County of San Mateo
Planning and Building Department

INITIAL STUDY
ENVIRONMENTAL EVALUATION CHECKLIST
(To Be Completed by Planning Department)

1. **Project Title:** Redwood Glen Change of Water Source - Creek Water Treatment and Filtration Facility

2. **County File Number:** PLN 2001-00695

3. **Lead Agency Name and Address:** County of San Mateo Planning and Building Department 455 County Center, 2nd Floor, Redwood City, CA 94063

4. **Contact Person and Phone Number:** Laura Richstone, Project Planner; 650/363-1829

5. **Project Location:** 100 Wright Drive, Loma Mar

6. **Assessor's Parcel Number and Size of Parcel:** 084-071-100; 084-071-260; 084-071-270; 084-120-010; and 084-120-060. 165 acres.

7. **Project Sponsor's Name and Address:** Redwood Glen, 100 Wright Drive, Loma Mar, CA 94021

8. **General Plan Designation:** Private Recreation Rural

9. **Zoning:** Resource Management District (RM)

10. **Description of the Project:**

    Developed with a conference center, cabins, lodges, camp grounds, RV sites, a swimming pool, and various other outdoor recreation facilities, Redwood Glen Camp and Conference Center (Redwood Glen) provides camping and lodging facilities for 165 guests. The applicant, Redwood Glen, is seeking a Use Permit Renewal, Use Permit Amendment, and a Resource Management District Permit to allow the continued operation of a Baptist Church Camp, a change of potable water source from County Memorial Park to surface streams (Hoffman and Piney Creek), and the installation of approximately 3,400 linear feet of above ground piping, two (2) 2,500 gallon water storage tanks, and a 320 sq. ft. water filtration facility (built within a shipping container). The pre-fabricated water filtration facility has been previously installed in a developed relatively flat area of the parcel. Minimal grading in the form of trenching to connect to an existing water main and slight ground leveling for the above ground water filtration supports and water storage tanks are expected to occur. The applicant is seeking permission to install the proposed above ground piping, connect the filtration facility, and use surface streams to meet their potable water demands. No trees are proposed for removal and this project will involve minimal ground disturbance due to the fact that the water filtration facility, water tanks, and proposed piping will be placed above ground.

Project Background

From its opening in 1958 until 1995, Redwood Glen received its potable water from surface streams (Hoffman and Piney Creeks) and multiple wells located on the parcels that comprise of the Redwood Glen property (084-120-060; 084-071-260; 084-071-100; and 084-120-010). During this time, Redwood Glen diverted up to 8-acre-feet of water per year (2,606,808 gallons/year) from surface streams. From 1995 to March 2016, Redwood Glen received its potable water from San Mateo County Memorial Park and continued to divert between 180,000 - 250,000 gallons of water per year from surface streams for irrigation purposes. In 2014, the State Water Resource Control Board (SWRCB) issued a notice to the San Mateo County Parks Department that Memorial Park would lose its classification as a transient non-community water system and be re-classified as a community water system if the park continued to serve Redwood Glen. To avoid re-classification, Memorial Park discontinued water service to Redwood Glen on March 1, 2016. Redwood Glen has elected to exercise their water rights and use Hoffman and Piney Creeks to meet their projected water demand of 4-acre-feet of water per year (1,305,953 gallons/year). Redwood Glen's existing water infrastructure consists of a point of water diversion on Hoffman Creek, a point of water diversion on Piney Creek, several on-site wells, above and below ground water piping, and three (3) 5,000 gallon, one (1) 20,000 gallon, and one (1) 70,000 gallon water storage tanks.

Water Rights

Redwood Glen holds riparian water rights to Hoffman Creek that allow the camp to divert up to 8-acre-feet of water per year, immediately utilize the available water from the creek, and store up to 10,000 gallons of water. Hoffman Creek will remain the primary source of water for the camp. Redwood Glen also holds appropriative rights to Piney Creek (License No. 11116) to divert up to 24-acre-feet of water per year and store an unlimited amount of raw water. Water from Piney Creek will supplement water from Hoffman Creek during the drier summer months. No construction of water diversion structures are proposed. Existing water diversion structures are already located within Hoffman and Piney Creeks.

11. **Surrounding Land Uses and Setting:**

Surrounding land uses include open space and rural residences. Redwood Glen is located on 165 acres in the Santa Cruz Mountains, south of Pescadero Creek Road between County Memorial Park and Pescadero Creek County Park. Redwood Glen is developed with a conference center, lodges, campground facilities, and recreational areas. A majority of the parcels that constitute the Redwood Glen grounds are undeveloped and covered with redwood forest alliance habitat and riparian habitat. The parcels that host the majority of Redwood Glen's development (084-120-090; 084-071-260; and 084-120-010) are hilly, slope down toward Pescadero Creek and have elevations that range from 200 – 1,000 feet above sea level. Two surface perennial streams, Piney and Hoffman Creeks, bisect the Redwood Glen property and flow into Pescadero Creek (located just north of the subject parcel). Existing water diversion sites on Hoffman and Piney Creeks are located approximately 0.5 miles and 0.4 miles upstream of Pescadero Creek, respectively.

Special-status species that have a high potential to occur throughout the project parcel and near the existing points of water diversion include the California red-legged frog, Foothill yellow-legged frog, Santa Cruz black salamander, California giant salamander, Townsend's big-eared bat, Western red bat, and the Dudley's lousewort plant. Special-status species, including the Western pond turtle, Steelhead salmon, and the San Francisco garter snake, have a low potential to occur.

12. **Other Public Agencies Whose Approval is Required:**

Regional Water Quality Control Board
California Department of Fish and Wildlife (Streambed Alteration Agreement)

13. **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?:**

This project is not subject to Assembly Bill 52, as the County of San Mateo has no records of requests for formal notification of proposed projects within the County from any traditionally or culturally affiliated California Native American Tribes. However, the County seeks to satisfy the Native American Heritage Commission's best practices and has referred this project to all tribes within San Mateo County. As of the date of this report, no tribes have contacted the County requesting formal consultation on this project.

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" or "Significant Unless Mitigated" as indicated by the checklist on the following pages.

	Aesthetics	X	Hazards and Hazardous Materials		Recreation
	Agricultural and Forest Resources	X	Hydrology/Water Quality		Transportation/Traffic
	Air Quality		Land Use/Planning		Tribal Cultural Resources
X	Biological Resources		Mineral Resources	X	Utilities/Service Systems
X	Cultural Resources		Noise		Mandatory Findings of Significance
	Geology/Soils		Population/Housing		
	Climate Change		Public Services		

EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.

   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

7. Supporting Information Sources. Sources used or individuals contacted should be cited in the discussion.

1.	**AESTHETICS**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
1.a.	Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?				X

Discussion: The subject parcel is not located within or adjacent to any County or State Scenic Corridors. Though mostly undeveloped, existing development in the form of staff cabins, lodges, a conference center, recreational areas, and camp ground facilities are located throughout the parcel. The proposed water filtration facility (which was previously installed but is not operational at this time) is located in a previously developed flat area of the parcel adjacent to an existing road. The water filtration facility is housed in a 320 sq. ft. shipping container and is consistent with the scale of surrounding development, which includes several existing water storage tanks and storage containers. Though the location of the proposed water filtration facility and above ground piping do have natural scenic qualities, given the distance, surrounding vegetation, and topography, the project will not impact views from any public lands, water bodies, or roads.

Source: Project Plans; Project Location.

1.b.	Significantly damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X

Discussion: The project site is not located within a State Scenic Highway. Furthermore, no trees are proposed for removal nor are any rock outcroppings located near the project site.

Source: Project Location; San Mateo County General Plan; Scenic Resources Map.

1.c.	Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline?				X

Discussion: See the discussion provided to question 1.a. above.

Source: Project Plans.

1.d.	Create a new source of significant light or glare that would adversely affect day or nighttime views in the area?			X	

Discussion: Exterior lights are proposed for the project. The lights will be attached to the water filtration facility and positioned at the entrance and rear of the structure. These lights will not create a significant source of light or glare as they are downward directed. Any light or glare created by the proposed lights will be screened by the surrounding vegetation and mature redwood forest.

Source: Project Plans.

1.e.	Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?				X

Discussion: The subject property is not located within a State or County Scenic Corridor. At its nearest point, the Pescadero Creek County Scenic Corridor's boundary ends approximately 600 linear feet to the northwest of the main project parcels (084-120-090 and 084-071-260). The location of the water filtration facility is located approximately 1,300 linear feet from the Pescadero Creek County Scenic Corridor. The location of the water filtration facility is not visible from the

corridor due to the long distances, topography of the area, mature vegetation, and existing development located between the parcel and the corridor.

Source: San Mateo County General Plan; Scenic Corridors Map; Project Plans; Project Location.

1.f.	If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?				X

Discussion: The project is not located within a Design Review District.

Source: Project Location; San Mateo County Zoning Map.

1.g.	Visually intrude into an area having natural scenic qualities?			X	

Discussion: Situated between Memorial and Pescadero Creek County Parks, the project parcel has natural scenic qualities consisting of rural lands, County parks, and mature redwood forests and riparian habitats. As previously discussed, the water filtration facility is not visible from surrounding parcels due to the surrounding topography of the parcel and the surrounding mature vegetation. The proposed water filtration facility will be located in a disturbed and developed area of the parcel adjacent to existing water tanks and roads. The proposed linear piping necessary to draw water from Hoffman and Piney Creeks will be located at grade and screened by existing vegetation. As such, the piping and water filtration facility will have minimal visual impacts to the area.

Source: Project Plans.

2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (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 forestland, 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. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
2.a.	For lands outside the Coastal Zone, 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?				X

Discussion: Redwood Glen is zoned Resource Management (RM) and consists of several heavily

forested parcels. Most of Redwood Glen's development is located on small portions of lots 084-271-260; 804-120-010; and 084-120-060. Though agricultural uses are allowed in the RM Zoning District, there are no agricultural lands on or adjacent to the project parcels as identified by the San Mateo County Important Farmland Map of 2014. In addition, the water filtration facility will be located in a disturbed area of parcel 084-071-260 and will not involve the conversion of undeveloped land to developed land.

Source: Project Plans; San Mateo County Important Farmland Map, 2014.

2.b.	Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X

Discussion: The project parcel is not located within an Open Space Easement or under a Williamson Act Contract. The project is zoned Resource Management (RM). While agriculture is an allowed use in the RM District, the current use of the site as camp grounds for private recreation is allowed with the issuance of a Use Permit. The existing Redwood Glen Camp has operated under a Use Permit with the County of San Mateo since 1958. The proposed project will allow Redwood Glen to continue operating by providing an adequate source of potable water.

Source: San Mateo County Zoning Regulations; San Mateo County Agricultural Preserves Map; Project Plans.

2.c.	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 forestland to non-forest use?				X

Discussion: This parcel is not designated as Prime Farmland and, as such, will not result in the conversion of Farmland to a non-agricultural use.

The definition of forestland (PRC Section 1220(g)) is "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." The subject parcel is located in a heavily forested pine and redwood forest south of San Mateo County Memorial Park and meets the definition of forestland. The project site proposed for the placement of the water treatment facility is located in a previously developed and cleared area of the parcel, does not involve tree removal, requires minimal grading, and will not convert forestland into a non-forest use (the existing site is already converted to non-forest use). Similarly, the proposed water piping infrastructure, which will be placed above ground, does not require tree removal or grading activities. The placement of the water filtration facility and above ground piping are within developed areas of the main project parcels (084-120-060 and 084-071-260) that have already been converted to non-forest use. The continued use of the project parcels as a camp ground and the proposed project will not result in the further conversion of forestland into a non-forest use.

Source: Department of Conservation San Mateo County Important Farmland Map 2014; Project Plans.

2.d.	For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?				X

Discussion: This project is not located within the Coastal Zone.

Source: San Mateo County GIS.

2.e.	Result in damage to soil capability or loss of agricultural land?			X	

Discussion: The proposed project site is located in a disturbed and developed area of the parcel adjacent to an existing road and is not considered to be protected agricultural land under the San Mateo County Zoning Regulations as soils in the project area have a Storie Index rating of Grade 4, where Grades 1-3 are protected. Though portions of the main project parcels (084-120-060 and 084-071-260) do contain soils with a Storie Index rating of Grade 3 (where Grade 3 is protected), no agricultural activities occur on these parcels. Additionally, the non-irrigated land capability of the project site is not rated, per the National Resources Conservation Service (NRCS), as the soils at the project site are sandy, sloping, and steep.

Though Grade 3 soils do exist on portions of the project parcels, various existing residential and camp buildings are located atop these soils. No new development (with the exception of the above ground piping) will occur on these soils. There is no expectation that the location of the water treatment facility, placement of the above ground piping, and the utilization of the surface creeks as a potable water source would result in any damage to the soil or soil capability.

Source: Zoning Maps; Natural Resources Conservation Service; San Mateo County General Plan Productive Soil Resources Soils with Agricultural Capability Map.

2.f.	Conflict with existing zoning for, or cause rezoning of, forestland (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))? *Note to reader: This question seeks to address the economic impact of converting forestland to a non-timber harvesting use.*				X

Discussion: The project parcel is zoned Resource Management (RM) and, as such, is not located in a Timberland Preserve Zoning District. The operation of a private recreation and camp ground facility is an allowed use subject to the issuance of a Use Permit in the RM Zoning District. Redwood Glen has operated under a Use Permit with San Mateo County since 1958. The proposed project, to renew and amend Redwood Glen's Use Permit to allow a change in potable water source, and the installation of a water treatment facility, are allowed under the current RM Zoning Regulations and no rezoning is proposed as a part of this project.

Source: San Mateo County Zoning Maps; San Mateo County Zoning Regulations.

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:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
3.a.	Conflict with or obstruct implementation of the applicable air quality plan?		X		

Discussion: The Bay Area 2010 Clean Air Plan (CAP), developed by the Bay Area Air Quality Management District (BAAQMD), is the applicable air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and climate.

The proposed project would not conflict with or obstruct the implementation of the BAAQMD's 2010 CAP. The project and its operation involve minimal hydrocarbon (carbon monoxide: CO2) air emissions, whose source would be exhaust from vehicle trips (e.g., construction vehicles and personal cars of construction workers), whose primary fuel source is gasoline, during its construction. Due to the site's rural location and assuming construction vehicles and workers are based in urban areas, potential project air emission levels from construction would be increased from general levels. However, any such construction-related emissions would be temporary and localized and would not conflict with or obstruct the Bay Area Air Quality Plan.

The BAAQMD has established thresholds of significance for construction emissions and operational emissions. As defined in the BAAQMD's 2010 CEQA Guidelines, the BAAQMD does not require quantification of construction emissions due to the number of variables that can impact the calculation of construction emissions. Instead, the BAAQMD emphasizes implementation of all feasible construction measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures that they have determined, when fully implemented, would significantly reduce construction-related air emissions to a less than significant level. These control measures have been included in Mitigation Measure 1 below:

Mitigation Measure 1: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stablizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

Also, see the discussion to question 7.1. (Climate Change: Greenhouse Gas Emissions), relative to

the project's compliance with the County Energy Efficiency Climate Action Plan. **Source:** BAAQMD CEQA Guidelines, May 2017; Project Plans.					
3.b.	Violate any air quality standard or contribute significantly to an existing or projected air quality violation?		X		
Discussion: The project would not violate any construction-related or operation air quality standards or contribute significantly to an existing or project air quality violation. See the discussion provided to question 3.a. and Mitigation Measure 1 above. **Source:** BAAQMD CEQA Guidelines, May 2017; Project Plans.					
3.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)?		X		
Discussion: The San Francisco Bay Area Air Basin is a State designated non-attainment area for Ozone, Particulate Matter (PM10), and Fine Particulate Matter (PM2.5). Therefore, any increase in these criteria pollutants would be significant. Past construction of the water filtration facility and future construction of the above ground piping and water tanks would generate temporary increases in these criteria pollutants due to construction vehicle emissions. However, the placement and assembly of the prefabricated water filtration facility and the laying of approximately 3,400 linear feet of above piping by hand would not result in a significant impact to air quality in the immediate area or the air basin. Implementation of Mitigation Measure 1 will minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level. **Source:** Project Plans.					
3.d.	Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD?			X	
Discussion: Sensitive receptors are facilities or land uses such as schools, hospitals, or residential areas where people live, play, convalesce, or a place where insensitive individuals spend significant amounts of time. Sensitive individuals, such as children and the elderly, are those most susceptible to poor air quality. While the above ground piping will be placed in locations in close proximity to sensitive receptors, all the piping will be installed and laid by hand. The installation of the piping will not produce any emissions nor expose any sensitive receptors to pollutants. The location of the water filtration facility and the proposed 2,500 gallon water tanks are located near the easterly border of the project parcel. This area sees little foot traffic and is located approximately 300 feet way from the nearest sensitive receptors (a single-family staff residence). Though already installed, any pollutant emissions generated from the construction of the water treatment facility would be temporary in nature. Similarly, pollutant emissions generated from the construction of the proposed water tanks and the installation of the linear piping will also be temporary. Once					

operational, the water treatment facility will be powered by electricity and any long-term emissions for the facility will be associated with its maintenance and transitory in nature. Maintenance for this facility will include hauling and disposing wastewater off-site to Trinity Liquid Waste Services (an appropriate disposal facility) monthly. Emissions from maintenance vehicles will be temporary in nature and will not impact any sensitive receptors.

Source: Project Plans; Redwood Glen's Proposed Operation and Maintenance Plan.

3.e.	Create objectionable odors affecting a significant number of people?			X	

Discussion: The project, once operational, will not create or generate any odors. The project has the potential to generate odors associated with construction and maintenance activities (i.e., vehicle exhaust). The project site is located in a rural area where any objectionable odors introduced during these times would be minimal, temporary in nature, and will not impact significant numbers of people over an extended duration of time. Thus, the impact would be less than significant.

Source: Project Plans.

3.f.	Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area?		X		

Discussion: Though the water filtration facility has already been installed, the delivery of the above ground piping, water tanks, and off-hauling of wastewater during the lifetime of the project could generate dust for a short duration of time. To ensure that project impacts will be less than significant, see Mitigation Measure 1 described in 3.a. above.

Source: See sources in Section 3.a.

4. BIOLOGICAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
4.a.	Have a significant 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 Wildlife or U.S. Fish and Wildlife Service?		X		

Discussion: According to the Biological Impact Assessment (Attachment A) prepared by MIG, Inc., dated December 2017, the majority of the project parcels contains redwood forest alliance habitat (i.e., forest stands where redwood trees are the dominant tree but other tree species often share the canopy) and riparian habitats along Piney and Hoffman Creeks. MIG biologists assessed the existing water diversion sites at the creeks on September 14, 2017 and identified the potential for

eight special-status animals and one special-status plant species to occur within or near the existing points of diversion.

Project activities including the maintenance and cleaning of the existing points of diversion and the increased diversion of water from Hoffman and Piney Creeks could result in permanent and temporary impacts to special-status reptiles and amphibians and their habitat. Species with the potential to occur at the existing points of water diversion are discussed below:

Reptiles, Amphibians, and Fish

California Red-Legged Frog (CRLF)

The California red-legged frog (*Rana draytonii*) is federally listed as threatened under the Federal Endangered Species Act (FESA) and is a designated state species of special concern. Redwood Glen campground and parcels are within the designated critical habitat for CRLFs and suitable breeding habitat for this species are also found in Pescadero Creek near Redwood Glen. CRLFs are also known to occur within the upper reaches of Pescadero Creek in neighboring Memorial, Sam McDonald, and Pescadero Creek County Parks. A field assessment of the existing points of water diversion (POD) concluded that while there is a lack of suitable breeding habitat, there is a high potential for CRLFs to move through, occupy, and forage within both Piney and Hoffman Creeks.

Potential indirect impacts on CRLFs include degradation of water quality resulting from the discharge of sediment from water diversion sites and the alteration of the hydrology of Piney and Hoffman Creeks. The proposed project could significantly impact CRLFs and their habitat. Due to the regional rarity of this species, increased mortality of the CRLF would be significant under CEQA. Implementation of the mitigation measures below will reduce potential impacts to CRLF to less than significant levels.

San Francisco Garter Snake (SFGS)

The San Francisco Garter Snake (*Thamnophlis sirtalis tetrataenia*) is listed under the FESA and CESA as Endangered. They are highly aquatic and endemic to the San Francisco Bay Area, and occur sympatrically with their primary prey species, the CRLF. The SFGSs are known to occur within the Pescadero Marsh and based on a field assessment by MIG, Pescadero Creek could provide suitable habitat for SFGSs. However, SFGSs have not been documented within the upper reaches of Pescadero Creek near Redwood Glen. Based on a lack of suitable wetland and upland habitat at or near the existing points of diversion, Redwood Glen does not support suitable breeding habitat for the SFGS. In addition, SFGSs are not expected to use Hoffman or Piney Creeks as movement corridors due to their lack of connectivity to suitable wetland habitat. The SFGSs have a low potential to be present at the existing points of diversion (or within Redwood Glen as a whole) based on the lack of nearby occurrences of SFGSs and lack of suitable habitat requirements. No impacts are expected to occur to the SFGS and, as such, no mitigation measures specific to the SFGS are necessary.

Steelhead Salmon

Central California Coast Steelhead Salmon (*Oncorhynchus mykiss irideus*) is threatened under the FESA. Pescadero Creek is within NOAA Fisheries designated critical habitat for this species. Steelhead are known to occur within Pescadero Creek and its tributaries and could occur in the lower reaches of Hoffman and Piney Creeks where they flow into Pescadero Creek.

During MIG's September 14, 2017 site visit, biologists noted that the PODs on Hoffman and Piney Creeks are located close to their respective headwaters where the creeks are shallow and lack the deep water pools necessary for spawning. No steelhead salmon have been documented in Hoffman or Piney Creeks. In 2004, Hoffman Creek was evaluated as a part of a fish passage study and was described as "Steep…[and] Deemed not fish bearing". As such, there is a low potential for

steelhead to be located near the existing points of diversion.

Though the existing PODs may not impact this species, increased water diversion from Hoffman and Piney Creeks (tributaries of Pescadero Creek) and possible subsequent changes in the hydrology of both creeks may impact this species.

A hydrology analysis, by Balance Hydrologics, Inc. (Balance), assessed the existing PODs and the projected effects of increased quantities of water diversion proposed by Redwood Glen. Balance stated that the existing PODs are inefficient and allow the majority of base flows to passively bypass the diversion systems (see Section 9. for further discussion). Balance also observed that the PODs are located at the headwater springs of both creeks, can only divert a portion of the total base flow at the mouth of both creeks, and that spring flows downstream of the diversion sites are not diverted. They also noted that the drainage areas of Hoffman and Piney Creeks are small compared to Pescadero Creek and constitute less than one percent of flow into Pescadero Creek. They concluded that Hoffman and Piney Creeks provide an adequate water supply for Redwood Glen and that the increased diversion from both creeks would not have a significant effect on the flowrates of Pescadero Creek. Because steelhead salmon have the potential to exist in the lower reaches of Hoffman and Piney Creeks where they flow into Pescadero Creek, the proposed water diversion activities have the potential to impact their habitat during drought scenarios and the dry summer months. Implementation of Mitigation Measure 5 below relating to water conservation will reduce potential impacts to a less-than-significant level.

Western Pond Turtle (WPT)

The western pond turtle (*Emys marmorat*) is a designated state species of special concern. WPTs are normally found in and along riparian areas and are known to occur in Pescadero Marsh, and in the San Gregorio and Waddell Creek watersheds to the north and south of Pescadero Creek, respectively. Though this species has not been documented within the upper reaches of Pescadero Creek, field assessments by MIG of Pescadero Creek, Hoffman Creek, and Piney Creek concluded that these creeks could provide suitable high-quality habitat. Based on lack of nearby occurrences and lack of suitable upland grassland habitat, there is a low potential for WPT to occur within the Redwood Glen property. Impacts on the WPT would be similar to those described for the CRLF and the steelhead salmon relating to a potential change in the hydrology of Hoffman and Piney Creeks, and the potential of accumulated sediment discharge (see Section 9.a. for further discussion) from the existing PODs. Implementation of the mitigation measures listed for the California red-legged frog and the steelhead salmon will minimize impacts to this species to a less-than-significant level.

California Giant Salamander (CGS)

The California giant salamander (*Dicamptodon ensatus*) is a state designated species of special concern. One of the largest terrestrial salamander in North America, the CGS is endemic to California and occurs in wet coastal forests in or near clear, cold permanent or semi-permanent streams. Hoffman and Piney Creeks provide suitable habitat for the CGS and this species is known to occur within nearby areas of Redwood Glen. There is a high potential for CGSs to occur at or near the water diversion sites and elsewhere along Hoffman and Piney Creeks based on the presence of suitable habitat and past nearby occurrences of this species. Impacts to the CGS could arise from a change in hydrology of Hoffman and Piney Creeks due to an increase in water diversion and thus a reduction in suitable habitat. Implementation of the mitigation measures below relating to the adherence to a water conservation plan and water diversion maintenance pre-construction surveys will reduce potential impacts to the CGS to a less-than-significant level.

Foothill Yellow-Legged Frog (FYLF)

The foothill yellow-legged frog (*Rana boylii*) is a designated state species of special concern and is proposed to be listed as threatened under the CESA. FYLFs are found in partly-shaded, shallow streams with rocky substrates in forests/woodlands and are known to occur in adjacent Pescadero

Creek County Park. Hoffman and Piney Creeks provide suitable breeding and foraging habitat for the FYLF and there is a moderate potential for this frog species to occupy both creeks. Implementation of, and compliance with, the mitigation measure below will reduce potential impacts to the FYLF to a less-than-significant level.

Santa Cruz Black Salamander (SCBS)

The Santa Cruz black salamander (*Aneides niger*) is a designated state species of special concern. Endemic to California, SCBSs are terrestrial salamanders and are found in damp environments near streams and creeks in deciduous woodlands, coniferous forests, and coastal grasslands. SCBSs have been known to occur within nearby areas of Redwood Glen, and the redwood forest habitat near both Hoffman and Piney Creeks provides suitable habitat for this species. Based on the presence of suitable habitat and nearby occurrences of this species, there is a high potential for the SCBS to occur near the existing points of water diversion and throughout Hoffman and Piney Creeks. Potential impacts to the SCBS could occur from a reduction in suitable habitat due to increased rates of water diversion from both Hoffman and Piney Creeks. Implementation of the below mitigation measures will reduce potential impacts to the SCBS to less-than-significant levels. See Section 9. (*Hydrology and Water Quality*) below for a discussion of Redwood Glen's water rights and the potential impacts that increased rates of water diversion may have on the hydrology of Hoffman, Piney, and Pescadero Creeks.

Birds

Marbled Murrelet (MM)

The Marbled Murrelet *(Brachyramphus marmoratus)* is federally listed as threatened under the FESA and state listed as endangered under the CESA. The MM is an aquatic bird the feeds near-shore and nests inland along the coast in old-growth redwood dominated forests. The MM is known to nest in nearby Memorial and Pescadero County Parks and both parks are within the federally designated critical habitat for the MM. There is a high likelihood for the MM to nest within Redwood Glen due to the presence of suitable habitat and nearby past occurrences of this species. Impacts to the MM relating to nest disturbance could occur during routine maintenance of the existing points of water diversion. Implementation of the below mitigation measures relating to pre-activity surveys will reduce potential impacts to the Marbled Murrelet to less-than-significant levels.

Mammals

Townsend's Big Eared Bat (TBEB)

Townsend's big eared bat (*Corynorhinus townsendii*) is a designated state species of special concern and is proposed to be listed as threatened under the CESA. TBEBs forage within woodlands and long streams and will roost in caves, mines, and large tree cavities. This species is known to occur in the Pescadero - Butano watershed. TBEBs are extremely sensitive to human disturbance and will abandon roost sites after human interference. Based on habitat requirements and nearby occurrences, there is a high potential for this species to occur within Redwood Glen and near the existing points of water diversion. Future construction or maintenance activities in the project area could result in direct and indirect impacts to roosting bats. Implementation of the mitigation measures below relating to pre-activity surveys will reduce potential impacts to this species to a less-than-significant level.

Western Red Bat (WRB)

Western red bats (*Lasiurus blossevillii*) are a state species of special concern. The western red bat primarily roosts in riparian trees and orchards and prefer habitat with trees that are protected from above and open below with open areas for foraging, including grasslands, shrublands, and open woodlands. Western red bats are known to occur in the Pescadero - Butano watershed and have been documented on the nearby La Honda Creek Open Space Preserve. Based on nearby

occurrences of this species and the presence of necessary habitat, there is a high potential for the WRB to occur. As stated before, increased rates of water diversion are not expected to have a significant effect on the base flow of the creeks / creek habitat in Hoffman, Piney, or Pescadero Creeks. However, maintenance activities may impact roosting bats. Implementation of the mitigation measures below will reduce potential impacts to the WRB to a less-than-significant level.

Plants

Dudley's Lousewort (DL)

Dudley's lousewort (*Pedicularis dudleyi*) is state listed as rare. DL is a perennial herb, endemic to the central Californian coast and grows coniferous forest, particularly in deep shady woods and steep cut banks in older coast redwood forests. Blooming from April - June, DL is threatened by foot traffic, erosion, and development. Based on the presence of suitable habitat in conjunction with nearby occurrences of this species, Dudley's lousewort has a high potential to occur near the points of water diversion and elsewhere throughout Redwood Glen.

Avoid or Minimize Disturbance

Mitigation Measure 2: Prior to the installation of the proposed above ground piping and prior to any scheduled maintenance, a pre-activity survey for special-status plant and animal species and communities will be conducted by a USFWS-approved biologist at the existing points of water diversion at Hoffman and Piney Creeks. The survey will consist of walking the site to ascertain the possible presence of these species. The USFWS-approved biologist will investigate all potential areas near the existing PODs that could be used by these species for feeding, breeding, sheltering, movement, or other essential behaviors. If any adults, seedlings, juveniles, eggs, or tadpoles are found, the USFWS-approved biologist will contact the USFWS and/or California Fish Wildlife Service to determine if the proposed maintenance or construction activities will negatively affect any identified species and if moving any of the individuals is appropriate. If the USFWS approves moving animals, the biologist and USFWS will identify a suitable relocation site, and the applicant will ensure that the USFWS-approved biologist is given sufficient time to move the animals from the work site before work is initiated. Only USFWS-approved biologists can capture, handle, and monitor the California red-legged frog, San Francisco garter snake, marbled murrelet, or steelhead salmon.

Mitigation Measure 3: Marbled Murrelets nest from March to September. Scheduled maintenance (with the exception of emergencies) at the existing points of water diversion shall occur outside of the nesting season. If work cannot be scheduled outside the breeding season, then the applicant shall hire a qualified biologist to conduct pre-construction surveys for nesting birds no more than 14 days prior to onset of construction or maintenance activities. If any active bird nests are observed within 50 ft. (or 250 ft. for raptors) of the new piping infrastructure or water filtration facility, the work shall be postponed until the biologist determines that all young have fledged the nest.

Mitigation Measure 4: The applicant shall not apply insecticides or herbicides at the project site during project implementation or long-term operational maintenance where there is the potential for these chemical agents to enter creeks, streams, waterbodies, or uplands that contain potential habitat for the identified special-status species.

Mitigation Measure 5: Redwood Glen shall implement the following water conservation measures to reduce potential significant impacts to sensitive habitats:

a. Landscape and recreation fields shall be irrigated early in the day or late in the evening between the hours of 10:00 p.m. and 6:00 a.m.

b. Water shall not be allowed to run off to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

c. Leaking pipes or faulty sprinklers shall be repaired within five (5) days or less if warranted by

the severity of the problem.

d. No hosing down of automobiles, boats, roadways, and/or driveways shall be permitted. All automobiles and/or equipment shall be washed on the lawn.

e. Washing of streets, parking lots, and buildings shall be prohibited except as necessary for health, sanitary, or fire protection purposes.

f. Attach automatic shut-off devices on any hose or filling apparatus in use. No water from the potable water system shall be used to fill or refill the swimming pool except as necessary for public health or fire protection.

g. No outdoor water use of any kind is permitted during power outages.

Mitigation Measure 6: Prior to building permit approval for the construction and utilization of Piney and Hoffman Creeks as a potable water source, coordinate with all state agencies to obtain applicable jurisdictional permits for the project, including the California Department of Fish and Wildlife (CDFW) to obtain a Streambed Alteration Agreement (if CDFW deems it necessary) and the State Water Resources Control Board (SWRCB) to obtain all required permits for the proposed potable water system. Prior to the issuance of a building permit for this project, the applicant shall submit evidence of these required permits.

Source: MIG Biological Impact Report, December 2017; TMF Report Attachment 4B Hydrology, May 2017.

4.b.	Have a significant adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

Discussion: Riparian habitat and Redwood forest alliance habitat cover a majority of Redwood Glen. Redwood forest alliance is classified as a highly imperiled and sensitive natural community by CDFW. Though no trees or vegetation are proposed for removal, increased water diversion activities have the potential to impact these habitats. Due to the inefficient water diversion sites that allow water to bypass the diversion structures, the fact that Piney and Hoffman Creeks constitute less than one percent of the flow into Pescadero Creek, the location of the points of diversion (at the spring headwaters), the existence of a 70,000 gallon water storage tank (that provides supplemental water during the dry months), and the implementation of water conservation activities (Mitigation Measure 5), the water diverted from both streams will not negatively affect surrounding vegetation.

Source: MIG Biological Impact Report, December 2017; TMF Report Attachment 4B-Hydrology, May 2017.

4.c.	Have a significant 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?				X

Discussion: There are no identified wetlands on the project parcel, nor is there any physical

evidence (such as wetland vegetation) to suggest that wetlands are present on-site. **Source:** Project Plans; Site Visit; Biological Impact Report, December 2017.					
4.d.	Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
Discussion: Redwood Glen (which consists of APNs 084-271-100; 084-271-260; 084-071-270; 084-120-060; and 084-120-010) is mostly undeveloped and is surrounded by open space and rural development including Pescadero Creek County Park to the south and Memorial County Park to the north. The undeveloped open spaces (including riparian, aquatic, and woodland habitat) within Redwood Glen likely act as wildlife corridors to both County parks and to Pescadero Creek. Operation of the existing water diversion sites and renewal of the camp's conditional use permit will not alter or impede wildlife movement. **Source:** Project Plans; MIG Biological Impact Report, December 2017.					
4.e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?				X
Discussion: No tree removal activities are proposed. Additionally, increased water diversion from Hoffman and Piney Creeks is not expected to have a significant impact on the surrounding redwood forest alliance/riparian habitat (see 4.b. above and Section 9. below). **Source:** MIG Biological Impact Report, December 2017; TMF Report Attachment 4B-Hydrology, May 2017.					
4.f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan?				X
Discussion: The project parcel is not located within the boundaries of any said conservation plan. **Source:** California Department of Fish and Wildlife.					
4.g.	Be located inside or within 200 feet of a marine or wildlife reserve?				X
Discussion: The project parcel nor the project site is inside or within 200 feet of a marine or wildlife reserve. **Source:** Project Location; California Department of Fish and Wildlife Services; National Wildlife Refuge System Locator.					

4.h.	Result in loss of oak woodlands or other non-timber woodlands?				X

Discussion: The project parcel does not contain oak woodlands; however, the parcel is heavily forested and is composed of a mixture of redwood forest alliance and riparian habitat. No impacts are expected to occur as no trees or vegetation removal activities are proposed with this project.

Source: MIG Biological Impact Report, December 2017; TMF Report Attachment 4B-Hydrology, May 2017.

5. CULTURAL RESOURCES. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
5.a.	Cause a significant adverse change in the significance of a historical resource as defined in CEQA Section 15064.5?			X	

Discussion: A referral was sent to the California Historical Information System (CHRIS) in April 2018. Their response noted that previous studies conducted in 1992 and 2007 identified the presence of resources and recommended that a new archaeological survey be conducted for the proposed project.

An archaeological survey conducted by MIG was submitted to the County in June 2018. One potential historical resource was noted on the parcel. Implementation of the proposed project will not have an impact on any identified historical resources nor affect the resources' potential eligibility for the California Register of Historical Resources (CRHR). As such, the proposed project would not result in an adverse change in the significance of the potential historical resource and a less than significant impact would occur.

Source: Project Plans; Archaeological Report, June 2018.

5.b.	Cause a significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?		X		

Discussion: In 1992, an archaeological survey was conducted on select portions of Redwood Glen's properties for the purposes of submitting a Timber Harvest Plan (THP 1-93-426 SMO). The survey resulted in the identification of archaeological resources. In 2007, Redwood Glen prepared a new Timber Harvest Plan (THP 1-06-147 SMO) and conducted another investigation into the archaeological resources as required and as part of the proposed timber harvesting operations. The resources found in 1992 were not found in 2007.

The 2018 archeological report prepared by MIG assessed the areas surveyed in 1992 and 2007 and included a 25-ft., buffer area on either side of the proposed above ground water pipeline. No cultural/archaeological resources were noted in the 2018 archaeological report. Though the project's minimal grading activities are not considered to have an adverse change to any previously identified archaeological resources, grading activities may have the potential to unearth previously

undiscovered subsurface archaeological resources.

In order to preserve potential undiscovered archaeological resources and reduce the proposed project's impacts to a less than significant level, the following mitigation measures from the 2018 archaeological report are proposed:

Mitigation Measure 7: Archaeological monitoring shall be instigated for all ground disturbing activities. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology shall be present at the project site during ground disturbing activities, including machine or hand excavation, or grubbing. No ground disturbing activities of any kind shall be allowed to take place if the archaeologist is not present. An archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased.

Mitigation Measure 8: In the event that archaeological remains from either a historic or prehistoric period are discovered (or have been suspected to have been discovered) during project construction, all ground disturbing work on the site shall cease and the Planning Department shall be notified of any such findings. The archaeologist shall assess the discovery before any additional ground disturbing work within the site shall be allowed to continue. No further ground disturbing work shall be allowed to continue until the archaeologist has fully evaluated the find, recommended appropriate protection measures, and those measures have been approved by the Planning Department, and implemented by the project applicant. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue.

Mitigation Measure 9: All excavator machinery shall use toothless buckets during ground disturbing activity to allow the monitoring archaeologist to more clearly identify archaeological features, if present.

Mitigation Measure 10: If a newly discovered resource is, or is suspected to be, Native American in origin, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Source: Project Plans; Timber Harvest Plan THP-1-06-147-SMO; Archaeologist Report, June 2018.

5.c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Discussion: The project site consists of sedimentary rocks (Tes), overlying rocks, and alluvium (Qoa) surficial sediments which are common geologic materials in the area. No mapped unique paleontological resources or geological features are found on the project parcel. No impacts are expected to occur.

Source: United States Geological Survey Geologic Map of the San Francisco Bay Region.

5.d.	Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion: Minimal grading activities in the form of trenching to connect the proposed project to an existing water main and slight leveling of the site to accommodate the above ground supports for the water filtration facility and water tanks are proposed with this project. The maximum depth of excavation will be approximately 3 feet below ground level. There are no known human remains located on the site and none were identified in previous evaluations of the project area. However,

the following mitigation measure has been included in the event human remains are encountered.

Mitigation Measure 11: In the event of discovery or recognition of any human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The applicant shall then immediately notify the County Coroner's Office and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Source: California Public Resources Code; Project Location.

6. GEOLOGY AND SOILS. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
6.a.	Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
	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 significant evidence of a known fault? *Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.*				X

Discussion: The project site is not located in a mapped Alquist-Priolo Earthquake Fault Zone or special study area where fault rupture is likely to occur.

Source: State of California Department of Conservation, California Geological Survey, Alquist-Priolo Regulatory Map.

	ii. Strong seismic ground shaking?			X	

Discussion: The project parcel is located approximately 4 miles away from the San Gregorio fault and 6 miles away from the San Andreas fault. The project site is expected to experience very strong ground shaking for a high intensity of 7.5 (Modified Mercalli Intensity (MMI)) earthquake scenario on the San Gregorio Fault and a strong shaking for a 7.2 MMI earthquake scenario on the San Andreas Fault. The principal concern related to human exposure to ground shaking is that strong ground shaking can result in structural damage to buildings, potentially jeopardizing the safety of its occupants. The water filtration facility is automated and access to the facility is restricted which limits the time and number of people that would be in the water filtration facility structure at any one time. The proposed project will be required to comply with applicable California Building Code

standards and is not considered a habitable structure. Similarly, all permitted structures on-site have been built to comply with the applicable California Building Code earthquake safety standards. Redwood Glen also has a camp wide emergency evacuation plan in place in case of future natural disasters. Therefore, the project and renewal of Redwood Glen's use permit pose little risk to health or safety. No further mitigation is necessary. **Source:** Association of Bay Area Governments, Shaking Hazard Map; Project Plans.				
iii. Seismic-related ground failure, including liquefaction and differential settling?			X	
Discussion: Based on the San Mateo County Geotechnical Hazards Synthesis Map, there is a low potential for liquefaction in the project area. The water filtration equipment (housed in a shipping container) is limited to private use, unmanned, and is not considered a habitable structure. Therefore, the proposed project proposes little risk to health or safety. No mitigation is necessary. **Source:** San Mateo County Geotechnical Hazards Synthesis Map, 1973.				
iv. Landslides?			X	
Discussion: Based on the U.S. Geological Survey's Landslide Susceptibility Map of 1972, the project site is located in Landslide Susceptibility IV (areas of very high susceptibility to landslide). The parcel has moderate to steep slopes. However, the water filtration facility is located in a flat portion of the parcel and does not exhibit visible scars of past slope failures. No grading activities that would impact ground stability are proposed. Therefore, the likelihood of a landslide at the project site is low. In addition, the project will be subject to the issuance of a building permit and all work shall be completed in accordance with the California Building Code. **Source:** U.S. Geological Survey's Landslide Susceptibility Map, 1972; Project Location; Site Visit.				
v. Coastal cliff/bluff instability or erosion? *Note to reader: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).*				X
Discussion: The project parcel is not located near any coastal cliffs or bluffs. **Source:** Project Location.				
6.b. Result in significant soil erosion or the loss of topsoil?				X
Discussion: Minimal grading activities in the form of trenching to connect the proposed project to an existing water main and slight leveling of the project area for the construction of the above ground water storage tanks and filtration facility supports are proposed. These grading activities are minor in nature and are confined to a small previously cleared and developed area of the property (084-271-260). No vegetation or tree removal activities are proposed for this project. The water filtration facility and associated water storage tanks are located adjacent to an existing dirt road in an area of the parcel that was previously developed with water storage tanks. While the water filtration facility was previously installed on the subject parcel, construction of the facility would not have resulted in significant soil erosion or loss of topsoil due to the fact that the facility sits above ground and only minimal grading in the form of leveling out the ground for the above ground supports was required				

for the construction of the facility's foundation. Similarly, the placement of the proposed above ground linear piping is not expected to result in soil erosion or loss of topsoil.

Operation of the proposed facility is not expected to result in significant erosion or loss of topsoil. Water from the creeks will be delivered to the water tanks and water filtration facility through waterproof piping while wastewater will be disposed of off-site. Because water from the proposed project will not flow freely across the parcel, no soil erosion or loss of topsoil is expected.

Source: Project Plans.

6.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, severe erosion, liquefaction or collapse?			X	

Discussion: See 6.a. and 6.b. above.

Source: U.S. Geological Survey's Landslide Susceptibility Map, 1972; Project Plans.

6.d.	Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property?				X

Discussion: The principal concern related to expansive soil is that it can result in structural damage, potentially jeopardizing the safety of persons in or around the structures. The water treatment facility will be required to comply with applicable California Building Code standards and is not considered a habitable structure. Furthermore, its use will be limited to providing potable drinking water to the camp facility and will be unmanned for a majority of its operation (with the exception of maintenance checks, etc.). Therefore, the project will not pose a significant risk to life of property. No mitigation is necessary.

Source: Project Plans.

6.e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?		X		

Discussion: Though the proposed water filtration facility and infrastructure do not involve the use of septic systems, Redwood Glen's soils are capable of adequately supporting the use of septic tanks as several septic systems exist throughout the Redwood Glen property. These septic systems have been reviewed and approved by the San Mateo County Environmental Health Division for Redwood Glen's Use Permit Renewal.

The water treatment facility will generate wastewater and insoluble solids which will be collected in a 2,500 gallon backflush settling tank and a separate 2,500 gallon Clean In Place (CIP) settling tank. As conditioned below, the wastewater from these tanks will be hauled off-site and disposed at an appropriate facility (Trinity Liquid Waste Services). As such, the disposal of the wastewater will not require the construction of additional wastewater disposal infrastructure nor will it impact the existing septic system infrastructure. To ensure no impacts result from the wastewater generated from the

water filtration facility, the following mitigation measures shall be implemented:

Mitigation Measure 12: The water treatment and storage facilities shall be properly maintained at all times. The water filtration facility shall be supervised by a Wastewater Treatment Operator licensed by the State Water Resources Control Board.

Mitigation Measure 13: No wastewater or settled solids shall be discharged on-site. All wastewater and solids generated from the water filtration facility's CMF waste streams shall be hauled off-site and disposed at a licensed waste facility.

Source: Technical, Managerial, and Financial (TMF) Report, Operations Plan; Surface Water Treatment Plant Waste Management Plan.

7. CLIMATE CHANGE. Would the project:

		Potentially Significant Impacts	*Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
7.a.	Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?			X	

Discussion: Project-related materials delivery or construction activities may result in the temporary generation of GHG emissions along travel routes and at the project site. In general, construction-related GHG emissions result mainly from exhaust from vehicles (i.e., construction vehicles and personal cars of construction workers). Due to the site's rural location, temporary nature of construction, and no emissions generated from the water filtration facility itself, the project's construction GHG emission levels are considered to be less than significant. Furthermore, Mitigation Measure 1 includes BAAQMD Best Management Practices for reducing construction vehicle and equipment emissions. No further mitigation is necessary.

Source: Project Plans.

7.b.	Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X		

Discussion: The San Mateo County Energy Efficiency Climate Action Plan (EECAP) identifies implementation measures for the reduction of GHG emissions resulting from development consistent with state legislation, including construction idling. GHG emissions from the project are expected to occur during the construction phase, primarily from vehicle exhaust. Although the emissions are temporary in nature, Mitigation Measure 1 in Section 3.a. will help ensure that any such temporary emissions are minimized.

Source: San Mateo County EECAP; BAAQMD 2017 CEQA Guidelines.

7.c.	Result in the loss of forestland or conversion of forestland to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering?			X	

Discussion: The project parcel meets the definition of forestland and is heavily forested with a mixture of redwood trees, pine trees, and riparian habitat. The Biological Impact Report prepared by MIG (December 2017) in conjunction with the findings made by Balance, Inc. concluded that the existing water diversion sites are inefficient and that the projected water diversion activities will not have a significant effect on existing water base flow rates for Piney or Hoffman Creek. As such, MIG concluded that the project would have a less than significant impact on the health of the surrounding forestland. In addition, the water filtration facility and water tanks will be located adjacent to an existing dirt road and will not require the removal of any trees. Similarly, the proposed piping will be placed above ground, will be laid between existing trees, and will not cause removal of trees or conversion of forestland.

The project will not alter the tree coverage on the parcel, will not convert forestland to a non-forestland use, and will not result in the release of significant amounts of GHG emissions.

Source: Biological Impact Report, December 2017; TMF Report.

7.d.	Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X

Discussion: The project parcel is over six miles from the Pacific Ocean and does not contain coastal cliffs and/or bluffs.

Source: Project Location; San Mateo County GIS.

7.e.	Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X

Discussion: The project parcel is located over six miles from the Pacific Ocean and sits well above sea level. As such, the project will not expose people or structures to significant risk involving sea level rise.

Source: Project Location; San Mateo County GIS.

7.f.	Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X

Discussion: The project parcel is not located in such an area. The project site is located within Flood Zone X (areas with minimal flood risk outside the 1-percent and 0.2-percent-annual-chance floodplains); Community Panel No. 06081C0395E, effective October 16, 2012.

Source: Project Location; Federal Emergency Management Agency, Flood Map Service Center.

7.g.	Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X

Discussion: The project is not located in such an area.

Source: Project Location; Federal Emergency Management Agency Flood Hazard Maps.

8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
8.a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?		X		

Discussion: The water filtration system will require the regular use of a NSF-60 certified 12.5% sodium hypochlorite solution and a NSF-60 certified citric acid anhydrous solution to make the water from the surface streams potable. Undiluted, these chemicals can be hazardous. The delivery of the sodium hypochlorite and citric acid anhydrous solutions will be regulated by industry standards. Implementation of Mitigation Measure 14 will reduce public or environmental exposure to these chemicals to less than significant levels.

Source: Project Plans; TMF Report.

8.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?		X		

Discussion: Project operation will require the storage and use of certain hazardous chemicals such as NSF-60 sodium hypochlorite and citric acid anhydrous. Inadvertent release of these materials into the environment could adversely impact soil, surface, or groundwater quality. To minimize this potential impact, the following mitigation measure is proposed:

Mitigation Measure 14: The applicant shall use the following Best Management Practices to minimize potential adverse effects of the project to groundwater and soils from chemicals used during the operation of the water filtration facility:

a. Follow the manufacturer's recommendations on use, storage, and disposal of chemicals used in the water filtration and cleaning process.

b. Avoid overtopping storage containers.

c. Provide secondary containment for any hazardous materials stored on-site.

d. Personal Protective Equipment (PPE) warning signs shall be placed on all chemical storage

containers.

e. Appropriate chemical warning signs shall be placed on the exterior of the water filtration facility.

f. Perform regular inspections of the water filtration system equipment and materials storage areas for leaks and maintain records documenting compliance with the storage, handling, and disposal of hazardous materials.

Source: Project Plans; TMF Report.

8.c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X

Discussion: The project site is not located within one-quarter mile of an existing or proposed school.

Source: Project Plans; Project Location.

8.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?				X

Discussion: The project site is not located in an area identified as a hazardous materials site.

Source: California Department of Toxic Substances Control, Hazardous Waste and Substances Site List.

8.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?				X

Discussion: The project site is not located within a known area regulated by an airport land use plan nor is it located within two miles of a public airport or public use airport.

Source: Project Location.

8.f.	For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?				X

Discussion: The project parcel is not located within the vicinity of any known private airstrips.

Source: Project Location.

8.g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Discussion: There is no evidence to suggest that the project will interfere with any emergency response plan. The water filtration system and associated water tanks will be located adjacent to a private dirt road in a sparsely developed area of the project parcel. The proposed above ground piping will be low lying, located adjacent to existing private roads/trails, and will not impede access to the site. All improvements are located within the boundaries of the project parcel, no work will occur that will impeded or close a public road, and there is no expectation that the proposed project will impact any such emergency response or evacuation plans. **Source:** Project Plans.					
8.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?			X	
Discussion: The project site is located within a High Fire Hazard Severity Zone. The water filtration facility and Use Permit Renewal was reviewed and approved by the San Mateo County Fire Authority (Cal-Fire). Given that the water filtration facility does not involve the construction of any habitable structures nor place more people within a fire hazard area than already occupy the Redwood Glen property, there is a less than significant impact. **Source:** Project Plans; Cal-Fire, Fire Hazard Severity Zones Maps.					
8.i.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Discussion: The project does not involve the construction of any housing or habitable structures. The project site is not located in 100-year flood hazard area. The project site is located within a Flood Zone X (areas with minimal food risk). No base flood elevations or base flood depths are shown within these zones. Community Panel No. 06081C0395E, effective October 16, 2012. **Source:** Project Plans; Federal Emergency Management Agency, Flood Map 06081C0395E.					
8.j.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
Discussion: See Section 8.i. above. **Source:** Project Location; Federal Emergency Management Agency, Flood Map 06081C0395E.					

8.k.	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?				X

Discussion: The project site is not located within a mapped flood area or within the vicinity of a levee or dam inundation area.

Source: Project Location; San Mateo County Dam Failure Inundation Areas Map.

8.l.	Inundation by seiche, tsunami, or mudflow?				X

Discussion: The project site is not in a seiche, tsunami, or mudflow hazard zone.

Source: San Mateo County General Plan, Hazards Map.

9. HYDROLOGY AND WATER QUALITY. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
9.a.	Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash))?		X		

Discussion:

Hoffman Creek

The existing Hoffman Creek diversion structure consists of a stainless-steel sink attached to a redwood log that crosses the creek. Sediment entrained from the diversion structure accumulates in a series of three 55-gallon plastic drums located along the bank of Hoffman Creek. The drums are drained twice annually to the upper bank of Hoffman Creek, once in mid-spring (March or April) and once following the first winter storm (October or November). Each drum is flushed one at a time and the discharged water and sediment are trickled through the rocks on the bank (to reduce turbidity) and reintroduced to the creek. Approximately 1.7 cubic yards of sediment reenters the creek annually (0.85 cubic yards per flush cycle). When necessary, sediment accumulation behind and within the diversion structure is scooped out of the sink, spread outside the banks of the creek, and does not renter the stream. Per Redwood Glen's Diversion Point Maintenance Procedure Plan (Attachment C), possible future repairs to the Hoffman Creek diversion structure may consist of resetting a stainless steel bolt or replacing a pipe flange. In addition, no chemicals/toxic substances would be involved in these repairs and all repair procedures, with the exception of bolt replacement, will occur outside of the creek channel.

Piney Creek

The existing Piney Creek diversion structure consists of a small concrete dam (4-ft. wide) and includes a 2-inch diameter diversion port, a 2-inch bypass port, and a 4-inch sediment sluice port. Sediment accumulates behind the dam structure. To clean the accumulated sediment, the sluice port is opened and sediment is flushed downstream twice annually, once in mid-spring (March/April) and again following the first fall storm event (October/November). When the sluice port is opened, a flush of 13.5 cubic feet of water and 2 cubic yards of sediment (4 cubic yards annually) are flushed downstream. Anticipated maintenance of the diversion structure is expected to include clearing leafy debris from the clogged ports by hand and the replacement of piping when necessary.

Natural sediment flow, which is an important component to stream health, can be interrupted by diversion structures. Redwood Glen's maintenance activities listed above propose to reintroduce the small quantities of sediment trapped behind the diversion structures to the creeks systems in order to maintain a healthy stream environment and morphology. Any increase in turbidity resulting from maintenance activities is very short in duration and localized at the discharge location. Balance, Inc. reviewed Redwood Glen's Diversion Point Maintenance Procedure Plan and concluded that anticipated maintenance activities would not impact the hydrologic or geomorphic features of Piney or Hoffman Creek.

With implementation of mitigation measures below which reduce water turbidity and limit maintenance activities that occur in the creeks, MIG concluded that the proposed Maintenance Plan would not result in significant impacts to biological resources.

Mitigation Measure 15: All repair work for the Hoffman Creek diversion structure, with the exception of the bolt replacement, shall occur outside the creek channel.

Mitigation Measure 16: Sediment-laden water associated with Hoffman Creek maintenance activities shall be reintroduced to the creek system through a natural filter (such as rocks and creek bank vegetation) to reduce water turbidity.

Mitigation Measure 17: Any required PVC glue necessary for the Piney Creek diversion structure shall be added to the pipe outside the creek channel and shall fully cure prior to installing the pipe in the creek.

Mitigation Measure 18: In the event of an extreme storm event where significant amounts of sediment accumulates behind the Piney Creek diversion dam, Redwood Glen shall remove the accumulated sediment using hand tools and spread the sediment outside the banks of the creek to prevent the reintroduction of the sediment into the creek system.

Source: Redwood Glen's Diversion Point Maintenance Procedure Plan; Project Plans.

9.b.	Significantly deplete groundwater supplies or interfere significantly 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)?			X	

Discussion: Redwood Glen is proposing to use a combination of existing wells and surface streams to meet their projected water demand. Of four existing groundwater wells on-site, only one well (drilled in 1992) provides acceptable potable water. Another well, also drilled in 1992, does not

meet potable water standards but can be used for irrigation. The two other existing wells were not pursued as potable water sources due to low pumping yields and poor water quality. Though Redwood Glen has two viable wells, a majority of their potable water demand will be met with water from surface streams. Utilization of the wells and surface streams would not significantly deplete groundwater supplies or interfere with groundwater recharge. Located at headwater springs, the diversion structures can only divert a small portion of the creek's total base flow at the mouth of the creek. The hydrology report determined that the proposed quantity of water diversion was not a significant quantity compared to overall creek flow and noted that spring flows downstream of the PODs are not diverted and are allowed to flow naturally, recharging the groundwater supply. In addition, the existing inefficient water diversion structures allow a majority of the water in Piney and Hoffman Creeks to bypass diversion and flow freely.

The Hoffman Creek diversion structure consists of a stainless steel sink attached to a redwood log across the creek. Sediment and wood debris that are impounded behind the log have raised the creek bed to allow water to flow over the log and into the sink. Underflow beneath the log bypasses the diversion structure, as does overflow when the sink is spilling. For example, Balance, Inc. measured late dry-season bypass base flows at the Hoffman Creek diversion structure in September 2017 and found that 0.73 gallons of water per minute (gpm) was being diverted while 4.6 gpm was passively flowing below the diversion structure.

Similarly, the Piney Creek diversion structure is also inefficient and allows water to bypass diversion. The Piney Creek diversion structure consists of a small 4-ft. wide dam and includes a bypass port and diversion port. The bypass port is the same size and located at the same elevation of the diversion port and passively splits the flow of Piney Creek in half. This allows a significant amount of water to bypass the diversion port and continue flowing downstream.

An analysis by Balance, Inc. determined that Hoffman and Piney Creeks supply enough water to meet Redwood Glen's projected water demand (see Section 18.d. for further discussion). Utilizing surface streams and two existing wells to meet Redwood Glen's water demand will have a less than significant impact on ground water supplies due to the fact that the diversion structures allow a majority of the water in the creeks to bypass diversion and recharge ground water supplies.

Source: MIG Biological Impact Report, Dated December 2017; TMF Report.

9.c.	Significantly 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 that would result in significant erosion or siltation on- or off-site?		X		

Discussion: The 320 sq. ft. water filtration facility (which is already constructed) is located in a flat area of the parcel. The shipping container that houses the filtration facility is elevated on pedestals and will not alter the natural drainage of the site as water will still be able to percolate into the soil. Additionally, utilization of the existing PODs is not expected to result in significant erosion and/or siltation. The Hoffman and Piney Creek PODs have been in situ for many years. Because water is allowed to flow under and below the PODs, use of these structures would not create a significant enough blockage that would cause the waterways to shift. Per Redwood Glen's POD Maintenance Procedure Plan (see 9.a. above), the small amount of sediment that accumulates behind the diversion structures would be reintroduced to the creek systems twice annually. Reintroduction of natural sediment into the creek systems will level out the creek beds, shore up the banks downstream, and prevent the creeks from altering their natural drainage patterns. Implementation of the following mitigation measure which requires Redwood Glen to quickly repair pipe leaks will ensure that transport of water from the creeks to the water filtration facility will not result in significant

erosion or on-site flooding. **<u>Mitigation Measure 19</u>:** The proposed above ground piping shall be inspected regularly for leaks. Upon discovery, all leaks shall be repaired within five (5) days or less. **Source:** MIG Biological Impact Report, December 2017; Diversion Point Maintenance Procedures.					
9.d.	Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?		X		
Discussion: See Section 9.c. above. **Source:** MIG Biological Impact Report, December 2017; Diversion Point Maintenance Procedures.					
9.e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide significant additional sources of polluted runoff?		X		
Discussion: See Section 9.c. above. **Source:** MIG Biological Report, Dated December 2017; Diversion Point Maintenance Procedures.					
9.f.	Significantly degrade surface or ground-water water quality?		X		
Discussion: Operation of the water filtration facility and utilization of the water diversion structures will not significantly degrade surface or groundwater quality. Implementation of Mitigation Measures 15-18 will ensure that all POD maintenance activities will not degrade the water quality of Hoffman or Piney Creek. See Section 9.a. for further discussion. **Source:** Redwood Glen's Diversion Point Maintenance Procedure Plan; Project Plans.					
9.g.	Result in increased impervious surfaces and associated increased runoff?			X	
Discussion: Elevated on pedestals, the water filtration facility structure will result in approximately 320 sq. ft. of impervious surface area. This increase in impervious surface area is minimal compared to the size of the parcel (084-271-260) and is not expected to result in increased water runoff as water will still be able to percolate into the ground under and around the water filtration facility structure. See Section 9.c. above for further discussion. **Source:** Redwood Glen's Diversion Point Maintenance Procedure Plan; Project Plans.					

10. LAND USE AND PLANNING. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
10.a. Physically divide an established community?				X
Discussion: There is no land division or development proposed that would result in the diversion of an established community. The project will provide the potable water necessary to continue the operation of a private camp ground and the associated occupation of six staff residences. **Source:** Project Plans.				
10.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?				X
Discussion: The project as proposed and conditioned (including the mitigation measures cited in this report) will not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental impact. **Source:** Project Plans; Zoning Regulations.				
10.c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
Discussion: The project would not conflict with any Habitat Conservation Plans or Natural Conservation Community Plans as none exist on the project parcel. **Source:** California Department of Fish and Wildlife, Habitat Conservation Planning, California Regional Conservation Plans Map.				
10.d. Result in the congregating of more than 50 people on a regular basis?			X	
Discussion: After construction, the water filtration facility will be largely self-sufficient and unmanned. Periodic maintenance activities will be short in duration and will not require a large number of workers. The water treatment facility will allow for the continued operation of Redwood Glen's private camp ground and conference center which may involve gatherings of 50 or more persons at a time. In operation since 1958, the water filtration facility will not result in increased congregations or visitorship to Redwood Glen beyond that which is already existing. **Source:** Project Plans.				

10.e.	Result in the introduction of activities not currently found within the community?				X

Discussion: The project consists of installing a water treatment facility, two 2,500 gallon water storage tanks, associated above ground piping, and changing Redwood Glen's water source from County Memorial Park to surface creeks. Because County Memorial Park no longer provides Redwood Glen with potable water, the proposed project is necessary to meet County requirements that all residential development have a sustainable source of potable water. The proposed project will allow Redwood Glen to continue its operation and will not introduce any activities not currently found in the community.

Source: Project Plans.

10.f.	Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?				X

Discussion: The project proposes improvements to only serve Redwood Glen. These improvements are completely within the boundaries of the Redwood Glen's property and do not encourage off-site development of underdeveloped areas. The project will not increase the development intensity of Redwood Glen itself as the currently proposed water system is designed to meet Redwood Glen's current projected needs. Any expansion of Redwood Glen's facilities (i.e., increased vistorship) would require an amendment to their Use Permit and would most likely require establishing another point of water diversion. Establishment of a new POD would require additional review and permits from various governmental agencies (i.e., CDFW and SWRCB).

Source: Project Plans; TMF Report.

10.g.	Create a significant new demand for housing?			X	

Discussion: As stated above, the project proposes improvements that will only serve Redwood Glen. The implementation of the proposed project will not create a significant demand for housing but allow the existing staff housing on the site to remain by providing a permanent source of potable water.

Source: Project Plans.

11. MINERAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
11.a. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X
Discussion: There are no known mineral resources identified on the project parcel. **Source:** Project Location; San Mateo County General Plan Mineral Resources Map.				
11.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?				X
Discussion: There are no locally important mineral resource recovery site(s) delineated on the County's General Plan, any specific plan, or any other land use plan. **Source:** Project Location; San Mateo County General Plan.				

12. NOISE. Would the project result in:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
12.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?			X	
Discussion: The construction of the proposed project will not generate excess noise levels as the water treatment facility will be housed in a shipping container and is partially pre-fabricated upon delivery. The proposed piping will not generate excessive noise levels as the piping will be placed above ground, will not require grading, and will by laid by hand. Similarly, the operation of the water treatment facility will not expose persons to excessive noise levels as the facility will be located away from existing residences and cabins. Though the operation of the water treatment facility will generate some noise, the shipping container will attenuate any noise generated to ensure that noise levels do not exceed standards established in the San Mateo County Noise Ordinance. **Source:** Project Plans; San Mateo County Noise Ordinance.				

12.b.	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				X
Discussion: It is not anticipated that this project will utilize heavy equipment that creates large amounts of vibration. There are no aspects of the project that would include generation of excessive ground-borne vibration or ground-borne noise levels. **Source:** Project Plans.					
12.c.	A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
Discussion: A temporary increase in ambient noise levels during the construction phase of the project is expected. Once construction is complete, the project is not expected to generate significant amounts of noise and noise levels will return to levels similar to the existing noise environment. The project will not result in excessive maintenance activities that will generate significant new levels and amounts of noise. Operational noise impacts will be less than significant. **Source:** Project Plans.					
12.d.	A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
Discussion: See Discussion 12.c. above. **Source:** Project Plans.					
12.e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure to people residing or working in the project area to excessive noise levels?				X
Discussion: The project site is not within or near an airport land use plan. **Source:** County GIS; Project Location.					
12.f.	For a project within the vicinity of a private airstrip, exposure to people residing or working in the project area to excessive noise levels?				X
Discussion: There are no private airstrips within the vicinity of the project site. **Source:** County GIS; Project Location.					

13. POPULATION AND HOUSING. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
13.a. Induce significant 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)?				X
Discussion: The project will not induce population growth as the water filtration system is located within the boundaries of the privately-owned project parcel. The water treatment facility, which is pending permits with the SWRCB, has been designed to only serve Redwood Glen. The water facility is not designed to, and will not, serve any adjacent parcels not owned by Redwood Glen. As their main source of potable water, the water treatment system is necessary for Redwood Glen's continued operation and will not trigger population growth in the area. Any proposed intensification of use or development will be subject to discretionary review under Redwood Glen's Use Permit. **Source:** Project Plans.				
13.b. Displace existing housing **(including low- or moderate-income housing)**, in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere?				X
Discussion: Six staff residences are located throughout the Redwood Glen camp facility. The proposed project would not displace existing housing or persons, as no residences are located near the location of the water treatment facility. The proposed project will provide potable water for the site and allow for the continued habitation of the staff residences. **Source:** Project Plans.				

14. PUBLIC SERVICES. Would the project result in significant adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
14.a. Fire protection?				X
14.b. Police protection?				X
14.c. Schools?				X

14.d.	Parks?				X
14.e.	Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?				X

Discussion: The project will not introduce uses that would adversely impact public services. No impacts to pubic services will occur as the project parcel is already developed. The project will allow for the continued operation of an existing private recreation facility.

Source: Project Plans.

15.	**RECREATION**. Would the project:				
		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
15.a.	Increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated?			X	

Discussion: The installation of the water treatment facility and associated infrastructure will allow for the continued operation of this private recreation facility. The proposed project will not increase visitorship but will enable Redwood Glen to continue its operation. Per the direction of the State Water Resources Control Board, Redwood Glen has ceased operations as of May 15, 2018. Until the permitting process necessary to construct the water filtration facility and provide a reliable source of potable water is completed, Redwood Glen will not be open for business or continue to accept visitors.

Source: Project Plans.

15.b.	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		X		

Discussion: The proposed project does not involve the expansion of private recreational facilities but will allow for the continued operation of Redwood Glen's private recreational facilities. The change of potable water source from County Memorial Park to surface streams has the potential to adversely affect the environment by drawing too much water from the streams. However, these potential impacts were assessed in a Biological Impact Report prepared by MIG, dated December 2017 and are discussed in Section 4. (*Biology*) above. Implementation of Mitigation Measures 12-13 and 15-19 will reduce impacts to less than significant levels.

Source: Project Plans; TMF Report; Biological Impact Report, Dated December 2017.

16. TRANSPORTATION/TRAFFIC. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
16.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?				X
Discussion: The proposed project involves the construction of a water treatment facility and above ground linear piping and will result in a temporary increase of traffic levels during construction. As the water treatment facility will require off-hauling of wastewater once a month, the project will not generate significant operational traffic upon completion. The water treatment facility itself will require weekly inspections involving 1-2 Redwood Glen staff members and would not generate a net increase in traffic. **Source:** Project Plans; TMF Report.				
16.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?				X
Discussion: No impacts are expected to occur as the project is not located within a congestion management designated area. In addition, the proposed site improvements will occur on a privately-owned parcel and the project does not involve a level of development that would conflict with any congestion management plan for designated roads or highways. **Source:** City/County Association of Governments of San Mateo County Final San Mateo County Congestion Management Program 2013; Project Plans.				
16.c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in significant safety risks?				X
Discussion: The project will not require or result in a change in air traffic patterns as the project site is not located near any public or private airports; therefore, no impacts will occur. **Source:** Project Location; County GIS.				

16.d.	Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
Discussion: The proposed project will not alter any existing roadways, create an impediment or hazard, or permanently utilize equipment that would be incompatible with existing vehicular traffic. **Source:** Project Plans.					
16.e.	Result in inadequate emergency access?				X
Discussion: The proposed project will not change existing access to the project site. The water filtration facility will be located at the easterly edge of the parcel off of a private road away from the main entry. The proposed linear piping will be located away from the main residences and cabins and will be parallel to existing private roads and trails. Both the proposed water filtration facility and piping will not interfere will emergency access to the site. Additionally, in the event of an emergency, the existing water storage tanks (and water filtration facility/infrastructure) can be used as supplemental water sources for fire suppression. **Source:** Project Plans.					
16.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?				X
Discussion: The project will not impact any bicycle, pedestrian, or public transit facilities, prevent the implementation of any transportation plan, or reduce the performance of any such facilities. Located in rural Loma Mar, there are no public transit stops on or immediately near the project parcel. **Source:** Project Plans.					
16.g.	Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?				X
Discussion: The water treatment facility is located adjacent to a private dirt road and will not result in the blockage or rerouting of any trail, sidewalk, or other walking paths. Similarly, the proposed above ground piping is located parallel to existing private roads and trails and will not cause an increase or change in pedestrian patterns in the area. **Source:** Project Plans.					
16.h.	Result in inadequate parking capacity?				X
Discussion: The project, an unmanned water filtration facility and above ground linear piping, will not require parking after the construction of the project is complete. There are several parking lots and sufficient areas on the project parcel to accommodate parking for construction workers during the construction phase. Similarly, the existing parking lots provide enough on-site parking to					

accommodate the existing camp ground and conference center.

Source: Project Plans.

17. TRIBAL CULTURAL RESOURCES. Would the project:				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
17.a. 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 or 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:				
i. 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)		X		

Discussion: The project site is not listed in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k).

This project is not subject to Assembly Bill 52 for California Native American Tribal Consultation requirements, as no traditionally or culturally affiliated tribe has requested, in writing, to the County to be informed of proposed projects in the geographic project area. However, a *Sacred Lands File and Native American Contacts List Request* was sent to the Native American Heritage Council (NAHC) in February 2018. A Sacred Lands File search was completed by the NAHC and no sacred lands were found in the subject area. In following the NAHC's recommended Best Practices, the County has also contacted local Native American tribes who may have knowledge of cultural resources in the project area. As of the date of this report, no tribe has requested consultation.

While the project is not expected to cause a substantial adverse change to any potential tribal cultural resources, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal resources:

Mitigation Measure 20: Should any traditionally or culturally affiliated Native American Tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation.

Mitigation Measure 21: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall cease until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resources in place, or minimize

adverse impacts to the resource. Those measures shall be approved by the County Planning Department prior to implementation and prior to continuing any work associated with the project.

Mitigation Measure 22: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

Source: California Office of Historic Preservation, San Mateo County Listed Historical Resources.

ii. 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)		X		

Discussion: No resources has been determined to be located on the project parcel. If during construction activities, a resource is uncovered, then the implementation of Mitigation Measures 7-10, and 20-22, will reduce impacts to a less-than-significant level.

Source: Project Plans, Native American Heritage Commission, State Assembly Bill 52.

18. UTILITIES AND SERVICE SYSTEMS. Would the project:

		Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
18.a.	Exceed wastewater treatment require-ments of the applicable Regional Water Quality Control Board?		X		

Discussion: Though utilization of the proposed water filtration facility will generate wastewater, Redwood Glen has been working with the SWRCB on the design of their proposed water filtration facility. Implementation of Mitigation Measures 12-13 will ensure that the operation of the water filtration facility meets wastewater standards. See Section 6.e. for further discussion.

Source: TMF, Operations Plan.

18.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?		X		

Discussion: The proposed project involves utilizing surface streams and the construction of a new water filtration facility (which has been installed but is not operational) to provide potable water to Redwood Glen. The proposed project has the potential to significantly impact biological, hydrological, and cultural resources. A biological report prepared by MIG surveyed the parcel for protected species and evaluated the potential impact that the proposed project would have on biological resources. Specifically, implementation of the mitigation measures found in Section 4. (*Biological Resources*) and Section 9. (*Hydrology and Water Quality*) will reduce potential impacts of the proposed project to less than significant levels. Similarly, hydrology reports prepared by Balance, Inc. assessed if Hoffman and Piney Creeks would be able to meet Redwood Glen's projected water demand and what the projected impact on the creek systems (see Section 9. for further discussion) would be. The hydrology reports concluded that the surface streams would meet the water demands of Redwood Glen (see Section 18.d.) and implementation of the project would not significantly affect the hydrology of the parcel. Implementation of mitigation measures found in Section 9. (*Hydrology and Water Quality*) and Section 18. (*Utilities and Service Systems*) will reduce potential impacts to the creek systems to less than significant levels. Though Redwood Glen does contain identified cultural resources, an archaeology report prepared by MIG assessed the potential impacts of the proposed project and concluded that the project would not significantly impact cultural resources with implementation of the mitigation measures found in Section 5. (*Cultural Resources*).

Source: MIG Biological Report, Dated December 2017; TMF Report; Redwood Glen's Diversion Point Maintenance Procedure Plan; Archaeological Report, Dated June 2018; Project Plans.

18.c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X

Discussion: The proposed project does not involve the construction of new stormwater facilities or the expansion of existing facilities.

Source: Project Plans.

18.d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		X		

Discussion:

Water Rights

Redwood Glen possesses riparian water rights to Hoffman Creek that allows 8 acre-feet/year of water to be diverted as well as up to 10,000 gallons of water to be stored on-site. Redwood Glen also holds appropriative water rights to Piney Creek which allows for 24 acre-feet of water per year to be diverted with unlimited on-site water storage. From 1995 through March 2016, Redwood Glen received its potable water from San Mateo County Memorial Park. During this time, Redwood Glen continued to utilize their appropriative and riparian water rights to Hoffman and Piney Creeks to divert between 180,000 - 250,000 gallons of water per year for irrigation purposes. Redwood Glen is now proposing to exercise their water rights to Hoffman and Piney Creeks to meet their projected potable water demands of approximately 1,305,953 gallons per year (or 4-acre-feet/year).

Water Supply Analysis

Balance Hydrologics, Inc. performed a supply vs. demand comparison to determine if Redwood

Glen's water demand could be entirely met by surface water sources. Balance, Inc. concluded that Hoffman Creek is sufficient to meet all of Redwood Glen's water needs from November to May and that from May to October, Piney Creek can provide enough supplemental water to match Redwood Glen's demands. Balance, Inc. also performed a single extreme dry-year and multi-dry year analysis to evaluate if the surface streams would still be sufficient to meet Redwood Glen's water demand. This analysis concluded that there was no water deficiency during the multiple dry-year scenario but that a slight shortage of surface water (approximately 4,500 gallons) occurs in August during a single extreme dry-year scenario. Balance concluded that an existing 70,000 gallon raw water storage tank would be able to provide an ample amount of water during the summer months and during an extreme dry-year scenario. Even during extreme dry years, most of the water in Hoffman and Piney Creeks would still passively bypass the water diversion structures, recharge groundwater supplies, and be available for flora and fauna downstream (see Section 9. for further discussion). This water supply analysis is based on Redwood Glen's existing visitorship and consumption. Redwood Glen's request for a Use Permit Renewal does not include an increase in visitorship. Any request for an increase in visitorship would require additional review to include a Use Permit Amendment and supplemental hydrology and biology reports to ensure that the camp does not expand beyond the capacity of Redwood Glen's surface creeks and wells and to ensure that any increase in water consumption will not unduly impact the surrounding environment.

Though surface streams provide enough water to meet Redwood Glen's water demand and no additional water entitlements are required, implementation of Mitigation Measure 5 relating to water conservation will ensure that Redwood Glen will have enough water to serve their needs.

Source: TMF Report, System Water Demand & Availability of Source Water; Biological Report, Dated December 2017; Project Plans.

18.e.	Result in a determination by the waste-water 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?				X

Discussion: A series of existing septic systems is used to process Redwood Glen's wastewater. While the water filtration facility will generate additional wastewater (see Section 6.e.), this wastewater will be disposed off-site at a licensed waste facility and will not impact Redwood Glen's septic systems.

Source: Project Plans; TMF Report.

18.f.	Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?		X		

Discussion: Solid waste in the form of solids that accumulate at the bottom of the water filtration facility's settling tank will be generated. Per Mitigation Measure 13, the solids from the water filtration facility will be transported to an appropriate off-site disposal facility for disposal.

Source: TMF, Operations Plan.

18.g.	Comply with Federal, State, and local statutes and regulations related to solid waste?				X

Discussion: It is not expected that the solid waste materials resulting from the operation of the water filtration facility would result in compliance issues with any Federal, State, or local statutes or regulations. **Source:** Project Plans.					
18.h.	Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources?			X	
Discussion: While the prefabricated water filtration facility has already been installed and constructed, the construction of the above ground piping and water storage tanks has yet to occur. Full implementation of the project will involve construction vehicles and equipment for which Mitigation Measure 1 provides limits on vehicle speeds and idling times, including for any diesel powered equipment, as well as ensuring that equipment is properly maintained and tuned in accordance with manufacturer's specifications. While these measures are set forth in Section 3.b. to help minimize construction-related air emissions, the measures will also encourage energy efficiency of construction equipment. Furthermore, as conditioned in Section 18.d., this project will be required to incorporate water conservation measures for the life of the project. **Source:** Project Plans.					
18.i.	Generate any demands that will cause a public facility or utility to reach or exceed its capacity?				X
Discussion: This project is proposing to construct a community water system (i.e., the water filtration facility) to meet Redwood Glen's water demands. **Source:** Project Plans.					

19. MANDATORY FINDINGS OF SIGNIFICANCE.				
	Potentially Significant Impacts	***Significant Unless Mitigated***	***Less Than Significant Impact***	***No Impact***
19.a. Does the project have the potential to degrade the quality of the environment, significantly 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?		X		
Discussion: Without mitigation, the project could potentially generate significant impacts to air quality, biological resources, cultural resources, soils, and the hydrology and water quality of the parcel. Mitigation measures have been included to reduce these potential impacts to a less than significant level. Any increase in water usage, expansion of facilities, and/or the construction of a new point of water diversion will require updated hydrology and biological reports and may trigger the need for further discussion in a subsequent environmental document. No request to expand the facilities or construct a new POD have been presented to the County for review and consideration. Because of the "stand-alone" nature of this project and recommended mitigation measures contained throughout this document, the project will have a less than significant cumulative impact on the environment. Furthermore, the project does not introduce any significant impacts that cannot be avoided through mitigation. **Source:** Project Plans; BAAQMD CEQA Guidelines, 2017; Biological Impact Report, Prepared by MIG, December 2017.				
19.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively consider-able" 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.)			X	
Discussion: As defined by the CEQA Guidelines, cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines, Section 15355[b]). To Staff's best of knowledge, there are no known approved pending or future projects associated with or near the project site. The project will not impact agricultural or mineral resources. The project's potential impacts with				

respect to air quality and greenhouse gas emissions will be limited to the construction phase of the project, monthly hauling of waste water, and minimal annual maintenance. All impacts will be mitigated and there is no evidence to suggest that they would substantially combine with other off-site impacts.

The project's potential impacts with respect to biological and water resources could extend beyond the site and combine with impacts from other projects. As described in Sections 4. and 9. (*Biology* and *Hydrology,* respectively), the current estimated water usage will not exceed Redwood Glen's water rights nor impact the biology of the site, as assessed by the Biological Report dated December 2017. However, cumulative biological impacts could occur if Redwood Glen proposes to increase its visitorship and subsequent water usage. Any request to increase visitorship will constitute a change in Redwood Glen's Use Permit and shall be subject to a biological evaluation to assess the potential cumulative impacts.

Without mitigation, the proposed project could potentially generate significant impacts to air quality, biological resources, cultural resources, climate change, and hydrology. Mitigation measures have been included to reduce these potential impacts to a less than significant level. Due to the "stand-alone" nature of this project in conjunction with the recommended mitigation measures contained throughout this document, the project will have a less than significant cumulative impact on the environment.

Source: Project Plans; Biological Impact Report, December 2017; TMF Report; POD Maintenance Plan.

19.c. Does the project have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly?				X

Discussion: Given the rural location of the project site, limited project scope, and purpose of the project to provide adequate potable water to the Redwood Glen Camp facilities and visitors, the project will not cause significant impacts on human beings.

Source: Project Scope.

RESPONSIBLE AGENCIES. Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
U.S. Army Corps of Engineers (CE)		X	
State Water Resources Control Board	X		
Regional Water Quality Control Board		X	
State Department of Public Health		X	
San Francisco Bay Conservation and Development Commission (BCDC)		X	
U.S. Environmental Protection Agency (EPA)		X	
County Airport Land Use Commission (ALUC)		X	

AGENCY	YES	NO	TYPE OF APPROVAL
Caltrans		X	
Bay Area Air Quality Management District		X	
U.S. Fish and Wildlife Service	X		
Coastal Commission		X	
City		X	
Sewer/Water District:		X	
Other: California Department of Fish and Wildlife	X		Streambed Alteration Agreement

MITIGATION MEASURES

	Yes	No
Mitigation measures have been proposed in project application.	X	
Other mitigation measures are needed.	X	

The following measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:

Mitigation Measure 1: The applicant shall require construction contractors to implement all the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, listed below:

a. Water all active construction areas at least twice daily.

b. Apply water two times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking, and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stablizers to inactive construction areas.

c. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

d. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour.

e. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485, of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

Mitigation Measure 2: Prior to the installation of the proposed above ground piping and prior to any scheduled maintenance, a pre-activity survey for special-status plant and animal species and communities will be conducted by a USFWS-approved biologist at the existing points of water diversion at Hoffman and Piney Creeks. The survey will consist of walking the site to ascertain the possible presence of these species. The USFWS-approved biologist will investigate all potential areas near the existing PODs that could be used by these species for feeding, breeding, sheltering,

movement, or other essential behaviors. If any adults, seedlings, juveniles, eggs, or tadpoles are found, the USFWS-approved biologist will contact the USFWS and/or California Fish Wildlife Service to determine if the proposed maintenance or construction activities will negatively affect any identified species and if moving any of the individuals is appropriate. If the USFWS approves moving animals, the biologist and USFWS will identify a suitable relocation site, and the applicant will ensure that the USFWS-approved biologist is given sufficient time to move the animals from the work site before work is initiated. Only USFWS-approved biologists can capture, handle, and monitor the California red-legged frog, San Francisco garter snake, marbled murrelet, or steelhead salmon.

Mitigation Measure 3: Marbled Murrelets nest from March to September. Scheduled maintenance (with the exception of emergencies) at the existing points of water diversion shall occur outside of the nesting season. If work cannot be scheduled outside the breeding season, then the applicant shall hire a qualified biologist to conduct pre-construction surveys for nesting birds no more than 14 days prior to onset of construction or maintenance activities. If any active bird nests are observed within 50 ft. (or 250 ft. for raptors) of the new piping infrastructure or water filtration facility, the work shall be postponed until the biologist determines that all young have fledged the nest.

Mitigation Measure 4: The applicant shall not apply insecticides or herbicides at the project site during project implementation or long-term operational maintenance where there is the potential for these chemical agents to enter creeks, streams, waterbodies, or uplands that contain potential habitat for the identified special-status species.

Mitigation Measure 5: Redwood Glen shall implement the following water conservation measures to reduce potential significant impacts to sensitive habitats:

a. Landscape and recreation fields shall be irrigated early in the day or late in the evening between the hours of 10:00 p.m. and 6:00 a.m.

b. Water shall not be allowed to run off to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

c. Leaking pipes or faulty sprinklers shall be repaired within five (5) days or less if warranted by the severity of the problem.

d. No hosing down of automobiles, boats, roadways, and/or driveways shall be permitted. All automobiles and/or equipment shall be washed on the lawn.

e. Washing of streets, parking lots, and buildings shall be prohibited except as necessary for health, sanitary, or fire protection purposes.

f. Attach automatic shut-off devices on any hose or filling apparatus in use. No water from the potable water system shall be used to fill or refill the swimming pool except as necessary for public health or fire protection.

g. No outdoor water use of any kind is permitted during power outages.

Mitigation Measure 6: Prior to building permit approval for the construction and utilization of Piney and Hoffman Creeks as a potable water source, coordinate with all state agencies to obtain applicable jurisdictional permits for the project, including the California Department of Fish and Wildlife (CDFW) to obtain a Streambed Alteration Agreement (if CDFW deems it necessary) and the State Water Resources Control Board (SWRCB) to obtain all required permits for the proposed potable water system. Prior to the issuance of a building permit for this project, the applicant shall submit evidence of these required permits.

Mitigation Measure 7: Archaeological monitoring shall be instigated for all ground disturbing activities. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology

shall be present at the project site during ground disturbing activities, including machine or hand excavation, or grubbing. No ground disturbing activities of any kind shall be allowed to take place if the archaeologist is not present. An archaeological report meeting the Secretary of the Interior's Standards detailing the findings of the monitoring will be submitted to the Northwest Information Center after monitoring has ceased.

Mitigation Measure 8: In the event that archaeological remains from either a historic or prehistoric period are discovered (or have been suspected to have been discovered) during project construction, all ground disturbing work on the site shall cease and the Planning Department shall be notified of any such findings. The archaeologist shall assess the discovery before any additional ground disturbing work within the site shall be allowed to continue. No further ground disturbing work shall be allowed to continue until the archaeologist has fully evaluated the find, recommended appropriate protection measures, and those measures have been approved by the Planning Department, and implemented by the project applicant. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue.

Mitigation Measure 9: All excavator machinery shall use toothless buckets during ground disturbing activity to allow the monitoring archaeologist to more clearly identify archaeological features, if present.

Mitigation Measure 10: If a newly discovered resource is, or is suspected to be, Native American in origin, the resource shall be treated as a significant Tribal Cultural Resource, pursuant to Public Resources Code 21074, until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative.

Mitigation Measure 11: In the event of discovery or recognition of any human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The applicant shall then immediately notify the County Coroner's Office and possibly the State Native American Heritage Commission to seek recommendations from a Most Likely Descendant (Tribal Contact) before any further action at the location of the find can proceed. All contractors and sub-contractors shall be made aware of these requirements and shall adhere to all applicable laws including State Cultural Preservation laws.

Mitigation Measure 12: The water treatment and storage facilities shall be properly maintained at all times. The water filtration facility shall be supervised by a Wastewater Treatment Operator licensed by the State Water Resources Control Board.

Mitigation Measure 13: No wastewater or settled solids shall be discharged on-site. All wastewater and solids generated from the water filtration facility's CMF waste streams shall be hauled off-site and disposed at a licensed waste facility.

Mitigation Measure 14: The applicant shall use the following Best Management Practices to minimize potential adverse effects of the project to groundwater and soils from chemicals used during the operation of the water filtration facility:

a. Follow the manufacturer's recommendations on use, storage, and disposal of chemicals used in the water filtration and cleaning process.

b. Avoid overtopping storage containers.

c. Provide secondary containment for any hazardous materials stored on-site.

d. Personal Protective Equipment (PPE) warning signs shall be placed on all chemical storage containers.

e. Appropriate chemical warning signs shall be placed on the exterior of the water filtration facility.

f. Perform regular inspections of the water filtration system equipment and materials storage areas for leaks and maintain records documenting compliance with the storage, handling, and disposal of hazardous materials.

Mitigation Measure 15: All repair work for the Hoffman Creek diversion structure, with the exception of the bolt replacement, shall occur outside the creek channel.

Mitigation Measure 16: Sediment-laden water associated with Hoffman Creek maintenance activities shall be reintroduced to the creek system through a natural filter (such as rocks and creek bank vegetation) to reduce water turbidity.

Mitigation Measure 17: Any required PVC glue necessary for the Piney Creek diversion structure shall be added to the pipe outside the creek channel and shall fully cure prior to installing the pipe in the creek.

Mitigation Measure 18: In the event of an extreme storm event where significant amounts of sediment accumulates behind the Piney Creek diversion dam, Redwood Glen shall remove the accumulated sediment using hand tools and spread the sediment outside the banks of the creek to prevent the reintroduction of the sediment into the creek system.

Mitigation Measure 19: The proposed above ground piping shall be inspected regularly for leaks. Upon discovery, all leaks shall be repaired within five (5) days or less.

Mitigation Measure 20: Should any traditionally or culturally affiliated Native American Tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation.

Mitigation Measure 21: In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall cease until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resources in place, or minimize adverse impacts to the resource. Those measures shall be approved by the County Planning Department prior to implementation and prior to continuing any work associated with the project.

Mitigation Measure 22: Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

DETERMINATION (to be completed by the Lead Agency).

On the basis of this initial evaluation:

	I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Planning Department.
X	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 of the mitigation measures in the discussion have been included as part of the proposed project. 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.

(Signature)

7/10/2018	Project Planner
Date	(Title)

ATTACHMENTS:

A. Project Location Map
B. Project Plans
C. Biological Impact Report, prepared by MIG, Inc., dated December 2017
D. Technical, Mechanical, Financial Report, dated May 16, 2017
E. Maintenance Procedures of Hoffman and Piney Creek Diversion Structures
F. Biological Evaluation of Proposed POD Maintenance Activities
G. Hydrological Evaluation of Proposed POD Maintenance Activities
H. Water Treatment Facility Waste Management Plan

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