Marin Municipal Water District

Addendum to the Amendment of the Mt. Tamalpais Watershed Road and Trail Management Plan – Restoration of Azalea Hill Initial Study/Mitigated Negative Declaration

State Clearinghouse No. 2004082018

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1 Introduction

1.1 Introduction

1.1.1 Mission

The Marin Municipal Water District (District) was chartered on April 25, 1912, and was the first municipal water district in California. Prior to that, water in central and southern Marin was provided by several small, private companies, and many of them were subsidiaries to local real estate developers. Recognizing the critical importance of reliable water service, the District was formed. The District's mission is to manage the lands, water, and facilities in our trust to provide reliable, high-quality water and adapt and sustain these precious resources for the future. As of 2024, the District serves more than 190,000 people and manages more than 18,000 acres of land on the Mount Tamalpais Watershed (Marin Municpal Water District, 2024).

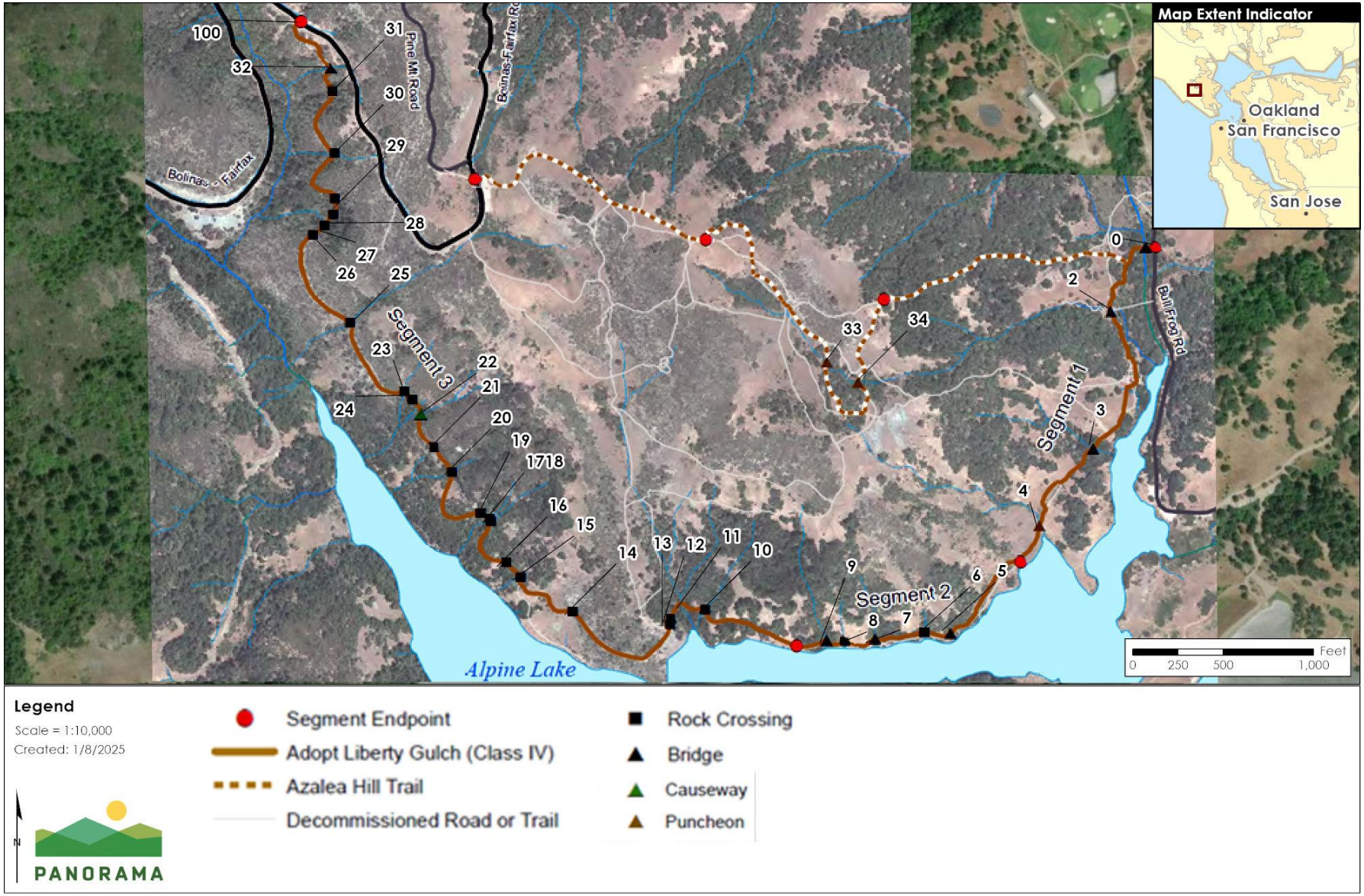
1.1.2 Roads and Trails Management

The District established a comprehensive plan to manage road and trail systems within the 22,000-acre Mt. Tamalpais watershed to meet the District's mission of managing water and natural resources. The most current iteration of the plan, the Mt. Tamalpais Watershed Roads and Trail Management Plan (RTMT), was approved in 2005.

Azalea Hill is a distinct area within the Mt. Tamalpais watershed that encompasses approximately 370-acres, bordered by Bon Tempe Creek and the Sky Oaks/Bullfrog area to the east, Alpine Lake to the south, Liberty Gulch Road, Bolinas-Fairfax Road and "Pine Mt." area to the west, and the Meadow Club golf course to the north (Figure 1). The area is crisscrossed by a network of approximately 7 miles of roads and trails that were constructed over time as hiking trails, carriage roads, ranch roads, or county vehicle roads. Numerous creeks originate on Azalea Hill, as well as several seeps and springs. Of the 7 miles of roads and trails, approximately 6 miles are social or "non-system" routes. "Non-system" routes, as opposed to system, or official routes, are also known as "social", "abandoned", "illegal", or "unofficial" routes that add to the burden of road and trail management. In 2019, The District undertook an Amendment to the Mt. Tamalpais Watershed RTMP for Restoration of Azalea Hill (referred herein as the "Azalea Hill Restoration project" or "Project). The Project included:

1. Removal of approximately 4.4-miles of non-system roads and trails and restoring those routes to natural conditions to improve habitat and water quality;

Figure 1 Azalea Hill Restoration Project Location



2. Adoption and improvement of a 1.9-mile Class IV road comprised of the existing Liberty Gulch Road (1.2 miles) and conversion of existing non-system trails (0.7 miles) to the wider, small vehicle route);
3. Improvement of the hiking and equestrian route over Azalea Hill by correcting erosion and drainage problems along approximately 1.1 miles of existing Class VI trail, rerouting the trail around sensitive plants, and adopting 250 feet of an existing non-system trail; and
4. Treatment of the Azalea Hill parking lot to correct its erosion problems and improve the visitor amenities.

Upon its completion, the Project will prevent up to an estimated 219 cubic yards of sediment from entering Azalea Hill's streams and Alpine Lake annually (or 4,380 cubic yards over 20 years) and will restore approximately one acre of habitat.

The Project is currently being implemented; however, an approximately 288-foot section of Liberty Gulch Road (within Segment 2, as shown in Figure 1) planned to be improved to a Class IV road through widening from approximately 18 to 24 inches to 4 feet is flanked by extensive populations of rare plants. While the approved Project allows for widening the trail and mitigating the effects to these rare plant populations, the District staff have found that the least impactful method in this area is to leave the trail at its current width and not actively disturb the rare plant populations. Additionally, improvements to Liberty Gulch Road under the Project included stream crossing upgrades at 34 sites. Six of these sites no longer need upgrades or upgrades can be minimized while still protecting water quality and reducing erosion from the road and trail improvements.

1.2 CEQA Compliance

The District's Board of Directors certified an Initial Study and Mitigated Negative Declaration (IS/MND) for the Azalea Hill Restoration project on May 14, 2019 (State Clearinghouse Number 2004082018) (Marin Water District, 2019). The IS/MND was prepared in accordance with the California Environmental Quality Act (CEQA) to assess the environmental effects of the Project, including the associated amendment to the RTMP. The Notice of Determination for the project was posted on May 15, 2019.

Aspects of the Azalea Hill Restoration project are proposed to be revised from what was analyzed in the certified IS/MND, as previously described. Pursuant to Section 15164 of the CEQA Guidelines, an addendum to an adopted Environmental Impact Report (EIR) or IS/MND shall be prepared if only minor technical changes or additions are necessary and none of the conditions described in Sections 15162 and 15163 of the CEQA Guidelines have occurred that call for preparation of a subsequent or supplemental EIR or IS/MND. As described in Section 15162(a), a subsequent or supplemental EIR or IS/MND would be required if substantial changes occur to the project or substantial changes to the circumstances under which the project is undertaken occur that would involve either (a) a new significant environmental effect or (b) a substantial increase in the severity of a previously identified significant effect.

1 INTRODUCTION

This addendum describes the proposed changes and additions to the Azalea Hill Restoration project, including the associated amendment to the RTMP (referred to as the "revised Project"), and identifies any additional analyses in accordance with the Appendix G resource questions analyzed in the IS/MND. This addendum finds that the proposed revisions to the Azelea Hill Restoration project and its associated IS/MND would not result in new significant impacts, nor would the revisions substantially increase the severity of previously identified significant impacts (CEQA Guidelines Section 15162). Based on this analysis, the District may conclude that an addendum is the appropriate approach to document the changes since certification of the IS/MND given that no new information of substantial importance has been identified, and none of the conditions described in Sections 15162 and 15163 of the CEQA Guidelines that call for preparation of a subsequent CEQA document are present. Refer to Section 4, Determination, for a detailed summary as to why none of the circumstances described under Section 15162 and 15163 are met.

Section 15164(c) of the CEQA Guidelines states that "[a]n addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration." Because the impact determinations in the Final IS/MND for the Azalea Hill Restoration project have not changed, additional circulation and review of public comments are not required.

2 Description of the Revised Project

2.1 Background

2.1.1 Goal of the Azelea Hill Restoration Project

Liberty Gulch Road was originally constructed to replace the Bolinas-Fairfax carriage road that was flooded by Alpine Dam and reservoir in 1919. When Alpine Dam was raised in 1924 and 1941, additional road construction or reroutes were required, which resulted in the contemporary alignment of Liberty Gulch. Liberty Gulch Road, at one time, provided the connection for all users between Bullfrog Road, a gateway to the "Lakes" area, and Fairfax-Bolinas Road, a gateway to the "Pine Mt." area. Over the years, non-system roads have developed in the area of Azelea Hill, which have many undesirable effects on the environment, including water quality impacts, migration or foraging barriers for wildlife, and physical removal of habitat.

One goal of the Azelea Hill Restoration project is to remove non-system roads and trails to restore those routes to natural conditions and thus to improve habitat and water quality. In order to meet the needs of recreational users and discourage future development of illegal routes, the Azelea Hill Restoration project included the development of Liberty Gulch Road and conversion of 0.70-miles of other non-system trails into an official road/trail meeting the Class IV road standards as identified in the RTMP. Liberty Gulch Road, along with the newly-designated Azalea Hill Trail to the north, will provide two multi-user routes to connect Fairfax-Bolinas Road and the Pine Mt. area to the Bullfrog Road and Lakes areas.

2.1.2 Roads and Trails Classes in the RTMP

The 2005 RTMP identifies specific improvements for roads and trails on the Mt. Tamalpais Watershed to reduce erosion. The RTMP identifies Best Management Practices and Environmental Protection Measures to be used when conducting the erosion control projects and for the long-term management of the roads and trails. The RTMP includes an inventory of all roads and trails and makes recommendations about accepting certain roads and trails as official roads and trails, reclassifying other roads and trails, and closing or decommissioning certain roads and trails. Roads and trails classifications are shown in Table 1. The subject of the revised project is Liberty Gulch Road, which was designated a *Class IV road* under the Azalea Hill Restoration project.

As defined in the RTMP, Class IV roads are typically 4 feet wide with a compacted, but unpaved surface, to allow for passage of small all-terrain vehicles (ATVs) associated with

District patrol operations. The designation as a "road" will also allow regular bicycling, hiking, and equestrian uses.

Table 1 Road and Trail Classifications in the RTMP

Classification	Type	Characteristics
Class I	Paved roads	High traffic volumes, year-round access to critical facilities, main ingress and egress routes for the watershed.
Class II	All season unpaved roads	Receive regular use, typically have hardened surfaces, provide access to important water infrastructure and for important watershed management.
Class III	Seasonal unpaved roads	Serves as emergency and recreational access. Typically, unsurfaced, narrower than Class I and II roads. Closed to vehicle traffic in the winter.
Class IV	**Small vehicle, unpaved roads**	**Primary use for patrol and route connectivity. Unsurfaced. Some sections only passable with small vehicles (i.e. ATV quads or small "bobcat" sized tractors). Limited truck and heavy vehicle traffic. Seasonal closures may apply.**
Class V	Restricted roads	Roads with special use restrictions (e.g. FAA facility)
Class VI	Equestrian trails	Substantial infrastructure improvements required to support use. Seasonal closures may apply.
Class VII	High use hiking trails	Hikers only. High to medium level of use and maintenance. Can be an important trail connector. Infrastructure improvements consistent with use levels.
Class VIII	Moderate use hiking trails	Hikers only. Medium to low level of use. Not an important trail connector. Little to no trail infrastructure improvements. Seasonal closures may apply.
Class IX	Backcountry trails	Hikers only. Low level of use. Minor maintenance. Not important trail connectors. Rustic-style trail infrastructure improvements only. Typically farthest from parking areas and towns.
Class X	Reserved	This classification is reserved for future use.

2.1.3 Rare Plant Avoidance

Numerous rare plants are found in the Azalea Hill Restoration project area. All of the plants surveyed in the Project area are included in the California Natural Plant Society (CNPS) Inventory of Rare and Endangered Plants of California as Rank 1, 2, 3, or 4 species, and none of the identified species are state or federally listed as threatened or endangered. Annual rare plants found within the Azalea Hill area include Mt. Tamalpais lessingia (*lessengia microdenia*), Tiburon buckwheat (*Eriogonum luteolum var. caninum*), and Marin County navarretia (navarretia rosulate). Mt. Tamalpais lessingia grows primarily on serpentine, but several individuals were found on non-serpentine soils. This population is extensive, growing in nearly the entirety of the Liberty Gulch Road section. Tiburon buckwheat is also a serpentine endemic found in Azalea Hill. Marin County navarretia is known in three populations, two in serpentine sections of Liberty Gulch Road were seen, numbering a few dozen plants each. While several populations of one-sided jewelflower are also known in the area.

A 288-foot section of the Liberty Gulch Road segment, from stream crossing site 7 to 9 (shown in Figure 1), is surrounded by numerous rare plants, including extensive Mt. Tamalpais lessengia and Tiburon buckwheat. This section of trail is narrow (from 18 to 24 inches in width), and sloped, with little room to expand the trail and with rare plants flanking the existing trail. The Azalea Hill Restoration project's IS/MND includes Mitigation Measure 3.2-B.2 that requires avoidance of rare plants, and if avoidance is not practicable, development of a rare plant mitigation and monitoring plan. Per the measure, "The rare plant mitigation and monitoring plan shall maintain pre-project rare plant populations by replacing all affected rare plants via seeding or transplanting (relocating). The success criteria for seeded and relocated plants shall be full replacement at a 1:1 ratio [number of plants established = number of plants impacted] after five years, accounting for annual variability as measured by reference populations near the project area or in similar environmental (soil, aspect, elevation, etc.) conditions."

Given the density of rare plant species found around the 288-foot section of the Liberty Gulch Road segment, the District botanist has determined that while it is feasible to widen the trail and mitigate for impacts to the rare plants, a less impactful approach would be to leave a small segment (288 feet) of the road at its current width. The District's botanist recommended not improving nor widening the 288-foot section, and to instead implement measures to minimize potential impacts to the rare plant populations, while still allowing multi-use.

2.1.4 Stream Crossing Improvements

The Azelea Hill Restoration project also includes 34 stream crossing improvements, including 22 upgrades to armored rock crossings, seven bridges, three puncheons, a causeway, and slip lining of one existing culvert. At several crossing improvement sites, unstable fills were to be removed to prevent additional sediment delivery to adjacent streams and existing failed culverts were to be removed.

The approach proposed to treat existing drainage and erosion problems along Liberty Gulch Road is one of being "light on the land" (page 24 of the Azalea Hill Restoration Project IS/MND)I Instead of undertaking full landform restoration and restoring all the creek channels, the work has been designed to be the minimum necessary to make the route sustainably passable for all users, and to correct the existing erosion issues. Culvert and armoring work, where applicable, was permitted through the California Department of Fish and Wildlife, Section 1600.

2.2 Trail Segment Modification and Changes to the Amendment of the RTMP

2.2.1 Trail Segment Modification

The revised Project is being proposed to further reduce rare plant impacts along a 288-foot section of the proposed Liberty Gulch Road segment of the Azalea Hill Restoration project. The section is shown in

Figure 2. The section is along an open serpentine grassland and the current

Figure 2 Liberty Gulch Road Revised Project From Stream Crossing Sites 7 to 9

trail is surrounded by rare plants as listed in the CNPS inventory. The current trail in this section is 18 to 24 inches wide. The revised Project would maintain the existing trail at its 18 to 24-inch width instead of widening itto the 4-foot-width of a Class IV road. The Class IV road designation, however, would be maintained along the entire road including this segment to allow for multiple uses including bicycles, hiking, and equestrian uses, and to ensure the Project's goal of multi-use connectivity from Fairfax-Bolinas Road and the Pine Mt. area to Bullfrog Road and the Lakes area. The revised Project would preclude ATV patrols through this segment, but preserve ATV patrol access from either end of the road, with this 288-foot section accessible on foot or bicycle.

Several additional measures would be included in the revised Project to avoid impacts to rare plants and ensure safety along this 288-foot Liberty Gulch Road segment. Additional measures that would be applied to the section of the road include:

1. Add a triangular yield sign with 5 mph limits, at the ends of the 288-foot section in addition to signage that indicates users a) must yield to others within the narrowed segment, allowing their full passage prior to proceeding, b) must slow speeds on bicycles to 5 mph with walking of bicycles encouraged, and c) must strictly stay on the trail.
2. Place signage along the trail warning users not to step off of the trail and indicating the sensitive environmental area.
3. Conduct on-going monitoring of the rare plant populations along the 288-foot section of trail once a year to identify any impacts to rare plants. If effects are seen, implement additional measures to reduce effects including improving signage, patrolling the segment at the busiest times, and requiring users to walk bicycles across the segment.
4. Conduct outreach including updating trail maps and online notification of the modified use of the Class IV road for the 288-foot section.
5. Prohibit ATV patrol usage along the narrowed section, requiring maintenance and patrols to access the road from Fairfax-Bolinas Road in the eastward direction, and Bullfrog Road in the westward direction, and patrolling the 288-foot section on-foot.
6. Mitigate any impacts to rare plants in accordance with Mitigation Measure BIO-1 and Mitigation Measure BIO-2 from the Azalea Hill Restoration project IS/MND All other mitigation measures identified in the Azalea Hill Restoration project IS/MND would remain applicable. These additional protection measures will reduce the likelihood of recreationalists stepping off of the existing trail and impacting the rare plant populations. While some digression from the trail could occur, the impacts are expected to be considerably less than impacts associated with reconstructing the trail to a 4-foot-wide Class IV road in this section. Monitoring any impacts will inform the extent to which, if any, rare plant mitigation measures should be implemented.

2.2.2 Modifications to the Amendment to the RTMP

The Azalea Hill Restoration project included amendments to Chapter 2 of the 2005 RTMP. Minor changes to the amendments are proposed under the revised Project. This section identifies the chapter and paragraph of the proposed additional changes. The associated additions are shown in underline text.

Page 2.13, Paragraph 2 of the RTMP Amendment, Changes to the Old Road and Trail System

"Noteworthy changes include the removal of redundant or unused roads in the vicinity of Peters Dam. Some other roads will be converted to Class IV, or small vehicle roads, to minimize erosion while still providing route connectivity. These include Grassy Slope Rd., Old Vee Rd., Lower Rocky Ridge, the southern portion of Concrete Pipe Rd., Lower Eldridge Grade, and Liberty Gulch Rd. A few roads will be converted to trails. Azalea Hill Rd. will be converted to a trail, mainly to keep cyclists from continuing beyond the road and down onto the trail, or worse, creating new trails that damage the environment and stress limited enforcement resources. A noteworthy area of decommissioning is in the Upper Berry-Lagoon Road area, primarily because of environmentally sensitive habitat concerns (serpentine soils), erosion and route redundancy that results in considerable search and rescue efforts. Most of the adoptions are on the periphery of the watershed and serve as established connectors to the near-by cities and towns. The decommissioning of Bald Hill Road and the end of Worn Springs Road, totaling approximately 0.15 miles, will be replaced with a new trail rerouted to a more stable location. Only one non-system road was adopted, Liberty Gulch Road, to improve connectivity for all users between the lakes area and the Pine Mountain area. A 288-foot section of Liberty Gulch Road is 24 to 18 inches wide and will not be open to patrol ATVs or trucks. Liberty Gulch Road, including this 288-foot segment, maintains multi-use for hikers, bicyclists, and equestrians, with modifications to protect sensitive resources and to ensure safety."

Page 2.17, Table 2.4 of the RTMP Amendment, Non-System Routes to Become System – Adoptions

Add to Table 2.4 the following line modifications:

Name of Route	Existing Class Road or Trail	1st Level Action: System or Non-System	2nd Level Action: Convert, Decom, Reroute, or Adopt	Criteria for Decision				Comments
				Water Quality	Redundant	Habitat	Cost	
Liberty Gulch Rd	Road		Adopt 9,978 feet	X				Important connector, improve drainage, Note that 288 feet will remain at current width, not to be used by truck or small ATV. Multi-recreational uses are

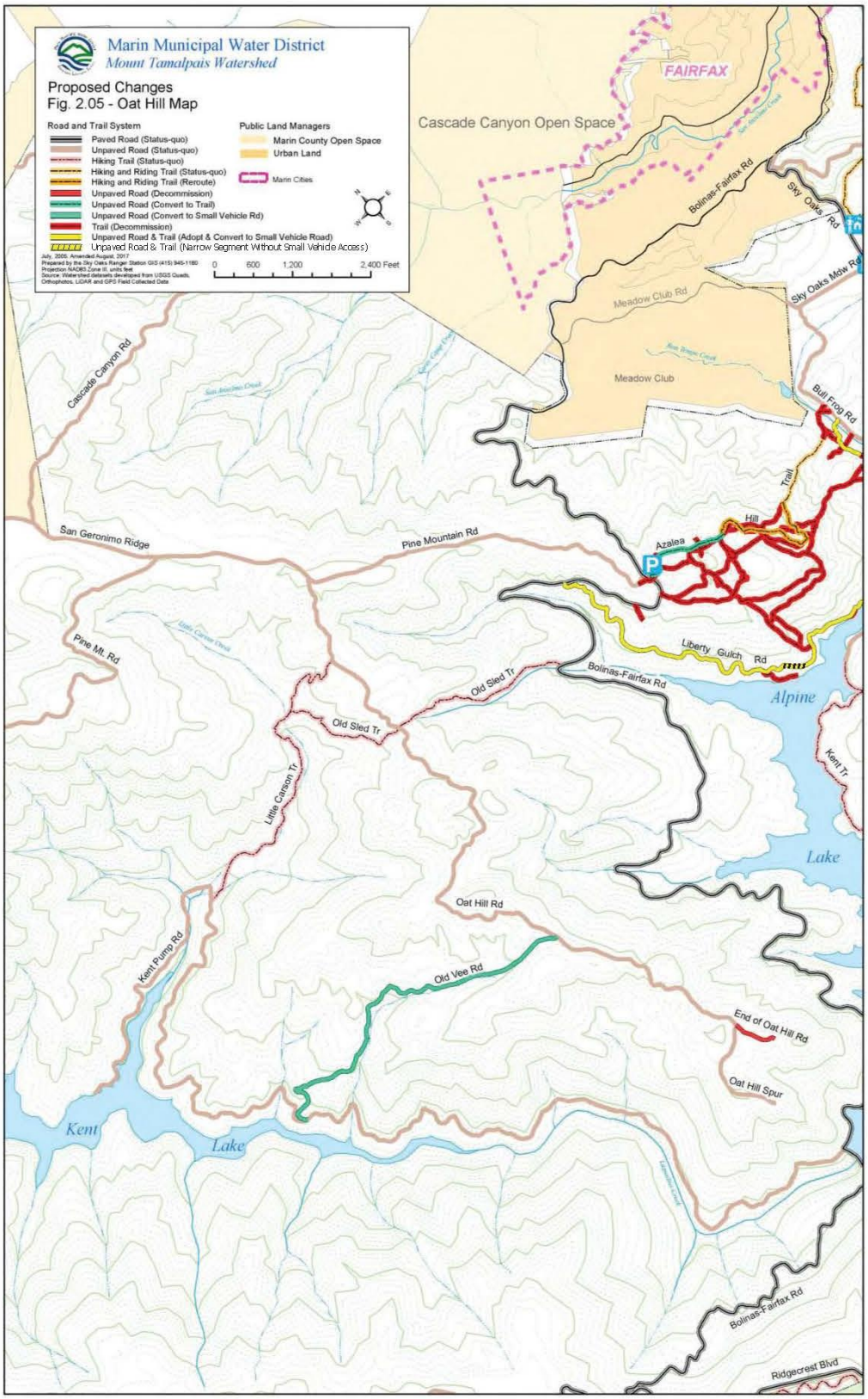
								allowed with special precautions.

Page 2.29, Table 2.5 of the RTMP Amendment, Road Classifications on the Watershed

Classification	Type	Characteristics	Miles
Class I	Paved roads	High traffic volumes, year-round access to critical facilities, main ingress and egress routes for the watershed.	17.6
Class II	All season unpaved roads	Receive regular use, typically have hardened surfaces, provide access to important water infrastructure and for important watershed management.	44.2
Class III	Seasonal unpaved roads	Serves as emergency and recreational access. Typically, unsurfaced, narrower than Class I and II roads. Closed to vehicle traffic in the winter.	24.5
Class IV	Small vehicle, unpaved roads	Primary use for patrol and route connectivity. Unsurfaced. Some sections only passable with small vehicles (i.e. ATV quads or small "bobcat" sized tractors). Limited truck and heavy vehicle traffic. Seasonal closures may apply. *	6.5

*288Liberty Gulch Road is classified as Class IV, including the narrower 288-foot segment of road, allowing for multiple recreational uses (i.e., bicycling, hiking, and equestrian), but with modifications to the use through the narrowed road width along this segment. No patrol trucks or ATVs are allowed on this 288-foot section of road.

Page 2.23, Figure 2.05 – Oat Hill Map



2.3 Stream Crossing Improvements

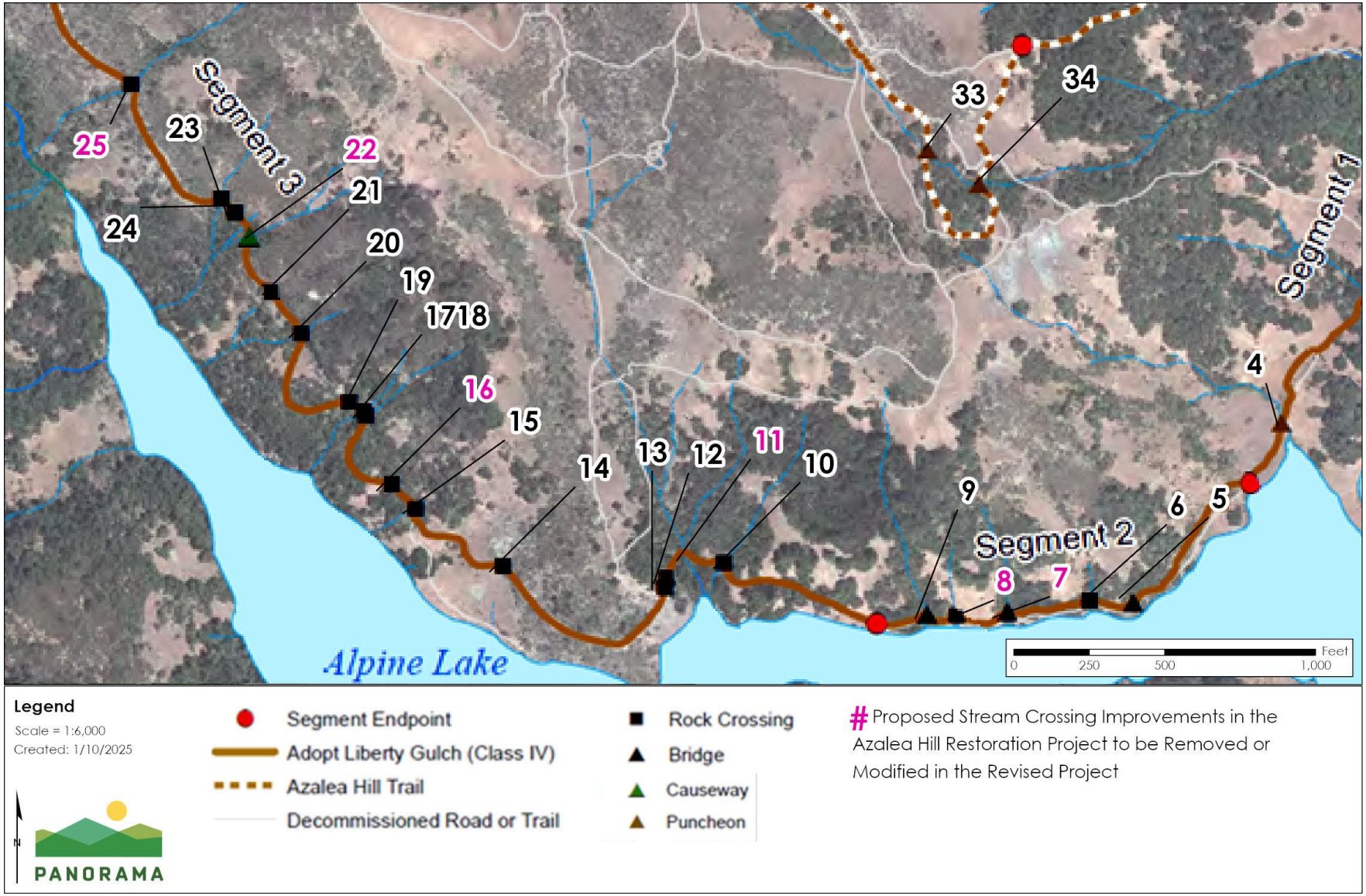
The Azalea Hill Restoration project included 34 stream crossing improvements. Six of these crossing improvements were determined not needed or need less work after field evaluation, which is in line with the District's stated approach in the Project of being "light on the land" in order to minimize effects to other sensitive resources, including rare plants. The crossings that are removed or modified as part of the revised Project are summarized below and shown in

Figure 3. Each of the modifications or removals were assessed by the District to ensure that the changes would still provide adequate erosion and sedimentation control.

Table 2 Stream Crossing Changes in the Revised Project

Site	Crossing Type	Initially Proposed Action	Reason for Removal or Modification of Action
7	Bridge	Construct a 20-foot bridge above creek	No bridge construction due to presence of rare plants but some armoring to be installed avoiding the plants and to provide adequate water quality protection. This crossing is within the section of Liberty Gulch Road to be left at current conditions and width.
8	Armor	Construct an armored wet crossing with 6 to 12-inch rock	To retain existing hydrologic function as well as water quality, while avoiding impacts to rare plants precisely hand-place two to three 12" rocks into the stream crossing.
11	Culvert	Slip-line culvert and add trash rack	The culvert is functioning and clean, therefore, no work is needed.
16	Armor	Construct armored wet crossing (5 cubic yards of 1-foot to 2-foot rock), treat approach, pull culvert	The culvert is functioning and clean, therefore, no work is needed.
22	Causeway	Raised boardwalk setback from fill slope edge (50 feet long x 4 feet wide).	No associated road widening is needed in this section of road; therefore, the causeway is not needed to keep users out of the stream. Rolling dips and drainage outlets would be added to adequately protect water quality.
25	Armor	Armored crossing, 50 cubic yards rock over 450 square feet (1-foot to 2-foot ft rock). Pull unstable fill, remove culvert. Treat 400 feet of approach	Leave culvert in place and armor instead of pulling culvert to avoid impacts to rare plants, while maintaining hydrology.

Figure 3 Locations of Stream Crossing Improvement Changes for the Revised Project



3 Evaluation

3.1 Aesthetics

3.1.1 Liberty Gulch Road

The Azalea Hill Restoration project IS/MND analysis concluded less than significant impacts on scenic vistas and visual character and quality from implementation of the Project. The analysis determined that views of the Project (e.g., widened trails) would primarily be obscured by vegetation and natural features. Implementation of the Project was in fact anticipated to improve the larger scenic vista that includes Azalea Hill because it would decommission and restore several of the casual trails that have been created over the years by users.

As the existing Liberty Gulch Road would be maintained, the Project's construction intensity and duration at this section would be less than what was analyzed in the Azalea Hill Restoration project IS/MND, thus reducing temporary visual impacts associated with the work. The implementation of the additional measures including installation of signage would require similar equipment to the equipment previously analyzed in the Azalea Hill Restoration project IS/MND. No new or more severe visual impacts from construction would occur.

During operations, this section of the road would be aesthetically different than what was analyzed in the Azalea Hill Restoration project IS/MND due to the reduced trail width and presence of signage. The signage would be similar to other signage found on the road and thus visually consistent. The revised Project would result in less than significant visual impacts and the revised Project would not result in new or substantially more severe impacts to aesthetics than those analyzed in the Azalea Hill Restoration project IS/MND.

3.1.2 Stream Crossing Improvements

The revised Project includes modifications to or not implementing six stream crossings as described in the IS/MND. Modifications would include using less armoring to avoid rare plants on some crossings, not building a bridge and using armoring instead, and not building a causeway. No changes to visual resource impact as described in the IS/MND would occur. All modifications to stream crossings would take an even more minimal approach than was proposed in the IS/MND and thus would introduce less man-made disturbance that could impact visual character. The revised Project would result in less than significant visual impacts and the revised Project would not result in new or substantially more severe impacts to aesthetics than those analyzed in the Azalea Hill Restoration project IS/MND.

3.2 Agriculture and Forestry Resources

Analysis in the Azalea Hill Restoration project IS/MND concluded that no impacts to agriculture and forestry resources would occur from implementation of the Project. Azalea Hill and the surrounding lands are designated as Other Land by the Marin County Important Farmland map compiled and published by the California Department of Conservation, Farmland Mapping and Monitoring Program. None of the lands adjacent to the Project are currently in agricultural production. The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

Under the revised Project, no changes to conditions would occur that could result in a conversion of land to a different use. The revised Project would not result in new or substantially more severe significant impacts on agriculture or forestry resources than those analyzed in the Azalea Hill Restoration project IS/MND.

3.3 Air Quality

Analysis in the Azalea Hill Restoration project IS/MND determined the Project would not violate an air quality standard nor contribute to an existing or projected air quality violation with implementation of Mitigation Measure AIR-1 to reduce fugitive dust emissions.

Air quality impacts would be similar or less than what was analyzed in the Project's IS/MND. Construction intensity and duration under the revised Project would be reduced since the 288-foot section would not be widened, and a bridge and a causeway would not be constructed at stream crossings 7 and 22. Consistent with the Project's IS/MND, the District, under the revised Project, would still be required to implement Mitigation Measure AIR-1 to reduce fugitive dust impacts during construction. With the implementation of Mitigation Measure AIR-1, air quality impacts from the revised Project would remain less than significant. Therefore, the revised Project would not result in new or substantially more severe impacts to air quality from criteria air pollutants than those analyzed in the IS/MND.

3.4 Biological Resources

3.4.1 IS/MND Summary

Analysis in the Azalea Hill Restoration project IS/MND determined that the Project could potentially result in significant impacts on special status species, riparian habitat or sensitive natural communities, and local polices or ordinances protecting biological resources. All other impacts were determined to be less than significant.

3.4.2 Special-Status Plants

Liberty Gulch Road

Analysis in the IS/MND determined that the Project could potentially result in significant impacts to special status plant species. As summarized in Table 4-1 of the IS/MND, 18 special-status plant species have been documented within or adjacent to the study area, while an additional 28 special-status plant species have potential to occur based on the presence of suitable habitat and known occurrences in the region. While many of the occurring and potentially occurring special-status plant species are associated with serpentine habitats (see Appendix D of the IS/MND), nearly all of the onsite habitats, serpentine and non-serpentine alike, are relatively undisturbed and support relatively high percentages of native plant species, and thus have potential to support special-status plant taxa known from the vicinity. The restoration of trails to be decommissioned could result in short-term impacts to the other special-status plants documented on or potentially occurring on the Project site, in the absence of avoidance measures. Other Project actions (e.g., improving existing trails, trail reroutes, conversion of non-system trail to official trails, bridge construction) could result in the loss of these special-status plants.

The Project's IS/MND included the following mitigation measures from the RTMP Final EIR (FEIR): 3.1-B.14, 3.1-B.17, 3.1-B.20, 3.1-B.21, 3.1-B.22, 3.1- B.23, 3.1-B.24, 3.1-B.26, 3.2-A.1, 3.2-A.2, 3.2-A.3, 3.2-B.1, 3.2-B.2, 3.2-B.3, 3.2-B.4, 3.2-B.5, 3.2- C.1, 3.2-D.1, 3.2-D.2, and 3.2-D.3. The IS/MND also included Mitigation Measures BIO-1 and BIO-2, which would reduce potential impacts to special-status plant species not fully addressed by the RTMP FEIR, to a less than significant level. Mitigation Measure BIO-1 requires the District to commission or conduct protocol-level surveys for special-status plant species prior to the commencement of construction activities and Mitigation Measure BIO-2 outlines avoidance and minimization procedures to protect special-status plant species from incidental harm due to construction equipment and spread of weeds. With the implementation of Mitigation Measures BIO-1 and BIO-2, as well as mitigation measures in the RTMP FEIR, impacts to special-status plants species were determined to be less than significant.

The revised Project is limited to the 288-foot section along the Liberty Gulch Road, from stream crossing site 7 to 9 (shown in Figure 1). This section is surrounded by numerous rare plants, including extensive Mt. Tamalpais lessengia and Tiburon buckwheat. This section of road is narrow (from 18 to 24 inches in width), and sloped, with little room to expand the road and with rare plants flanking the existing trail. The Project's IS/MND included Mitigation Measure 3.2-B.2 from the RTMP FEIR that requires avoidance of rare plants, and if avoidance is not practicable, development of a rare plant mitigation and monitoring plan. Per the measure, "The rare plant mitigation and monitoring plan shall maintain pre-Project rare plant populations by replacing all affected rare plants via seeding or transplanting (relocating). The success criteria for seeded and relocated plants shall be full replacement at a 1:1 ratio [number of plants established = number of plants impacted] after five years, accounting for annual variability as measured by reference populations near the Project area or in similar environmental (soil, aspect, elevation, etc.) conditions."

Given the density and rare plant species found around the 288-foot section of the Liberty Gulch Road segment, the District botanist has determined that while it is feasible to widen the road and mitigate for impacts to the rare plants, a less impactful approach would be to leave the road at its current width. The District's botanist recommended not improving nor widening the 288-foot section, and to instead implement measure to minimize potential impacts to the rare plant populations, while still allowing multi-use. The revised Project would further reduce potential impacts to special-status plant species at this road section compared to what was analyzed in the Project's IS/MND. The revised Project would still implement Mitigation Measures BIO-1 and BIO-2, as well as mitigation measures in the RTMP FEIR, to reduce potential impacts to special-status plant species. Since the road would not be widened, extra precautions including signage requiring users to wait for recreationalists in the opposite direction to pass before passing, imposing a 5 mph speed for bicycles and equestrian users, warning users not to step off the road, and providing other public outreach to educate the public about special precautions applicable to this section of road would minimize the likelihood of users traveling off trail and trampling rare plants. The area would also be monitored annually to determine if the rare plant populations are being impacted and if impacts from trampling are seen, Mitigation Measure 3.2-B.2 requiring replacement would be implemented. The number of plants that could be impacted and mitigated for would still be expected to be considerably less than would be impacted and mitigated for under the currently approved Project where the trail can be widened to 4 feet in this section. The revised Project would not result in a new or substantially more severe significant impact to special-status plant species than those analyzed in the Azalea Hill Restoration project IS/MND.

Stream Crossing Improvements

The stream crossing improvements would utilize a minimal approach, which would also reduce impacts to rare plants by avoiding disturbance of rare plants instead of mitigating for their loss. The six modified crossing locations are in locations that have been found to not need additional erosion control or are expected to still accomplish the appropriate erosion and sedimentation control with less ground impacts, based on existing conditions. The revised Project would not result in a new or substantially more severe significant impact to special-status plant species than those analyzed in the Azalea Hill Restoration project IS/MND.

3.4.3 Special-Status Wildlife

Liberty Gulch Road

Analysis in the Azalea Hill Restoration project IS/MND determined that the Project could potentially result in significant impacts to special status wildlife species. As summarized in the IS/MND, 35 special-status wildlife species have the potential to occur on the Project site. The locations of documented occurrences of special status wildlife species relative to the Project site are shown in Figure 8 in the Azalea Hill Restoration project IS/MND.

While the Project would improve habitat quality in the long-term (through trail decommissioning), construction activities may result in significant impacts due to the presence of construction equipment and widening the road into undisturbed areas. To reduce potential

impacts to special-status wildlife species, the IS/MND identified the following mitigation measures that would be applicable from the RTMP FEIR: 3.1-B.14, 3.1-B.16, 3.1-B.17, 3.1-B.18, 3.3-C.1, 3.3-C-2, 3.3-C-3, 3.3-D.1, 3.3-D.2, 3.3-D.3, 3.3-D.1, 3.3-D.4, and 3.3-F.1. The Project's IS/MND also includes Mitigation Measures BIO-3 through BIO-10 to reduce potential impacts to the following species: California red legged frog, yellow legged frog, California giant salamander, western pond turtle, nesting birds, roosting bats, and American badger. With the implementation of Mitigation Measures BIO-3 through BIO-10, as well as mitigation measures in the RTMP FEIR, impacts to special-status wildlife species were determined to be less than significant.

While the purpose of the revised Project is to further reduce impacts to special-status plants along the 288-foot-long segment, leaving this area at its current width may also reduce impacts to special-status wildlife species and their habitats compared with the impacts analyzed in the Project's IS/MND. Impacts would be reduced as the revised Project would not require use of heavy equipment and ground disturbance along the 288-foot-section that could temporarily impact wildlife. Some construction activities would be needed to place speed control features and signage. The revised Project would still be required to implement Mitigation Measures BIO-3 through BIO-10, as well as mitigation measures in the RTMP FEIR, to reduce potential impacts to special-status wildlife species (e.g., nesting birds). Impacts would be less than significant with mitigation incorporated. The revised Project would not result in a new or substantially more severe significant impact to special-status wildlife species than those analyzed in the IS/MND.

Stream Crossing Improvements

The modifications to a more minimal approach for the six stream crossings would not result in any greater impacts to wildlife species from the revised Project. Terrestrial wildlife would experience less impacts from reduced construction, particularly by avoidance of a bridge crossing at stream crossing 7 and a causeway at stream crossing 22. Impacts to aquatic wildlife is not expected to be different than analyzed in the IS/MND since the revised Project includes either not implementing additional in-stream features, or reducing the effect of the in-stream features (e.g., armoring instead of installing a bridge in the crossing). A primary purpose of the Project and the RTMP is to reduce sedimentation to creeks and reservoirs. The IS/MND notes that the Project, as proposed, saves 4,380 cubic yards of sediment over 20 years from entering Alpine Lake by decommissioning and restoring to natural conditions along 4.4 miles of non-system roads. Even with the modifications in the revised Project, net benefits to fisheries would result. No greater or new significant impacts than were already addressed in the IS/MND are anticipated from the revised Project.

3.4.4 Riparian Habitat or Other Sensitive Natural Community

Liberty Gulch Road

Analysis in the Azalea Hill Restoration Project IS/MND determined that the Project could potentially result in significant impacts to sensitive natural communities. The Project area encompasses a number of sensitive plant communities (see Appendix B of the Azalea Hill

Restoration project IS/MND). Three plant communities are within the Project area that are designated as Rare and Threatened by the California Department of Fish and Wildlife, including Serpentine Bunchgrass, Purple Needle Grass Grassland, and Mt. Tamalpais Manzanita Chaparral. Potential impacts to sensitive natural communities could also occur due to the spread of weeds. Construction equipment or trail users could transport seeds of invasive plant species to the site, or areas incidentally disturbed during construction could be colonized by invasive plant species. Impacts to sensitive plant communities were found to be potentially significant in the IS/MND.

To reduce potential impacts to sensitive natural communities, the Project's IS/MND requires the implementation of the following mitigation measures from the RTMP FEIR: Measures 3.1-B.14, 3.1-B.16, 3.1-B.17, 3.1-B.18, 3.2-E.1, 3.2-F.1, 3.2-I.1, 3.2-I.2, and 3.2-I.3. The IS/MND also includes Mitigation Measures BIO-11, BIO-12, and BIO-13 to reduce potential impacts to sensitive natural communities. Mitigation Measure BIO-11 requires the District to prioritize the protection of native vegetation where trails would be rerouted or where activities would occur outside of existing trails. Mitigation Measure BIO-12 requires the restoration and revegetation of all areas temporarily disturbed during Project construction. Mitigation Measure BIO-13 requires all decommissioned trails to be monitored by a qualified botanist annually for a period of five years. With the implementation of Mitigation Measures BIO-11, BIO-12, and BIO-13, as well as mitigation measures in the RTMP FEIR, impacts to sensitive natural communities were determined to be less than significant.

While the purpose of the revised Project is to further reduce impacts to special-status plants along the 288-foot-long section, leaving this area at its current width may also reduce impacts to sensitive natural communities (serpentine bunchgrass) and their habitats compared with the impacts analyzed in the Project's IS/MND because it would result in less direct disturbance to the communities by not widening the road. The District, under the revised Project, would still be required to implement Mitigation Measures BIO-11, BIO-12, and BIO-13, as well as mitigation measures in the RTMP FEIR, to reduce potential impacts to sensitive natural communities. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in a new or substantially more severe significant impact to sensitive natural communities than those analyzed in the IS/MND.

Stream Crossing Improvements

The IS/MND identified that the 34 stream crossings would impact 308 linear feet and 665 square feet of stream channels. The modifications to a more minimal approach for the six stream crossings would not result in any greater impacts to riparian habitat from the revised Project.

The stream crossing sites are generally unvegetated and the stream crossing improvements would serve to remedy existing erosion problems and prevent future erosion problems. Each crossing improvement would include native revegetation, erosion control, and native seeding to stabilize adjacent slopes and establish a functional native riparian corridor, as required by the RTMP FEIR. Where stream crossing improvements would not be implemented as initially proposed, it is based on current and predicted adequate function of the crossing. A primary

purpose of the Project and the RTMP is to reduce sedimentation to creeks and reservoirs. The IS/MND notes that the Project, as proposed, saves 4,380 cubic yards of sediment over 20 years from entering Alpine Lake by decommissioning and restoring to natural conditions 4.4 miles of non-system roads. Even with the modifications in the revised Project, net benefits of reduced erosion and stream sedimentation would result with overall benefits to riparian corridors. No greater or new significant impacts than were already addressed in the IS/MND are anticipated from the revised Project.

3.4.5 Conflict with Local Policies or Ordinances Protecting Biological Resources

Analysis in the Azalea Hill Restoration project IS/MND determined that the Project could potentially result in significant impacts due to a conflict with a local policy or ordinance established to protect biological resources. Specifically, the RTMP would result in the removal of twenty-six trees, as shown in Table 4-3 in the IS/MND, which may conflict with a local ordinance intended to protect heritage trees. Although the District is exempt from local ordinances, the removal of trees may be considered a significant impact. The IS/MND includes Mitigation Measures BIO-10, BIO-11, and BIO-12, which requires the District to avoid impacts to existing vegetation and trees to the extent practicable, replace trees removed that are greater than 8-inch diameter at breast height (DBH), and conduct five-years of monitoring and adaptive management to ensure revegetation. Impacts were determined to be less than significant with mitigation incorporated.

Mitigation Measures BIO-10, BIO-11, and BIO-12 would still be required under the revised Project to reduce potential impacts to trees and vegetation. Overall, the revised Project would result in less impacts to biological resources than what was analyzed in the IS/MND as the adjacent hillside would not be disturbed through road widening due to the presence of protected special-status plant species. The revised Project does not require the removal of additional trees beyond those identified in the IS/MND. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in a new or substantially more severe significant impact due to a conflict with a local tree protection ordinance than those analyzed in the IS/MND.

3.5 Cultural Resources

Analysis in the IS/MND determined that the Project could potentially result in significant impacts on archaeological resources and human remains. The IS/MND concluded that the District's implementation of Mitigation Measures ARC-1 and ARC-2 would reduce impacts to less than significant. Implementation of Mitigation Measure ARC-1 would reduce impacts on any previously unrecorded and buried archaeological resources to less than significant levels by requiring the District and its contractors to adhere to appropriate procedures and protocols for minimizing such impacts in the event that a possible archaeological resource is discovered during construction. Mitigation Measure ARC-2 would be implemented during Project construction to minimize potential impacts on any buried human remains and associated or unassociated funerary objects that may be accidentally discovered during construction activities

to less than significant levels by requiring the District to adhere to appropriate excavation, removal, recordation, analysis, custodianship, and final disposition protocols.

The revised Project would result in less impacts to cultural resources than was analyzed in the IS/MND, as lesser area would be disturbed since the 288-foot section would not be widened to 4 feet and six of the stream crossings would be modified for a more minimal approach. The District, under the revised Project, would continue to be required to implement Mitigation Measures ARC-1 and ARC-2 to reduce potential impacts to cultural resources. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in a new or substantially more severe significant impact related to cultural resources than those analyzed in the IS/MND.

3.6 Energy

The IS/MND did not include an analysis for potential impacts to energy. The changes associated with the revised Project would not create an additional demand for energy in California or substantially affect supply. The revised Project would require similar or less than the anticipated energy as the Project as proposed, since the 288-foot section would not be widened and six stream crossings would be modified for a more minimal approach. The revised Project would also not change the conditions that could result in an impact on energy related to a State or local plan because no State or local plans for renewable or energy efficiency apply to the RTMP. The revised Project would not result in new or substantially more severe significant impact related to energy.

3.7 Geology and Soils

3.7.1 Liberty Gulch Road

Analysis in the IS/MND concluded that impacts on geology and soil resources would be less than significant. The revised Project would not increase the previously identified management boundary of the adopted RTMP, nor would it allow additional management actions that were not analyzed under the IS/MND. The revised Project would reduce the disturbance area, as the 288-foot road section would not be widened, so potential impacts on geology and soil resources from loss of topsoil from erosion would be proportionately reduced during construction. The road would still function as a Class IV road, allowing multiple uses including equestrians and bicycles. The usage may increase, which can increase erosion, which was addressed in the IS/MND. While a segment of the road would be narrower, greater erosion than was identified in the IS/MND is not expected since the same type of impact would occur from user's footprints or bicycle wheels. The road would continue to be maintained as needed to minimize erosion. No greater impacts than were already addressed in the IS/MND are anticipated from the revised Project.

3.7.2 Stream Crossing Improvements

The modifications to a more minimal approach for the six stream crossings would not result in any greater impacts to geology and soils from the revised Project than was analyzed in the IS/MND. The reduced methods at six crossings would result in less construction than assessed in the IS/MND that could cause erosion and topsoil loss. The modifications are not expected to result in greater water sedimentation or erosion, as each site was evaluated by the District and found to either be adequate or that modified crossing improvement would not result in greater erosion and sedimentation from usage. A primary purpose of the Project and the RTMP is to reduce sedimentation to creeks and reservoirs. The IS/MND notes that the Project, as proposed saves 4,380 cubic yards of sediment over 20 years from entering Alpine Lake by decommissioning and restoring to natural conditions 4.4 miles of non-system roads. Even with the modifications in the revised Project, net benefits of reduced erosion would still result. No greater or new significant impacts than were already addressed in the IS/MND are anticipated from the revised Project.

3.8 Greenhouse Gas Emissions

Analysis in the IS/MND concluded impacts on greenhouse gas emissions (GHG) would be less than significant. The Project would generate GHG emissions from temporary construction-related activities, including from mobile equipment, site preparation, and excavation. The revised Project would result in similar or lessened GHG emissions than where analyzed in the adopted IS/MND, as construction intensity and duration would be reduced since the 288-foot section would not be widened and six of the stream crossings would be modified for a more minimal approach. Given that the Project activities would be temporary in nature and would occur intermittently over the construction time-frame, impacts would be less than significant. The revised Project would not result in new or substantially more severe impacts to GHG emissions than those analyzed in the IS/MND.

3.9 Hazards and Hazardous Materials

3.9.1 Hazardous Materials

Analysis in the IS/MND concluded that implementation of the Project could potentially result in significant impacts due to the routine transport, use, or disposal of hazardous materials and accidental release of hazardous materials into the environment. Within the Azalea Hill Restoration project area are serpentine soils, which, when disturbed, could release naturally occurring asbestos, which is a carcinogen, into the immediate atmosphere. Serpentine substrates in the Project area are concentrated along the central, mostly convex slopes, as well at the western edge. Accidental release of asbestos fibers into the localized atmosphere could result in a significant impact. Impacts may occur to groundwater and soils from chemicals used during construction activities. Implementation of Mitigation Measures HAZ-1 and HAZ-2, along with the District's existing practices and OSHA's existing regulations, would reduce any risk to the

public or environment through the routine transport, use, or disposal of hazardous materials or foreseeable release of hazardous materials, to a less than significant level.

Under the revised Project, no changes to conditions would occur that could increase an impact on hazardous materials. The 288-foot section is along serpentine soils and thus not widening the road would reduce impacts. The District, under the revised Project, would continue to be required to implement Mitigation Measures HAZ-1 and HAZ-2, along with the District's existing practices and OSHA's existing regulations, to reduce any risk to the public or environment through the routine transport, use, or disposal of hazardous materials or foreseeable release of hazardous materials. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in new or substantially more severe impacts to hazardous materials than those analyzed in the IS/MND.

3.9.2 Wildland Fires

Analysis in the IS/MND determined that implementation of the Project could potentially result in significant impacts due to wildland fires. The Project area is generally classified as having a "high" fire risk by the County of Marin (2013b), which could expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The IS/MND concluded that implementation of Mitigation Measure HAZ-3, which requires checking weather and limiting equipment use under certain conditions, avoiding work on red flag warning days, having appropriate fire-fighting equipment on hand during work, and training workers on fire safe practices, which would reduce potential impacts to less than significant.

Under the revised Project, no changes to conditions would occur that would increase the risk of wildland fires. The District, under the revised Project, would continue to be required to implement Mitigation Measure HAZ-3 to reduce the risk of wildland fires during construction. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in new or substantially more severe impacts than those analyzed in the IS/MND.

3.10 Hydrology and Water Quality

3.10.1 Liberty Gulch Road

Analysis in the IS/MND concluded that implementation of the Project would result in less than significant impacts to hydrology and water quality during construction and operation of the Project.

During construction, water quality could be affected by erosion from grading and earthmoving operations, a release of fuels or other chemicals used during construction, or a release of materials generated during demolition and construction. Grading and earthmoving would expose soil during construction and could result in erosion, with excess sediments carried in stormwater runoff to adjacent drainages. Stormwater runoff from temporary on-site use and storage of vehicles, fuels, wastes, and building materials could also carry pollutants into the

combined sewer system if these materials were improperly handled. To address stormwater runoff, the Project would implement a Stormwater Pollution Prevention Plan (SWPPP) which includes best management practices (BMPs) to ensure stormwater leaving the construction site is in compliance with water quality standards.

Under the revised Project, no changes to conditions would occur that could result in an impact on hydrology and water quality related to the alteration of an existing drainage pattern, including substantially increasing the rate or amount of surface runoff resulting in flooding, exceeding the capacity of exiting or planning stormwater drainage systems, or impede or redirect flows. The revised Project would not result in new or substantially more severe significant impacts to hydrology and water quality related to the alteration of an existing drainage pattern than those analyzed in the IS/MND. The revised Project would reduce the disturbance area as the 288-foot section would not be widened. As such, the potential for erosion and stormwater runoff during construction would be proportionately reduced. The District, under the revised Project, would still be required to implement a SWPPP, as well as the mitigation measures from the RTMP FEIR (Mitigation Measures 3.1-B.1, 3.1-B.4, 3.1-B.5, 3.1-B.6, 3.1-B.8, 3.1-B.9, 3.1-B.11, 3.1-B.12, and 3.2-H.9) to reduce impacts to water quality. With the implementation of a SWPPP and mitigation measures from the RTMP FEIR, impacts during construction would remain less than significant.

3.10.2 Stream Crossing Improvements

The IS/MND identified that the 34 stream crossings would impact 308 linear feet and 665 square feet of stream channels. The modifications to a more minimal approach for the six stream crossings would not result in any greater impacts to surface water hydrology from the revised Project.

The stream crossing sites are generally unvegetated and the stream crossing improvements would serve to remedy existing erosion problems and prevent future erosion problems. Each crossing improvement would include native revegetation, erosion control, and native seeding to stabilize adjacent slopes and establish a functional native riparian corridor, as required by the RTMP FEIR. Where stream crossing improvements would not be implemented as initially proposed, it is based on current and predicted adequate hydrologic function of the crossing. The following table summarizes why each crossing would not result in greater hydrologic impacts.

Site	Crossing Type	Initially Proposed	Revised Project	Hydrologic Impact Difference
7	Bridge	Construct a 20-foot bridge above creek	No bridge but some armoring that avoids rare plants.	This crossing is within the section of Liberty Gulch Road to be left at current conditions and width. The armoring is adequate to protect the stream crossing the trail, given the trail will not be widened into a 4-foot road here.

8	Armor	Construct an armored wet crossing with 6 to 12-inch rock	Hand-place two to three 12" rocks	This crossing is within the section of Liberty Gulch Road to be left at current conditions and width. The modified and reduced protection is adequate given the trail will not be widened to 4-foot road here.
11	Culvert	Slip-line culvert and add trash rack	No work	The culvert is functioning and clean, therefore, no work is needed and no new impacts to hydrology would occur
16	Armor	Construct armored wet crossing (5 cubic yards of 1-foot to 2-foot rock), treat approach, pull culvert	No work	The culvert is functioning and clean, therefore, no work is needed and no new impact to hydrology would occur.
22	Causeway	Raised boardwalk setback from fill slope edge (50 feet long x 4 feet wide).	No causeway	No associated road widening is needed in this section of road; therefore, the causeway is not needed to keep users out of the stream. Rolling dips and drainage outlets would be added to adequately protect water quality.
25	Armor	Armored crossing, 50 cubic yards rock over 450 square feet (1-foot to 2-foot ft rock). Pull unstable fill, remove culvert. Treat 400 feet of approach.	Leave culvert in place and armor instead of pulling the culvert	The culvert is functioning adequately, with some additional armoring. No new impacts to hydrology would occur from modifying this stream crossing to a more minimal approach.

The primary purpose of the RTMP is to reduce sedimentation to creeks and reservoirs, which would result in long term beneficial impact to hydrology and water quality. Overall, the Project would save an estimated 4,380 cubic yards of sediment over 20 years from entering Alpine Lake by decommissioning and restoring 4.4 miles of non-system roads and trails. The revised Project is not anticipated to significantly alter the estimated sediment retention over the life of the Project even with modified stream crossings. The revised Project would not contribute runoff that would exceed the capacity of existing drainage systems or result in additional sources of polluted runoff. Impacts on hydrology and water quality would be less than significant. Therefore, the revised Project would not result in new or substantially more severe significant impact related to hydrology and water quality than those analyzed in the IS/MND.

3.11 Land Use and Planning

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts on land use and planning. Under the revised Project, no changes to conditions that could result in an impact on land use and planning would occur. The revised Project would not

result in new or substantially more severe significant impacts on land use and planning than those analyzed in the IS/MND.

3.12 Mineral Resources

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts to mineral resources. Similar to the adopted Project, the revised Project would not involve any activities that would permanently impede mineral recovery. The revised Project would not result in new or substantially more severe significant impacts on mineral resources than those analyzed in the IS/MND.

3.13 Noise

Analysis in the IS/MND concluded that implementation of the Project would result in less than significant impacts related to noise and vibration. Most of the work to implement the revised Project would be accomplished with manual labor and hand tools. The use of small tools would be used to install the signage. However, construction activities for the revised Project would not result in noise impacts to sensitive receptors as the area is isolated and far from receptors. The District, under the revised Project, would still be required to adhere to Section 6.70.030(5) of the Marin County Municipal Code, which establishes limitations on the hours of construction as a means of ensuring a minimum of noise generation associated with construction activities. All work for the revised Project would take place between the following allowed work hours: Monday through Friday (7 am to 6 pm), Saturday (9 am to 5 p), and prohibited on Sundays and holidays. The noise level at the 288-foot road section is expected to be similar or less than the noise analyzed in the IS/MND, as construction intensity and duration would be reduced. The reduced stream crossing work would result in less noise as a bridge and causeway would not be constructed under the revised Project. Following completion of Project construction the noise generated by users would be similar to that described in the IS/MND, which was found to have no impact. The revised Project would not result in new or substantially more severe impacts to noise than those analyzed in the IS/MND.

3.14 Population and Housing

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts to population and housing. Similar to the adopted RTMP, the revised Project would not introduce elements that would allow for the addition of homes or businesses, or the infrastructure needed to induce population growth. The revised Project would also not involve the replacement or removal of existing housing and would not result in the displacement of people. Because the revised Project would not change the conditions that could result in an impact on population and housing, the revised Project would not result in new or substantially more severe significant impact related to population and housing than those analyzed in the IS/MND.

3.15 Public Services

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts to public services. The revised Project would not require the provision of new or physically altered public facilities. No impacts would occur to public services from the implementation of the revised Project. The revised Project would not result in new or substantially more severe significant impact related to police service ratios, schools, or other public facilities than those analyzed in the IS/MND.

3.16 Recreation

3.16.1 IS/MND Summary

Analysis in the IS/MND determined that implementation of the Project could result in significant impacts on recreation during operations. Specifically, the Project could attract more visitors to the Project area, which could potentially degrade existing recreational facilities that are composed of system roads, trails, and parking lots. The IS/MND includes mitigation measures to reduce the potential impact to less than significant. Mitigation Measure BIO-10 would track and control potential user impacts on District facilities through the implementation of edge-of-trail treatments, trail surface hardening, seasonal closures, monitoring, and enforcement. Mitigation Measure REC-1 includes the installation of interpretive signage (kiosk, etc.) that explains and illustrates the sensitive plants and communities on Azalea Hill, encourages their avoidance and protection, and identifies the importance of staying on system trails. Mitigation Measure REC-2 includes a survey to identify adaptive management actions to treat any deterioration in trail and road segments and parking lots serving the Project area. Mitigation Measure REC-3 includes the installation of speed calming features (e.g. signs, changes in elevation such as earthen speed bumps, lane narrowing, diagonal diverters using local logs or rocks, etc.) on Liberty Gulch Road to reduce the downhill speed of bicyclists. Mitigation Measure REC-4 requires the District to conduct focused patrols at Azalea Hill, similar to those it conducts for Project Restore, and document its patrol and enforcement activity in the Azalea Hill area and prepare a report on its findings after five years. The number of focused patrols shall be determined based on the illegal activity discovered or reported (the schedule of such patrols need to remain confidential). Findings of illegal activity, including failure to abide by permitted use on a route, failure to comply with speed limits, including when passing, and failure to keep out of closed areas, shall trigger corrective actions as described in Mitigation Measure BIO-10. These efforts shall continue until the desired outcome, compliance with District regulations preventing illegal activities, is achieved. With the implementation of Mitigation Measures BIO-10, REC-1, REC-2, and REC-3, and REC-4 would reduce the potential for substantial physical deterioration of existing recreational facilities to a less than significant level.

3.16.2 Liberty Gulch Road

Similar to the IS/MND, the District would continue to be required to implement Mitigation Measures BIO-10, REC-1, REC-2, and REC-3, and REC-4 under the revised Project to reduce the potential for substantial physical deterioration of existing recreational facilities. The revised Project does not alter the proposed road routes or uses. The main difference to the road and trail network is that a 288-foot-long section of Liberty Gulch Road would not be widened. The Class IV road designation would be maintained along this segment to allow for multiple uses, including bicycles, hiking, and equestrian uses, to maintain multi-use connectivity from Fairfax-Bolinas Road and the Pine Mt. area to Bullfrog Road and the Lakes area.

Due to the smaller width at this section, ATV patrols would not be allowed to ride through this area, would have to access the segment of the road from either end, and would have to patrol this 288-foot road section on foot. The narrowing of the road at the 288-foot section may also increase hazards to users, as there would be less space on the road to pass or maintain spacing. The revised Project would implement the following safety measures to reduce potential conflicts with users:

- Add a triangular yield sign with 5 mph limits at the ends of the 288-foot road section in addition to signage that indicates users a) must yield to others within the narrowed segment, allowing their full passage prior to proceeding b) must slow speeds on bicycles to 5 mph with walking of bicycles encouraged c) must strictly stay on the road.
- Place signage along the road warning users not to step off of the road and indicating the sensitive environmental area.
- Conduct outreach including updating maps and online notification of the modified use of the Class IV road for the 288-foot section.

With the implementation of the Project features described above as well as Mitigation Measures BIO-10, REC-1, REC-2, and REC-3, and REC-4 in the IS/MND, implementation of the revised Project would not substantially increase hazards along the 288-foot road section. The revised Project would not increase usage beyond what was analyzed in the IS/MND. Because the revised Project would not change the conditions that could result in an impact on recreation, the revised Project would not result in new or substantially more severe significant impact related to recreation than those analyzed in the IS/MND.

3.16.3 Stream Crossing Improvements

The modifications to a more minimal approach for the six stream crossings would not result in any greater impacts to recreation from the revised Project than was analyzed in the IS/MND. Minimizing stream crossing work would have no impact on recreational usage.

3.17 Transportation

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts on transportation. Similar to the impacts analyzed in the IS/MND, the revised Project would decrease hazards to bicyclists that currently use Bolinas-Fairfax Road by redistributing bicyclists from the paved (bicycle/vehicle) route along Bolinas-Fairfax to Liberty Gulch Road. This redistribution will reduce the number of District vehicles and bicyclists traveling on Bolinas- Fairfax Road between the Sky Oaks Watershed turnoff and the parking lot at Azalea Hill and potential accidents. The reduction in the number of bicyclists along Bolinas-Fairfax Road between Sky Oaks Watershed turnoff and the parking lot at Azalea Hill is expected to reduce hazards associated with incompatible or competing uses between bicyclists and vehicles. Maintaining multiple uses as a Class IV roads along all of Liberty Gulch Road, including the unwidened section, should not impact the redistribution of bicyclists from Bolinas-Fairfax Road to Liberty Gulch Road analyzed in the IS/MND. The modifications to a more minimal approach for the six stream crossings would not result in any impacts to transportation. The IS/MND found that following construction, the maintenance of the Azalea Hill area would be changed from the current pattern in that 4.4 miles of non-system roads and trails would be decommissioned and visitors would most likely use the rerouted Azalea Hill Trail or the adopted and converted Liberty Gulch Road. The adoption and conversion of the Liberty Gulch Road, and the addition of improved trail marker signage, would improve ranger patrol and emergency response in the area. While patrol would not be able to access the 288-foot section nor connect all the way through Liberty Gulch Road, emergency access would still be improved as compared with existing conditions since 4.4 miles of non-system roads would be removed. The section that would not be accessible by ATV is in the middle third of the road. Access to areas just to the west of the road would take slightly longer as it would need to be accessed via Bolinas-Fairfax Road versus Bullfrog Road; however, the difference in response time would not be substantial given the distance difference is less than 1 mile. No new or greater impacts than were assessed in the IS/MND to transportation, including emergency response, are expected from the revised Project.

3.18 Tribal Cultural Resources

Analysis in the IS/MND concluded that implementation of the Project would result in less than significant impacts to cultural resources. Based on the results of the cultural resources investigation and consultation with local California Native American Tribes, no tribal cultural resources have been identified within the Project area. In the event that a tribal cultural resources or prehistoric archaeological resources are identified during construction, the Project would adhere to the measures and protocols described under Section 5, Cultural Resources. Specifically, Mitigation Measure ARC-1 that outlines procedures and protocols for the discovery of an archaeological resource and Mitigation Measure ARC-2 which outlines protocols for the discovery of buried human remains and associated or unassociated funerary during construction.

The revised Project would result in less potential impacts to tribal cultural resources than what was analyzed in the IS/MND as less area would be disturbed since the 288-foot section would not be widened and six stream crossings would be modified for a more minimal approach. The District, under the revised Project, would continue to be required to implement Mitigation Measures ARC-1 and ARC-2 to reduce potential impacts to tribal cultural resources. Impacts would be less than significant with mitigation incorporated. The revised Project would not result in a new or substantially more severe significant impact related to tribal cultural resources than those analyzed in the IS/MND.

3.19 Utilities and Service Systems

Analysis in the IS/MND concluded that implementation of the Project would result in no impacts to utilities and service systems. Similar to the adopted IS/MND, the revised Project does not include the construction of any structures or facilities that would require typical municipal services such as water, waste water collection and treatment, or storm water drainage systems. As such, implementation of the revised Project would have no impacts on utilities or service systems. Therefore, the revised Project would not result in new or substantially more severe significant impact related to utilities and service systems than those analyzed in the IS/MND.

3.20 Wildfire

The IS/MND did not include a section specifically for wildfire. However, potential wildfire impacts were analyzed under Section 8 (h). As discussed in Section 3.9.2. of this document, the Project area is generally classified as having a "high" fire risk by the County of Marin (2013b), which could expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The IS/MND concluded that implementation of Mitigation Measure HAZ-3 would reduce potential impacts to less than significant.

Under the revised Project, no changes to conditions would occur that would increase the risk of wildland fires. Similar to the IS/MND, the District, under the revised Project would continue to be required to implement Mitigation Measures HAZ-3 to reduce the risk of wildland fires during construction. Impacts would be less than significant with mitigation incorporated. While patrol vehicles would not be able to access the 288-foot section, nor connect all the way through Liberty Gulch Road during operation, emergency access (including fire) would still be improved as compared with existing conditions since 4.4 miles of non-system roads would be removed and the majority of Liberty Gulch Road upgraded. The section that would not be accessible by ATV is in the middle third of the road. Access to areas just to the west of the road would take slightly longer as they would need to be accessed via Bolinas-Fairfax Road versus Bullfrog Road; however, the difference in fire response time would not be substantial given the distance difference is less than 1 mile. No new or greater impacts to wildfire are expected from the revised Project.

3.21 Other CEQA Topics

3.21.1 Changes in Land Use that Commit Future Generations

The revised Project would not result in a change to the zoning or land use designations. The revised Project would not commit future generations to significant changes in land use. All impacts are consistent with those analyzed in the IS/MND.

3.21.2 Consumption of Non-Renewable Resources

Non-renewable resources include mineral resources, groundwater, and fossil fuels. Similar to the analysis in the adopted Azalea Hill Restoration project IS/MND, the revised Project would not involve any activities that would permanently impede mineral recovery and would not require the use of substantial groundwater.

The revised Project would require the use of fossil fuels for management activities, including the use of mechanical tools and equipment. Use of vehicles and equipment during these activities and to reach Project sites would also use fossil fuels. The revised Project would use fossil fuels intermittently throughout the year, but would not require continued use. The use of fossil fuels would be considered beneficial, necessary, and not wasteful as discussed under subsection 3.6: Energy.

3.21.3 Irreversible Damage from Environmental Accidents

Action proposed under the revised Project would involve use of equipment and vehicles, which could result in the accidental spill of hazardous materials such as diesel and gasoline, similar to the adopted IS/MND. The revised Project would not change the types of management activities that were allowed under the adopted IS/MND. Implementation of Mitigation Measures HAZ-1 and HAZ-2, along with the district's existing practices and OSHA's existing regulations, would reduce any risk to the public or environment through the routine transport, use, or disposal of hazardous materials or foreseeable release of hazardous materials, to a less than significant level. The revised Project would not result in irreversible damage from environmental accidents.

3.21.4 Growth-Inducing Impacts

Similar to the adopted IS/MND, the revised Project does not involve the construction of housing and would not directly contribute to population growth in the area. The revised Project does involve the expansion of infrastructure, such as roadways or sewer lines and it does not involve the construction of a new facility that would indirectly induce population growth. Therefore, the revised Project would not result in new or substantially more severe significant impacts related to growth-inducing impacts than those analyzed in the IS/MND.

4 Determination

In accordance with CEQA Guidelines Section 15162. Subsequent EIRs and Negative Declarations, none of the conditions for preparation of a subsequent IS/MND are met and thus an addendum is the appropriate document for proposed revised Project approval. The following table summarizes why none of the provisions are met. Based on the table and analysis in Section 3, this addendum to the adopted Azalea Hill Restoration Project IS/MND is the appropriate level of environmental review for the project revisions, as identified in CEQA Guidelines Section 15164.

Table 3 Addendum Justification per CEQA Guideline Section 15162

Section 15162 Provision	Explanation
(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;	The revised Project is limited to a 288-foot segment along the Liberty Gulch Road, from stream crossing site 7 to 9 (shown in Figure 1). The revised Project would include not widening the road at this section to a Class IV 4-foot standard to voluntarily reduce impacts to special-status plant species located adjacent to this section. The revised Project also includes undertaking no or minimized activities on six stream crossings (shown in Figure 3). As the revised Project would result in less disturbed areas, the revised Project is expected to reduce potential impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources. Impacts to biological resources would be less than those anticipated from widening the identified 288-foot road segment and then implementing compensatory mitigation for all affected rare plant populations. Provisions have been incorporated to reduce the potential for off-trail trampling; but should it occur, existing mitigation measures to compensate for affected plants would be implemented (which is still expected to be less than the compensation needed for widening the road. Where stream crossing improvements would not be implemented as initially proposed, it is based on current and predicted adequate hydrologic function of the crossing and thus no greater impacts to hydrology, erosion, or sedimentation are anticipated. All other thresholds would be similar to the impact levels identified in the IS/MND. The District, under the revised Project, would be required to implement all the mitigation measures identified in the IS/MND and no additional mitigation measures are required due to the changes in the Project. Therefore, as described in Chapter 3, the revised Project would not result in new or substantially more severe impacts than those identified in the Azalea Hill Restoration project IS/MND.
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or	As described in Chapter 3, the revised Project would not result in new significant environmental effects or a substantial increase in the severity of any previously identified potentially significant effect identified in the IS/MND. All potentially significant impacts are mitigable to less than significant level under the IS/MND and would remain so under the revised Project.

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:		
	(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;	As described in Section 4, Biological Resources, of the IS/MND, special-status plant species were known to occur adjacent to the 288-foot road section. However, further review by the District botanist determined that a less impactful approach would be to leave this segment of the road at its current width due to the density of rare plant species at this section. Therefore, the revised Project does not include new information of substantial importance which was not known at the time of preparation of the IS/MND.
	(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;	N/A. See response 3(A), above.
	(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or	The revised Project would require the District to implement all of the mitigation measures identified in the IS/MND and no new mitigation measures are required. As described in Chapter 3, the revised Project would not result in new or substantially more severe impacts than those identified in the IS/MND.
	(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.	The District, under the revised Project, would be required to implement all the mitigation measures identified in the IS/MND and no new mitigation measures are required. As described in Chapter 3, the revised Project would not result in new or substantially more severe impacts than those identified in the IS/MND.

5 References

Marin Water District. (2019, October 15). *Meetings & Events, Board of Directors, Oct 15, 2019 at 07:30 pm - Oct 15, 2019 at 08:30 pm*. Retrieved from Marin Water: https://www.marinwater.org/node/452

Panorama Environmental, I. (October 2019). *Marin Municipal Water District Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan.* Marin Water District.