources could potentially be impacted by the implementation of the Update.

As an emerging issue, the introduction of exotic pathogens such as sudden oak death (SOD) is a potential indirect effect to scenic vistas and visual character of the watershed lands. Over time, the mortality of native oaks and other plants susceptible to pathogens can alter habitat structure and diversity in the landscape. Similarly, tree mortality could decrease the visual character. Bicycle tires, hikers' boots, and equestrian hooves can transport pathogens from one location to another. Limiting recreation use to designated trails and following best management practices (BMPs) will help slow the human-mediated spread of pathogens. Since 2002 *Phytophthora ramorum*, the pathogen that

causes SOD, has caused localized mortality on the watershed. Implementation of the following BMPs has reduced the human-caused spread of the disease to a level of insignificance, and is expected to be effective with the limited introduction of bicycle access as proposed:

- Staying on established trails
- Leaving plant material and soil in situ
- Avoiding travel through muddy areas.

In addition, the proposed additional recreational access onto existing service roads and the disc line is expected to pose an insignificant risk of introducing new pathogens as vehicles already use these alignments for watershed operations and management.

The increase in pathogens is new information that has become available since the PEIR was certified. It does not show that there will be significant effects not discussed in the PEIR because continued implementation of existing in the EBWMP that will reduce any related aesthetic impacts to a level of insignificance.

The proposed change in access policy for watershed trail system could also potentially impact scenic vistas and the visual character of the watershed lands. The number and type of recreational users may affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users. While the direct effects from erosion is addressed in Section 2.6, Geology and Soils sections and Section 2.9, Hydrology and Water Quality, excess erosion could also degrade the visual character surrounding the new trail locations. However, the roads are maintained by EBMUD and were designed for vehicular traffic so the potential to cause any substantive erosion would be considered less than significant. The low level of current use by trail permittees, the generally rugged terrain of the new trail segments, and the limited available parking at the trailheads all indicate that the increased recreational use resulting from this change in policy will be modest. Finally, EBMUD would continue to implement BMPs to maintain the trails and protect them from adverse effects related to erosion.

Impacts to scenic vistas and the visual character of the watershed lands can also result from the creation of informal trails. However, since both the Pinole Valley and Eagle's Nest trail routes are already well-established and maintained it is unlikely that cyclists and others would be confused about the route. Additional signs designating the trail, along with new trail maps at the trailhead, would be installed as part of the Update to educate recreation users and reduce the potential for informal trails, thereby reducing potential impacts to less than significant.

As described above, the proposed project would have less than significant impacts to aesthetics. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- d) **No Impact.** Implementation of two of the key issues proposed in the Update, emerging issues and changes in access policy for watershed trail system, would not result in the introduction of a new source of substantial light or glare, therefore there would be no impact.
-

2.2 Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
2. AGRICULTURAL AND FOREST RESOURCES —				
<p>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 (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Within the watershed boundaries, there are approximately 10,000 grazeable acres on loamy upland range sites (EBMUD, 2001) and within the district lands there are 15 cattle grazing allotments and three community horse pastures (Hill, 2017).

Proposed changes in the Update's guidelines reference the Range Resource Management Plan and its guidance for reducing grazing impacts. Under this plan, the prohibition on sheep and pig grazing would no longer be in effect. However, no sheep or pigs would be included as a leasehold under the Range Resource Management Plan. Sheep may be considered to meet specific grazing prescriptions on a case by case basis.

a, b, e) **No Impact.** Implementation of the Update proposes changing the access policy for the watershed trail system to allow mountain bike use on two trails. The location of these trails is on land that is currently protected open space and would not conflict with the existing use of or otherwise change/prohibit use of these lands for range use.

While the Update would allow sheep grazing, it would on a limited basis to target certain vegetation in limited areas, and it is not expected that this change would result in

increases in grazing pressure on the watershed because of the ability for controlled grazing by sheep. Therefore, the project would not convert prime, unique, or farmland of Statewide Importance to non-agricultural use, nor would it result in any conflict with existing zoning for agricultural use, or Williamson Act contract. The Update would not involve other changes which could result in conversion of farmland, as shown on the Contra Costa County Important Farmland Map (DOC, 2016) to non-agricultural use.

As described above, the proposed project would have no impacts to agricultural resources. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- c, e) **No Impact.** The introduction of mountain bike use to two trails in the watershed would not require any construction or tree removal or change in the existing land use in the selected trail location, which are existing fire roads and a disc line. Therefore, implementation of the Update would not result in or involve other changes in the existing environment which could result in the loss of forest land or conversion of forest land to non-forest use.

As described above, the proposed project would have no impacts to forest resources. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

References

California Department of Conservation (DOC), Farmland Mapping and Monitoring Program, 2016. Contra Costa County Important Farmland Map 2014.

EBMUD, 2001. *East Bay Watershed Range Resource Management Plan*, December 2001.

Hill, Scott, Manager of Watershed & Recreation, East Bay Municipal Utility District, email communication, September 12, 2017.

2.3 Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. 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 plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The Update’s key issues considered for the air quality analysis includes the proposed changes to the IPM Program and the access policy for the watershed trail system. As described in the Project Description, the two proposed trails that would be opened for mountain bike use would not require any heavy equipment for trail construction or maintenance operations.

- a) **Less than Significant.** The project site is within the San Francisco Bay Area Air Basin (Bay Area), which is currently designated as a nonattainment area for state and national ozone standards, state particulate matter (PM₁₀ and PM_{2.5}) standards, and federal PM_{2.5} (24-hour) standard. The Bay Area Air Quality Management District (BAAQMD)’s 2017 *Clean Air Plan* (2017 CAP; BAAQMD, 2017a) is the applicable clean air plan that has been prepared to address nonattainment issues.

The BAAQMD *CEQA Air Quality Guidelines* identify a three-step methodology for determining a project’s consistency with the current clean air plan (BAAQMD, 2017b). If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is “does the project support the goals of the Air Quality Plan” (currently the 2017 CAP). The BAAQMD-recommended measure for determining project support for these goals is to assess its consistency with BAAQMD thresholds of significance. Specifically, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 CAP. As

indicated in the following discussion with regard to air quality impact questions b) and c), both construction and operation of the project would result in less-than-significant air quality impacts. Therefore, the project would be considered to support the primary goals of the 2017 CAP and, therefore, consistent with the 2017 CAP.

The second question to be assessed in this consistency methodology is “does the project include applicable control measures from the CAP?” The 2017 CAP contains 85 control measures aimed at reducing air pollution in the Bay Area in the follow sectors: stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water and supper-GHG pollutants. Projects that incorporate all feasible air quality plan control measures are considered consistent with the 2017 CAP. Since none of the 2017 CAP measures are applicable to the proposed project, the proposed project would hinder the implementation of the 2017 CAP measures.

The third question to be assessed in this consistency methodology is “does the project disrupt or hinder implementation of any control measures from the CAP?”¹ As previously discussed, the proposed project would not create any barriers or impediments that would hinder implementation of the 2017 CAP control measures. The responses to all three of the questions with regard to plan consistency are affirmative and the project would not conflict with or obstruct implementation of the 2017 CAP. This is a less-than-significant impact. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- b) **Less than Significant.** The Bay Area experiences occasional violations of ozone and particulate matter (PM₁₀ and PM_{2.5}) standards. The BAAQMD CEQA AIR Quality Guidance provides mass emission significance thresholds of 54 pounds per day for ozone precursor (i.e., reactive organic gases [ROG] and nitrogen oxides [NO_x]), 82 pounds per day for PM₁₀ exhaust and 54 pounds per day for PM_{2.5} exhaust emissions (BAAQMD, 2017b). Projects that exceed the BAAQMD significance threshold for ROG, NO_x, PM₁₀ and PM_{2.5} would result in a significant impact.

Implementation of integrated pest management approaches would expand the variety of methods employed for weed management by limiting the use of herbicides with the active ingredient glyphosate, where feasible. Substituting other weed management methods such as mowing, weed whacking, flaming, or burning could cause a temporary air quality disturbance.

The implementation of the two mountain bike trails would not require any construction with heavy equipment and therefore, no off-road construction equipment or heavy trucks would emit emissions of ozone or particulate matter.

¹ Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements.

Since the proposed project would not generate construction emissions of ROG, NO_x, PM₁₀ and PM_{2.5}, the project would not exceed the BAAQMD significance thresholds. This impact would result in a less than significant impact. Although connecting to the Bay Area Ridge Trail could increase the number of people visiting the watershed trail system, it is unlikely that the changes to access policy would result in a net increase in mobile source criteria pollutant emissions that would exceed the BAAQMD's significance thresholds and this impact would be less than significant. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- c) **Less than Significant.** According to the BAAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In addition, according to the BAAQMD *CEQA Air Quality Guidelines*, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2017b). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. As discussed for criteria "b" above, because the project would not involve any construction with heavy equipment, the project would result in less than significant construction emissions-related impacts and would not result in long-term adverse air quality impacts. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.
- d) **Less than Significant.** The BAAQMD recommends that lead agencies assess the incremental toxic air contaminant (TAC) exposure risk to all sensitive receptors within a 1,000-foot radius of a project's fence line (BAAQMD, 2017b). There are single-family residences located to the north and northwest of the WMP area. However, the proposed project does not include any construction activities that require off-road construction equipment or heavy trucks. Therefore, the proposed project would not generate emissions of TAC that would result in a health risk, this impact would result in a less-than-significant impact.

In addition, the long-term implementation of the mountain bike trails would not result in any new sources of TAC emissions. Existing maintenance operations includes annual grading of fire and service roads and discing of the firebreak. As a result, exposure of existing residential sensitive receptors to substantial TAC emissions from the proposed project, and exposure of maintenance workers and visitors at the project site to substantial TAC emissions from existing sources in the vicinity, would result in impacts that would be less than significant. Therefore, the proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- e) **Less than Significant.** Diesel equipment used during construction can emit objectionable odors associated with combustion of diesel fuel. However, since the introduction of the proposed mountain bike trails would not require construction with heavy equipment such as off-road construction equipment or heavy trucks, potential odor impacts would be less than significant.

BAAQMD has identified typical sources of odor in the CEQA Air Quality Guidelines, a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. While sources that generate objectionable odors must comply with air quality regulations, the public's sensitivity to locally produced odors often exceeds regulatory thresholds. The proposed changes to access policy for the watershed trail system would not include uses that have been identified by BAAQMD as potential sources of objectionable odors. Therefore, odor impacts associated with project implementation would be less than significant. The proposed project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

References

Bay Area Air Quality Management District (BAAQMD), 2017a. *Bay Area 2017 Clean Air Plan*, adopted April 19, 2017. Available at <http://www.baaqmd.gov>.

Bay Area Air Quality Management District (BAAQMD), 2017b. *CEQA Air Quality Guidelines*, revised May 2017. Available at <http://www.baaqmd.gov>.

2.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, 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 Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The Project area covers the EBMUD watershed lands in the East Bay area (Figure 1). Located in California’s coast range with varying geology, topography, and landscape positions, these lands support a diverse suite of habitats, plants, and animals, including a number of special-status species. In addition, EBMUD watershed lands are largely undeveloped and are managed with the goal of protecting biodiversity.

Habitat types and special-status species that are known to occur on EBMUD watershed lands within the Project area are discussed in the EBWMP (Appendix A, Section 2). EBMUD watershed lands include areas designated as critical habitat for two federally listed species: California red-legged frog (*Rana draytonii*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*). Pinole Creek and San Leandro Creek are also home to the threatened Central California Coast steelhead (*Oncorhynchus mykiss*). The discussion below assesses the Project’s potential impacts to biological resources.

- a) **Less than Significant.** The Project proposes changes to the EBWMP to address emerging challenges through adaptive management. The incorporation of adaptive management to address emerging challenges such as invasive species and pathogens into

the Update would primarily benefit biological resources, including special-status species and their habitats. Incorporating adaptive management as a guideline to support biodiversity goals and objectives would allow EBMUD to identify management actions that are not sustaining or improving biodiversity, then develop and use new approaches to meet management objectives. The Update also formalizes the recent implementation of vessel inspections to prevent the introduction and spread of invasive aquatic organisms in reservoirs managed by EBMUD. This action would protect aquatic habitats important to special-status species as well as common wildlife and help to maintain aquatic biodiversity. In the case of exotic pathogens such as sudden oak death (*Phytophthora ramorum*; SOD) in watershed forests, implementation of the recreational BMPs listed below has reduced the human-caused spread of the disease to a level of insignificance, and is expected to minimize any negative effects from bicycle use on wildlife habitat and reduce associated habitat conversion:

- Staying on established trails
- Leaving plant material and soil in situ
- Avoiding travel through muddy areas.

Implementation of integrated pest management approaches would expand the variety of methods employed for weed management by limiting the use of herbicides with the active ingredient glyphosate, where feasible. Substituting other weed management methods such as mowing, weed whacking, flaming, or burning could cause a temporary noise or air quality disturbance to special-status wildlife such as Alameda whipsnake or nesting birds. However, this change represents a minor, temporary increase in disturbance and is less than significant. Glyphosate-based herbicides are broad-spectrum and replacing them with other broad-spectrum methods including mowing, or spraying with an alternative broad-spectrum herbicide, would not change the potential impact of weed management activities on special-status plants such as bent-flowered fiddleneck (*Amsinckia lunaris*) or Diablo sunflower (*Helianthella castanea*) that could be unintentionally sprayed. The ongoing use of livestock grazing for fuels reduction and habitat protection can also be used as a weed management tool, as directed in the Range Resource Management Plan (EBMUD, 2001) and the WMP livestock grazing guidelines.

The Project includes the introduction of two mountain bike routes: Pinole Valley Trail (6.7 miles; Figure 2) and Eagle's Nest Trail (0.8 mile; Figure 3). The Pinole Valley Trail is a disced fire break that traverses grassland habitat and several drainage and stream crossings along Sludge Road, with a short segment along Goat Road that passes through oak woodland and adjacent to a drainage. The Eagle's Nest Trail would be within an existing service road that crosses shrubland, and non-native forest (mainly eucalyptus trees). Public access to these roads is currently prohibited and the Project proposes to open them to bicycle, pedestrian, and equestrian recreation. These recreation uses require a permit from EBMUD, which requires an annual application and fee. Trails would not require any improvements other than signage to designate the routes and permitted uses.

Potential impacts associated with changes to the EBWMP (adding bicycle usage): One potential impact to special-status species could arise from an increase in water quality impacts due to erosion and sedimentation. Erosion may cause sediment from trails to pass into drainages, ponds, and streams adjacent to or downslope from the trails. These areas may include suitable habitat for California red-legged frog and western pond turtle (*Actinemys marmorata*). Pinole Creek downslope of the Pinole Valley Trail supports Central California Coast steelhead and resident rainbow trout (*Oncorhynchus mykiss*). While a minor increase in trail erosion could occur, sedimentation is not expected to increase water turbidity or deposit sediment at pond or creek margins in areas that support California red-legged frogs or salmonids. The potential for trail erosion is related to trail slope (Chiu and Kriwoken, 2003), with steeper slopes being more susceptible to erosion. The number and type of recreational users may also affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users.

Recreation use during the bird nesting season may indirectly disturb nest sites leading to nest abandonment. Tree cover is sparse along the Pinole Valley trail route, while the Eagle's Nest Trail traverses a large stand of mature eucalyptus trees that may support nest sites for raptors and other nesting birds. No golden eagle (*Aquila chrysaetos*) or bald eagle (*Haliaeetus leucocephalus*) nesting has been reported on the Eagle's Nest Trail alignment.

Direct habitat destruction can result from the creation of informal trails. However, since both the Pinole Valley and Eagle's Nest trail routes are already well-established and maintained it is unlikely that cyclists and others would be confused about the route. Additional signs designating the trail, along with new trail maps at the trailhead and augmented enforcement would be implemented as part of the Update to educate recreation users and reduce the potential for informal trails.

Potential impacts associated with new information (introduction of exotic pathogens): Introduction of exotic pathogens such as sudden oak death (SOD) is another potential indirect effect to special-status species. Over time, the mortality of native oaks and other plants susceptible to pathogens can alter habitat structure and diversity in the landscape. Similarly, tree mortality could decrease the availability of nest sites for birds and roosting sites for bats. Bicycle tires, pedestrian boots, and equestrian hooves can carry fungal spores from one location to another. Limiting recreation use to designated trails, and implementing BMPs as proposed for this Project could help reduce the risk of introduction and spread of exotic pathogens.

Reasons for "Less than Significant" determination: Potential impacts to special-status species and their habitat – from both changes to the EBWMP (adding bike usage) and new information (introduction of exotic pathogens) – would be less than significant because of protective measures already incorporated into the original EBWMP, and the selection of fire roads for trail access that already support vehicular traffic. One of the EBWMP recreation objectives states, "Ensure that currently permitted or new

recreational activities do not increase the potential for additional soil erosion, landscape modification, or pollutant loading, or adversely affect other watershed or reservoir resources.” The guidelines that correspond with this objective are DRT.3 and DRT.4. DRT.3 directs EBMUD to monitor use levels and modify them as needed. DRT.4 provides an option to close recreational facilities to protect important resources such as special-status species. This, for example, would resolve to any potential conflicts with sensitive raptor nesting areas that should be avoided or protected at certain times of the year. Ongoing monitoring for recreation-related impacts would allow EBMUD to identify areas of soil erosion or other adverse impact to biological resources, including special-status species. Wherever feasible, EBMUD would identify and diagnose the issue and propose a solution using adaptive management. If no solution is available or feasible, EBMUD would close the recreational facility.

For the same reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- b) **No Impact.** No construction is proposed for the Project, therefore direct impacts to riparian habitats and sensitive natural communities would be avoided. As discussed in Hydrology and Water Quality, the Project would not violate any water quality standards or waste discharge requirements that could subsequently affect sensitive biological resources including sensitive natural communities, wetlands and riparian habitats.
- c) **Less than Significant.** The introduction of mountain bikes could result in potential water quality impacts due to erosion and sedimentation. Erosion may cause sediment from trails to pass into drainages, ponds, and streams adjacent to or downslope from the trails. While a minor increase in trail erosion could occur, sedimentation is not expected to increase water turbidity or deposit sediment at pond or creek margins. The potential for trail erosion is related to trail slope (Chiu and Kriwoken, 2003), with steeper slopes being more susceptible to erosion. The number and type of recreational users may also affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users. While the EBWMP Programmatic EIR identified the potential for significant water quality impacts from allowing bicycle access to District trails, that conclusion was based on the potential impacts from mountain bike use in a scenario where bicycling would be allowed on a substantial portion of the 83-mile trail system, including single-track trails. By contrast, the anticipated impacts from new recreational use from the proposed change in trail access policy are expected to be insignificant because: 1) only 7.5 miles of trails will be affected; 2) of these trail segments, 6.7 miles (90%) do not drain to a terminal reservoir; 3) incremental use beyond the existing modest levels will be constrained by the rugged terrain and the limited parking available at the trailheads; and 4) no single-track trail access is proposed. The existing EBWMP contains provisions to monitor recreation use levels and modify access (DRT.3), and to close recreational facilities and trails as needed to protect sensitive wildlife species, curtail soil erosion, protect water quality and other values (DRT.4). The Project has been designed to be consistent with these EBWMP guidelines by requiring

adherence to the implementation guidelines described in the project description section of this Initial Study. Adherence to those guidelines will ensure that impacts remain insignificant. The Project does not include any construction or earth moving; therefore, no fill of waters of the U.S. or State is proposed. As discussed in Hydrology and Water Quality, the Project would not violate any water quality standards or waste discharge requirements that could subsequently affect waters of the U.S. or state. No Section 404 wetlands are located in the project area, therefore there is no impact on wetlands.

For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- d) **Less than Significant.** The Project does not propose any new structures or movement barriers. Informal trails may lead to habitat fragmentation (Marion and Wimpey, 2007). As described above under a.) informal trails would be discouraged and managed by the placement of signs designating the trail, trail maps at the trailhead and routine enforcement.
- e) **No Impact.** The Project would not include tree removal, and would not conflict with any local policies or ordinances protecting biological resources.
- f) **Less than Significant.** The EBWMP Update includes a guideline for consistency with the adopted EBMUD Low Effect Habitat Conservation Plan (EBMUD HCP). Prior to implementing the EBMWP Update, EBMUD would confer with the USFWS and update the EBMUD HCP as needed to ensure that there are no conflicts with the adopted plan. The Pinole Valley Trail and the Eagle's Nest Trail are not included in the EBMUD HCP and may need to be added to the list of covered activities. The EBMUD HCP may need to be amended to include recreation uses on the Pinole Valley Trail and Eagle's Nest Trail, and the amendment would be reviewed and approved by USFWS. These elements of the EBWMP update would not be implemented prior to receipt of the revised EBMUD HCP, or approval of the project elements by the USFWS. With coordination with the USFWS and associated revision and amendment of the EBMUD HCP as necessary, this impact is less than significant.

There are no other adopted Habitat Conservation Plan and/or Natural Community Conservation Plans or other approved conservation plans that include the Project area or cover Project activities.

References

- Chiu, L., and L. Kriwoken. 2003. Managing Recreational Mountain Biking in Wellington Park, Tasmania, Australia. *Annals of Leisure Research* 6(4):339-361.
- EBMUD, 2001. *East Bay Watershed Range Resource Management Plan*, December 2001.
- Marion, J, and J. Wimpey. 2007. Environmental Impacts of Mountain Biking: Science Review and Best Practices. In: *Managing Mountain Biking: IMBA's Guide to Providing Great Riding*, P. Webber, editor. 256 pages.

2.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed changes to the access policy for the watershed trail system could have potential impacts on cultural resources. The following impact discussion analyzes separately impacts on architectural resources and archaeological resources, including those that are potentially historical resources according to CEQA Guidelines Section 15064.5. The first discussion point (a) addresses architectural resources that may be historical resources, while the second discussion point (b) addresses archaeological resources that may be either historical resources pursuant to CEQA Guidelines Section 15064.5, or unique archaeological resources, pursuant to PRC Section 21083.2(g).

- a) **Less than Significant.** No known architectural resources would be impacted by the proposed changes to the watershed trail access for mountain bikes. The EDWMP PEIR (pp. 4-16 and 4-17) determined that the existing EBWMP would have an overall benefit on such resources by providing increased protection through background research, surveys, and avoidance. The proposed changes to the EBWMP do not change any of the guidelines associated with reducing potential significant impacts to architectural resources. Therefore, the potential impacts of the proposed changes to the EBWMP on historical resources are considered less than significant and no additional mitigation is required. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- b) **Less than Significant.** No known archaeological resources would be impacted by the changes to watershed trail access. The proposed trails for mountain bike use are existing fire roads and a firebreak and would not require any construction or heavy equipment to upgrade the trails for bicycles. The EBWMP PEIR (pp. 4-16 and 4-17) determined that the existing EBWMP could result in a significant impact on such resources through ground disturbance associated with fire management activities and, as a result, prescribed a mitigation measure to incorporate into the EBWMP a cultural resources awareness training for fire management personnel to reduce the potential impact to less than

- significant. The existing EBWMP Cultural Resources Program Guideline CR.5 fulfilled this mitigation measure. The only proposed change to the EBWMP guidelines associated with reducing potential significant impacts to archaeological resources is to allow for an as-needed approach to consultation with Native Americans regarding disposition of Native American artifacts and remains. This proposed change is minimal and would not result in any significant impacts to archaeological resources. Therefore, the potential impacts of the proposed changes to the EBWMP on archaeological resources are considered less than significant and no additional mitigation is required. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- c) **Less than Significant.** No known paleontological resources would be impacted by the proposed changes to the EBWMP. The EBWMP DEIR did not specifically address potential impacts to paleontological resources. However, the existing EBWMP Cultural Resources Program calls for identification (background research and survey), inventory, and avoidance of “cultural resources”. In the context of CEQA, paleontological resources are typically addressed as part of the cultural resources analysis, and the guidelines of the existing EBWMP Cultural Resources Program, if also carried out for paleontological resources, would reduce any potential significant impacts to such resources to a less than significant level. Additionally, the proposed changes to the EBWMP do not change any of the guidelines that would reduce potential significant impacts to paleontological resources. Therefore, the potential impacts of the proposed changes to the EBWMP on paleontological resources are considered less than significant and no additional mitigation is required. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- d) **Less than Significant.** No known human remains would be impacted by the proposed changes to the EBWMP. The EBWMP PEIR (pp. 4-16 and 4-17) determined that the existing EBWMP could result in a significant impact on such resources through ground disturbance associated with fire management activities and, as a result, prescribed a mitigation measure to incorporate into the EBWMP a cultural resources awareness training for fire management personnel to reduce the potential impact to less than significant. The existing EBWMP Cultural Resources Program Guideline CR.5 fulfilled this mitigation measure. The only proposed change to the EBWMP guidelines associated with reducing potential significant impacts to human remains is to allow for an as-needed approach to consultation with Native Americans regarding disposition of Native American artifacts and remains. This proposed change is minimal and would not result in any significant impacts to human remains. Therefore, the potential impacts of the proposed changes to the WMP on human remains are considered less than significant and no additional mitigation is required. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

2.6 Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
6. 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? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a.i) **No Impact.** The majority of the EBMUD watershed property is not located within an Alquist-Priolo Fault Rupture Hazard Zone, as designated through the Alquist-Priolo Earthquake Fault Zoning Act.² The only exception being that the Hayward fault, an active fault, does intersect the Lake Chabot area of EBMUD property. However, there are no elements of the proposed Project that would include construction of occupied buildings or uses that would bring additional users to this area. The elements that could bring new recreationists to the Project site, the two trail segments that would be opened up for bicycle use, are not located on or immediately adjacent to an active fault trace. Therefore, because of the Project characteristics and the relative location to active fault traces, there would be no potential impact from surface fault rupture due to the EBWMP Update. For these reasons, the changes to the EBWMP proposed in the Update are

² Alquist-Priolo Zones designate areas most likely to experience fault rupture, although surface fault rupture is not necessarily restricted to those specifically zoned areas.

- insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- a.ii) **Less than Significant.** The watershed area is located in a seismically active region of California with numerous active faults that are capable of producing significant ground shaking. Seismic activity in the region is dominated by the San Andreas Fault system, which includes the San Andreas, Hayward, and Calaveras faults. According to the U.S. Geological Survey (USGS) Working Group on Earthquake Probabilities, the probability of one or more earthquakes of Richter magnitude 6.7 or higher occurring in the San Francisco Bay Area for the following 30-years is 63 percent. The Hayward and San Andreas faults are the most likely of the Bay Area faults to experience a major earthquake. However, the proposed Project does not include the construction of any physical improvements and although it may bring additional recreationists to the area, the likelihood of exposing people to greater risk of loss, injury or death while accessing the trails is relatively low. Therefore, the potential impacts of ground shaking would be less than significant. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- a.iii) **Less than Significant.** Seismic shaking can also trigger ground-failures caused by liquefaction. Liquefaction is the process by which granular soils, such as sands or loamy sands, behave like a dense fluid when subjected to prolonged shaking during an earthquake. As noted above, the Project does not include the construction of any buildings or substantive structures of any kind that could become damaged or expose to people to liquefaction hazards. As a result, implementation of the proposed Project is unlikely to adversely affect any new recreationists accessing the site and the potential impact would be less than significant. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- a.iv) **Less than Significant.** The watershed area includes varied topography with steep slopes and areas that are prone to landslides including earthquake-induced landslides. An earthquake-induced landslide could cause surface deposits to intersect one of the access trails. The proposed elements of the Project would not include any physical changes and so would not increase the risk or susceptibility of any existing landslide-prone areas. In addition, it would be very unlikely that a new recreationist on either the Pinole Valley or Eagle's Nest trails would be harmed by an earthquake-induced landslide. Therefore, while earthquake-induced landslide hazards are present in the study area, the potential impact would be considered less than significant. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- b) **Less than Significant.** The proposed Project does not include any substantive ground disturbances that would expose soils to erosion or cause the loss of topsoil. The proposed new access to the two trails, Pinole Valley and Eagle's Nest, would allow cyclists onto

- the fire roads which could incrementally increase erosion potential. While a minor increase in trail erosion could occur, the number and type of recreational users may also affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users. As noted above, the increase in trail use from the proposed change in the trail access policy is expected to be modest due to the existing low level of use, the rugged terrain, and the limited parking available at the trailheads. In addition, the roads are maintained by EBMUD and were designed for vehicular traffic so the potential to cause any substantive erosion or loss of topsoil would be considered less than significant. In addition, EBMUD would continue to implement BMPs to maintain the trails and protect them from adverse effects related to erosion. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- c) **Less than Significant.** As noted above, the EBWMP Update does not include the construction of any new buildings or other improvements that could become susceptible to unstable soils. Increased use of the two trails by cyclists would be unlikely to be adversely affected by unstable soils or cause soils to become unstable. The potential impact would be less than significant. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- d) **No Impact.** Expansive soils are soils that can over time cause damage to foundations and improvements through cyclical volume changes from moisture content. As noted above, the Update does not include the construction of any new buildings or other improvements that could become susceptible to expansive soils. Therefore, there would be no impact related to expansive soils. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- e) **No Impact.** None of the proposed key issues in the Update include the installation of septic tanks or alternative wastewater disposal systems. Thus, no impact associated with alternative wastewater disposal systems would occur. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
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2.7 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Less than Significant.** The Bay Area Air Quality Management District (BAAQMD) has adopted GHG significance thresholds of 10,000 metric tons of carbon dioxide equivalent (CO_{2e}) per year for stationary source projects and 1,100 metric tons CO_{2e} per year for projects non-stationary source projects (BAAQMD, 2017a).

Since the proposed project would not be a stationary GHG emission source, annual construction emissions that exceed the BAAQMD’s GHG significance threshold of 1,100 metric tons of CO_{2e} per year would be considered to result in a significant impact on the environment. The proposed updates to the EBWMP would allow the Pinole Valley and Eagle’s Nest trails to be open to non-motorized mountain bikes. These proposed trail segments would be composed of fire roads and a disced firebreak and would not require any additional construction activities. Other than the installation of signage, the proposed trail segments would not require the introduction of a new use of off-road construction equipment such as excavators or graders that emit GHG emissions that would exceed the BAAQMD’s GHG Significance threshold of 1,100 metric tons per year CO_{2e}. Since there would be no construction associated with the implementation of the new trails proposed for mountain bike access, the project would not exceed the BAAQMD’s GHG significance threshold, and this would result in a less-than-significant impact.

Although connecting to the Bay Area Ridge Trail could increase the number of people visiting the watershed trail system, the changes to access policy would not result in a net increase in mobile source GHG emissions such that the BAAQMD’s GHG Significance threshold of 1,100 metric tons per year CO_{2e} would be exceeded. Existing routine maintenance of the fire roads including the annual grading with a motorgrader and discing of the firebreak would continue. Therefore, GHG emissions associated with the implementation of the proposed project would result in a less than significant impact.

Greenhouse gases (GHGs) were not analyzed in the PEIR and were not commonly analyzed in CEQA documents at the time the PEIR was prepared and certified. As described above, the proposed project would have less than significant impacts to greenhouse gases. For these reasons, the changes to the EBWMP proposed in the Update

are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- b) **Less than Significant.** Since the proposed project is located in an unincorporated area of Contra Costa County, the most applicable GHG plan is the Contra Costa County Climate Action Plan (Contra Costa County CAP, 2015). The Contra Costa County CAP was adopted by the Contra Costa County Board of Supervisors on December 15, 2015 and identifies how the County will achieve the AB 32 GHG emissions reduction target of 15 percent below baseline levels by the year 2020. The Contra Costa County CAP identifies GHG reduction measures in the areas of energy efficiency and conservation, renewable energy, land use and transportation, solid waste, water conservation and government operations. The proposed project would include new trails proposed for mountain bike access and would not apply directly to the GHG reduction measures found in the Contra Costa County CAP. Therefore, the proposed project would not conflict with the adopted Contra Costa County CAP.

In addition to the Contra Costa County CAP, the proposed project would not conflict with the Assembly Bill 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act), and BAAQMD's 2017 Clean Air Plan (2017 CAP) (BAAQMD, 2017b). AB 32 requires the California Air Resources Board to design and implement feasible and cost-effective emissions limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25-percent reduction in emissions). The 2017 CAP contains 35 control measures aimed at reducing GHG emissions in the Bay Area in the follow sectors: stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water and supper-GHG pollutants. The 2017 CAP does not contain any GHG measures applicable to the proposed project. Therefore, the proposed project would not conflict with the implementation of the GHG reduction measures found in 2017 CAP. The BAAQMD GHG thresholds were designed to meet the AB32 goal of reducing GHG emissions to 1990 levels by 2020. As discussed under item a), the proposed project would not result in any temporary or new permanent sources of GHG emissions that would exceed the BAAQMD's 1,100 metric tons per year CO_{2e} significance threshold. Since the BAAQMD GHG significance threshold would not be exceeded, the project would not result in a cumulatively considerable increase in GHG emissions that would impair the State's ability to implement AB 32. This impact would be less than significant.

Greenhouse gases (GHGs) were not analyzed in the PEIR and were not commonly analyzed in CEQA documents at the time the PEIR was prepared and certified. As described above, the proposed project would have less than significant impacts to greenhouse gases. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

References

Bay Area Air Quality Management District (BAAQMD), 2017a. *CEQA Air Quality Guidelines*, revised May 2017. Available at.

Bay Area Air Quality Management District (BAAQMD), 2017ba. *Bay Area 2017 Clean Air Plan*, adopted April 19, 2017. Available at <http://www.baaqmd.gov>.

Contra Costa County, 2015. *Contra Costa County Climate Action Plan*. adopted December 15, 2015. Available at <http://www.co.contra-costa.ca.us/DocumentCenter/View/39791>.

2.8 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
8. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

Of the three key issues proposed in the EBWMP Update, one would affect hazards and hazardous materials: changes to access policy for the watershed trail system. As such, the analysis of hazards and hazardous materials impacts below is focused solely on that proposed change. As described in the Project Description, the EBWMP Update on Emerging Challenges serves to identify new development and issues that have arisen since adoption of the 1996 EBWMP, but does not necessarily specify detailed practices. Likewise, the EBWMP Update on IPM emphasizes “eliminating pesticides where feasible”, so while it is not specific in details, it would likely result in a reduction in pesticide use as compared to the 1996 EBWMP.

- a) **Less than Significant.** Changes to access policy for the watershed trail system would increase access to the watershed trail system for bicycle use on EBMUD land. The Pinole Valley Multi-Use Trail, a new multi-use trail would be created on approximately 6.7 miles of existing fire roads and a firebreak currently not open to the public. In

addition, the Eagle's Nest Multi-Use trail would be created on a 0.8-mile-long existing service road beginning at Nimitz Way through Wildcat Canyon and Tilden Regional Park then descending to San Pablo Dam Road.

Allowing bicycle access to the watershed trail system would result in an overall increase in recreation and trail use compared to what was envisioned in the 1996 EBWMP. An increase in recreationists would lead to increased use of vehicles into the Project area that may contain hazardous substances such as fuel and oil. Inadvertent release of these materials into the environment could adversely impact soil, surface waters, or groundwater quality and potentially result in a significant hazard. However, the increase in recreationists would likely not be substantive in the context of the potential for increased release of pollutants into receiving waters. In addition, the District would manage and monitor the Project area to ensure that these impacts would be less than significant through implementation of BMPs cited in the Plan.

The Project would not involve any construction activities. Maintenance activities of the Pinole Valley and Eagle's Nest Multi-Use trails would not include routine transport or disposal of hazardous materials; therefore, this impact would be less than significant.

Hazards and hazardous materials were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to hazards and hazardous materials. Therefore, the new information related to hazards and hazardous materials would not result in substantial changes to the EBWMP proposed in the Update with respect to this impact area and do not require major revisions to the PEIR.

- b) **Less than Significant.** The Project would not involve ground disturbances and thus no potential exists for the encounter of subsurface hazardous sites or underground facilities such as sewer lines and for leaks in those structures to expose workers to hazardous materials.

Maintenance activities of the Project would not include routine transport or disposal of hazardous materials and such activities would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; therefore, this impact would be less than significant.

Hazards and hazardous materials were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to hazards and hazardous materials. Therefore, the new information related to hazards and hazardous materials would not result in substantial changes to the EBWMP proposed in the Update with respect to this impact area and do not require major revisions to the PEIR.

- c) **No Impact.** There are no existing or proposed schools within one-quarter mile of the Project.

- d) **No Impact.** The proposed Project is not included on any of the lists of hazardous materials sites maintained by the State Water Resources Control Board (SWRCB, 2017a; SWRCB, 2017b) or the Department of Toxic Substances Control (DTSC, 2017a; DTSC, 2017b) that are compiled pursuant to Government Code Section 65962.5.
- e) **No Impact.** The Project is not located within an airport land use plan or within two miles of a public airport or public use airport.
- f) **No Impact.** The Project is not located within the vicinity of a private airstrip.
- g) **No Impact.** The Project would not result in changes to the existing road network and no construction activities are proposed as part of the Project that could affect the implementation of any emergency response or evacuation plan.
- h) **Less than Significant.** The Association of Bay Area Governments (ABAG) maintains a mapping database that identifies fire-threatened communities located at the wildland-urban interface and indicates wildfire hazards based on the existing fuel/ground cover present in a given area. Parts of the proposed Pinole Valley Mountain Bike trail are within areas identified as having a wildland urban interface fire threat (ABAG, 2017a). The Eagle's Nest Multi-Use trail is not within an area identified as having a wildland urban interface fire threat (ABAG, 2017b). The California Department of Forestry and Fire Protection (CAL FIRE) maps wildland fire threats throughout the State of California through an index rating system based on the combination of potential fire behavior (Fuel Rank) and expected fire frequency (Fire Rotation). The Project is subject to a high threat of fire in the vicinity of the Pinole Valley Multi-Use trail and subject to a very high threat of fire in the vicinity of the Eagle's Nest Multi-Use trail (CAL FIRE, 2007).

No construction activities requiring heavy equipment or new structures would occur as a result of the Project. However, the Project proposes changes to the access policy for the watershed trail system to include designation of the Pinole Valley and Eagle's Nest Multi-Use trails for mountain bikers which would increase the number of recreationists on the trail that could potentially become exposed to wildland fires. However, the Project would be required to adhere to the Fire Management Plan regarding fuels and fires to reduce impacts relating to fire threats. In addition, while there would likely be an increase in the number of visitors, relative to wildfire hazards, the increase would not be substantial. Existing fire protection and safety measures contained in the Fire Management Plan would be sufficient to reduce the potential impact to less than significant levels.

Hazards and hazardous materials were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to hazards and hazardous materials. Therefore, the new information related to hazards and hazardous materials would not result in substantial changes to the EBWMP proposed in the Update with respect to this impact area and do not require major revisions to the PEIR.

References

Association of Bay Area Governments (ABAG), 2017a. Wildland Urban Interface – Fire Threatened Communities, quake.abag.ca.gov/wildfires, accessed August 22, 2017.

Association of Bay Area Governments (ABAG), 2017b. Wildland Urban Interface – Fire Threatened Communities, quake.abag.ca.gov/wildfires, accessed August 24, 2017.

California Department of Forestry and Fire Protection (CAL FIRE), 2007. Fire Hazard Severity Zones in SRA. Fire and Resource Assessment Program, adopted on November 7, 2007.

California Department of Toxic Substances Control (DTSC), 2017a. EnviroStor Database search, www.envirostor.dtsc.ca.gov/public, accessed August 22, 2017.

California Department of Toxic Substances Control (DTSC), 2017b. EnviroStor Database search, www.envirostor.dtsc.ca.gov/public, accessed August 24, 2017.

State Water Resources Control Board (SWRCB), 2017a. GeoTracker Database search, geotracker.waterboards.ca.gov, accessed August 22, 2017.

State Water Resources Control Board (SWRCB), 2017b. GeoTracker Database search, geotracker.waterboards.ca.gov, accessed August 24, 2017.

2.9 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 (e.g., 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

Of the three key issues proposed in the EBWMP Update, one would affect hydrology and water quality: changes to access policy for the watershed trail system. As such, the analysis of hydrology and water quality impacts below is focused solely on that proposed change. The other key proposed changes to the 1996 EBWMP – Emerging Challenges on the East Bay Watershed and Integrated Pest Management (IPM) – would not affect hydrology and water quality. As described in the Project Description, the EBWMP Update on Emerging Challenges serves to identify new development and issues that have arisen since adoption of the 1996 EBWMP but does not necessarily specify detailed practices. Likewise, the EBWMP Update on IPM emphasizes “eliminating pesticides where feasible”, and while there are no specific details, the guidance would likely result in a reduction in pesticide use compared to the 1996 EBWMP.

- a, f) **Less than Significant.** Allowing bicycle access to the watershed trail system would result in an overall increase in recreation and trail use compared to what was envisioned in the 1996 EBWMP. An increase in recreationists would lead to increased use of vehicles into the Project area that may contain hazardous substances such as fuel and oil. Inadvertent release of these materials into the environment could adversely impact surface water or groundwater quality. While the EBWMP Programmatic EIR identified the potential for significant water quality impacts from allowing bicycle access to District trails, that conclusion was based on the potential impacts from mountain bike use in a scenario where bicycling would be allowed on a substantial portion of the 83-mile trail system, including single-track trails. By contrast, the anticipated impacts from new recreational use from the proposed change in trail access policy are expected to be insignificant because: 1) only 7.5 miles of trails will be affected; 2) of these trail segments, 6.7 miles (90%) do not drain to a terminal reservoir; 3) incremental use beyond the existing modest levels will be constrained by the rugged terrain and the limited parking available at the trailheads; and 4) no single-track trail access is proposed. Specifically, new trail access would be limited to existing roads (and a firebreak to be disced and compacted) that already accommodate vehicular traffic. In addition, the District would manage and monitor the Project area through implementation of BMPs to ensure that these impacts would be less than significant.

No construction activities would be associated with the Project that could violate water quality standards or waste discharge requirements. The use of the Pinole Valley Mountain and Eagle's Nest Bike trails would be monitored and managed by the District in such a way that source water quality would continue to be protected per EBMUD Policy 9.04 Watershed Management and Use (EBMUD, 2016). Maintenance activities of the Pinole Valley and Eagle's Nest Multi-Use trails would be minimal and would also adhere to EBMUD Policy 9.04. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- b) **No Impact.** The Project would not involve pumping or extraction of groundwater, and therefore would not directly result in the drawdown of groundwater levels nor would the Project involve the construction of new impervious surfaces.
- c) **Less than Significant.** The proposed Project does not include any substantive ground disturbances that would expose soils to erosion. The proposed new access to the two trails, Pinole Valley and Eagle's Nest, would allow cyclists onto the fire roads which could incrementally increase erosion potential. While a minor increase in trail erosion could occur, the number and type of recreational users may also affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users. However, the roads are maintained by EBMUD and were designed for vehicular traffic so the potential to cause any substantive erosion would be considered less than significant. In addition, EBMUD would continue to implement BMPs to maintain the trails and protect them from adverse effects related to erosion. For

- these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- d, e) **No Impact.** The Project would not alter the existing drainage patterns including through the alteration of the course of a stream or river. The proposed changes would be reflected in trail usage, thus the potential for flooding would not change with the Project and there would be no impact.
- g) **No Impact.** The Project does not propose construction of any housing. There would be no impact related to this criterion.
- h) **No Impact.** The Project does not propose the building of any structures and therefore no element of the Project would impede or redirect flood flows. There would be no impact related to this criterion.
- i) **Less than Significant.** The Pinole Valley Multi-Use trail is partially located within a 100-year flood zone (FEMA, 2017a). The Eagle's Nest Multi-Use trail is located outside of the 100-year flood zone (FEMA, 2017b). The Project would involve changes to the access policy for the watershed trail system and would not include any construction or other procedures on, adjacent to, or within a levee, dam, or other flood control feature, and therefore would not directly affect such facilities. A catastrophic release of the San Pablo Dam Reservoir would not affect the Eagle's Nest Trail or the Pinole Valley Multi-Use trail as neither are located within the dam inundation area for the reservoir. While there are numerous reservoirs in the watershed, and existing trails may intersect with dam inundation areas in some circumstances, any increase in recreationists being on trails at the time of a catastrophic failure of a dam would be unlikely. For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.
- j) **Less than Significant.** The Pinole Valley Multi-Use trail is not located immediately adjacent to an enclosed water body, such that it could be affected by seiche. The Eagle's Nest Multi-Use trail is located adjacent to the San Pablo Reservoir and could be affected by seiche. However, the likelihood of a seismic event causing seiche waves at the exact time of recreational uses at the locations of the trail closest to the reservoir would have a very low probability. Potentially, a tsunami could enter San Francisco Bay through the Golden Gate; however, the Project site is not located along the Bay shoreline and is outside of any tsunami hazard zone. Both trails are located in areas that are considered susceptible to mudflows (ABAG, 2017a; ABAG, 2017b). For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

References

Association of Bay Area Governments (ABAG), 2017a. Existing Landslide Distribution, <http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndslid>, accessed on August 22, 2017.

Association of Bay Area Governments (ABAG), 2017b. Existing Landslide Distribution, <http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndslid>, accessed on August 24, 2017.

EBMUD, 2016. Policy 9.04 Watershed Management and Use. As amended by Resolution No. 34080-16, April 26, 2016.

Federal Emergency Management Agency (FEMA), 2017a. FEMA's National Flood Hazard Layer (Official), <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-122.3176435743576,37.95332527122871,-122.27610152113387,37.96449137989086>, accessed on August 22, 2017.

Federal Emergency Management Agency (FEMA), 2017b. FEMA's National Flood Hazard Layer (Official), <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-122.3176435743576,37.95332527122871,-122.27610152113387,37.96449137989086>, accessed on August 24, 2017.

2.10 Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. LAND USE AND LAND USE PLANNING —				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

District watershed lands are located primarily in unincorporated portions of Alameda and Contra Costa Counties. Small portions are located within the Cities of Orinda, Lafayette, and Oakland and adjoin the incorporated Cities of Hercules, Lafayette, Moraga, Oakland, Orinda, Pinole, Richmond, and San Leandro and the unincorporated communities of Castro Valley and El Sobrante. In addition, substantial portions of District land are bordered by EBRPD lands.

The EBWMP Update includes the following changes in the Management Direction for Interjurisdictional Coordination section: Text changes related to Larch Avenue, Orinda, and El Toyonal provide updated status information based on land use decisions by local governments since the 1996 adoption of the EBWMP; Discussions of the Gateway Property and Bear Creek Property are deleted as the issues of concern no longer exist; The fruition of the Wilder Development and subsequent zoning changes with the City of Orinda effectively resolved potential land use concerns; and the Willow Park Golf Course has been renamed the Redwood Canyon Golf Course, and updated information provided.

- a) **No Impact.** The introduction of two new trails that would allow mountain bike would not require any construction. The proposed trails would be located on existing fire roads and therefore would not require any changes to land use that would physically divide an established community, and no impact would result.
- b) **No Impact.** Implementation of the Update would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project. The management programs described in the EBWMP provide a mechanism for coordination with other resource management programs to reduce land use conflicts. As described in the discussion above, the Update incorporates interjurisdictional coordination and updates relevant changes in land use conditions. This effort promotes consistency between the Update and regional jurisdiction land use plans. Therefore, the project is consistent with the EBWMP and local land use plans and zoning (in answer to one of the questions posed in Section 1, Introduction). In addition, the Range Resource Management Plan (EBMUD, 2001) and the Fire Management Plan (EBMUD, 2000) incorporate the goals and

objectives identified in the EBWMP. The Low Effect Habitat Management Plan (2008) was developed to protect listed species and their habitats on watershed lands and has also been incorporated into the Update. The Update reflects the adoption and adherence to these recent plans.

- c) **Less than Significant.** The EBWMP Update includes a guideline for consistency with the adopted EBMUD Low Effect Habitat Conservation Plan (EBMUD HCP). Prior to implementing the EBWMP Update, EBMUD would confer with the U.S. Fish and Wildlife Service (USFWS) and update the EBMUD HCP as needed to ensure that there are no conflicts with the adopted plan. The Pinole Valley Trail and the Eagle's Nest Trail are not included in the EBMUD HCP and may need to be added to the list of covered activities. The EBMUD HCP may need to be amended to include recreation uses on the Pinole Valley Trail and Eagle's Nest Trail, and the amendment would be reviewed and approved by USFWS. These elements of the EBWMP Update would not be implemented prior to receipt of the revised EBMUD HCP, or approval of the project elements by the USFWS. With coordination with the USFWS and associated revision and amendment of the EBMUD HCP as necessary, this impact is less than significant.

There are no other adopted Habitat Conservation Plan and/or Natural Community Conservation Plans or other approved conservation plans that include the Project area or cover Project activities.

For these reasons, the changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

2.11 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** Implementation of the Update that would change the access policy for the watershed trail system would not result in any ground disturbance or construction, nor would it promote any changes to the watershed land that could result in the loss of availability of a known mineral resources that would be of value to the region and residents of the state.

Mineral resources were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to mineral resources. Therefore, the new information related to mineral resources would not result in a new potentially significant environmental effect that was not identified in the PEIR.

- b) **No Impact.** Implementation of the Update that would change the access policy for the watershed trail system would not result in any ground disturbance or construction, nor promote any changes to the watershed land that could result in the loss of availability of locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Mineral resources were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to mineral resources. Therefore, the new information related to mineral resources would not result in a new potentially significant environmental effect that was not identified in the PEIR.

2.12 Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant.** The proposed updates to the EBWMP would allow the Pinole Valley and Eagle’s Nest trails to be used as a mountain bike trail for the general public. These proposed trail segments would be composed of fire roads and a firebreak and would not require any additional construction activities. Other than the installation of signage, the proposed trail segments would not require the introduction of new uses of off-road construction equipment such as excavators or graders that could expose nearby sensitive land uses to excessive noise levels. Existing maintenance of the fire roads includes annual grading with a motorgrader and discing of the firebreak.

Since the trail segments selected for evaluation would not include the introduce a new use of equipment know to generate high noise levels, implementation of the proposed project would not expose nearby sensitive land uses to noise levels that would result in a violation of Contra Cost County’s General Plan or municipal code. Additionally, while allowing mountain biking along the Pinole Valley and Eagle’s Nest trails could increase the number of people visiting the watershed trail system, the changes to access policy would not introduce any new noise sources (e.g., generators, pumps) that could expose nearby sensitive land uses to noise levels that would result in a violation of Contra Costa County’s General Plan or municipal code. Therefore, implementation of the project would not expose nearby sensitive land uses to noise levels and the impact would be less than significant impact.

Noise was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to noise. Therefore, the new information related to noise would not result in a new potentially significant environmental effect that was not identified in the PEIR.

- b) **No Impact.** Vibration impacts from construction activities primarily occur as a result of large or impact equipment use. The proposed project would not include blasting, drilling, or other activities typically associated with groundborne vibration or groundborne noise. Therefore, the proposed project would not expose nearby sensitive land uses to vibration levels and there would be no impact.
- c) **Less than Significant.** Proposed project-related operations within the EBWMP area would be similar to current conditions with the exception of the increase in the number of people visiting the watershed trail system. Although the increase in people visiting the watershed trail system would result in an increase in vehicular trips along local roadways, this increase in vehicular trips would not result in a doubling of traffic. According to Caltrans' Technical Noise Supplement, a doubling in traffic volumes would result in an increase in traffic noise of 3 dB, which is considered a barely perceptible increase in noise to the average human being (Caltrans, 2013). Since the proposed project would not result in an increase in existing noise levels that would be considered noticeable to the average human being during implementation, this would be a less-than-significant impact.

Noise was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to noise. Therefore, the new information related to noise would not result in a new potentially significant environmental effect that was not identified in the PEIR.

- d) **Less than Significant.** There would be no construction or ground disturbance requiring heavy equipment associated with the changes to access policy for the watershed trail system. Therefore, no equipment that is known to generate excessive noise such as a backhoe, grader (beyond the already existing annual road grading and fire break discing) or excavator would be used. Implementation of integrated pest management approaches would expand the variety of methods employed for weed management by limiting the use of herbicides with the active ingredient glyphosate, where feasible. Substituting other weed management methods such as mowing, weed whacking, flaming, or burning could cause a temporary noise or disturbance. However, this potential periodic increase in ambient noise levels is not expected to be substantial and these methods of weed management are already in practice throughout the watershed. The level of impact on nearby sensitive land uses resulting from any noise generated by the implementation of the Update would be less than significant.

Noise was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to noise. Therefore, the new information related to

noise would not result in a new potentially significant environmental effect that was not identified in the PEIR.

- e) **No Impact.** The proposed project does not involve the development of new noise sensitive land uses, and thus, implementation of the project would not expose people to excessive aircraft noise. In addition, the Proposed Project would not be located within 2 miles of a private airstrip. Therefore, this impact would result in no impact.
- f) **No Impact.** The proposed project would not be located within the vicinity of a private airstrip. Therefore, there would be no impact with regard to exposure of people residing or working to excessive noise levels from a private airstrip.

References

Caltrans, 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013.

2.13 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** The project includes updates to recent changes in land use conditions on jurisdictions whose planning boundaries coincide with District ownership, as described in Section 2.10, Land Use and Land Use Planning. Some of these updates include proposed housing developments. However, the implementation of the Update would not induce population growth directly by proposing new homes or indirectly by extending any new infrastructure or increasing water supply as part of the project. Implementation of the Update would not increase employment at the site, although maintenance may require a relatively small increase in the amount of time devoted to enforcing rules and safety following the proposed addition of trails open to mountain bikers. However, the project would not induce substantial population growth, and would result in no impact.

Population and housing was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to population and housing. Therefore, the new information related to population and housing would not result in a new potentially significant environmental effect that was not identified in the PEIR.

- b, c) **No Impact.** The project updates recent changes in land use conditions on jurisdictions whose planning boundaries coincide with District ownership. Some of these updates include proposed housing developments. However, the implementation of the Update would not result in a substantial displacement of existing housing or people and would therefore not necessitate the construction of replacement housing elsewhere.

Population and housing was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to population and housing. Therefore, the new information related to population and housing would not result in a new potentially significant environmental effect that was not identified in the PEIR.

2.14 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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 following public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **No Impact.** None of the key issues proposed under the EBWMP Update would result in any physical change or construction on the watershed land. Implementation of the Project would not generate a need for any new public facilities (schools, police protection, parks, etc.), because it does not induce population and employment growth. Because the Update does not involve any new construction or ground disturbance requiring heavy equipment, there would be no temporary workers associated with the implementation of the Update who would put an additional demand on public services in the watershed area. The potential increase of recreationists to watershed lands resulting from the addition of two mountain biking trails could lead to an increase in demand for emergency services should any accidents or collisions occur from mountain bike use, however any increase in demand would not be such that a new or physically altered government facility would be required to meet this demand. The Project would have a beneficial effect on firefighting coordination and management through the incorporation of the Fire Management Plan (2000) into the Update. Therefore, there would be no impact resulting from the Update on public services.

Public services were not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to public services. Therefore, the new information related to public services would not result in a new potentially significant environmental effect that was not identified in the PEIR.

2.15 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The watershed lands and reservoirs of EBMUD provide recreational opportunities for the public with expansive open space views, wildlife viewing opportunities, hiking and equestrian trails, and limited vehicular access. EBMUD watershed lands in the East Bay offer 80 miles of trails for hiking and equestrian use. Trail use requires the purchase of a permit from EBMUD. Currently bikes are not allowed on any unpaved road or trail.

District-owned reservoirs also provide varying degrees of water-dependent and water-enhanced recreational opportunities. San Pablo Reservoir provides opportunities for shoreline and boat fishing and other forms of motorized and non-motorized boating. Briones Reservoir allows only limited water-dependent use for college crew team practice. Lafayette Reservoir allows only use of “cartop” boats (sailboats, canoes, row boats, paddle boats, and electric motor boats) and fishing from docks and the shoreline. The Upper San Leandro Reservoir is located in a pristine setting with no water-dependent use recreation allowed on or near the reservoir. Lake Chabot is located in the Anthony Chabot Regional Park and is operated by EBRPD under a long-term lease with the District. Water-dependent uses allowed at the lake include fishing and many types of non-motorized boating.

As outlined in the Project Description, EBMUD has proposed two key issues in the Update that could impact recreation: a formalization of the existing requirement of a vessel inspection program to prevent the spread of zebra/quagga mussels; and the provision to allow mountain bike use on two new multi-use trails.

To prevent the spread of zebra/quagga mussels the District has implemented a vessel inspection program at the terminal storage reservoirs. Prior to launching, boats are subject to a two-part inspection that includes a history survey and a physical inspection. Boats failing the inspection are not allowed to launch.

The introduction of two mountain bike trails would be permitted under the proposed revision to the Developed Recreation and Trails Guideline DRT.25 below:

DRT.25 Use of designated unpaved roads or trails shall be limited to hiking and equestrians with restrictions as provided in the watershed rules and regulations and by

signage at trailheads, except in those portions of the Lake Chabot watershed that are leased to EBRPD or as required under the ADA. Bicycle access shall be allowed only on designated portions of the Pinole Valley and Eagle's Nest trails consisting of service roads. The EBMUD Board of Directors reserves the right to revoke bicycle access on these trails at any time and for any reason.

The Bay Area Ridge Trail is a planned, 550-mile trail system circumscribing the San Francisco Bay, of which 367 miles are already open and available for public use. The Bay Area Ridge Trail Council advocates for the completion of the Ridge Trail, including multi-use where possible. EBMUD evaluated several different trail segments of the Ridge Trail alignment on EBMUD land for suitability to multi-use, including bicycle access.

The proposed trail segments selected for evaluation in this Initial Study are composed of fire roads and a firebreak that would require no redesign to address safety concerns other than signage. No single-track mountain bike trails would be allowed under this proposal. The proposed Pinole Valley Multi-Use Trail, is a 6.7-mile trail consisting in the eastern section of fire roads not currently open to the public, which would connect to the existing Ridge Trail at Goat Road (Figure 2). The proposed Eagle's Nest Multi-Use Trail, is a 0.8-mile trail on a service road beginning at Nimitz Way (Road), a paved path in the East Bay Regional Parks District that allows bikes and connects 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 (Figure 3).

- a) **Less than Significant.** The Update includes a vessel inspection program at the terminal storage reservoirs to prevent the spread of zebra/quagga mussels. The program requires a two-part inspection that includes a history survey and a physical inspection prior to launching boats. Boats failing the inspection are not allowed to launch. Implementation of this program would not be expected to increase the use of recreational facilities (e.g., reservoirs in the District's watershed lands) such that substantial physical deterioration of the facility would occur or be accelerated. It could potentially decrease the use of boats in the reservoirs due to those boaters that do not pass inspection or choose not to undergo an inspection. Such boaters may choose to use other nearby reservoirs that do not require an inspection program, however it is unlikely that any increase in the use of neighboring or regional reservoirs would result in an accelerated physical deterioration of those recreational facilities and this impact would be less than significant.

With the implementation of the EBWMP Update, two trails would be open to mountain bike use. In order to protect the watershed values of water quality and biodiversity, the trail locations were selected based on their lower potential for impacts on sensitive biota or habitat, or erosion into a reservoir as well as their connectivity to existing regional trail systems. The proposed trail segments are composed of service roads that would require no redesign to address safety concerns.

Introduction of this new recreational use would be supported by EBMUD's goals for Recreation and Trails, which include:

- Ensure that currently permitted or new recreational activities do not increase the potential for additional soil erosion, landscape modification, or pollutant loading, or adversely affect other watershed or reservoir resources.
- Ensure a high quality of recreational experience on District lands by reducing user conflicts, promoting safety and courtesy, and controlling overcrowding.
- Where feasible, provide trail links to the surrounding regional open space network that do not conflict with resource protection priorities.
- Ensure that no net increase in adverse environmental effects will result from additions to or modifications of District recreation management programs, and prioritize protection of the interior watershed areas that serve as a refuge for plants and animals.

The guidelines that support these goals are DRT.3 and DRT.4. DRT.3 directs EBMUD to monitor use levels and modify them as needed. DRT.4 provides an option to close recreational facilities as needed to protect sensitive wildlife species (e.g., nesting birds) and special status species, curtail soil erosion, protect water quality, reduce fire hazards, and address other public safety concerns.

Mountain bikes are already permitted along Nimitz Way in the EBRPD, the connector for the proposed 0.8-mile Eagle's Nest trail. Therefore, it is not expected that the introduction of mountain bikes along the Eagle's Nest trail would increase the use of neighboring regional parks, rather it would provide a linkage to an existing recreational use.

While the introduction of mountain biking use on these two trails may increase the use of EBMUD's watershed land, it would be closely monitored under guideline DRT.3 for any potential physical deterioration along the trail segments. Ongoing monitoring for recreation-related impacts would allow EBMUD to identify areas of soil erosion or other adverse impacts to the environment, including special-status species, as described in Section 2.4, Biological Resources. As noted, the existing low level of recreational use on the two trails is unlikely to increase substantially due to the generally rugged nature of the terrain and the limited parking available at the trailheads.

As described in Section 2.6, Geology, Soils, and Seismicity and Section 2.9, Hydrology and Water Quality, while a minor increase in trail erosion could occur, the number and type of recreational users may also affect the potential for trail erosion, with higher levels of use and mountain bike use potentially increasing the impact over other trail users. However, the roads are maintained by EBMUD and were designed for vehicular traffic so the potential to cause any substantive erosion or loss of topsoil would be considered less than significant. In addition, EBMUD would continue to implement BMPs to maintain the trails and protect them from adverse effects related to erosion.

The use of the Pinole Valley and Eagle's Nest Multi-Use trails would be monitored and managed by the District in such a way that source water quality would continue to be protected per EBMUD Policy 9.04 Watershed Management and Use (EBMUD, 2016).

Maintenance activities of the Pinole Valley and Eagle's Nest Multi-Use trails would be minimal and would also adhere to EBMUD Policy 9.04, which permits only those uses that can be adequately monitored and managed by the District.

Wherever feasible, EBMUD would identify and diagnose any adverse indirect effects resulting from the implementation of new recreational uses and propose a solution using adaptive management. If no solution is available or feasible, EBMUD would close the recreational facility. Therefore, any potential impacts from the mountain bike trails would be less than significant. In addition, the implementation measures described on pages 9-11, above, would ensure that impacts would remain insignificant.

As described above, the proposed project would have less than significant impacts to recreation. The changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- b) **Less than Significant.** As described above, the Update includes a vessel inspection program at the terminal storage reservoirs to prevent the spread of zebra/quagga mussels. Implementation of this program would not require the construction or expansion of recreational facilities. Therefore, no impact would result.

As described above, the new mountain bike trails proposed in the Update would require no construction or redesign as they would open up existing fire roads to recreationists. As directed under guideline DRT.3 the introduction of mountain biking use on these two trails would be closely monitored for any potential physical deterioration along the trail segments. Should the expansion of this recreational resource result in any adverse physical effect on the environment, EBMUD would identify and diagnose the issue and propose a solution using adaptive management. If no solution is available or feasible, EBMUD would close the recreational facility. Therefore, any potential impacts from the mountain bike trails would be less than significant.

As described above, the proposed project would have less than significant impacts to recreation. The changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

2.16 Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. TRANSPORTATION/TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

Of the proposed changes to the 1996 EBWMP, only one would affect transportation and traffic conditions: changes to access policy for the watershed trail system. As such, the analysis of transportation and traffic impacts below is focused solely on that proposed change.

- a) **Less than Significant.** Changes to access policy for the watershed trail system would increase access to the watershed trail system for bicycle use by connecting to a portion of the Bay Area Ridge Trail that is located on EBMUD land. This would comprise opening up approximately 7.5 miles of existing trails (Eagle's Nest Trail and Pinole Valley Multi-Use Trails) to bicycle access.

Allowing bicycle access to two segments of the watershed trail system could result in an overall increase in recreation and trail use compared to what was envisioned in the 1996 EBWMP. Furthermore, increased recreation use on watershed lands would result in higher traffic volumes on local roadways and parking facilities used to access the trails. As stated in the EBWMP PEIR (EBMUD, 1995), none of the area roadways that would be used to access the watershed trail system currently experience substantial weekday congestion, and weekend traffic volumes for most roadways would be even less due to the lack of commuter traffic. Most of the recreational traffic would occur on summer

weekends and no congestion problems currently occur on local roadways. Therefore, although this proposed change to the 1996 EBWMP would generate more vehicle traffic, the relatively minor increase is still expected to have a less-than-significant impact on peak weekend and weekday traffic conditions.

Similar to existing conditions, temporary traffic congestion and parking shortages at entrances to EBMUD recreational facilities would likely continue to occur on holiday weekends or during special events. Recreation area entrances are closed when capacity limits are reached, causing increased congestion and parking on roadways leading to the entrances (i.e., San Pablo Dam Road, Mt. Diablo Boulevard, and Lake Chabot Road). Unlike EBMUD's heavily visited recreation areas, no parking congestion was identified in the EBWMP PEIR at either end of the proposed Pinole Valley Multi-Use Trail (i.e., Coach Drive and Pereira and Alhambra Valley Roads). The relatively minor increase in parking demand generated by opening up new access to bicycles is not expected to cause any new congestion at these entrances. Existing traffic congestion and parking shortages may increase slightly at the entrance to the San Pablo Reservoir Recreational Area due to the proposed change in access policy to allow bicycles on Eagle's Nest Trail; however, as stated in the EBWMP PEIR, the upper parking area has excess capacity even on the most crowded days because it is located further away from recreation areas. This is the parking area located nearest to the Eagle's Nest Trail. Therefore, the impact of the proposed change in access policy to the watershed trail system on traffic congestion and parking would be less than significant.

As described above, the proposed project would have less than significant impacts to transportation and traffic. The changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- b) **Less than Significant.** Contra Costa County and Alameda County both maintain congestion management programs (CMPs), which are required under the Measure J Growth Management Program to manage the performance of regional transportation facilities within their respective jurisdictions. Performance is measured using traffic level-of-service (LOS) standards that apply to a system of designated CMP routes that includes, at a minimum, all State highways and principal arterials. CMPs were not legally required at the time the EBWMP PEIR was prepared, because the Measure J legislation was not passed until 2004. As such, there is no evaluation of CMP facilities in the EBWMP PEIR.

The CMP for Contra Costa County is administered by the Contra Costa Transportation Authority (CCTA). The CMP-designated facilities located closest to EBMUD's recreational facilities that would be affected by the proposed change in access policy to the watershed trail system are:³

³ CCTA, 2015a.

- San Pablo Dam Road/Castro Ranch Road Intersection
- San Pablo Dam Road/Camino Pablo/Bear Creek Road Intersection
- Interstate 80 from State Route 4 to San Pablo Dam Road

Based on the 2015 Monitoring Report (CCTA, 2015b), none of these three facilities currently operate below the CMP-established LOS standard during the weekday AM or PM peak hours. As noted previously, most of the recreational traffic would occur on summer weekends when traffic volumes are typically lower due to the lack of commuter traffic. Therefore, although this proposed change to the 1996 EBWMP would generate more vehicle traffic, the relatively minor increase is still expected to have a less-than-significant impact on peak weekend and weekday traffic conditions on CMP-designated facilities.

The CMP for Alameda County is administered by the Alameda County Transportation Commission. Since the proposed change in access policy to the watershed trail system would not affect any recreational facilities in Alameda County, no analysis of the performance of CMP-designated facilities in Alameda County is required.

As described above, the proposed project would have less than significant impacts to transportation and traffic. The changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

- c) **No Impact.** The EBMUD District Boundary lies approximately five miles west of Buchanan Field Airport (Concord), and approximately five miles east of Oakland International Airport, and the project would not place any object within the flight path for airplanes in the area. The project would not 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. There would be no impact.
- d) **No Impact.** Neither project construction nor project operations would alter the physical configuration of the existing roadway network serving the area, and would not introduce unsafe design features. The project also would not introduce uses that are incompatible with existing uses already served by the road system that serves the project area. There would be no impact.
- e) **No Impact.** As described above, neither project construction nor project operations would alter the physical configuration of the existing roadway network serving the area, and would have no effect on access to local streets or adjacent uses (including access for emergency vehicles). There would be no impact.
- f) **Less than Significant.** Implementation of the project would neither directly nor indirectly eliminate existing or planned alternative transportation corridors or facilities (e.g., bike paths, lanes, bus turnouts, etc.), include changes in policies or programs that support alternative transportation, nor construct facilities in locations in which future

alternative transportation facilities are planned. In fact, the project would offer improved connectivity to existing regional trail systems for bicycle users. The project would not conflict with adopted policies, plans and programs supporting alternative transportation. The new multi-use trail facilities that would be established by the project would be developed with the safety of all trail users in mind. Since the proposed Eagle's Nest Trail and Pinole Valley Multi-Use Trail would be composed of fire roads and a firebreak, no redesign would be required to address safety concerns. The performance or safety of alternative transportation facilities could be temporarily affected by additional truck traffic generated by the construction of improvements to the trail segments; however, this affect would be of limited duration. Overall, the impact would be less than significant.

As described above, the proposed project would have less than significant impacts to transportation and traffic. The changes to the EBWMP proposed in the Update are insubstantial with respect to this impact area and do not require major revisions to the PEIR.

References

Contra Costa Transportation Authority, 2015a. *Update of the Contra Costa Congestion Management Program*, December 16, 2015.

Contra Costa Transportation Authority, 2015b. *2015 Monitoring Report*, August 2015.

2.17 Tribal Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. Tribal Cultural Resources —				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

Pursuant to PRC Section 21074, tribal cultural resources are: 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing in the California Register of Historical Resources (California Register), or local register of historical resources, as defined in PRC Section 5020.1(k); or, 2) a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (PRC Section 21074[b]). Also, an historical resource, as defined in PRC Section 21084.1, unique archaeological resource, as defined in PRC Section 21083.2(g), or non-unique archaeological resource, as defined in PRC Section 21083.2(h), may also be a tribal cultural resource.

Tribal cultural resources were not considered under CEQA as a separate resource at the time of the PEIR and existing EBWMP. Therefore, potential impacts on tribal cultural resources were not addressed in the PEIR, though much of the analysis for archaeological resources and human remains also pertains to tribal cultural resources.

ESA sent a Sacred Lands File (SLF) search request to the Native American Heritage Commission (NAHC) on September 26, 2017. The NAHC responded on October 10, 2017, indicating that the SLF has no record of any resources in the project area. On October 16, 2017, ESA sent letters on behalf of EBMUD to the six tribal representatives provided in the NAHC response requesting that the representatives provide comments on any cultural resources or sacred sites that could be impacted by the project. No replies were received. No known tribal cultural resources would be impacted by the project.

As described below, the project would have less than significant impacts to cultural resources. Therefore, the project is consistent with the EBWMP and would not result in any new potentially significant effects on the environment that were not examined in the PEIR.

- a) **Less than Significant.** Based on the results of correspondence with the NAHC and tribal representatives, no known tribal cultural resources listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the project. The only proposed change to the EBWMP guidelines associated with reducing potential significant impacts to potential tribal cultural resources is to allow for an as-needed approach to consultation with Native Americans regarding disposition of Native American artifacts and remains. This proposed change is minimal and would not result in any significant impacts to tribal cultural resources. Therefore, the potential impacts of the proposed changes to the EBWMP on tribal cultural resources are considered less than significant and no additional mitigation is required.

 - b) **Less than Significant.** Based on the results of correspondence with the NAHC and tribal representatives, EBMUD did not determine any resource that could potentially be affected by the project to be a tribal cultural resource pursuant to criteria set forth in PRC Section 5024.1(c). The only proposed change to the EBWMP guidelines associated with reducing potential significant impacts to potential tribal cultural resources is to allow for an as-needed approach to consultation with Native Americans regarding disposition of Native American artifacts and remains. This proposed change is minimal and would not result in any significant impacts to tribal cultural resources. Therefore, the potential impacts of the proposed changes to the EBWMP on tribal cultural resources are considered less than significant and no additional mitigation is required.
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2.18 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
18. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-g) **No Impact.** The implementation of the key issues proposed under the EBWMP Update would not result in any construction requiring heavy equipment on the watershed land. Because the Update does not involve any new construction or ground disturbance, the project would not generate any new demand for public utilities and services systems such as water or wastewater facilities, nor would the project require any additional solid waste disposal needs. Therefore, the project would result in no impact to utilities and service systems.

Utilities and service systems was not analyzed in the PEIR. As described above, the proposed project would not result in any significant effects related to utilities and service systems. Therefore, the new information related to utilities and service systems would not result in a new potentially significant environmental effect that was not identified in the PEIR.

2.19 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
19. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Less than Significant.** As discussed in the Initial Study Checklist analysis, the project does not have the potential to 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. Any potential short-term increases in potential effects to the environment during implementation of the project are less-than-significant, as described throughout the Initial Study.
- b) **Less than Significant.** For the purposes of this Initial Study, the geographic context for the proposed project’s cumulative impact assessment is generally the EBMUD watershed lands. This Initial Study determined that the proposed project would have no impact for the following issues: agricultural and forest resources, mineral resources, population and housing, public services, and utilities and service systems. Therefore, the proposed project would not contribute to cumulative impacts related to these issue areas. The remaining resource areas evaluated in this Initial Study resulted in less than significant impacts with no mitigation required.

The EBWMP Programmatic EIR identified the potential for significant water quality and biological impacts to result from allowing bicycle access to District trails, that conclusion was based on the potential impacts from mountain bike use in a scenario where bicycling would be allowed on a substantial portion of the 83-mile trail system, including single-track trails, anticipating a large and growing population of recreationists. By contrast, the

anticipated impacts from new recreational use from the proposed change in trail access policy are expected to be insignificant because: 1) only 7.5 miles of trails will be affected; 2) of these trail segments, 6.7 miles (90%) do not drain to a terminal reservoir; 3) incremental use beyond the existing modest levels will be constrained by the rugged terrain and the limited parking available at the trailheads; and 4) no single-track trail access is proposed.

The PEIR also noted general concern regarding the potential cumulative effects of allowing bicycle access on watershed trails, given the “large and growing population of recreationists.” (Final PEIR, Section 2-2.) Since the PEIR was certified, however, recreational use in the area of the trail segments proposed for multi-use has remained very low. Given this low level of use and previously mentioned constraints on recreational use of these trail segments, the Project would not contribute to any potential cumulative effects resulting from the proposed use of watershed lands.

For these reasons. Cumulative effects would be less than significant.

As identified elsewhere in this Initial Study, the less than significant environmental impacts from the proposed project are primarily limited to the implementation of the proposed changes in the EBWMP Update, none of which require any construction. Specifically, new trail access would be limited to existing roads (and a disc-line to be compacted) that already accommodate vehicular traffic. Therefore, any potential overlap with construction of nearby projects in the watershed land vicinity would not result in any cumulatively considerable impacts.

- c) **No Impacts.** The project would not result in any significant adverse impacts that would cause substantial adverse effects on human beings either directly or indirectly.

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