

KIDDER CREEK ORCHARD CAMP

ZONE CHANGE (Z-14-01) AND

USE PERMIT (UP-11-15)

Draft

Environmental Impact Report

County of Siskiyou
806 S. Main Street
Yreka, CA 96097



August 2019

State Clearinghouse Number 2016092016

Kidder Creek Orchard Camp

DRAFT

ENVIRONMENTAL IMPACT REPORT

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Prepared for:



County of Siskiyou
806 S. Main Street
Yreka, California 96097

Prepared by:



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EXECUTIVE SUMMARY

ES.1 Introduction

This Executive Summary has been prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines § 15123(b), which states that an EIR should contain a brief summary of the Proposed Project and its consequences, and should identify:

1. Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;
2. Areas of public controversy known to the lead agency, including issues raised by the agencies and the public; and
3. Issues to be resolved, including the choice among alternatives and how to mitigate the significant effects.

The County of Siskiyou (County) has been petitioned to consider the Kidder Creek Orchard Camp Project (Project; Proposed Project). This Draft Environmental Impact Report (Draft EIR; DEIR) has been prepared by the County to analyze the potential environmental effects associated with implementation of the Proposed Project. The DEIR analysis focuses on potential environmental impacts that could arise from implementation of the Proposed Project, as regulated and guided by the large number of federal, state, and local regulations, including ordinances, General Plan policies, and local resource plans. The DEIR is intended to provide a credible worst-case scenario of the impacts resulting from project implementation.

CEQA requires that the Lead Agency, in this case the County of Siskiyou, consider the information contained in the EIR prior to taking any discretionary action. This DEIR may also be used by other public agencies that must make discretionary actions related to the Proposed Project.

ES.2 Project Location and Setting

The Project site is located on 580 acres at the west end of South Kidder Creek Road, approximately two miles west of State Highway 3, south of the community of Greenview in the Scott Valley, (Assessor Parcel Numbers (APNs) 024-370-040 and 380; 024-440-140, 150, 310, 320 and 330; 024-450-390, 400 and 590). See **Figure 1. Project Location**. Adjacent parcels are largely undeveloped. Large commercial timber lands and vacant/open space parcels 80 acres or larger are located to the west and south of the site. Large lot rural residential homes and vacant lands are located to the north and east. These parcels to the north and east are typically 5 - 75 acres in size.

The Project site and surrounding area are within the County's Scott Valley Area Plan (SVAP) as identified in the Siskiyou County General Plan. Those areas directly south of the Project site have the zoning designation of Timber Production (TPZ). East of the site, this area has the zoning designation of TPZ and Rural Residential Agricultural 40-acre minimum (R-R-B-40). West of the site, the zoning designation is R-R-B-40. The areas north of the Project site have the zoning designation of TP, R-R-B-40, Rural Residential

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Agricultural 10-acre minimum (R-R-B-10) and Non-Prime Agriculture (AG-2), and Rural Residential Agricultural – Mobile Home 5-acre minimum (R-R-MH-B-5).

ES.3 Project History

The existing camp was permitted by three separate use permit approvals beginning in 1976. Use permits were approved in 1977 (UP-76-39), 1985 (UP-85-37), and 1996 (UP-95-12). The 1996 use permit approved the current occupancy capacity of 165 guests¹, a maximum annual occupancy of 3,340, with an onsite parking limitation of 215 vehicles, and an average daily traffic volume of 131 vehicles. Mitigated Negative Declarations (MNDs) were prepared for the 1985 use permit (SCH# 1985110397) and for the 1996 use permit (SCH# 1996103658) project approvals. The camp also obtained approval on December 5, 1979, of a use permit (UP-68-79) for a 2.3-x-3-foot (6.9-square foot) directional sign to be placed at the State Highway 3/South Kidder Creek intersection.

On September 9, 2016, the Kidder Creek Orchard Camp Zone Change (Z-14-01) and Use Permit (UP-11-15) Draft Initial Study/Mitigated Negative Declaration (IS/MND) (SCH#2016092016) was circulated by the County for a 30-day public review period.

The County received 233 letters and post cards commenting on the IS/MND. See **Appendix A** for the Draft IS/MND and comment letters and post cards. The comments were both for and against the Proposed Project. While many of the comments did not raise concerns with the adequacy of the environmental analysis, there were a number that raised environmental concerns. These comments fall into the following general categories:

- Agriculture: loss of timber resources
- Hazards: wildland fires
- Noise: construction noise, project noise
- Traffic: emergency access, roadway safety, traffic increase
- Water: water quality, stream diversion/water allocation usage

As a result of comments on the Draft IS/MND, the County determined that an EIR level of analysis was required for specific impact areas. Those areas include agriculture (project and cumulative), hazards (project and cumulative), noise (project and cumulative), traffic (project and cumulative), and water (project and cumulative). These impact areas are the subject of this EIR. All other impact analysis areas defined in Appendix G of the CEQA Guidelines and analyzed in the 2016 Draft IS/MND will not be included in this EIR. However, all mitigation measures identified in these sections will be included as mitigation in this EIR and in the Mitigation Monitoring and Reporting Program (MMRP).

¹ The 1996 use permit allows up to 165 guests. This use permit does not limit the number of staff and volunteers at the camp. Currently, the maximum daily occupancy, including guests, staff and volunteers, at the camp is 310 persons. 310 persons is used as the baseline for this environmental review as it represents the current existing condition.

ES.4 Description of Proposed Project

The Proposed Project includes a request to expand the use of the site and requires a new use permit (UP-11-15). This would allow for the revocation of the previous use permits to consolidate all the approved uses into a single use permit. Therefore, all existing use permit conditions of approval and all previously adopted mitigation measures will be reviewed and incorporated into the proposed use permit, where necessary. Conditions of approval and mitigation measures that are no longer necessary, have been complied with, or would be satisfied/fulfilled with new conditions of approval or mitigation measures may be eliminated.

The use permit application requests the increase of allowable occupancy at the camp from 165 guests to a total occupancy of 844 (guests, staff, and volunteers), increase the physical size of the camp from 333 to 580 acres, and add a number of structures, recreation features, including a second pond and ancillary facilities.

The Project also includes a request for a zone change (Z-14-01) to rezone ±170 acres from TPZ to Rural Residential Agricultural, 40-acre minimum parcel size (R-R-B-40).

As stated above, the Project proposes an increase of allowable occupancy at the camp from 165 guests to a total occupancy of 844 (guests, staff, and volunteers), an increase the physical size of the camp from 333 to 580 acres, and the addition of a number of structures, recreation features, including a second pond and ancillary facilities. See **Figure 5. Proposed Project**.

The Project includes four major facilities to be constructed and several minor facilities such as those associated with the High Adventure Camps and Basecamps. Major facilities (with reference number for table below) include:

1. Welcome Center and Dining – this building would create new office space, dining hall, and restroom.
2. Equestrian Center – this building would provide new horse facilities for Ranch Camp.
3. Cabins for Pines/Ranch Camp – these are new winterized buildings.
4. Staff housing/ Adult Retreat Centers – these buildings are being proposed, but further study will be needed to determine if Kidder Creek will move forward with these plans. This EIR assumes that these structures would be built.

ES.5 Areas of Controversy

As a result of comments on the Draft IS/MND, the County determined that an EIR level of analysis was required for specific impact areas. Those areas include agriculture (project and cumulative), hazards (project and cumulative), noise (project and cumulative), traffic (project and cumulative), and water (project and cumulative). These impact areas are the subject of this EIR. All other impact analysis areas defined in Appendix G of the CEQA Guidelines and analyzed in the 2016 Draft IS/MND will not be

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included in this EIR. However, all mitigation measures identified in these sections, as shown in **Table ES-1**, will be included as mitigation in this EIR and in the MMRP.

ES.6 Project Alternatives

CEQA requires an evaluation of the comparative effects of a reasonable range of alternatives to the Proposed Project that would feasibly attain most of the project's basic objectives and that would avoid or substantially lessen any of the significant impacts of the Proposed Project. In this case, all of the significant impacts of the Proposed Project would be mitigated to a less-than-significant by the measures included in the Proposed Project. Nonetheless, three alternatives were evaluated to determine their impacts as compared to those of the Proposed Project: the No Project Alternative (Alternative 1), the No Pond Alternative (Alternative 2) and the Reduced Project Alternative (Alternative 3). All alternatives were deemed feasible and reasonable alternatives to the Proposed Project. However, Alternative 1 would not meet any of the five project objectives.

Alternative 3 (Reduced Project) is the Environmentally Superior Alternative because it meets all five of the Proposed Project objectives while, at the same time, resulting in a reduction in the magnitude of environmental impacts when compared to those of the Proposed Project.

One alternative, that of an alternative site, was rejected for a number of reasons including: the ability to assemble and purchase acreages of the size of the Project, which would be cost prohibitive and infeasible, an alternate site would eventually double the number of camps as the existing camp would continue to operate and therefore result in greater impacts than the Proposed Project site, insufficient vacant correctly zoned lots to accommodate the Project, and the fact that the Project site is already used for the proposed purpose and, therefore, the increase of this use would have less impact than the development of a new camp on vacant undisturbed land. These reasons led to a determination that the alternative was not feasible.

ES.7 Issues to be Resolved by the Lead Agency

The major issues to be resolved by the County of Siskiyou as Lead Agency include the following:

- Whether the Draft EIR adequately describes the environmental impacts of the Proposed Project;
- Whether the recommended mitigation measures should be modified/adopted;
- Which among the Proposed Project and its alternatives should be selected for approval.

ES.8 Summary of Impacts and Mitigation Measures

Table ES-1 presents a summary of environmental impacts analyzed and identified in the IS and this Draft EIR, the mitigation measures proposed for those impacts (if required), and the level of significance after mitigation.

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Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Environmental Impact Report Mitigation Measures			
Hazards and Hazardous Materials			
Impact 3.2.1: Wildland Fire Hazards	SI	MM 8.1 Prior to the initiation of construction inhabitable structures for the Proposed Project, the emergency access road will be developed by the Project and approved as to form and function by the California Department of Forest and Fire Protection and the Siskiyou County Public Works Department. This access roadway shall be maintained by the Project and re-approved on an annual basis or as the County and CAL FIRE determines necessary.	LTS
Impact 3.3.7: Flooding as a Result of the Failure of a Levee or Dam	SI	MM 9.1 Prior to any land disturbance activities associated with the construction of the proposed seven-acre pond, the following shall be completed: 1) If the dam necessary to impound the proposed pond is subject to Department of Water Resources, Division of Safety of Dams jurisdiction, proof of full compliance with the required permitting and plan approval shall be provided to the Siskiyou County Community Development Department – Planning Division; or 2) If the dam necessary to impound the proposed pond is not subject to the Department of Water Resources, Division of Safety of Dams jurisdiction, the applicant shall submit plans to the County, stamped by a qualified engineer registered in the State of California, detailing the structural design of the dam. The County will review and approve said plans to ensure that the proposed dam is structurally adequate and is not a hazard. The applicant shall be responsible for paying all costs associated with the County's review of said plans. The County retains the right to hire a third-party engineering firm to review the required plans.	LTS
Initial Study Mitigation Measures			
Air Quality			
d) Expose sensitive receptors to substantial pollutant concentrations?	SI	MM 3.1: Prior to construction activities, the project applicant shall submit a Dust Control Plan to the Siskiyou County Air Pollution Control District (SCAPCD). This plan shall ensure that adequate dust controls are implemented during all phases of project construction, including the following:	LTS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<ol style="list-style-type: none"> 1) Water exposed earth surfaces as necessary to eliminate visible dust emissions; 2) When grading within 100 feet of any residence, park or other sensitive receptor boundary, utilize pre-soaking with sprinkler or water trucks in addition to normal watering for dust control; 3) Suspend grading operations when wind is sufficient to generate visible dust clouds; 4) Pave, use gravel cover, or spray a dust agent on all haul roads; 5) Impose an onsite speed limit on unpaved roads to 15 mph or lower (this speed must be posted); 6) All grading operations shall be suspended when sustained wind speeds exceed 25 mph; 7) All exposed surfaces and overburden piles shall be revegetated or covered as quickly as possible; 8) If fill dirt is brought to, or stockpiled on, the construction site, tarps or soil stabilizers shall be placed on the dirt piles to minimize dust problems; 9) Clean earthmoving construction equipment as needed to ensure that haul trucks leaving the site do not track dirt onto area roadways; 10) Cover all trucks hauling soil, sand, and other loose materials and ensure that all trucks hauling such materials maintain at least two feet of freeboard; 11) Institute measures to reduce wind erosion when site preparation is completed; 12) Install sandbags or other erosion control measure to prevent silt runoff onto public roadways; 	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>13) Designate a person or persons to monitor the dust control programs as approved by the SCAPCD, and to order increased watering, as necessary, to prevent the transport of dust off site. This designee's duties will include holiday and weekend periods when work may not be in progress. A phone number of the applicant's designated contact person shall be included in the Dust Control Plan and updated as necessary.</p> <p>14) The approved Dust Control Plan shall be included on all development plans, including, but not limited to building permit plans and grading plans.</p>	
Biological Resources			
<p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?</p> <p>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	SI	<p>MM 4.1 Regarding the two identified populations of <i>Chaenactis suffrutescens</i> (Shasta chaenactis), as identified and described in the Botanical Resource Survey (Tyler 2014), the following mitigation measures shall be implemented:</p> <p>a. A qualified botanist shall survey the area identified as containing the two plant populations. The extent of the plant populations shall be mapped at a legible scale, and include setbacks to identifiable natural and/or human-made structures or features. The map shall be provided for review to Planning Division staff. No land disturbances shall occur until said map is reviewed and approved by Planning Division staff. Prior to any land disturbances within 100 feet of the identified plant populations, construction fencing shall be erected to protect the plant populations. The fencing shall be located and secured in a manner that does not adversely impact the plant populations. A qualified biologist shall provide best management practices (BMPs) regarding the placement of construction fencing to ensure that the plant populations are not adversely impacted.</p> <p>b. Interpretative signage shall be placed in proximity to the plant populations to educate camp staff and visitors regarding the plants status as a special status species. A description of the plants habitats and illustrations or photographic images of the plant shall be included on the signage. A minimum of one sign shall be placed at each of the identified plant populations. The proposed signage shall be submitted to Planning Division staff for review and approval.</p>	LTS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>MM 4.2 Regarding Pacific Fishers (<i>Martes pennant</i>), the following mitigation measure shall be implemented.</p> <ul style="list-style-type: none"> a. Land disturbance and construction activities that involve the removal of vegetation shall take place outside of the Pacific fisher denning period of March through August, when the female Pacific fisher and kits are vulnerable to incidental take while residing in tree dens or ground dens in the area; or b. If construction or land disturbance activities that involves the removal of vegetation takes place during the denning season (March through August), preconstruction surveys shall be completed by a qualified wildlife biologist to ensure that construction activities do not adversely impact denning fishers. The survey shall take place no more than one week prior to vegetation removal associated with construction or land disturbance activities. If an active den is discovered during the survey, no vegetation shall be removed within 50 feet of the den until the fishers have vacated the den. The results of the pre-construction survey shall be sent to the CA Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001. <p>MM 4.3 To reduce potential impacts to Pacific Fishers (<i>Martes pennant</i>) from poisoning due to the eating of dead or dying rodents exposed to rodenticides, the following mitigation measure shall be implemented:</p> <p>No rodenticides shall be used to control the proliferation of rodents.</p> <p>MM 4.4 In order to avoid impacts to nesting migratory birds and/or raptors, including osprey (<i>Pandion haliaetus</i>), protected under California Fish and Game Code Section 3503, one of the following shall be implemented:</p> <ul style="list-style-type: none"> a. Vegetation removal associated with construction of driveways and residences shall be limited to September 1 through January 31 when birds are not nesting; or b. If vegetation removal will occur during the avian breeding season of February 1 through August 31, a survey for nesting migratory birds shall be completed by a qualified biologist no more than one week prior to vegetation removal associated with construction of driveways and residences. If an active nest is located during the 	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		survey, no vegetation shall be removed until the young have fledged, as determined through additional monitoring by a qualified biologist. The results of the nesting bird survey(s) shall be sent to the Department at: California Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001.	
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?</p> <p>c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?</p>	SI	<p>MM 4.5 Where structures, buildings, or other land disturbing activities are proposed to be located less than 50 feet from a naturally occurring waterway or water body, the following shall be completed:</p> <p>a) A stormwater pollution prevention plan (SWPPP), completed by a Qualified Storm Water Pollution Prevention Plan Developer (QSD), shall be submitted to the Siskiyou County Community Development Department – Planning Division for review and approval. The SWPPP shall be developed to the same standards that would be required for Construction General Permit; and</p> <p>b) Stormwater associated with newly created impervious surfaces shall be retained, detained, or directed away from said waterways or water bodies.</p> <p>MM 4.6 Jurisdictional <i>Waters of the United States</i>, as regulated by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act, shall be avoided; or</p> <p>If avoidance is not possible, an application for a Section 404 permit shall be approved by the USACE prior to any land disturbance activities that would result in the dredge, fill, or alteration of hydrology to any jurisdictional waters. Where avoidance is not possible measures shall be implemented to minimize unavoidable impacts, restoration procedures, and compensatory creation or enhancement to ensure no net loss of wetland extent or function.</p>	LTS
Cultural Resources			
<p>a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</p>	SI	<p>MM 5.1 If, during the course of project implementation, cultural resources (i.e., prehistoric sites, historic features, isolated artifacts, and features such as concentrations of shell or glass) are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and a professional archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. The County shall consider mitigation</p>	LTS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
<p>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</p> <p>c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?</p> <p>d) Disturb any human remains, including those interred outside of formal cemeteries?</p> <p>e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?</p>		<p>recommendations presented by a professional archaeologist and implement a measure or measures that the County deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.</p> <p>MM 5.2 If, during the course of project implementation, paleontological resources (e.g., fossils) are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. The County shall consider the mitigation recommendations presented by a professional paleontologist and implement a measure or measures that the County deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.</p> <p>MM 5.3 If, during the course of project implementation, human remains are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and the County Coroner must be notified, according to Section 5097.98 of the California Public Resources Code and Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in California Code of Regulations Section 15064.5(d) and (e) shall be followed.</p>	
Geology and Soils			
<p>b) Result in substantial soil erosion or the loss of topsoil?</p>	SI	<p>MM 6.1 The applicant shall either revegetate soils disturbed by land clearing for construction of improvements or provide and maintain an adequate ground cover within these disturbed areas. Adequate ground cover may be accomplished through paving and/or laying down wood chips, shredded bark, or similar material(s). If construction activities are suspended for six (6) or more months, disturbed soils shall be revegetated or adequately covered until construction activities resume. Upon completion of construction activities, soils shall be revegetated or adequately covered within six (6) months.</p>	LTS
Hydrology and Water Quality			
<p>i) Expose people or structures to a significant risk of loss, injury, or death involving flooding,</p>	SI	<p>MM 9.1 Prior to any land disturbance activities associated with the construction of the proposed 7-acre pond, the following shall be completed:</p>	LTS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
including flooding as a result of a failure of a levee or dam?		<p>a) If the dam necessary to impound the proposed pond is subject to Department of Water Resources, Division of Safety of Dams jurisdiction, proof of full compliance with the required permitting and plan approval shall be provided to the Siskiyou County Community Development Department – Planning Division; or</p> <p>b) If the dam necessary to impound the proposed pond is not subject to the Department of Water Resources, Division of Safety of Dams jurisdiction, the applicant shall submit plans to the County stamped by a qualified engineer registered in the State of California detailing the structural design of the dam. The County will review and approve said plans to ensure that the proposed dam is structurally adequate and is not a hazard. The applicant shall be responsible for paying all costs associated with the County's review of said plans. The County retains the right to hire a third party engineering firm to review the required plans.</p>	
Noise			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	SI	<p>MM 12.1 During project site development construction activities shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday, and from 8:00 a.m. to 6:00 p.m. on Saturdays. Construction activities are prohibited on Sundays and federal holidays. This condition shall be noted on Building Permits documents and any Improvement Plans required for this project.</p> <p>MM 12.2 The use of loud or amplified sound (i.e. music, stereo equipment, public address (PA) systems, etc.) shall be limited to 8:00 AM to 10:00 PM Monday through Saturday, and 9:00 AM to 10:00 PM Sunday and National and State-recognized holidays. Noise shall be limited to 60 dB Leq at the boundaries of the project site during the hours listed above and 45 dB Leq at all other times².</p>	LTS

² Leq has been added to the decibel measurement as it provides a more accurate level of measurement of noise levels over a period of time.

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ES.9 References

Tyler, Kathleen

2014. Botanical Resource Survey Addendum For Kidder Creek Orchard Camp Land Use Permit Application. Update May 23, 2014.

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1.0 INTRODUCTION

This Draft Environmental Impact Report (Draft EIR; DEIR) identifies and evaluates the potential environmental impacts associated with the implementation of the Kidder Creek Orchard Camp Project (Proposed Project, Project). The Project applicant has submitted to Siskiyou County, applications requesting a revision of an existing use permit (UP-11-15) and a zoning change (Z-14-01) to allow for an expansion of the existing Kidder Creek Orchard Camp.

1.1 Purpose and Use of the EIR

This DEIR was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] §§ 21000-21177) and the Guidelines for the Implementation of CEQA (California Administrative Code §§ 15000 et seq.). As described in CEQA Guidelines § 15121(a), an EIR is a public informational document that assesses the potentially significant environmental impacts of a project, identifies ways to minimize the significant impacts, and describes a reasonable range of alternatives to the project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency).

The County of Siskiyou (County) is the Lead Agency for the Proposed Project. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development, where feasible, and are obligated to balance a variety of public objectives including economic, environmental, and social factors in their decision-making. The County has determined that an EIR is the appropriate CEQA documentation due to the potential for significant environmental impacts that could result from approval of the requested actions and development of the Proposed Project. This Draft EIR evaluates the existing environmental resources in the area, analyzes potential impacts on those resources due to the Proposed Project (particularly as they relate to prior CEQA analyses and clearances), and if necessary, identifies feasible mitigation measures that could avoid or reduce the magnitude of those impacts. This EIR provides an analysis and evaluation of on- and offsite environmental impacts resulting from the construction and operation of the Proposed Project.

1.2 Known Trustee and Responsible Agencies

For the purpose of CEQA, the term *trustee agency* means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. In CEQA, the term *responsible agency* includes all public agencies other than the lead agency that may have approval authority in some regard associated with the Proposed Project. Interested agencies may have a general interest in the proposal with respect to issues germane to their organization. The following agencies have been identified as potential responsible, trustee, or interested agencies with direct or indirect interest in the project:

- California Department of Conservation (DOC)
- California Department of Transportation (Caltrans), District 2

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- California Department of Fish and Wildlife (CDFW), Region 1
- California Department of Forestry and Fire Protection (CAL FIRE)
- Native American Heritage Commission (NAHC)
- Regional Water Quality Control Board (RWQCB), Region 1
- Siskiyou County Air Pollution Control District
- Siskiyou County Environmental Health
- State Water Resources Control Board (SWRCB)
- U.S. Army Corps of Engineers (USACE)

This EIR may also be used by other public agencies to issue approvals and permits related to the Proposed Project.

1.3 Type of Document

CEQA and the CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR is for a specific development project with defined parameters. As such, this EIR is a "project" EIR. Project EIRs are defined by CEQA Guidelines (Section 15161) as:

"The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation."

1.4 Intended Use of the EIR

This Draft EIR is intended to evaluate the environmental impacts of the Kidder Creek Orchard Camp Project. This EIR in its final form will be used by the County of Siskiyou in considering approval of the Proposed Project. In accordance with CEQA Guidelines § 15126, the EIR will be used as the primary environmental document in consideration of all subsequent planning and permitting actions associated with the project, to the extent such actions require CEQA compliance and as otherwise permitted under applicable law.

1.5 Environmental Impact Report Organization

- **Section 1.0** of the EIR provides an introduction to the Proposed Project, the purpose of the DEIR, a description of the organization of the DEIR, the intended uses of the DEIR, and a description of the public review process.
- **Section 2.0** provides a description of the Proposed Project.

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- **Section 3.0** provides the environmental analysis of the Proposed Project. This includes the description of the regulatory and environmental setting, the analysis of environmental impacts, and a discussion of mitigation measures to reduce or eliminate potential impacts.
- **Section 4.0** discusses the alternatives and potential environmental impacts of implementing alternatives to the Proposed Project.
- **Section 5.0** addresses long-term effects of the Proposed Project, including cumulative impacts, growth-inducing impacts, and significant irreversible and/or unavoidable impacts.
- **Section 6.0** provides a list of agencies and persons consulted.
- **Section 7.0** includes the references used to prepare the DEIR.
- **Section 8.0** provides a list of the DEIR preparers.
- **Section 9.0** includes a list of acronyms and abbreviations.

The Notice of Preparation (NOP) and responses received during the scoping period are presented in Appendix A. Technical reports for some resource areas are also provided in the appendices.

1.6 Environmental Review Process

1.6.1 Draft Initial Study/Mitigated Negative Declaration

On September 9, 2016, the Kidder Creek Orchard Camp Zone Change (Z-14-01) and Use Permit (UP-11-15) Draft Initial Study/Mitigated Negative Declaration (IS/MND, State Clearinghouse (SCH)#2016092016) was circulated by the County for a 30-day public review period.

CEQA Guidelines Section 15204 recommends that in reviewing negative declarations, persons and public agencies should focus on the proposed finding that the project will not have a significant effect on the environment. If persons and public agencies believe that the project may have a significant effect, they should: (1) Identify the specific effect, (2) Explain why they believe the effect would occur, and (3) Explain why they believe the effect would be significant. Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to State CEQA Guidelines § 15064, an effect shall not be considered significant in the absence of substantial evidence supporting such a conclusion.

The County received 233 letters and post cards commenting on the IS/MND. See **Appendix A** for the Draft IS/MND and comment letters and post cards. The comments were both for and against the Proposed Project. While many of the comments did not raise concerns with the adequacy of the environmental analysis, there were a number that raised environmental concerns. These comments fall into the following general categories:

- Agriculture - loss of timber resources
- Hazards - wildland fires

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- Noise - construction noise, project noise
- Traffic - emergency access, roadway safety, traffic increase
- Water - water quality, stream diversion/water allocation usage

As a result of comments on the Draft IS/MND, the County determined that an EIR level of analysis was required for specific impact areas. Those areas include agriculture (project and cumulative), hazards (project and cumulative), noise (project and cumulative), traffic (project and cumulative), and water (project and cumulative). These impact areas are the subject of this EIR. All other impact analysis areas defined in Appendix G of the CEQA Guidelines and analyzed in the 2016 Draft IS/MND will not be included in this EIR. However, all mitigation measures identified in these sections, as shown below, will be included as mitigation in this EIR and in the Mitigation Monitoring and Reporting Program (MMRP).

1.6.2 Initial Study Mitigation Measures

The Initial Study analysis determined that the following mitigation measures were required to reduce impacts to a less than significant level:

Air Quality

MM 3.1: Prior to construction activities, the project applicant shall submit a Dust Control Plan to the Siskiyou County Air Pollution Control District (SCAPCD). This plan shall ensure that adequate dust controls are implemented during all phases of project construction, including the following:

- 1) Water exposed earth surfaces as necessary to eliminate visible dust emissions;
- 2) When grading within 100 feet of any residence, park or other sensitive receptor boundary, utilize pre-soaking with sprinkler or water trucks in addition to normal watering for dust control;
- 3) Suspend grading operations when wind is sufficient to generate visible dust clouds;
- 4) Pave, use gravel cover, or spray a dust agent on all haul roads;
- 5) Impose an on-site speed limit on unpaved roads to 15 mph or lower (this speed must be posted);
- 6) All grading operations shall be suspended when sustained wind speeds exceed 25 mph;
- 7) All exposed surfaces and overburden piles shall be revegetated or covered as quickly as possible;
- 8) If fill dirt is brought to, or stockpiled on, the construction site, tarps or soil stabilizers shall be placed on the dirt piles to minimize dust problems;
- 9) Clean earthmoving construction equipment as needed to ensure that haul trucks leaving the site do not track dirt onto area roadways;
- 10) Cover all trucks hauling soil, sand, and other loose materials and ensure that all trucks hauling such materials maintain at least two feet of freeboard;
- 11) Institute measures to reduce wind erosion when site preparation is completed;

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- 12) Install sandbags or other erosion control measure to prevent silt runoff onto public roadways;
- 13) Designate a person or persons to monitor the dust control programs as approved by the SCAPCD, and to order increased watering, as necessary, to prevent the transport of dust off site. This designee's duties will include holiday and weekend periods when work may not be in progress. A phone number of the applicant's designated contact person shall be included in the Dust Control Plan and updated as necessary.
- 14) The approved Dust Control Plan shall be included on all development plans, including, but not limited to building permit plans and grading plans.

Timing/Implementation: *Prior to and during construction*

Enforcement/Monitoring: *Siskiyou County Community Development Department – Planning Division; Siskiyou County Air Pollution Control District*

Biological Resources

MM 4.1 Regarding the two identified populations of *Chaenactis suffrutescens* (Shasta chaenactis), as identified and described in the Botanical Resource Survey (Tyler 2014), the following mitigation measures shall be implemented:

- a. A qualified botanist shall survey the area identified as containing the two plant populations. The extent of the plant populations shall be mapped at a legible scale, and include setbacks to identifiable natural and/or human-made structures or features. The map shall be provided for review to Planning Division staff. No land disturbances shall occur until said map is reviewed and approved by Planning Division staff. Prior to any land disturbances within 100 feet of the identified plant populations, construction fencing shall be erected to protect the plant populations. The fencing shall be located and secured in a manner that does not adversely impact the plant populations. A qualified biologist shall provide best management practices (BMPs) regarding the placement of construction fencing to ensure that the plant populations are not adversely impacted.
- b. Interpretative signage shall be placed in proximity to the plant populations to educate camp staff and visitors regarding the plants status as a special status species. A description of the plants habitats and illustrations or photographic images of the plant shall be included on the signage. A minimum of one sign shall be placed at each of the identified plant populations. The proposed signage shall be submitted to Planning Division staff for review and approval.

Timing/Implementation: *Prior to land disturbance activities.*

Enforcement/Monitoring: *Siskiyou County Community Development Department - Planning Division*

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- MM 4.2** Regarding Pacific Fishers (*Martes pennant*), the following mitigation measure shall be implemented.
- a. Land disturbance and construction activities that involve the removal of vegetation shall take place outside of the Pacific fisher denning period of March through August, when the female Pacific fisher and kits are vulnerable to incidental take while residing in tree dens or ground dens in the area; or
 - b. If construction or land disturbance activities that involves the removal of vegetation takes place during the denning season (March through August), preconstruction surveys shall be completed by a qualified wildlife biologist to ensure that construction activities do not adversely impact denning fishers. The survey shall take place no more than one week prior to vegetation removal associated with construction or land disturbance activities. If an active den is discovered during the survey, no vegetation shall be removed within 50 feet of the den until the fishers have vacated the den. The results of the pre-construction survey shall be sent to the CA Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001.

Timing/Implementation: Prior to construction or land disturbance activities that involve the removal of vegetation.

Enforcement/Monitoring: Siskiyou County Community Development Department - Planning Division; California Department of Fish and Wildlife

- MM 4.3** To reduce potential impacts to Pacific Fishers (*Martes pennant*) from poisoning due to the eating of dead or dying rodents exposed to rodenticides, the following mitigation measure shall be implemented:

No rodenticides shall be used to control the proliferation of rodents.

Timing/Implementation: During the life of the use permit

Enforcement/Monitoring: Siskiyou County Community Development Department - Planning Division

- MM 4.4** In order to avoid impacts to nesting migratory birds and/or raptors, including osprey (*Pandion haliaetus*), protected under Fish and Game Code Section 3503, one of the following shall be implemented:

- a. Vegetation removal associated with construction of driveways and residences shall be limited to September 1 through January 31 when birds are not nesting; or
- b. If vegetation removal will occur during the avian breeding season of February 1 through August 31, a survey for nesting migratory birds shall be completed by a qualified biologist no more than one week prior to vegetation removal associated

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with construction of driveways and residences. If an active nest is located during the survey, no vegetation shall be removed until the young have fledged, as determined through additional monitoring by a qualified biologist. The results of the nesting bird survey(s) shall be sent to the Department at: California Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001.

Timing/Implementation: No more than one week prior to vegetation removal during the avian breeding season of February 1 through August 31.

Enforcement/Monitoring: Siskiyou County Community Development Department -Planning Division; California Department of Fish and Wildlife

MM 4.5 Where structures, buildings, or other land disturbing activities are proposed to be located less than 50 feet from a naturally occurring waterway or water body, the following shall be completed:

- a. A stormwater pollution prevention plan (SWPPP), completed by a Qualified Storm Water Pollution Prevention Plan Developer (QSD), shall be submitted to the Siskiyou County Community Development Department – Planning Division for review and approval. The SWPPP shall be developed to the same standards that would be required for Construction General Permit; and
- b. Stormwater associated with newly created impervious surfaces shall be retained, detained, or directed away from said waterways or water bodies.

Timing/Implementation: Prior to land disturbance activities within 50 feet of a naturally occurring waterway or water body

Enforcement/Monitoring: Siskiyou County Community Development - Planning Division

MM 4.6 Jurisdictional *Waters of the United States*, as regulated by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act, shall be avoided; or

If avoidance is not possible, an application for a Section 404 permit shall be approved by the USACE prior to any land disturbance activities that would result in the dredge, fill, or alteration of hydrology to any jurisdictional waters. Where avoidance is not possible measures shall be implemented to minimize unavoidable impacts, restoration procedures, and compensatory creation or enhancement to ensure no net loss of wetland extent or function.

Timing/Implementation: In perpetuity

Enforcement/Monitoring: United States Army Corp of Engineers (USACE); Siskiyou

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Cultural Resources

MM 5.1 If, during the course of project implementation, cultural resources (i.e., prehistoric sites, historic features, isolated artifacts, and features such as concentrations of shell or glass) are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and a professional archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to determine the significance of the discovery. The County shall consider mitigation recommendations presented by a professional archaeologist and implement a measure or measures that the County deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.

Timing/Implementation: During ground disturbance activities associated with development of the site.

Enforcement/Monitoring: Siskiyou County Community Development Department - Planning Division

MM 5.2 If, during the course of project implementation, paleontological resources (e.g., fossils) are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. The County shall consider the mitigation recommendations presented by a professional paleontologist and implement a measure or measures that the County deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.

Timing/Implementation: During ground disturbance activities associated with development of the site.

Enforcement/Monitoring: Siskiyou County Community Development Department - Planning Division

MM 5.3 If, during the course of project implementation, human remains are discovered, all work shall cease in the area of the find, the Siskiyou County Community Development Department – Planning Division shall be immediately notified, and the County Coroner must be notified, according to Section 5097.98 of the California Public Resources Code and Section 7050.5 of the California Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in California Code of Regulations Section 15064.5(d) and (e) shall be followed.

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Timing/Implementation: *During ground disturbance activities associated with development of the site.*

Enforcement/Monitoring: *Siskiyou County Community Development Department - Planning Division*

Geology and Soils

MM 6.1 The applicant shall either revegetate soils disturbed by land clearing for construction of improvements or provide and maintain an adequate ground cover within these disturbed areas. Adequate ground cover may be accomplished through paving and/or laying down wood chips, shredded bark, or similar material(s). If construction activities are suspended for six (6) or more months, disturbed soils shall be revegetated or adequately covered until construction activities resume. Upon completion of construction activities, soils shall be revegetated or adequately covered within six (6) months.

Timing/Implementation: *During ground disturbance activities associated with improvements.*

Enforcement/Monitoring: *Siskiyou County Community Development Department – Planning Division*

Hydrology and Water Quality

MM 9.1 Prior to any land disturbance activities associated with the construction of the proposed 7-acre pond, the following shall be completed:

- a. If the dam necessary to impound the proposed pond is subject to Department of Water Resources, Division of Safety of Dams jurisdiction, proof of full compliance with the required permitting and plan approval shall be provided to the Siskiyou County Community Development Department – Planning Division; or
- b. If the dam necessary to impound the proposed pond is not subject to the Department of Water Resources, Division of Safety of Dams jurisdiction, the applicant shall submit plans to the County stamped by a qualified engineer registered in the State of California detailing the structural design of the dam. The County will review and approve said plans to ensure that the proposed dam is structurally adequate and is not a hazard. The applicant shall be responsible for paying all costs associated with the County’s review of said plans. The County retains the right to hire a third party engineering firm to review the required plans.

Timing/Implementation: *Prior to land disturbance activities associated with pond construction*

Enforcement/Monitoring: *Siskiyou County Community Development - Planning Division*

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Noise

MM 12.1 During project site development construction activities shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday, and from 8:00 a.m. to 6:00 p.m. on Saturdays. Construction activities are prohibited on Sundays and federal holidays. This condition shall be noted on Building Permits documents and any Improvement Plans required for this project.

Timing/Implementation: During grading and construction of improvements

Enforcement/Monitoring: Siskiyou County Community Development - Planning Division

MM 12.2 The use of loud or amplified sound (i.e. music, stereo equipment, public address (PA) systems, etc.) shall be limited to 8:00 AM to 10:00 PM Monday through Saturday, and 9:00 AM to 10:00 PM Sunday and National and State-recognized holidays. Noise shall be limited to 60 dB Leq at the boundaries of the project site during the hours listed above and 45 dB Leq at all other times¹.

Timing/Implementation: As long as the Use Permit is valid

Enforcement/Monitoring: Siskiyou County Community Development - Planning Division

The review and certification process for the EIR will involve the following general procedural steps:

1.6.3 Notice of Preparation

In accordance with CEQA Guidelines § 15082, the County prepared a Notice of Preparation (NOP) of an EIR for the Proposed Project that was distributed to responsible agencies and the public for a 30-day comment period, beginning on August 31, 2018, and concluding on September 29, 2018. One public scoping meeting was held on September 13, 2018 at the Fort Jones Town Hall in order to receive additional comments and input from the public as to the scope and content of the EIR. Comments received in response to the NOP were considered during preparation of the EIR. **Table 1-1** provides a brief summary of the written comments received. The reader is referred to **Appendix B** for the NOP and the written comments received from interested parties and agencies.

Table 1-1. List of NOP Comment Letters and Summary of Comments

Interested Party/Agency	Date	Summary of Comment(s)
Wend, Che'usa	09-02-18	Concerned with the conversion of Timberland Production to Rural Residential Agricultural zoning. The commenter re-submits comments responding to the Initial Study. These comments include: increased traffic, emergency access in case of fire, water usage, sewage disposal, noise, lighting, and lost tax revenue for county.
Native American Heritage Commission Totton, Gayle	09-05-18	The commenter provides information regarding the requirements for Native American consultation as required by Assembly Bill 52 and Senate Bill 18.

¹ Leq has been added to the decibel measurement as it provides a more accurate level of measurement of noise levels over a period of time.

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Interested Party/Agency	Date	Summary of Comment(s)
Stapleton, Betsy	09-05-18	Problem with the proposal of limiting in scope the cumulative analysis based on CEQA Guidelines Section 15335(b). The project description has a lack of specificity and detail. Supports permitting the KCOC with a conditional use permit with detailed permit terms.
Wiley, Neal and Donna	09-05-18	Concerns about traffic and traffic safety regarding a visually obstructed left turn from their driveway onto South Kidder Creek Road.
Morrill, Julie	09-07-18	Supports KCOC, KCOC has positive impact on local economy, KCOC tries to make plans environmentally friendly and have minimal impact to neighbors, KCOC listens to neighbor's concerns and tries to mitigate problems including traffic.
Taylor, Murray	09-07-18	Commenter provides personal background as a firefighter and a 1925 wildfire. Concerned over the potential for wildfires and provides information on recent wildfire increases in the state.
Warner, Judie	09-07-18	KCOC has listened and worked with neighbors over the years regarding traffic, noise and expansion of camp. Provides information on the attributes of the camp.
Marsh, Anne	09-09-18	Commenter provides a brief history of the requested expansion of KCOC. The commenter states that the occupancy of 310 persons is a false baseline and demands that the NOP be recirculated with what she considers the correct baseline to be, an occupancy of 165 persons. Has concerns about the following: length of project, use permit of planned development zoning, inadequacy of mitigations, lack of a list of permits required from other agencies, hydrology and water, greenhouse gas emissions, county allowed buildout without approval of the project, traffic and the traffic study, noise and the noise study, land use-compatibility with the general plan and SVAP, utilities and services systems, and cumulative impacts.
CALFIRE Anzo, Phillip	09-10-18	All timber operations must be approved by CALFIRE. A Timberland Conversion Permit (TCP) is required for all project converting more than three acres of timberland to non-timberland use. An exemption from the TCP is allowed if operation converts non-TPZ land to a subdivision.
Stapleton, Michael	09-10-18	Concerns about non-compliance with the SVAP, traffic, wildfire escape routes, zoning, possible related link to allow expansion of JH Ranch Resort with approval of Proposed Project, sewage, and drinking water.
Jones, Dee	09-12-18	Re-submittal of comments made about the Initial Study dated October 3, 2016. Concerns about traffic on South Kidder Creek Road, adequate sewage treatment, water use, and a deeded emergency access.

**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

Interested Party/Agency	Date	Summary of Comment(s)
Sierra Club Pace, Felice	09-12-18	<p>The application should be deemed incomplete and DEIR suspended until the following is provided: The NOP is inadequate as it mis-represents the potential amount of single-day and over-night users and should be corrected, KCOC provides documentation for adequate groundwater rights for drinking water and surface water rights to fill and operate the proposed pond, plan for disposal of wastewater that has been reviewed by the NCWQCB, approval from CalFire for emergency road access, KCOC must provide approval of a Public Water System from the State Water Quality Control Board, proof that the extraction of groundwater for the proposed expansion would not affect surface flows in Kidder Creek and Jenner Kidder Creek Ditch . The county should not be approving developments that include groundwater extraction rights which it could later have to curtail.</p> <p>Issues for DEIR Analysis and Disclosure: 1) Water supply, use and impacts; 2) Wastewater; 3) Public and environmental safety including law enforcement, flooding, and fire; 4) Scott Valley Plan and quality of life; and 5) Other legal compliance and mitigations including does the project comply with the California Code of Regulations on Organized Camp's. Title 17 Subchapter 6.</p> <p>Key Information needed to complete and adequate DEIR: the maximum and average number of campers, staff, visitors and others on any one day and for longer periods; the wastewater system design; identification of sources of drinking and other water and maximum amount of water withdrawn from those sources on a daily, weekly and annual basis.</p> <p>The Proposed Project is a commercial and industrial use therefore, the proposed zoning is inappropriate, and the county must zone the property as a commercial/industrial use. The proposed rezoning is not consistent it the General Plan and Scott Valley Area Plan.</p> <p>The following key conditions should be included in the use permit: all needed safety features including emergency access, all needed permits and approvals to be completed prior to project construction, an escrow fund to complete all safety features, water supply and wastewater system prior to ground disturbing activities, all mitigations identified in the EIR implemented prior to construction activities.</p> <p>An industrial recreational development like the Proposed Project is incompatible with the rural character and existing land uses in the Scott River Valley.</p>
Dr. Duinu, John	09-13-18	A great idea, an organization that cares for the environment and builds character in youths.
Hoppas, Sharon	09-13-18	How is the SVAP and General Plan considered in the expansion of the KCOC.
Rosene, Sandra	09-13-18	Number one problem; county not paying attention to locals and their plans. Fire danger, water problems, population problems, changes to wildlife and timber areas, traffic, loss of county taxes.
Taylor, Murray	09-13-18	Concerns about a catastrophic fire at the site.
Walker, Freda	09-13-18	Concerns about water quality and impacts to her well.
Walker, Freda	09-13-18	Concerns about the impact to wildlife, increases in population, deer patterns and birds impacts.
Williams, Steffanie	09-13-18	Concerns about water issues.
CALFIRE Roath, Greg	09-17-18	Road width for South Kidder Creek Road will be required to meet the requirements of Section 1273.01. A secondary deeded access road must be identified and meet and maintained to the required road standards. Water supply for fire protection is required and is dependent on cubic square footage of structure to be protected. The project must comply with fire safety requirements for an Organized Camp per Health and Safety Code Section 18897.
Eastman, Kimberley	09-21-18	The camp enriches the lives of hundreds of local families and acts as a source of summer employment for local people and is an excellent example of responsible land and resource use.

**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

Interested Party/Agency	Date	Summary of Comment(s)
Leissler, Lynn	09-21-18	Feels that the Proposed Project would not have a negative impact to the neighborhood.
Wildearth, Donna	09-22-18	Concerns about road safety on South Kidder Creek Road, an adequate emergency exit road, wastewater treatment, stream diversion, and water quality.
Pace, Felice	09-23-18	Provides information on Siskiyou County's obligation to consider impacts to Public Trust Resources associate with the Scott River based on a recent Appeals Court decision. The DEIR must consider impact of groundwater extraction to the Scott River watershed including Kidder Creek and Chinook and Coho salmon.
Scott, Tamara Lynn	09-23-18	Concerned about more traffic, trespassing, theft, noise, road damage, and population.
Corrigan, Jan	09-24-18	Concerns about water supply, traffic, and adequate emergency evacuation.
California Dept. of Fish and Wildlife McKannay, Adam	09-25-18	Update biological studies to include current California Natural Diversity Data Base (CNDDDB) lists. A complete assessment of rare, threatened, and endangered invertebrate, fish, wildlife, reptile, and amphibian species should be presented in the draft EIR. An assessment of rare plants and rare natural communities following the updated March 2018 <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities</i> . A discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, A range of Project alternatives shall be analyzed to ensure that the full spectrum of alternatives to the proposed Project are fully considered and evaluated, mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats should be developed, fuel modification impacts on vegetation in the biological resources section of the draft EIR, If applicable, the EIR should demonstrate that the Project will not result in a net loss of wetland habitat values or acreage, consultation with the State Water Resources Control Board (SWRCB) regarding water rights that were previously proposed to fill the new pond, and the document should fully identify the potential impacts to the lake, stream or riparian resources.
Eastlick, Randy and Jo Ann	09-27-18	Concerns about traffic, emergency evacuation due to wildfires, water supply and water quality.
Walker, Winifred	09-28-18	Concerns about wildfires, traffic, new well will impact area groundwater levels, water rights, camp needs a water treatment plant, cumulative impacts, inconsistent with SVAP.
Dale La Forest and Associates	09-29-18	Noise study is inadequate, construction and traffic noise analysis in noise study is insufficient.
Marsh, Anne	09-29-18	Considers the IS/MND be inadequate in a number of areas and provides information as to this inadequacy including: the project description, occupancy, geology and soils, hazardous materials, noise, light and glare, water rights, land use and planning, traffic, emergency access road, greenhouse gas, permits required, and cumulative impacts. The commenter has non-environmental concerns with the county allowing buildout of the project without approval, the environmental consultant's contract, length of project and lack of specifics, use permit or planned development zoning, and the traffic analysis and noise analysis completed for the project. The commenter states that a full EIR is required for the project.
Wagner, Albert	No date	The project conflicts with SVAP policies 42 and 43. Concerned about fire safety, water supply and impacts to local water, septic systems are inadequate to handle proposed increase, cumulative impacts related to increased traffic, loss in tax revenue because of non-profit status.
Williams, Marc	No date	CEQA concerns about non-compliance with the SVAP, wildfire, traffic and noise, widening of road, and wildlife. Non-CEQA concerns about lack of county support for the SVAP, level of fire protection at the camp, field surveys for wildlife should be done, will county adequately monitor the number of visitors to the camp, and Grand Jury Report regarding road signage, county adoption of a noise ordinance, road improvements to be paid for by KCOC and no outdoor concerts or special events.

Kidder Creek Orchard Camp Draft Environmental Impact Report

1.6.4 Draft EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the Proposed Project, description of the environmental setting, identification of project impacts, and feasible mitigation measures for impacts found to be significant, as well as an analysis of project alternatives. Upon completion of the Draft EIR, the County will file the Notice of Completion (NOC) with the California Office of Planning and Research (OPR) to begin the public review period (PRC § 21161).

1.6.5 Public Notice/Public Review

Concurrent with the NOC, the County will provide public notice of the availability of the Draft EIR for public review and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period is 45 days. Notice of the time and location of any public meetings and hearings will be published prior to the meeting/hearing in accordance with applicable law. All comments or questions regarding the Draft EIR should be addressed to:

Rachel Jereb
Associate Planner
County of Siskiyou
806 South Main Street
Yreka, California 96097

Comments may be sent to Ms. Jereb via e-mail at: planning@co.siskiyou.ca.us

1.6.6 Response to Comments/Final EIR

Following the public review period, a Final Environmental Impact Report (FEIR) will be prepared. The FEIR will respond to all comments received during the public review period that raise significant environmental concerns and may contain revisions to the Draft EIR, if necessary. The Draft EIR, as revised and combined with responses to comments, will constitute the Final EIR.

1.6.7 Certification of the EIR/Project Consideration

The County of Siskiyou Planning Commission will review and make recommendation to the County Board of Supervisors regarding certification of the EIR and action on the Proposed Project. The Board of Supervisors will then review and consider the FEIR. If the County finds that the FEIR is "adequate and complete," the County may certify the FEIR. Upon review and consideration of the FEIR, the County may take action to approve, revise, or reject the Proposed Project. Any decision to approve the project would be accompanied by written findings in accordance with CEQA Guidelines Sections 15091 and 15093. A MMRP, as described below, must also be adopted for mitigation measures that have been incorporated into or imposed on the Project to reduce or avoid significant effects on the environment. The MMRP will be designed to ensure that these measures are enforceable and carried out during project implementation.

**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

1.6.8 Mitigation Monitoring and Reporting Program

CEQA Section 21081.6(a) requires lead agencies to adopt an MMRP to describe measures that will be adopted and made a condition of Project approval in order to mitigate or avoid significant effects on the environment. The specific reporting or monitoring program required by CEQA is not required to be included in the EIR; however, it must be presented to the Board of Supervisors for adoption.

Throughout the EIR, mitigation measures have been clearly identified and presented in language that will facilitate establishment of an MMRP. Any mitigation measures adopted by the County as conditions for approval of the project will be included in an MMRP to ensure enforceability and verify compliance.

1.7 References

Tyler, Kathleen

2014. Botanical Resource Survey Addendum For Kidder Creek Orchard Camp Land Use Permit Application. Update May 23, 2014.

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**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

2.0 PROJECT DESCRIPTION

The majority of the following information was acquired from the *Updated Project Description for UP 11-15* provided by Kidder Creek Orchard Camps, Inc. This document is included as **Appendix C** of this EIR.

2.1 Project Location and Setting

The ±580-acre Project site is located at the west end of South Kidder Creek Road, approximately two miles west of State Highway 3, south of the community of Greenview in the Scott Valley, Siskiyou County, California; T42N, R10W, portions of Sections 1 and 2; T43N, R10W, portions of Sections 35 and 36, Mount Diablo Baseline and Meridian (Latitude 41°31'45.00"N, Longitude 122°57'08.00"W). **See Figure 1. Project Location.** The Project is located on 10 parcels including the following:

<u>Accessor's Parcel Numbers</u>	
024-370-040	024-440-320
024-370-380	024-440-330
024-440-140	024-450-040
024-440-150	024-450-390
024-440-310	024-450-590

Elevations at the site range from approximately 3,000 to 3,950 feet. In addition to Kidder Creek, which traverses the northwesterly portion of the site, a number of seasonal waterways and the Barker Irrigation Ditch traverse the site. The low elevation areas include a meadow with some jurisdictional wetlands and remnants of an apple orchard. The remaining apple trees are currently producing apples that are harvested annually. Upland areas are generally forested with conifers, interspersed with oak trees. Natural habitats include riparian woodlands, cobbly/sandy riverbanks, wet meadows, mixed conifer forests, and oak woodlands.

2.1.1 Surrounding Land Uses

Adjacent parcels are largely undeveloped. Large commercial timber lands and vacant/open space parcels 80 acres or larger are located to the west and south of the site. Large lot rural residential homes and vacant lands are located to the north and east. These parcels to the north and east are typically 5 to 75 acres in size.

The Project site and surrounding area are within the County's Scott Valley Area Plan (SVAP) as identified in the Siskiyou County General Plan. Those areas directly south of the Project site have the zoning designation of Timberland Production (TPZ). East of the site, this area has the zoning designation of TPZ and Rural Residential Agricultural 40-acre minimum (R-R-B-40). West of the site, the zoning designation is R-R-B-40. The areas north of the Project site, have the zoning designation of TPZ, R-R-B-40, Rural Residential Agricultural 10-acre minimum (R-R-B-10) and Non-Prime Agriculture (AG-2), and Rural Residential Agricultural – Mobile Home 5-acre minimum (R-R-MH-B-5).

**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

2.2 Project Objectives

The Proposed Project objectives are defined as follows:

- 1) Provide improved facilities and accommodations to support and expand ministry.
- 2) Enhance the visual perception of the camp property.
- 3) Maximize the use and experience of water across the property.
- 4) Separate vehicle and pedestrian traffic.
- 5) Create a flexible layout that accommodates phased construction.

2.3 Existing Conditions

2.3.1 Project Background

The existing camp was permitted by three separate use permit approvals beginning in 1976. Use permits were approved in 1977 (UP-76-39), 1985 (UP-85-37), and 1996 (UP-95-12). The 1996 use permit approved the current occupancy capacity of 165 guests¹, a maximum annual occupancy of 3,340, with an onsite parking limitation of 215 vehicles, and an average daily traffic volume of 131 vehicles. Mitigated Negative Declarations (MNDs) were prepared for the 1985 use permit (SCH# 1985110397) and for the 1996 use permit (SCH# 1996103658) project approvals. The camp also obtained approval on December 5, 1979, of a use permit (UP-68-79) for a 2.3-x 3-foot (6.9-square-feet) directional sign to be placed at the State Highway 3/South Kidder Creek intersection. Based on the use permits, the Kidder Creek Orchard Camp is approved for the following:

2.3.2 Existing Approvals

Maximum Daily Occupancy:	165 guests (310 including staff and volunteers) ¹
Maximum Annual Occupancy:	3,340 persons
Average Daily Traffic:	131 vehicles
On-Site Parking:	215 vehicles

The Project applicant has submitted applications requesting a revision of an existing use permit (UP-11-15) and a zoning change (Z-14-01) to allow for an expansion of the existing Kidder Creek Orchard Camp to Siskiyou County.

¹ The 1996 use permit allows up to 165 guests. The 1996 use permit does not limit the number of staff and volunteers at the camp. Currently, the maximum daily occupancy, including guests, staff and volunteers, at the camp is 310 persons, which is used as the baseline for this environmental review as it represents the current existing condition.

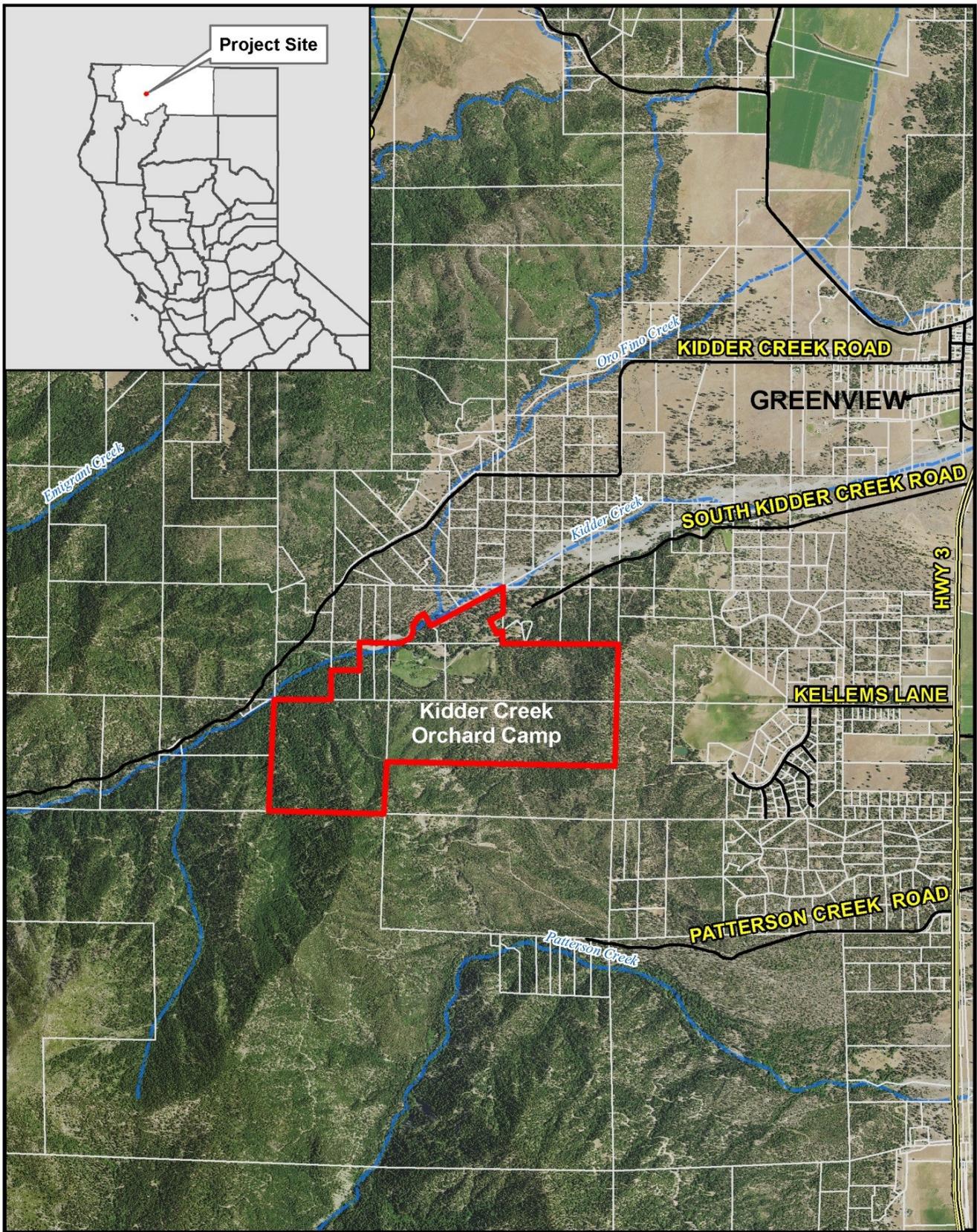


Figure 1. Project Location
2018-123 Kidder Creek Orchard Camp

**Kidder Creek Orchard Camp
Draft Environmental Impact Report**

2.3.3 Existing Site Conditions

The existing Kidder Creek Orchard Camp (KCOC) occupies ±333 acres. The property has been used for residential programs for more than 40 years, and continues to be operated by Scott Valley residents, both paid and volunteer, with seasonal staff hired locally and outside the area.

Elevations at the site range from approximately 3,000 to 3,950 feet. In addition to Kidder Creek, which traverses the northwesterly portion of the site, a number of seasonal waterways and the Barker Irrigation Ditch traverse the site. The low elevation areas include a meadow with some jurisdictional wetlands and an apple orchard. Upland areas are generally forested with conifers, interspersed with oak trees. Natural habitats include riparian woodlands, cobbly/sandy riverbanks, wet meadows, mixed conifer forests, and oak woodlands.

As shown in **Table 2-1**, the existing camp includes four camping areas, a recreational vehicle (RV) camping area and five staff/guest homes. Based on the occupant levels for each area, the maximum total occupancy is 310 persons, including guests and staff, in the summer months and approximately 38 persons in the fall and spring months. The existing approval allows for 165 persons (310 persons with staff and guests as discussed previously), these numbers are used as the occupancy baseline for the environmental analysis as they represent the highest existing capacity potential. See **Figure 2. Existing Site**.

Table 2-1. Existing Uses and Occupancy

Map ID#	Area	Estimated Building/ Area Size	Summer Occupancy	Spring and Fall Occupancy
7	Ranch Camp	280 sq. ft. (each cabin)	5 cabins @ 8 persons (40 persons total)	0 persons
		320 sq. ft. (each cabin)	1 cabin @ 8 persons (8 persons total)	0 persons
9	Base Camp #1	Camp sites	50 persons	0 persons
9	Base Camp #3	Camp sites	20 persons	0 persons
10	Timberline Camp #1	Tent Structures 280 sq. ft.	13 cabins @ 8 persons (104 persons total)	0 persons
		Tent Structures 380 sq. ft.	2 cabins @ 8 persons (16 persons total)	0 persons
		Hilton 560 sq. ft.	1 building (10 persons total)	0 persons
11	RV Area #1	1 acre 12 spaces	24 persons	0 persons
14	Staff Residence #1 (Warren home)	2,200 sq. ft.	6 persons	6 persons
14	Staff Residence #2 (Jones home)	1,248 sq. ft.	6 persons	6 persons
13	Staff/Guest House #1 (Orchard House)	1,728 sq. ft.	10 persons	10 persons
13	Staff /Guest House #2 (Cedar Lodge)	2,000 sq. ft.	10 persons	10 persons
13	Staff/ Guest house #3 (Creekside)	1,850 sq. ft.	6 persons	6 persons
Total:			310 persons	38 persons

Current routine camp activities and uses include a horse riding/equestrian area, archery course, rifle range, ropes courses, a paintball course, mountain biking, ropes course, zip line, waterslide and water activities.

Kidder Creek Orchard Camp Draft Environmental Impact Report

Off-site activities include hiking, camping, horse-packing, rock climbing, river rafting, swimming, mountain biking and horseback riding on and off national forest lands.

2.4 Proposed Project

2.4.1 Requested Amendments and Entitlements

The Proposed Project is a request to expand the use of the site. Expansion of the site requires a new use permit (UP-11-15). Issuance of a new use permit would allow for the revocation of the previous use permits to consolidate all the approved uses into a single use permit. Therefore, all existing use permit conditions of approval and all previously adopted mitigation measures will be reviewed and incorporated into the proposed use permit, where necessary. Conditions of approval and mitigation measures that are no longer necessary, have been complied with, or would be satisfied/fulfilled with new conditions of approval or mitigation measures may be eliminated.

The use permit application requests approval to increase the allowable occupancy at the camp from 165 guests to a total occupancy of 844 (guests, staff, and volunteers), increase the physical size of the camp from 333 acres to 580 acres, and add a number of structures and recreation features, including a second pond and ancillary facilities.

The Project also includes a request for a zone change (Z-14-01) to rezone ±170 acres from Timberland Production District (TPZ) to Rural Residential Agricultural, 40-acre minimum parcel size (R-R-B-40). The existing zoning and proposed zoning maps are included as **Figure 3. Existing Zoning** and **Figure 4. Proposed Zoning**.

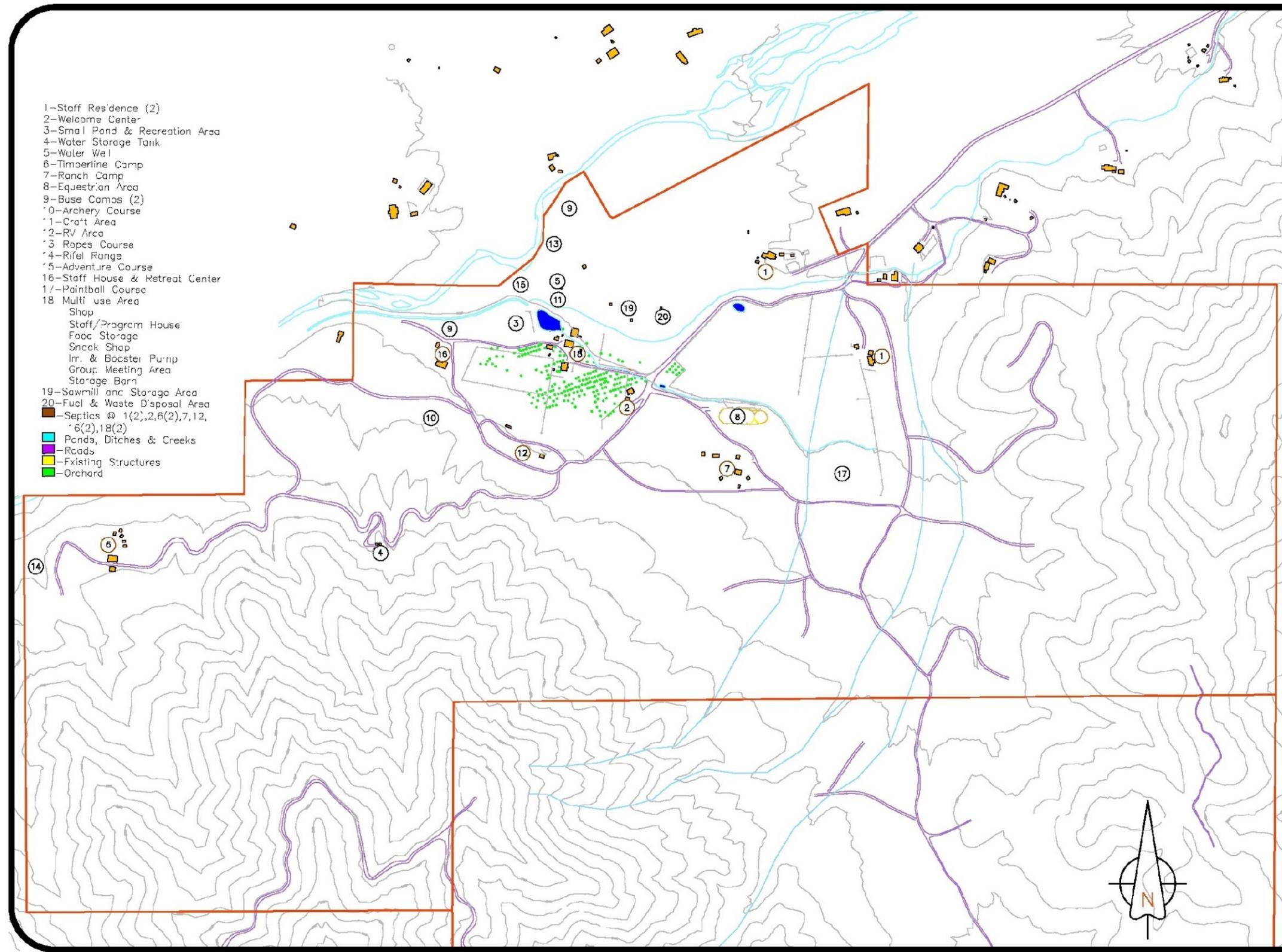
If the proposed zone change and/or use permit is not approved, the existing use permit approvals and mitigation measures would not be revoked and would continue to be effective.

2.4.2 Project Description

New Buildings

As stated above, the Project proposes an increase of allowable occupancy at the camp from 165 guests to a total occupancy of 844 (includes guests, staff, and volunteers), an increase the physical size of the camp from 333 to 580 acres, and the addition of a number of structures and recreation features, including a second pond and ancillary facilities. See **Figure 5. Proposed Project**.

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- 1-Staff Residence (2)
- 2-Welcome Center
- 3-Smal Pond & Recreation Area
- 4-Water Storage Tank
- 5-Water Well
- 6-Timberline Camp
- 7-Ranch Camp
- 8-Equestrian Area
- 9-Buse Camos (2)
- 10-Archery Course
- 11-Craft Area
- 12-RV Area
- 13 Ropes Course
- 14-Rifel Range
- 15-Adventure Course
- 16-Staff House & Retreat Center
- 17-Paintball Course
- 18 Multi use Area
- Shop
- Staff/Program House
- Food Storage
- Snack Shop
- Irr. & Booster Pump
- Group Meeting Area
- Storage Barn
- 19-Sawmill and Storage Area
- 20-Fuel & Waste Disposal Area
- Septics @ 1(2),2,6(2),7,12,6(2),18(2)
- Ponds, Ditches & Creeks
- Roads
- Existing Structures
- Orchard

Master Site Plan Existing

No.	Revision/Issue	Date

Kidder Creek Camp
 2700 S. Kidder Creek Rd.
 PO Box 208
 Greenview, CA 96027
 530-487-3265

Project	MSP	Sheet	1
Date	1-6-14		
Scale	1"=575'		

Figure 2. Existing Site
 2018-123 Kidder Creek Orchard Camp

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Kidder Creek Orchard Camp Draft Environmental Impact Report

The Project includes four major facilities to be constructed and several minor facilities such as those associated with the High Adventure Camp, and Basecamps. Major facilities (with reference number for table below) include the following:

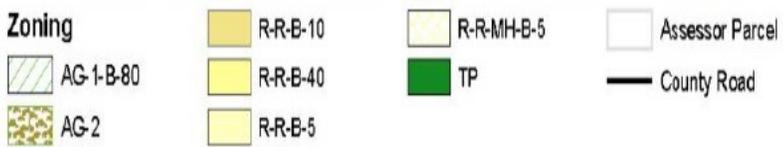
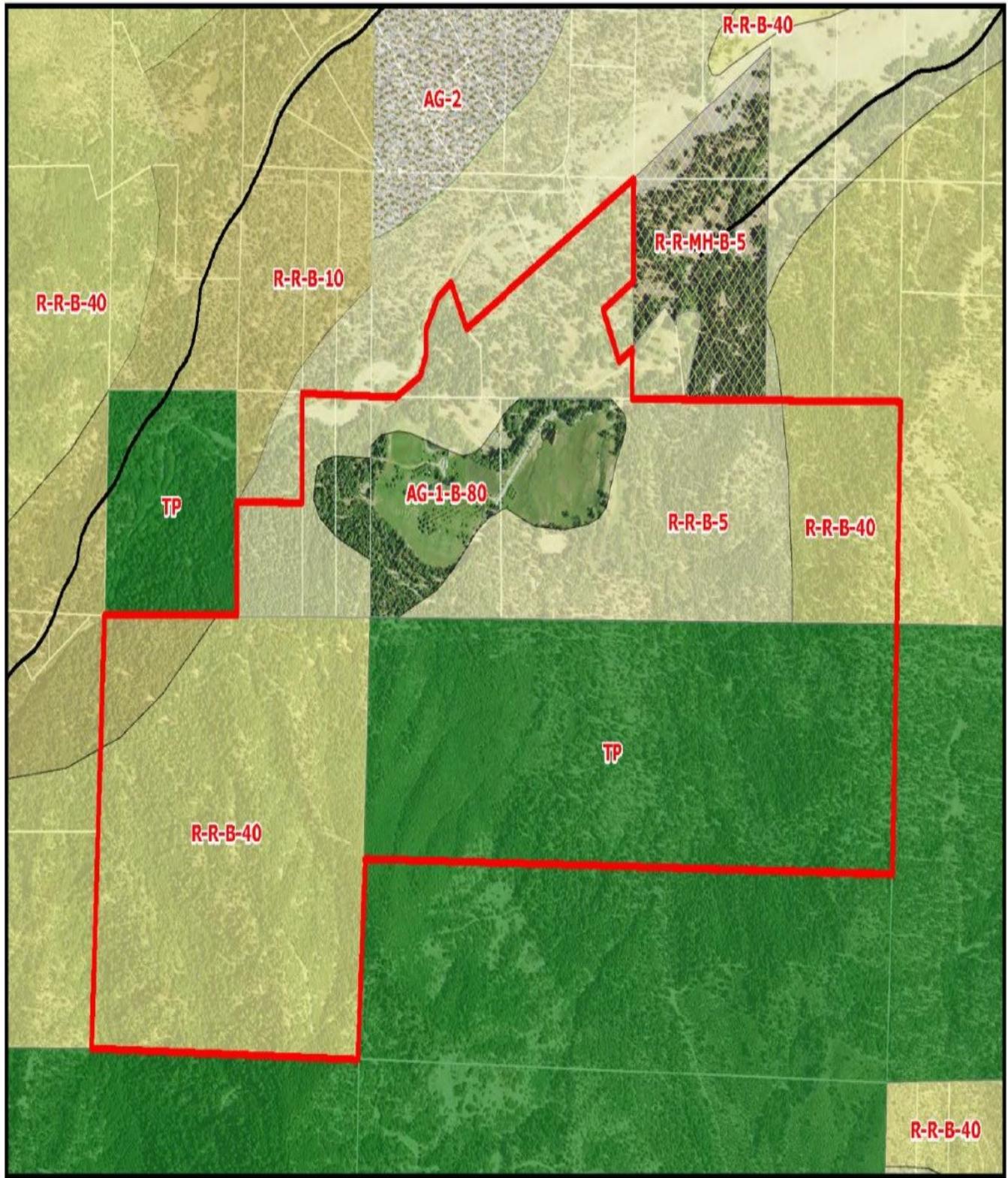
1. Welcome Center and Dining – this building would create new office space, dining hall, and restroom.
2. Equestrian Center – this building would provide new horse facilities for Ranch Camp.
3. Cabins for Pines/Ranch Camp – these are new winterized buildings.
4. Staff housing/Adult Retreat Centers – these are new winterized buildings.

It is important to note that there are three areas designated as Base Campsites. These are basic in nature and allow for “outdoor” camping. Future development may include restrooms and showers and basic outdoor dining and meeting facilities.

Table 2-2 illustrates the proposed new buildings and structures on the 580 acre Project site. **Table 2-3** indicates that the Proposed Project results in an increase of 534 persons in the summer and 550 persons in the spring and fall months over existing conditions to meet the proposed occupancy total 844 persons in the summer and 588 in the spring and fall months.

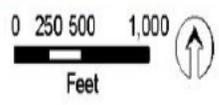
Table 2-2. Proposed Uses and Occupancy

Map ID#	Area	Estimated Building/ Area Size	Summer Occupancy	Spring and Fall Occupancy
1	Welcome Center and Dining	16,200 sq. ft. 3,000 sq. ft. deck	-	-
3	Equestrian Center	20,000 sq. ft.	-	-
6	The Pines	1,152 sq. ft. (each cabin)	10 cabins @ 16 (160 persons total)	10 cabins @ 16 (160 persons total)
		576 sq. ft. (each cabin)	3 cabins @ 8 (24 persons total)	3 cabins @ 8 (24 persons total)
7	Ranch Camp (relocated, allows an increase of 40 persons over existing uses)	1,152 sq. ft. (each cabin)	4 cabins @ 16 persons (64 persons total)	4 cabins @ 16 persons (64 persons total)*
		576 sq. ft. (each cabin)	3 cabins @ 8 persons (24 persons total)	3 cabins @ 8 persons (24 persons total)
9	Base Camp #1 (relocated, no increase in occupation total)	Camp sites	50 persons**	0 persons
9	Base Camp #2	Camp sites	30 persons	0 persons
10	Hi Adventure Camp #2	Tent Structures	40 persons	0 persons
11	RV Area #2	12 spaces	24 persons	24 persons
11	RV Area #3	12 spaces	24 persons	24 persons
12	Staff housing/ Retreat Center #1	4,950 sq. ft.	40 persons	40 persons
12	Staff housing/ Retreat Center #2	4,950 sq. ft.	40 persons	40 persons
15	Adult Retreat Center #1	4,950 sq. ft.	40 persons	40 persons
15	Adult Retreat Center #2	4,950 sq. ft.	40 persons	40 persons
15	Adult Retreat Center #3	4,950 sq. ft.	40 persons	40 persons
14	Staff Residence #3	1,850 sq. ft.	6 persons	6 persons



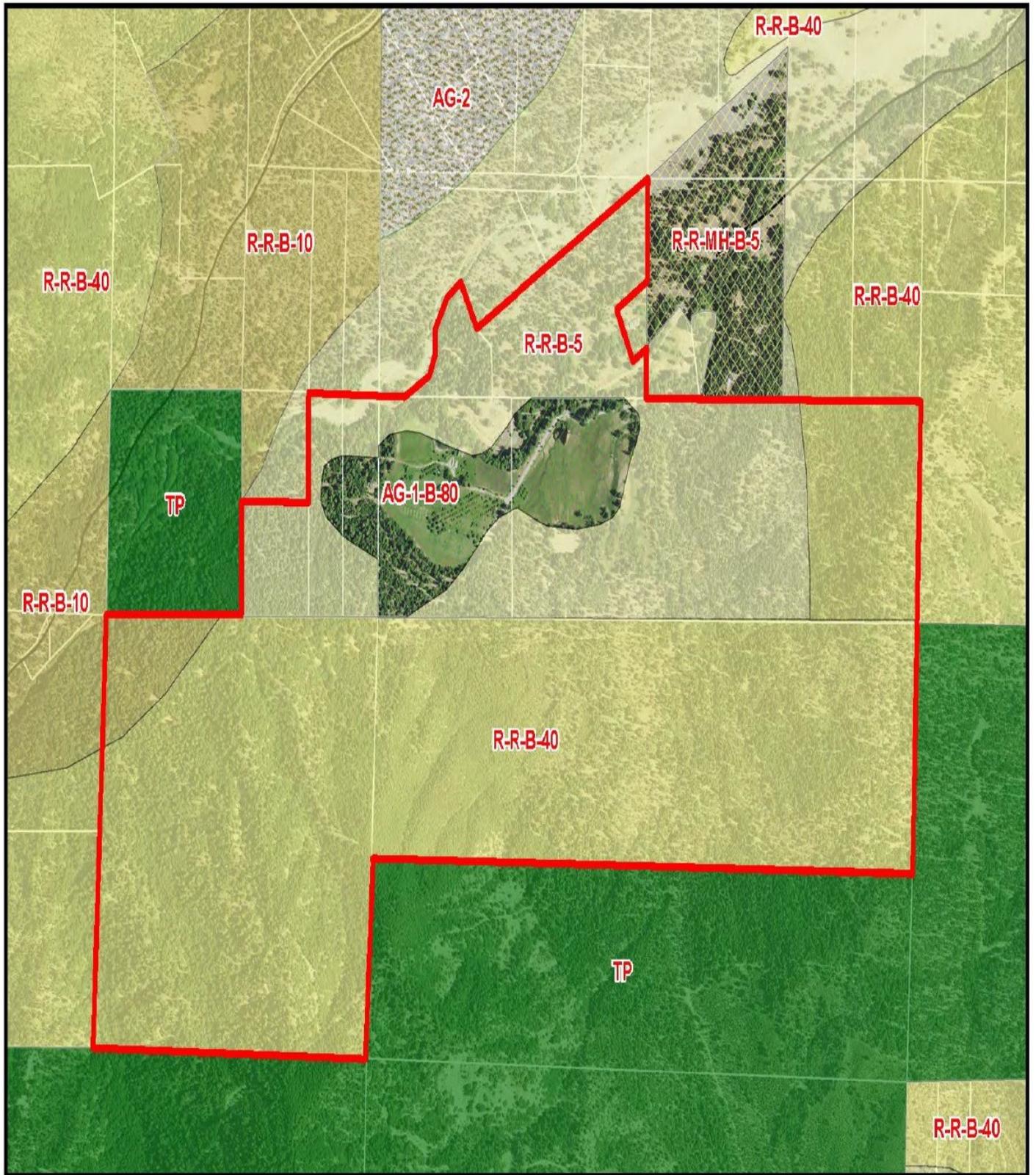
Map created by Siskiyou County
Community Development on
January 13, 2016;

Data Sources: Siskiyou County,
USDA, US Census



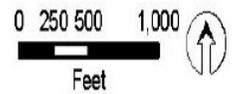
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 3. Existing Zoning
2018-123 Kidder Creek Orchard Camp



Zoning	R-R-B-10	R-R-MH-B-5	Assessor Parcel
AG-1-B-80	R-R-B-40	TP	County Road
AG-2	R-R-B-5		

Map created by Siskiyou County
Community Development on
January 13, 2016.



Data Sources: Siskiyou County,
USDA, US Census



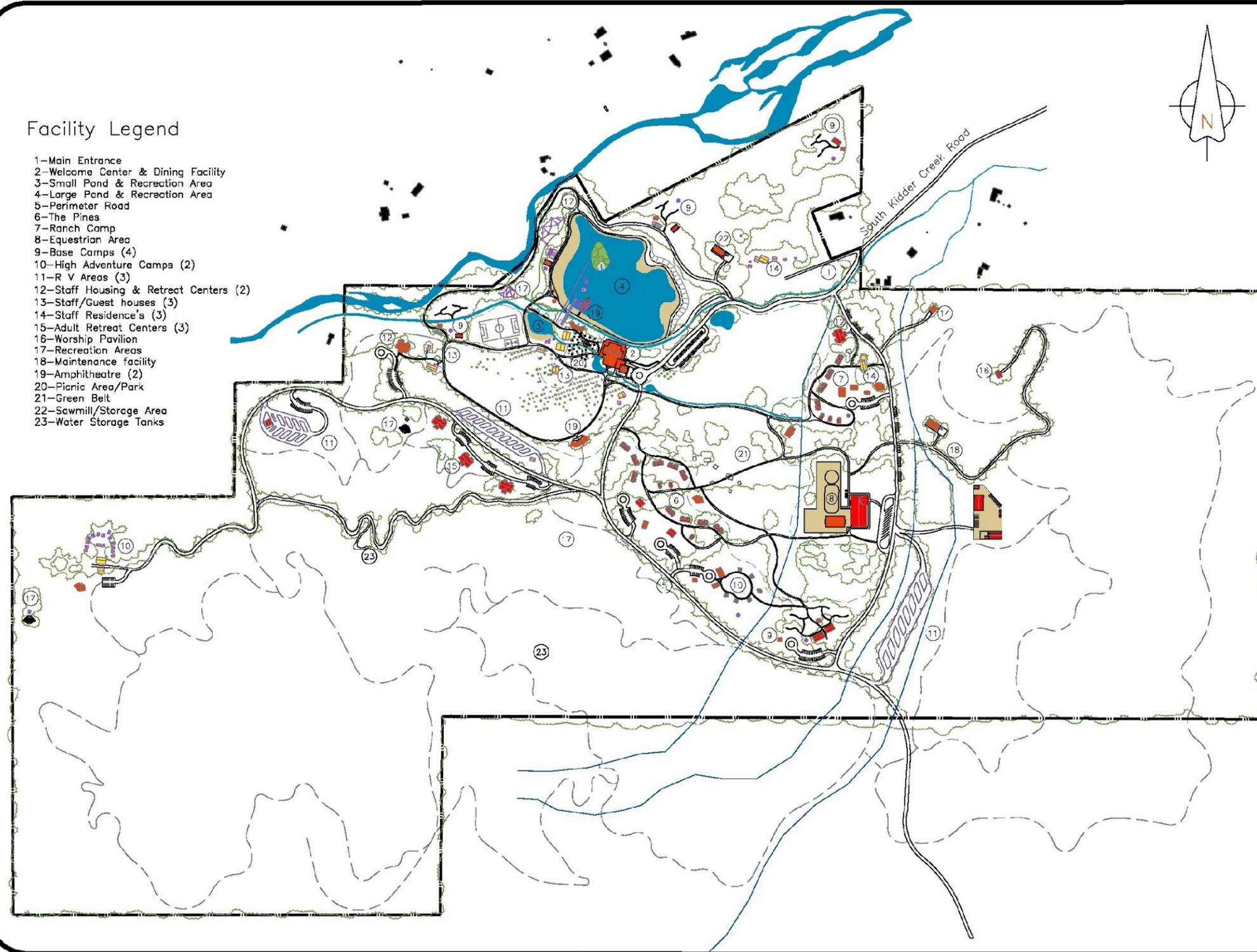
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 4. Proposed Zoning
2018-123 Kidder Creek Orchard Camp

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Facility Legend

- 1—Main Entrance
- 2—Welcome Center & Dining Facility
- 3—Small Pond & Recreation Area
- 4—Large Pond & Recreation Area
- 5—Perimeter Road
- 6—The Pines
- 7—Ranch Camp
- 8—Equestrian Area
- 9—Base Camps (4)
- 10—High Adventure Camps (2)
- 11—R V Areas (3)
- 12—Staff Housing & Retreat Centers (2)
- 13—Staff/Guest houses (3)
- 14—Staff Residence's (3)
- 15—Adult Retreat Centers (3)
- 16—Worship Pavilion
- 17—Recreation Areas
- 18—Maintenance facility
- 19—Amphitheatre (2)
- 20—Picnic Area/Park
- 21—Green Belt
- 22—Scawmill/Storage Area
- 23—Water Storage Tanks



Master Site Plan Proposed

No.	Revision/Issue	Date

Kidder Creek Camp
2700 S. Kidder Creek Rd.
PO Box 208
Greenview, CA 96027
530-487-3265

Date: 1/15/14 Scale: 1" = 575'	4
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Figure 5. Proposed Project
2018-123 Kidder Creek Orchard Camp

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Table 2-3. Proposed Occupancy Levels

Occupancy	Summer	Spring and Fall
Proposed Project Total	534 persons	550 persons
Existing Total	310 persons	38 persons
Proposed Occupancy Total (including existing uses)	844 persons	588 persons

Proposed routine camp activities and uses include a horse riding/equestrian area, archery course, target range, ropes courses, a paintball course, mountain biking, waterslide and water activities. Off-site activities include hiking, camping, horse-packing, rock climbing, river rafting, swimming, mountain biking and horseback riding on and off national forest lands.

The information presented below describes the various existing and new features of the Proposed Project as identified on **Figure 5**.

1. *Main Entrance* – The entrance to the camp will remain in the same location.
2. *Welcome Center and Dining facility* – New arrivals will be directed to the Welcome Center where the registration and administrative offices will be located along with a gift shop and infirmary. The new Dining facility would be adjacent to the Offices and situated to overlook the new Pond and Recreation area.
3. *Small Pond and Recreation Area* – The existing areas would expand to include a new snack shack, a new restroom, and a recreation room.
4. *Large Pond & Recreation area* – This new seven-acre pond would be built in the existing Sawmill and storage area. The source of water for supplying this pond will not change from the current source providing water to the existing pond. Along with the new pond, additional water toys and non-motorized vessels such as kayaks and canoes will also be enjoyed.
5. *Perimeter Road* – This design allows all traffic to be on the perimeter of the camps activities, eliminating crossover of pedestrian and vehicle traffic.
6. *The Pines* – This new area will handle the traditional camp programs currently running at Timberline and will accommodate week-long programs during the summer and weekend and weekend programs during the spring and fall. These cabins will be suitable for all season use.
7. *Ranch Camp* – The existing program will be moved to a new, larger location closer to the camp entrance. These cabins will accommodate week-long programs during the summer and weeklong & weekend programs during the spring and fall. These cabins will be suitable for all season use.
8. *Equestrian Area* - The existing equestrian area will move to a new location with expanded facilities that will allow for all-season use and would include an enclosed Arena and educational building.
9. *Base Camp* - These camps have a basic campground layout with a centralized restroom and shower facility and an outdoor, covered but open dining pavilion. Campers will sleep on the ground in sleeping bags.

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10. *High Adventure Camps* – These have very simple sleeping structures, with a centralized restroom and shower facility and an outdoor, covered but open dining pavilion. Sleeping structures could be tent platforms or an open-sided, framed structure with a simple roof.
11. *RV Areas* - These areas are not open to the public and would be used by individuals or groups working at the camp, and individuals or groups helping with or involved in a program.
12. *Staff Housing and Retreat Centers* - The primary purpose during the summer would be housing for summer staff. During the spring & fall these structures would be used for adult retreat housing, usually on weekends.
13. *Staff/Guest Houses* – Currently the camp has five homes on the property. These include the Warken home, the Orchard House, Cedar Lodge, Creekside and the Jones home. They are to be used throughout the year by staff and guests.
14. *Staff Residence* – Two of the current residences are included with the homes listed above, the Warken and Jones homes, and one more would be added in the future.
15. *Adult Retreat Centers* - These will be used year-round and would accommodate guests staying two to six days. These cabins are suitable for all season use.
16. *Worship Pavilion* – located on a remote and secluded hill with a panoramic view, this structure would be an open sided, covered pavilion.
17. *Recreation Areas* – These areas are set apart for future development of recreational activities.
18. *Maintenance Facility* – This new area will include a maintenance shop with equipment and storage facilities.
19. *Amphitheatre* – These areas are designed for large group meetings and situated where there is a nice view and where the sound can be projected into a hillside with a large amount of vegetation to absorb noise.
20. *Picnic Area/Park* – This new area would be situated between the new Dining facility and the existing pond and recreation area. Designed for large groups, it would be utilized by the camp programs and for community and special events.
21. *Greenbelt* – Designated to allow for large open spaces in the center part of the camp to protect and preserve the natural beauty of the site.
22. *Sawmill/Storage Area* – The existing sawmill and lumber storage area would be relocated to allow for the development of the new pond.
23. *Water Storage Tanks* – Additional water storage to accommodate the camps expansion would enlarge the existing storage tanks and add a secondary location.

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2.5 Occupancy

The total number of persons utilizing the camp is proposed to incrementally increase over a 20-year implementation period. At full capacity, the estimated maximum occupancy is 844 during summer time (peak season, a period of approximately 12 weeks per year). Spring and fall occupancy is significantly reduced to a potential of 588 depending on seasonal access. The Project anticipates an incremental increase in occupancy as shown in **Table 2-4**:

Table 2-4. Proposed Incremental Occupancy Increase

Implementation Period	Total Occupancy
Currently	310
After 5 years	450
10 years	600
15 years	724
20 years	844

2.5.1 Occupancy Use Description

In order to address the actual increased numbers that the Project represents the following describes six classifications of housing for the site.

Residential Camps

This classification includes both The Pines and Ranch Camp, which normally accommodate week-long programs during the summer and weeklong and weekend programs during the spring and fall. These cabins are suitable for all season use.

The Pines is a camp that is estimated to be used about 90 percent of the time during the summer and 50 percent of the weekends during the spring and fall months. The average use will be 80-90 percent capacity during the summer and 20-40 percent capacity during the spring and fall. Average stay would be six days per week during the summer and 2½ days in the spring and fall. It would be built to 50 percent capacity in two to six years and would be built to 100 percent capacity in four to 10 years.

Ranch Camp is a camp that is estimated to be used about 90 percent of the time during the summer months and 50 percent of the weekends during the spring and fall. The average use will be 80-90 percent capacity during the summer months and 40-60 percent capacity in the spring and fall. Average stay would be six days per week during the summer and 2½ days during the spring and fall. It will be built to 75 percent capacity in two to seven years and built to 100 percent capacity in four to 10 years.

Base Camps and High Adventure Camps

The Base Camp approach is to allow visitors of the Project to enjoy the access to wilderness, river and natural adventure areas. The majority (95 percent) of these groups will be at the base camps from June to September. These camps have a basic campground layout with a centralized restroom and shower facility and an outdoor, covered but open dining pavilion. Based on the size of the groups, these facilities would have an average attendance of 50-75 percent of their capacity and occupants would stay for one to three

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days. Some groups would start at KCOC for a day, and then go on a natural adventure, returning to KCOC two to five days later for a shower, meal and overnight stay.

High Adventure Camps are similar; except they are occupied by KCOC programs and the campers are offsite about 50 percent of the time. Ninety-five percent of these groups attend the camp from June to September. The High Adventure Camps have very simple sleeping structures, with a centralized restroom and shower facility and an outdoor, covered but open dining pavilion. The average use would be about 80-90 percent of their capacity during the summer months, and about 20 percent of their capacity during the spring and fall. The average stay is 3½ days during the summer and 1½ days during the spring and fall.

Currently there are two Base Camps operating. One of the residential camps (Timberline) would be converted to a High Adventure Camp. This means that three camps would be phased in immediately and the other two could be built in the next five to 10 years.

Recreational Vehicle Areas

Three RV areas are designated under the Proposed Project. These areas are not open to the public and would be used by individuals or groups working at the camp, and individuals or groups helping with or involved in a program. One RV area is currently in existence, and the other two are proposed. It is estimated that these would be used 50 percent of the time from March to October, while a minimal number of people will assist the camp during the winter months. The average stay of users is one to three weeks, though some choose to stay for only a few days. The additional RV areas will be added from two to ten years.

Staff Housing and Retreat Centers

These structures are intended to have two purposes depending on the season. The primary purpose during the summer (June through August) would be housing for summer staff. During the spring and fall these structures would be used for adult retreat housing, usually on weekends. Average use would be 60-80 percent of the facility's capacity. Summer staff would stay about three months, while spring and fall guests would stay two to four days. The first of these structures will be built in three to eight years and the second structure would be built in six to 12 years.

Adult and Family Retreat Centers

The Adult Retreat Centers are included as part of the Project as an option for future Adult and Family Program development. They would be used during the spring, summer and fall seasons to accommodate guests staying two to six days. Their average use is anticipated to be about 50-70 percent of occupancy, based on averages within the industry. These would be introduced in 15-20 years.

Staff Residence and Guest Houses

Currently KCOC has five residences on the property. These include the Warken home, the Orchard House, Cedar Lodge, Creekside and the Jones home. Each will retain its use as a residence or housing for small

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groups. They will be used throughout the year by staff and guests. One additional residence is included in the Proposed Project and is anticipated to be built in 10-15 years.

Large Pond

The Project includes a proposal for an additional new seven-acre pond located to the east of the existing pond. See **Figure 5** for the location. The pond will have a full liner eliminating water loss into the ground. The water for filling the pond would be obtained from the Barker Ditch, which is used to deliver water to five water right holders. The source of water for supplying this pond will not change from the current source providing water to the existing pond located on Camp property. A new canal will be required to supply water to the pond and return water to Barker Ditch.

The height of the water barrier for the pond will not exceed six feet at the spillway point. This pond would be designed to be below the jurisdictional threshold of the Department of Water Resources, Division of Safety of Dams (DSD) regulations (Water Code § 6000 et seq.)². Preliminary analysis provided by the applicant indicates that the pond would impound approximately 36 AF of water with an average depth of six feet. Engineering of the pond has not been completed at this time. The applicant intends to have engineered plans completed should the Project be approved.

An analysis of water rights to fill and store water from Barker Ditch for the new pond was completed by Alan B. Lilly, Attorney, from the Bartkiewicz, Kronick and Shanahan law firm. This analysis (see **Appendix C**) determined that because the water diverted from Kidder Creek, via the Baker Ditch, into the new pond would be stored in the pond for a maximum of 30 days before being conveyed down the ditch, such temporary storage would be a reasonable "Regulatory Storage" under the Scott River Adjudication decree (Siskiyou County Superior Court No. 30662). Also, because the pond would be lined to eliminate percolation losses, this storage would not reduce the amounts of water that other water users on Baker Ditch would receive. The Proposed Project applicant has made arrangements with the other users on Baker Ditch to temporarily store water in the new pond from the ditch.

Special Events

In addition to routine camp activities, Kidder Creek has proposed to accommodate special events (public and private), which may include weddings, birthdays, religious functions, concerts, auctions, picnics, horse clinics, demonstrations, and training events, and similar events. Estimated attendance would be between 20 and 250 guests, average three to eight hours per event, and be held approximately once per month between the months of April and October. These special events would not occur at the same time as regular camp activities but may occur when campers are offsite. In addition to the special event, opening day registration, public events, the annual fall festival, and closing day will bring additional visitors to the Project site. **Table 2-5** provides information about these events.

² If the dam height is more than 6 feet and it impounds 50 acre-feet or more of water, or if the dam is 25 feet or higher and impounds more than 15 acre-feet of water, it is under DSD jurisdictional oversight.

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Table 2-5. Special Events

Type of Event	Anticipated attendance	Duration and frequency of this type of event	Overlap with regular camp session
1. Opening registration	1-400 people	2-3 hours Currently every Sunday from 3:30-6:00 PM, mid-June through August	Starting day of camp session
2. Closing Day	100-400 people	3-4 hours Currently every Friday 4:00-8:00 pm from mid-June through August.	Ending day of camp
3. Private events – Weddings, birthdays, baptisms, church events, group & family events	20-250 people	Most 3-8 hours Average of one private event/month from April to October.	Large events would not be scheduled at the same time as regular camp activity.
4. Public events – i.e. Concerts, auctions, picnics, special church services, community groups, horse clinics and demonstrations, training events	20-250 people	Most 3-8 hours Average of one public event/month from April to October.	Large events would not be scheduled at the same time as regular camp activity.
5. Annual Fall Festival – a free local event as a ‘thank you’ to the community.	1,250 people	Approximately 8 hours One day per year in September or October.	No other guest activities are scheduled for this day.

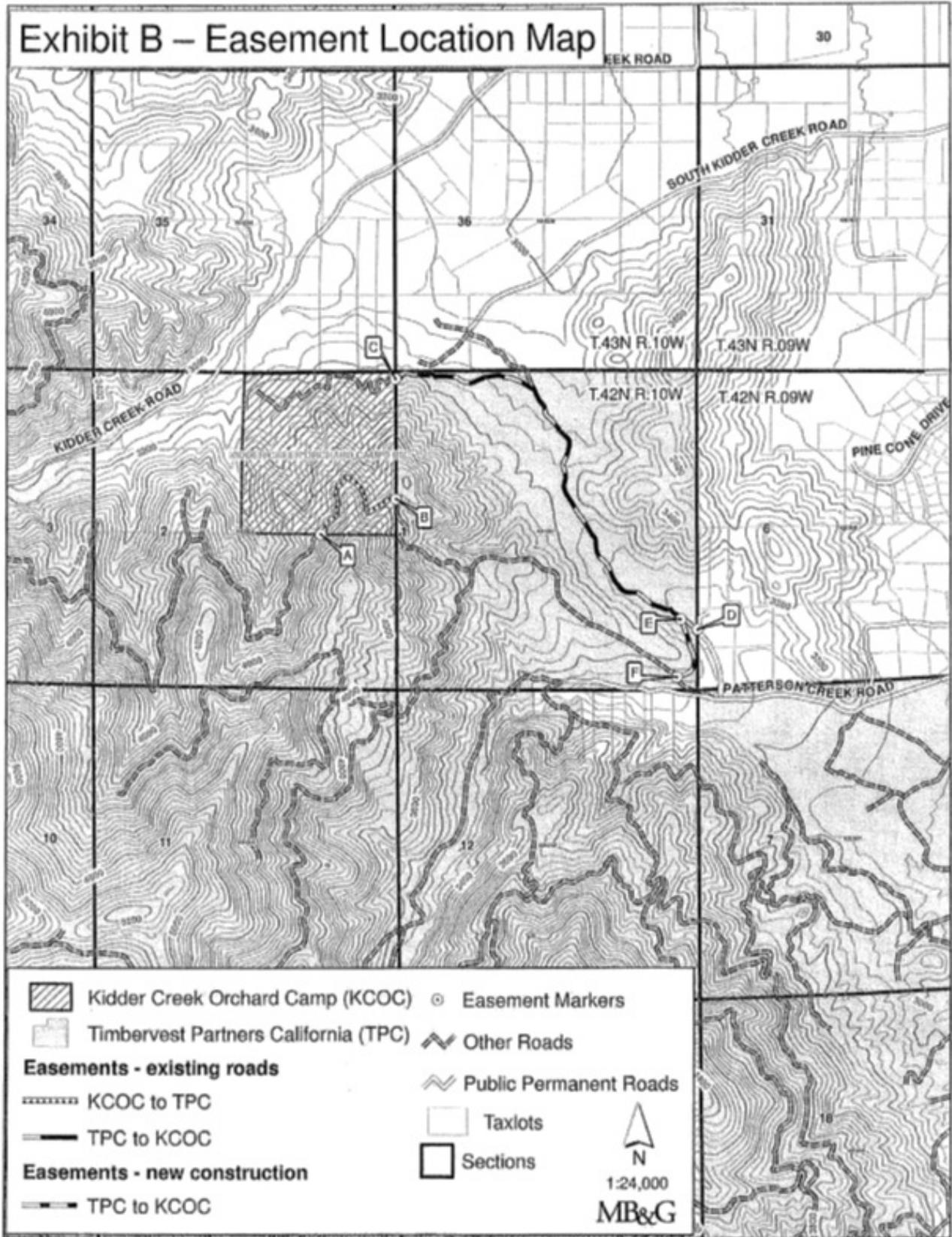
Roads, Access and Parking

The primary access to the Project site is South Kidder Creek Road. Considering existing program schedules the maximum traffic use would occur on Sunday afternoons and Friday evenings during summer time occupancy.

Currently the existing camp road cuts through the pasture/open space and perceptually “divides” the camp. The primary pedestrian routes are shared with vehicles. Additionally, the Project will provide pedestrian circulation pathways that maintain a natural experience while navigating the property.

Taylor Divide Road is an unimproved dirt road which provides secondary access to and from the camp (see **Figure 6. Emergency Access**). There is an existing easement for access by landowners for this road (including KCOC, Ecotrust³, and Rhodes). This road connects to Patterson Creek Road, a partially paved, county-maintained road. This road is available for use as an ingress/egress route in the event of emergency evacuation. Since 2008, this road has been improved and treated for fire fuels reduction to improve access by larger emergency vehicles and to create a buffer zone for firefighters in the event of wildfire.

^{3 3} Property formally owned by Timbervest Partners California (TPC).



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A portion of the secondary access does not exist and will be constructed and maintained by KCOC as a part of the Project. As shown in **Figure 6**, the roadway between markers E and F would be new roadway of an estimated 1,400-1,500 feet in length. As with the existing roadway, the new portion of the roadway is located in an area of mixed conifer forest. The new roadway alignment would not pass through or require the alteration of any natural waterways as none exist in the area. A portion (approximately 500 feet) of this roadway alignment has been previously partially cleared by Ecotrust (the owners of the property). While this section of roadway is an offsite improvement and the land is not owned by the KCOC, this access road is subject to all of the mitigation measures provided in this EIR.

In October 2018, CAL FIRE inspected the KCOC property including the viability of the secondary emergency access to the camp property. CAL FIRE identified and provided a list of requirements the camp and proposed roads/secondary access would have to meet for fire safe regulations. KCOC will comply with requirements and Fire Safe regulations as is required through the building permit process. The secondary access point will not be used for primary ingress and egress from the site, therefore additional traffic due to the project will not affect this access. The Proposed Project will not use this road as a public entrance for its guests and will maintain a locked gate.

Full buildout of the Project will include a total of 339 parking spaces. Location of these spaces are shown in **Table 2-6** below.

Table 2-6. Site Plan Parking Spaces

Map ID#	Area	Parking Spaces
#2	Welcome Center	50
#6	The Pines Camp	21
#7	Ranch Camp	21
#8	Equestrian Area	64 + 10 pull-through sites
#9	Base Camp 1	7
#9	Base Camp 2	7
#9	Base Camp 3	26
#10	High Adventure Camp 1	15
#10	High Adventure Camp 2	15
#12	Staff Housing/Retreat Center 1	25
#12	Staff Housing/Retreat Center 2	18
#15	Adult Retreat Centers	50
#18	Maintenance Facility	10
Total:		329 + 10 pull-through sites

Project Timing

Full buildout of the Project is anticipated to take approximately 20 years. **Table 2-7** illustrates the anticipated timeline for the various facilities of the Project.

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Table 2-7. Project Timing

New Feature	Approximate Years To Complete
Maintenance Facility	2 years
Perimeter Road Development	2 years
Base Camps/High Adventure (3)	2-5 years
Base Camps/High Adventure (2)	5-10 years
Additional Residential Camping Facilities	4-10 years
RV Areas	2-10 years
Pond and Recreation Area	5-10 years
Dining Prep Facility & Welcome Center	5-15 years
Staff Housing & Retreat Centers	6-12 years
Staff Residence & Guest Houses	10-15 years
Adult Retreat Centers	15-20 years
Equestrian Center	8-20 years
Amphitheaters	4-20 years

2.6 Regulatory Requirements, Permits, and Approvals Regulatory Requirements, Permits, and Approvals from Other Public Agencies

2.6.1 Project Relationship to Existing Planning Documents

General Plan

California state law requires cities and counties to prepare a General Plan describing the location and types of desired land uses and other physical attributes in the city or county. General Plans are required to address land use, circulation, housing, conservation, open space, noise, and safety. The Siskiyou County General Plan is the County's basic planning document and provides a comprehensive, long-term plan for physical development in the County. The Proposed Project will be located entirely within the unincorporated area of Siskiyou County. The Proposed Project will be required to abide by all applicable goals and policies included in the County's adopted General Plan.

Scott Valley Area Plan

The Project site is within the Scott Valley Area Plan (SVP) boundary. The SVP includes goals and policies pertaining to land use within the Scott River Watershed. The Scott River Watershed encompasses ±330,000 acres of land. The SVP was adopted by the by Board of Supervisors on November 13, 1980.

Zoning Ordinance

The Siskiyou County Zoning Ordinance implements the policies of the General Plan by classifying and regulating the land uses and associated development standards in the County. As discussed previously, development of the Project as proposed would require a rezoning of the property from TPZ to R-R-B-40 in order to be consistent with the County's Zoning Ordinance. A Board of Supervisors approval of the

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rezoning would be required for development of the Project. This rezoning is a part of the Project and is considered in this Draft EIR.

2.6.2 Permits and Approvals

This EIR and the previously prepared Initial Study will be used by the County of Siskiyou in considering approval of the Proposed Project. In accordance with CEQA Guidelines Section 15126, the EIR will be used as the primary environmental document in consideration of all subsequent planning and permitting actions associated with the project, to the extent such actions require CEQA compliance. The Project may require approvals, permits, and entitlements from other public agencies for which this EIR may be used, including, without limitation, the following:

- California Department of Transportation (Caltrans), District 2
- California Department of Fish and Wildlife (CDFW), Region 1
- California Department of Forestry and Fire Protection (CAL FIRE)
- Regional Water Quality Control Board (RWQCB), Region 1
- Siskiyou County Air Pollution Control District
- Siskiyou County Environmental Health
- State Water Resources Control Board (SWRCB)
- U.S. Army Corps of Engineers (USACE)

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3.0 ENVIRONMENTAL ANALYSIS

The following is an introduction to the project-specific and cumulative environmental analysis and general assumptions used in the analysis. The reader is referred to the individual technical sections of this Draft Environmental Impact Report (Draft EIR; DEIR) regarding specific assumptions, methodology, and significance criteria used in the analysis.

3.0.1 Introduction

On September 9, 2016, the Kidder Creek Orchard Camp Zone Change (Z-14-01) and Use Permit (UP-11-15) IS/MND (SCH#2016092016) was circulated by the County for a 30-day public review period. As a result of this IS, (see **Appendix A**) a number of impact areas were determined to have a less than significant impact, a less than significant impact with mitigation, or no impact as a result of Project implementation. All mitigation measures identified in these sections will be included as mitigation in this EIR (**Table ES-1**) and in the MMRP. Therefore, the following impact areas will not be discussed in this EIR.

■ Aesthetics	■ Land Use and Planning
■ Air Quality	■ Mineral Resources
■ Biological Resources	■ Population and Housing
■ Cultural and Paleontological Resources	■ Public Services
■ Geology and Soils	■ Recreation
■ Greenhouse Gas and Climate Change	■ Tribal Cultural Resources
■ Hazards and Hazardous Materials	■ Utilities and Service Systems

As a result of comments on the Draft IS/MND, the County determined that an EIR level of analysis was required for specific impact areas. Those areas include the following:

■ Agricultural Resources (loss prime farmland and timberland resources)	■ Noise
■ Hazards (wildland fires)	■ Transportation/Traffic
■ Hydrology and Water Quality	

This section provides a detailed discussion of the environmental settings, impacts associated with the Proposed Project, and mitigation measures designed to reduce significant impacts to a less-than-significant level.

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To assist the reader in comparing information about the various environmental issues, each section presents information under the following headings:

- Environmental Setting
 - The existing environment within and in the vicinity of the Proposed Project is described.
- Regulatory Setting
 - Relevant federal, state, and local regulations pertaining to each issue area.
- Thresholds of Significance
 - Relevant thresholds of significance as identified by CEQA or another relevant standard.
- Environmental Impacts
 - The nature and extent of project impacts relative to the issue areas listed above are analyzed. These analyses address direct (or primary effects of the Proposed Project) as well as indirect (or secondary) effects. Where applicable, impacts are identified as short-term or long-term.
- Mitigation Measures
 - Mitigation measures to reduce or eliminate project impacts are provided, as applicable.
- Residual Impacts After Mitigation
 - A discussion of the significance of each impact after mitigation is provided.

3.0.2 Analysis Assumptions Generally Used To Evaluate The Impacts Of The Project

Baseline Environmental Conditions Assumed in the Draft EIR

Section 15125(a) of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of the Project, as they exist at the time the Notice of Preparation (NOP) is published. The CEQA Guidelines also specify that this description of the physical environmental conditions is to serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant. For the Proposed Project, the physical environment as it existed at the time the NOP was published serves as the baseline, released on August 31, 2018

The environmental setting conditions of the Project area and the surrounding area are described in detail in the technical sections of this Draft EIR (see **Sections 3.1 through 3.6**). In general, these setting discussions describe the setting conditions as they existed when the NOP was released.

Definition of Cumulative Setting

CEQA Guidelines Section 15130(a) requires that an EIR “discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” CEQA Guidelines Section 15130(b) states, “The

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discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.”

However, the cumulative setting varies for each environmental issue area, depending on the resources affected and any relevant boundaries. For example, the area related to cumulative impacts for air quality is much greater in size and is based on the air basin, which can cover hundreds of square miles, while those related to noise can be limited to the immediate Project area. Each technical section of the Draft EIR includes a description of the geographic extent of the cumulative setting for that resource based on the characteristics of the environmental issues under consideration as set forth in CEQA Guidelines Section 15130(b).

The area where the Proposed Project is located is sparsely developed and no development in the area is proposed at this time nor does existing zoning allow for dense development. As such, the cumulative conditions analysis for this EIR considers long-term development that could be anticipated in a 20-year horizon. There are an estimated 17 legal lots that access South Kidder Creek Road that are currently vacant but could be developed under existing zoning policy. These parcels can all be permitted with one single-family dwelling unit. In addition, the County also allows second dwellings where parcels are more than five acres in size and where there is adequate space for necessary septic/leach fields/well separation.

It can be assumed that within the phased Kidder Creek Orchard Camp build-out time frame (two to 20 years), homes could be constructed on the 17 vacant lots. It was estimated that 10 percent of the 52 total lots that access South Kidder Creek Road would have a second dwelling unit. Therefore, the cumulative conditions analysis includes 23 additional single-family residential units in the Project area.

Consideration of Cumulative Impacts

Each technical section in the Draft EIR considers whether the Project’s effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect). The determination of whether the Project’s impact on cumulative conditions is considerable is based on applicable public agency standards, consultation with public agencies, and/or expert opinion.

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SECTION 3.1 AGRICULTURAL AND FORESTRY RESOURCES

This section describes the agricultural resources of the Project site and discusses potential impacts focusing on the conversion of farmland and forest land/timber resources, issues relating to the Williamson Act, and other changes that could result in the conversion of adjacent farmland or forest land/timber resources. The following analysis is based on a review of the Siskiyou County General Plan (1997), the Scott Valley Area Plan (Siskiyou County 1980) and the Department of Conservation (DOC) Important Farmland Finder interactive website (DOC 2018).

3.1.1 Environmental Setting

Agriculture

According to the California DOC, Siskiyou County had 1,148,465 acres of agricultural land in 2006, 77,573 acres of which were considered Prime Farmland. Prime Farmland is defined as land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. By 2016, acreage of agricultural land in Siskiyou County had decreased slightly to 1,148,128 acres. Prime Farmland had decreased to 71,456 acres, a loss of 6,117 acres. Grazing land had increased by 5,117 acres during the same time period (DOC 2016a).

Approximately 24.8 acres of the 580 acre Project site is identified as Prime Agriculture by the SVAP and DOC. This area is also identified as being within the AG-1-B-80 zoning district. See **Figure 3. Existing Zoning** for this area. Also, ± 20 acres are identified as Grazing Land and the remaining ± 535 acres are identified as Farmland of Local Importance by the DOC (DOC 2018). See **Figure 7. Farmland**.

Farmland Classification and Rating System

The Farmland Mapping and Monitoring Program (FMMP), administered by the California DOC, maps agricultural areas based on soil quality and land use with categories such as Prime Farmland, Farmland of Statewide Importance, and Grazing Lands. More information about these classifications is provided below.

Farmland Mapping and Monitoring Program

The FMMP was established in 1982 to continue farmland mapping efforts begun in 1975 by the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The USDA's intent was to produce agricultural resource maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria, which classified land's suitability for agricultural production. Suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA soil survey maps using the LIM criteria. Important Farmland Maps for California are compiled using the modified LIM criteria. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding classification. The Important Farmland Maps identify five agriculture-related categories:

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Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. According to the California DOC (2018) Important Farmland Finder interactive mapping tool, the Project site is considered to be Prime Farmland (70.3 Percent), Unique Farmland (29.7 percent), and a small percentage of Grazing Land (0.2 percent) (DOC 2018).

Storie Index Rating System

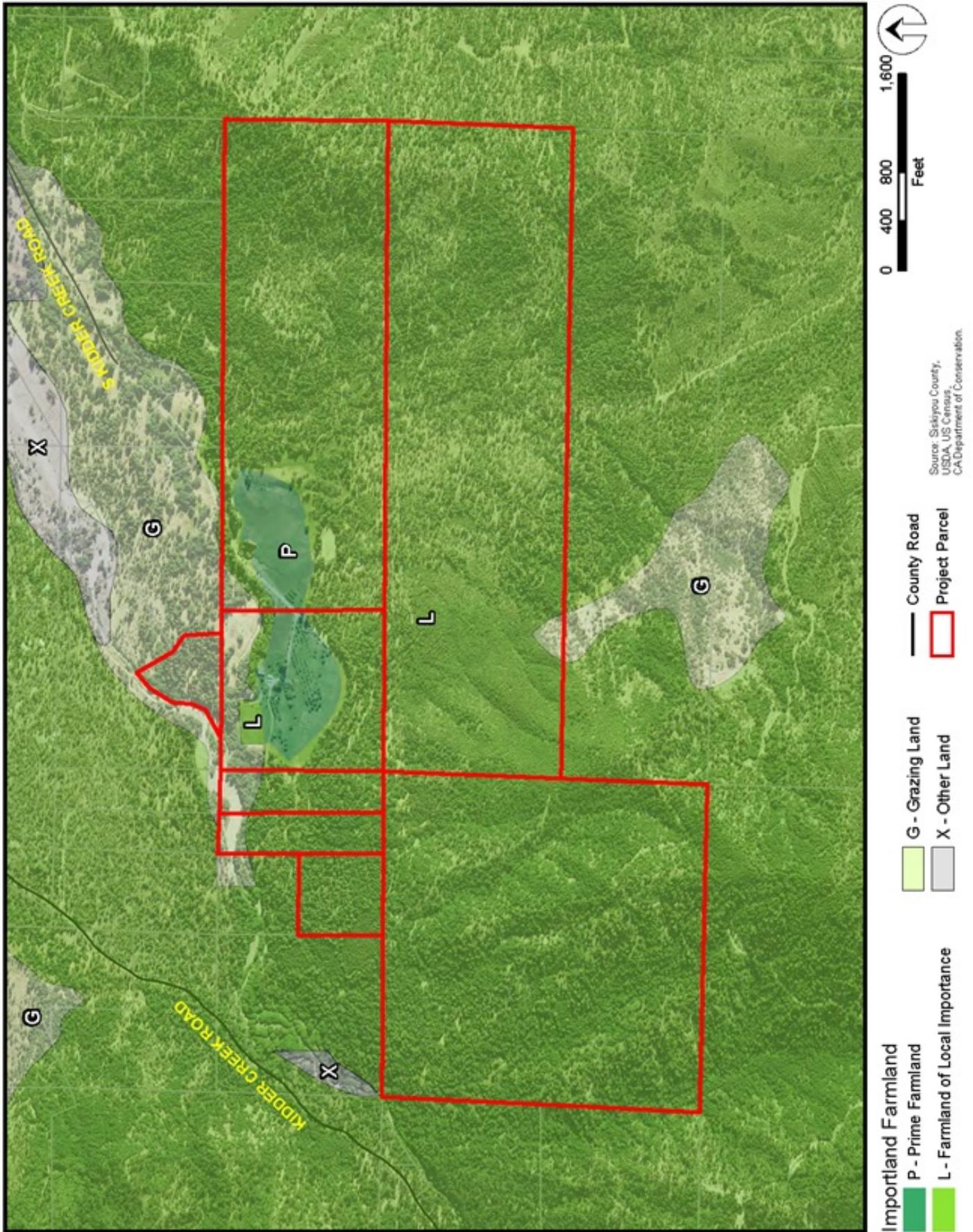
An additional method to determining farmland in California is the California Revised Storie Index. The Storie Index Rating System ranks soil characteristics according to their suitability for agriculture. Ratings range from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The Storie Index assesses the productivity of a soil from the following four characteristics: Factor A, degree of soil profile development; Factor B, texture of the surface layer; Factor C, slope; and Factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are then multiplied together to derive an index rating (NRCS 1992).

As shown in **Table 3.1-1**, according to the USDA NRCS (2018), approximately 5.4 percent of the Project site is comprised of Stoner gravelly sandy loam, 2 to 5 percent slopes. This soil is considered to have a Grade 2-Good Storie Index. See **Appendix D** for the NRCS Soils Report.

Table 3.1-1. Project Soil Storie Index

SOIL MAP UNIT	SOIL	ACREAGE	PERCENTAGE OF SITE	STORIE INDEX
105	Atter very cobbly sandy loam, 0 to 5 percent slopes	1.7	0.3	Grade 3 Fair
165	Kindig-Neuns gravelly loams, 50 to 80 percent slopes complex	125.9	21.7	Grade 4 Poor
183	Marpa-Kinkel-Boomer, cool complex, 5 to 15 percent slopes	105.0	18.0	Grade 4 Poor
184	Marpa-Kinkel-Boomer, cool complex, 15 to 50 percent slopes	255.8	44.1	Grade 4 Poor
212	Riverwash	23.8	4.0	Not Rated
230	Stoner gravelly sandy loam, 2 to 5 percent slopes	31.3	5.4	Grade 2 Good
238	Xerofluvents, nearly level	36.5	6.3	Grade 3 Fair

Source: NRCS 2018



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Forest Land and Timber Resources

California has 32 million acres of forest land – about 1/3 of the state’s total land area. Most of the forests are found in the mountainous areas of the state such as the Klamath, Sierra Nevada, and Coast Ranges, and in the cool mesic fog belt along the state’s north and central coasts. This combination of topography and vegetation along the Pacific coast are among the most diverse in North America, creating a unique mix of ecoregions and forest types. Federal agencies such as the U.S. Forest Service (USFS), Bureau of Land Management (BLM), and National Park Service (NPS) manage more than half of the forest land in California. Federal lands tend to be at higher elevations and contain older forests, and therefore contain bigger trees on less productive sites. Nearly 40 percent of the forested land area is privately owned by both corporations and private owners and is distributed throughout the state (USFS 2014).

There are 3,093,527 acres of forest land in Siskiyou County. Of these, 68.3 percent is USFS land, 29.3 percent is privately owned land, 1.8 percent is other federal agency land, and 0.7 is state and local lands (USFS 2014). There are ±558,000 acres in the County zoned as Timberland Production Zone (TPZ).

Forest lands are defined under the California Public Resources Code (PRC) § 12220(g) as “land that can support 10-percent 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.” Timberland is defined under PRC § 4526 as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce timber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.”

The Proposed Project is located in the foothills of the Marble Mountains, a sub-range of the Klamath Mountains. The highest peak in the Marble Mountains is Boulder Peak at 8,299 feet. Boulder Peak is located approximately eight miles northwest of the Camp.

The Project site is located in the North Coast and Montane vegetation zone and most of the site is considered a Productive Forest Site, capable of growing 10 percent cover of industrial wood species. The vegetation cover types at the site include conifer forest/woodland, mixed conifer and hardwood forest/woodland, shrub, and herbaceous (USDA Vegetation Classification and Mapping 2015). A Botanical Survey Assessment was prepared for the Project (Resource Management 2014), which identified a number of conifer and oak species at the site. A complete list of plant species identified at the site is detailed in the Botanical Survey included in **Attachment D**.

The proposed rezone of 170 acres from TPZ to R-R-B-40 is regulated by the State under Government Code § 51120 et seq. The applicant has requested an immediate rezone instead of a 10-year rollout rezone. The purpose of the rezone is to allow for a limited number of new structures associated with the Project in the area currently zoned TPZ. The Project intends on retaining as much timberland as possible; timberland is considered an amenity of the camp experience. Therefore, the rezone will be processed pursuant to Government Code § 51134. Section 51134 is as follows:

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Section 51134

- (a) If an application for conversion is not required pursuant to Section 4621 of the Public Resources Code, the board or council may approve the immediate rezoning request only if by a four-fifths vote of the full board or council it makes written findings that all of the following exist:
 - (1) The immediate rezoning would be in the public interest.
 - (2) The immediate rezoning does not have a substantial and unmitigated adverse effect upon the continued timber-growing use or open-space use of other land zoned as timberland production and situated within one mile of the exterior boundary of the land upon which immediate rezoning is proposed.
 - (3) The soils, slopes, and watershed conditions will be suitable for the uses proposed by the applicant if the immediate rezoning is approved.
 - (4) The immediate rezoning is not inconsistent with the purposes of subdivision (j) of Section 3 of Article XIII of the Constitution and of this chapter.
- (b) The existence of an opportunity for an alternative use of the land shall not alone be sufficient reason for granting a request for immediate rezoning pursuant to this section. Immediate rezoning shall be considered only if there is no proximate and suitable land which is not zoned as timberland production for the alternate use not permitted within a timberland production zone.
- (c) The uneconomic character of the existing use shall not be sufficient reason for the approval of immediate rezoning pursuant to this section. The uneconomic character of the existing use may be considered only if there is no other reasonable or comparable timber-growing use to which the land may be put.
- (d) Immediate rezoning action shall comply with all the applicable provisions of state law and local ordinances.
- (e) The county or city may require the payment of a fee by the landowner for the cost of processing the application and recording the necessary documentation.

3.1.2 Regulatory Framework

Federal

Natural Resources Conservation Service

Farmland Protection Policy Act: The NRCS, a federal agency within the USDA, is the primary agency responsible for implementation of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize federal programs' contribution to the conversion of farmland to nonagricultural uses by ensuring federal programs are administered in a manner that is compatible with state, local, and private programs designed to protect farmland. The NRCS provides technical assistance to federal agencies, state and local governments, tribes, or nonprofit organizations that desire to develop farmland protection programs and policies.

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State

California Department of Conservation

The DOC administers and supports a number of programs, including the FMMP, the California Agriculture Land Evaluation and Site Assessment (LESA) Model, and the Williamson Act. These programs are designed to preserve agricultural land and provide data on the conversion of agricultural land to urban use.

Farmland Mapping and Monitoring Program

The Important Farmland Inventory System initiated in 1975 by the USDA NRCS classifies land based on 10 soil and climatic characteristics. The DOC started a similar system of mapping and monitoring for California in 1980, known as the FMMP.

Under the California Environmental Quality Act (CEQA), the lead agency is required to evaluate agricultural resources in environmental assessments at least in part based on the FMMP. The state's system was designed to document how much agricultural land in California was being converted to nonagricultural land or transferred into Williamson Act contracts. The definitions of Important Farmland types are provided in the FMMP discussion in the Environmental Setting subsection above.

California Agriculture Land Evaluation and Site Assessment Model

The California Agriculture LESA model was developed in 1997 based on the federal LESA system. It can be used to rank the relative importance of farmland and the potential significance of its conversion on a site-by-site basis. The California LESA model considers the following factors: land capability, Storie Index, water availability (drought and non-drought conditions), land uses within 1/4 mile, and protected resource lands (e.g., Williamson Act lands) surrounding the property. A score can be derived and used to determine if the conversion of a property would be significant. Under CEQA, lead agencies may refer to the LESA model in their environmental analysis but are not required to do so.

Williamson Act: The California Land Conservation Act of 1965 (Government Code §51200 et seq.), commonly referred to as the Williamson Act, is a non-mandated state program administered by counties and cities to preserve agricultural land and discourage the premature conversion of agricultural land to urban uses. The act authorizes local governments and property owners to (voluntarily) enter into contracts to commit agricultural land to specified uses for 10 or more years. Once restricted, the land is valued for taxation based on its agricultural income rather than on unrestricted market value, resulting in a lower tax rate for owners. In return, the owners guarantee that these properties will remain under agricultural production for an initial 10-year period. The contract is renewed automatically unless the owner files a notice of nonrenewal, thereby maintaining a constant 10-year contract. The DOC is responsible for approving Williamson Act Easement Exchange Program agreements. Termination of a Williamson Act contract through the nonrenewal process is the preferred method to remove the enforceable restriction of the contract.

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California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) enforces the laws that regulate logging on privately-owned lands in California. The Forest Practice Act was enacted in 1973 to ensure that logging is done in a manner that will preserve and protect California's fish, wildlife, forests and streams. Additional rules enacted by the State Board of Forestry and Fire Protection are also enforced to protect these resources.

Forest Practice Act: The 1973 California Forest Practice Act (PRC §4511 et seq.) was designed to protect, enhance, and restore California's timberlands. It is recognized as the most comprehensive forest regulation in the United States. The purpose of the act was to achieve maximum sustained production of high quality timber while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment. The regulations authorized by this law define the size location of harvest areas, as well as protection of riparian corridors and archaeological sites, timing of harvest during wildlife nesting seasons, locations of roads, and operations during certain seasons to protect wet soils (University of California [UC] 2007).

Local

County of Siskiyou General Plan

The County recognizes that agriculture and forest resources have a significant role in the Siskiyou County economy and as such, has provided a number of policies for the protection of these lands. While many of these policies and action items require the County to take certain actions, they are not related to development of a particular project. Those policies that pertain to the Proposed Project are listed below.

Land Use Element

- Policy 32: Single-family residential, light industrial, light commercial, open space, non-profit and non-organizational in nature recreational uses, commercial/recreational uses, and other public or quasi-public may only be permitted. The permitted uses will not create erosion or sedimentation problems.
- Policy 33: All land uses and densities shall be designed so as not to destroy timber productivity on large parcels and high suitability soils (Class I and II).
- Policy 35: The minimum parcel size on prime agricultural land shall be 40 acres. The permitted density will not create erosion or sedimentation problems.
- Policy 37: Only agricultural uses are permitted on prime agricultural land.

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Scott Valley Area Plan

The SVAP identifies agriculture as the major economic factor in the Scott Valley Watershed. The SVAP includes a number of policies designed to protect agricultural uses in the area. The following are those policies that would pertain to the Proposed Project.

Policy 1: Only agricultural and public uses may be permitted on prime agricultural soils.

Policy 2: The minimum parcel size that is permitted to be created on prime agricultural land is 80 acres.

3.1.3 Environmental Impacts

Thresholds of Significance

CEQA Guidelines Appendix G states that a project may have a significant effect on agricultural and forestry resources. if the project would result in any of the following:

1. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to nonagricultural use?
2. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
3. Would the project conflict with existing zoning for, or cause the 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))?
4. Would the project result in the loss of forestland or conversion of forestland to non-forest use?
5. Would the project Involve other changes in the existing environment, which due to their location of nature, could result in conversion of farmland to nonagricultural use?

Methodology

Evaluation of potential agricultural and forest/timber land impacts of the Proposed Project was based on information gathered from the California DOC Farmland Conversion Reports, the California DOC Important Farmlands Map and the UC Davis Forest Stewardship program. This analysis addresses direct impacts and losses of farmland and forest land.

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Project Impact Analysis

Impact 3.1.1: Conversion of Farmland to Non-Agricultural Use

<i>Threshold:</i>	<i>Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to nonagricultural use?</i>
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As previously stated, the DOC Important Farmland Finder identifies six agriculture-related categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Farmland of Local Potential, and Grazing Land. The significance threshold is conversion of land identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses. The 24.8 acres identified as Prime Farmland by the DOC are located in the valley area of the Project site. While the majority of the area is open space, there are currently a number of structures such as the Welcome Center (#2 on **Figure 2**), shop, staff house, food storage, snack shop, booster pump, group meeting area and storage barn (#18 on **Figure 2**) in the area. The Project proposes a new Welcome Center (#32 on **Figure 5**) and an Amphitheater (#19 on **Figure 5**) which are located in the area identified as Prime Farmland by the DOC. However, the construction of these uses would not remove the ability to use the remaining area as farmland, if so desired in the future, as these structures are relatively small in size and the construction sites are on the edge of the Prime Farmland area. As such, the Proposed Project would have a **less than significant** impact regarding the conversion of Prime Farmland.

Impact 3.1.2: Conflict with Existing Zoning or Williamson Act

<i>Threshold:</i>	<i>Would project conflict with existing zoning for agricultural use, or a Williamson Act contract?</i>
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The DOC provides mapping in California by county which illustrates lands under agricultural conservation easements. According to the DOC (2016b), the Project site is not under Williamson Act contract and is not located near any contracted lands. The closest contracted lands are located more than 1.5 miles north and east of the site. The current zoning at the site, AG-1, R-R, and TPZ, allows for agricultural uses. The proposed rezone from TPZ to R-R would continue to allow for agricultural uses. Therefore, the Project will **not adversely** impact agricultural activity and/or a Williamson Act contract. As such, the Proposed Project would have a **less than significant** impact regarding the Williamson Act contracts and conflicts with agriculturally zoned lands.

Impact 3.1.3: Conflict with Existing Zoning For, or Cause the Rezoning of, Forestland

Impact 3.1.4: Loss of Forestland

<i>Threshold:</i>	<i>Would project result in the loss of forestland or conversion of forestland to non-forest use?</i>
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Parcels to the south and west of the site are zoned TPZ, and significant amounts of land surrounding the Project site are considered forestland. The proposed improvements associated with the Project would place structures in areas defined by the State as forestland; however, the limited improvements are not

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anticipated to adversely impact forestry use on the Project site or in the adjacent properties. Therefore, the impact would be **less than significant**.

Impact 3.1.5: Loss of Farmland

<i>Threshold:</i>	<i>Would the project involve other changes in the existing environment, which due to their location of nature, could result in conversion of farmland to nonagricultural use?</i>
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The DOC identifies, ±24.8 acres of the 580 acre Project site as Prime Agriculture Also, ±20 acres are identified as Grazing Land and the remaining ±535 acres are identified as Farmland of Local Importance by the DOC (DOC 2018). See **Figure 7. Farmland**. However, with the exception of the apple orchard area, none of this land area is currently being used as farmland or grazing land. No new structures or construction is being proposed within the apple orchard and this area will remain as it presently exists with implementation of the Project. Therefore, the Project would not result in the conversion of farmland to a nonagricultural use. The Project would have a **less than significant** impact in this area.

3.1.4 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

3.1.5 Residual Impacts After Mitigation

No mitigation measures are required therefore, **no residual impacts** would occur.

3.1.6 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Agricultural and forestry resources are of statewide importance; as such, the cumulative setting consists of all agricultural and forestry resources in California. Throughout the state, development pressures are resulting in the conversion of thousands of acres of agricultural land. According to the latest statewide study by the FMMP, there were 31,486,642 acres classified as agricultural land in the state in 2010. This was reduced to 31,444,202 acres by 2012, resulting in a conversion of ±44,440 acres of agricultural land to nonagricultural use in this time period (DOC 2015).

Of the 32 million acres of forest within California, 16.6 million acres are considered timberlands (California Department of Fish and Wildlife [CDFW] 2017). Timberland is forest that can produce commercial wood products and is not reserved. By definition, reserved forests preclude timber harvest, such as NPS forests and other publicly owned protected forests. According to the USFS, 77 percent of Siskiyou County was forest land (3,093,527 acres) and of this 72 percent was considered timberland (2,233,879 acres) in 2014 (USFS 2014).

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Cumulative Impacts and Mitigation Measures

Impact 3.1.6: Cumulative Agricultural Impacts

<i>Threshold</i>	<i>Would the project, in combination with existing, approved, proposed, and reasonably foreseeable development in nearby areas of Siskiyou County, result in the direct or indirect conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use?</i>
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In 2014, there were 1,146,010 acres of agricultural land in Siskiyou County. By 2016, the County had 1,148,128 acres or an increase of 2,118 acres (DOC 2016a). During the two-year period between 2014 and 2016, only 28 acres of Important Farmland (Prime Farmland, Unique Farmland, and Farmland of Statewide Importance) in Siskiyou County were converted to urban uses. As previously discussed, implementation of the Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and thus would result in a **less than significant** impact. Since the Project would not convert any Important Farmland, it would not contribute to the overall decline of this resource. Impacts are **less than cumulatively considerable**.

Impact 3.1.7: Cumulative Forestland Impacts

<i>Threshold</i>	<i>Would the project, in combination with existing, approved, proposed, and reasonably foreseeable development in nearby areas of Siskiyou County, result in the direct or indirect conversion of forestland to non-forestland use?</i>
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The County recently has had two requests for conversion of TPZ lands to non-timberland use, totaling ±2,000 acres. This represent 0.3 percent of the total TPZ zoned land in the County. No other requests for the conversion of TPZ land have been received by the County at this time. The proposed rezone from TPZ to R-R-B-40 represents approximately 0.03 percent of TPZ zoned lands in the County. Therefore, implementation of the Proposed Project, in combination with other approved, proposed, and reasonably foreseeable projects, would not result in the direct and indirect conversion of forestland to non-forestland use. Impacts are **less than cumulatively considerable**.

Cumulative Mitigation Measures

None required.

Residual Impacts After Mitigation

No mitigation measures are required under cumulative conditions therefore, **no residual impacts** would occur.

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3.1.7 References

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SECTION 3.2 HAZARDS AND HAZARDOUS MATERIALS

The Initial Study completed for the Proposed Project determined that the Project would have a less than significant impact or no impact in the following impact analysis areas:

1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
2. Would the project 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?
3. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4. Would the project 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, create a significant hazard to the public or the environment?
5. For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
7. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No comments were received discussing the impact analysis areas shown above by the public and agencies during the Initial Study public review period. As such, these analysis areas are not evaluated in this EIR.

3.2.1 Environmental Setting

The Proposed Project is in the foothills of the Marble Mountains, which are a sub-range of the Klamath Mountains. The highest peak in the Marble Mountains is Boulder Peak at 8,299 feet. Boulder Peak is located approximately eight miles northwest of the Camp.

The 580-acre Project site ranges in elevation from approximately 3,000 to 3,950 feet. Slopes at the site generally range from 0 to more than 30 percent. Vegetation at the site is characterized by meadows, apple orchards, mixed conifer forests, oak woodlands, and shrubs.

3.2.2 Wildland Fire Hazards

A wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger and causing destruction to life and property. Wildfires can occur in undeveloped areas and spread to urban areas where structures and other human development are more concentrated. According to CAL FIRE (2009), the Project site is located in an area designated as a Very High Fire Hazard Severity Zone on the 2009 Very High Fire Severity Zones in Local Responsibility Area (LRA) map.

3.2.3 Regulatory Framework

State

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. The code includes specifications for fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises. Storage of corrosive materials and liquid and solid oxidizers must be in compliance with Uniform Fire Code § 5404 and 6304, which include provisions for indoor storage, detached storage, liquid-tight floors, and smoke detection, among others.

3.2.4 Environmental Impacts

Thresholds of Significance

CEQA Guidelines Appendix G states that a project may have a significant effect on the environment if any of the following would occur:

1. Would the project 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?

Methodology

The following impact analysis is based primarily on information available from CAL FIRE, proposed uses of the site, the Siskiyou County General Plan, and other relevant materials, as appropriate.

Project Impact Analysis

Impact 3.2.1: Wildland Fire Hazards

<i>Threshold:</i>	<i>Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands area adjacent to urbanized areas or where residences are intermixed with wildlands?</i>
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According to the CAL FIRE, the Project site is located in an area designated as a Very High Fire Hazard Severity Zone on the 2009 High Fire Hazard Severity Zones in LRA map¹ (CAL FIRE 2009). This map also identifies that the Project site is within a State Responsibility Area and therefore is subject to certain building and area improvements to protect from fire related hazards.

Title 24 of the California Code of Regulations (CCR), known as the California Building Standards Code or "Title 24," contains the regulations that govern the construction of buildings in California. Title 24 Part 9 – California Fire Code (CFC) contains regulations consistent with nationally recognized accepted practices for safeguarding, to a reasonable degree, life and property from the hazards of the following:

- Fire and explosion
- Hazardous conditions in the use or occupancy of buildings or premises
- Dangerous conditions arising from the storage, handling and use of hazardous materials and devices

All new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, such as the Proposed Project, are required to comply with all sections of the CFC. These requirements are included for the Proposed Project on a case-by-case basis as a part of the building permit process.

In addition, the Project site is required to comply with the PRC Division 4, Part 2, Chapter 3 Section 4291 which applies to all "persons who own, lease, control, operate, or maintain a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material". Section 4291(a)(1) states a person shall at all times do the following:

"Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels."

¹ LRA = Local Responsibility Area

This code is enforced through CAL FIRE's Defensible Space and Hazardous Vegetation Management program. The key to defensible space is managing the hazardous vegetation around houses and reduce the potential severity of wildfire exposure.

The County also requires at least two points of access to the Project site for emergency access. As shown on **Figure 6 Emergency Access** and discussed in **Section 2.0, Project Description**, the Project proposes an emergency access which will be required to comply with CAL FIRE's Fire Safe regulations. While portions of the emergency access road are not on property owned by KCOC, KCOC has easements on these properties (including KCOC, Ecotrust², and Rhodes) to allow the use and upkeep of the roadway by KCOC to the point where it connects with Patterson Creek Road. While property ownership may change in the future, the easements would remain in effect as they are bound to the property not the owner.

Patterson Creek Road (also known as Forest Service Road 42N07) is a County public road for the first approximately ½ mile from the Highway 3/Patterson Creek Road intersection. From that point it becomes a USFS road for its remaining length. While this road does pass through private property beyond the County public road portion, the road right-of-way is owned by the USFS. This road is identified by the USFS as a roadway open to all vehicles (USFS 2015).

As a part of the Project review process, CAL FIRE on April 11, 2014 and again on October 31, 2018, inspected the proposed emergency access and determined that once the improvements required by CAL FIRE were made to the road it would serve as an adequate secondary access to the camp property. However, to ensure that the emergency access is adequate and maintained according to CAL FIRE requirements, mitigation measure **MM 8.1** is required.

3.2.5 Mitigation Measures

MM 8.1 Prior to the initiation of construction inhabitable structures for the Proposed Project, the emergency access road will be developed by the Project and approved as to form and function by the California Department of Forest and Fire Protection and the Siskiyou County Public Works Department. This access roadway shall be maintained by the Project and re-approved on an annual basis or as the County and CAL FIRE determines necessary.

Timing/Implementation: Prior to the initiation of construction inhabitable structures.

Monitoring/Enforcement: County of Siskiyou Public Works and CAL FIRE

3.2.6 Residual Impacts After Mitigation

Implementation of mitigation measure **MM 8.1** would ensure the Project site is appropriately investigated and mitigated to minimize risks associated with the potential for hazards related to wildfires and emergency access. Therefore, with implementation of mitigation measure **MM 8.1**, this impact would be **less than significant**.

² Property formally owned by Timbervest Partners California (TPC)

3.2.7 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Hazardous material, human health, and safety impacts as described in CEQA Appendix G are generally site-specific and not cumulative in nature, as impacts generally vary by land use, site characteristics, and site history. The cumulative setting for the Proposed Project would be the project as well as existing and future projects in the immediate vicinity.

Cumulative Impacts and Mitigation Measures

Impact 3.2.9: Cumulative Hazardous Materials and Emergency Response Impacts

Threshold: Would the Proposed Project, in combination with other existing, proposed, and reasonably foreseeable future development in the area, cumulatively increase exposure of people, property, and the environment to hazardous materials and interference with emergency response?

Cumulative hazardous materials impacts would result if other existing, planned, or reasonably foreseeable projects in the vicinity of the Project area included the addition of hazardous materials above planning thresholds. This would change the total amount of hazardous materials being transported over public roadways and being used and stored near the Proposed Project site.

There are no identified hazardous materials sites on the Proposed Project site. While the Proposed Project would result in the use of low levels of hazardous materials for residential upkeep and cleaning, this use would be minimal and at the level of use for a project of this type. Based on the existing hazardous material regulatory structure, the Proposed Project would not cause a threat to public safety during Project construction or operation.

The Proposed Project would increase the number of persons or structures to the potential for wildland fires beyond current conditions. However, existing CAL FIRE defensible space regulations and mitigation measure **MM 8.1** would reduce this potential to less than significant. Therefore, development of the Project would not contribute to the potential for hazards and hazardous materials impacts under cumulative conditions. As such, the Project's contribution to significant cumulative impacts to human health associated with hazards and hazardous materials or conditions is considered ***less than cumulatively considerable***.

Cumulative Mitigation Measures

No significant cumulative impacts were identified. No cumulative mitigation measures are required.

3.2.8 *References*

[CAL FIRE] California Department of Forestry and Fire Protection

- 2009 Siskiyou County Very High Hazard Severity Zones in LRA map. July 21, 2009.
http://frap.fire.ca.gov/webdata/maps/siskiyou/fhszl_map.47.pdf.

[USFS] United States Forest Service

- 2015 Motor Vehicle Use Map Klamath National Forest Scott River Ranger District.
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5376647.pdf

SECTION 3.3 HYDROLOGY AND WATER QUALITY

This section describes the environmental setting for hydrology and water quality, including the regulatory setting and existing site conditions, the impacts on hydrology and water quality that would result from the Proposed Project, and the mitigation measures that would reduce these impacts.

3.3.1 Environmental Setting

Surface Water

Klamath River Basin

Kidder Creek is part of the Scott River watershed which is part of the Klamath River Basin Hydrologic Unit. The Klamath River Basin covers 10.5 million acres in southern Oregon and northern California. The Klamath River, which starts in Oregon, travels for approximately 250 miles through California before flowing into the Pacific Ocean near Crescent City. The river is impounded by four dams - one for water delivery and three for hydroelectric generation, part of PacifiCorp's Klamath Hydroelectric Project. In California, the Klamath River Basin is located in Siskiyou, Modoc, Trinity, Humboldt, and Del Norte counties. Major tributaries to the Klamath include the Shasta, Scott, Salmon and Trinity rivers (EPA 2015).

The Klamath Basin has been in the forefront of national attention due to contentious resource issues including water allocation, water quality, and threatened and endangered species. The Klamath River has been the third-largest producer of salmon on the West Coast, following closely behind the Sacramento and Columbia rivers. In 2002, a massive die-off of over 33,000 adult salmon on the Klamath River brought renewed attention to this area (EPA 2015). Several water bodies in the Klamath Basin, the Lost River, the Klamath Straits Drain, and the Klamath River from Link River to the Pacific Ocean, are considered to be impaired waters¹ due to too much pollution. In 2013, the California State Regional Water Quality Control Board (RWQCB) issued a news release stating that due to potential health risks from Blue-Green Algae, reaches of the Klamath River including the Copco and Iron Gate Reservoirs, and below to the confluence with Tully Creek were posted with health advisories warning against human and animal contact with the water (SWRCB 2013). In July 2014, RWQCB issued a news release stating that the Copco and Iron Gate Reservoirs and the Klamath River below Iron Gate Dam down to Weitchpec on the Yurok Reservation were posted with health advisories for Blue-Green Algae warning against human and animal contact with the water (SWRCB 2014a).

The algal blooms appear as bright green in the water, and blue-green, white or brown foam, scum or mats can float on the water and accumulate along the shore. Recreational exposure to toxic blue-green algae can cause eye irritation, allergic skin rash, mouth ulcer, vomiting, diarrhea, and cold and flu-like

¹ Water quality is impaired when a pollutant or pollutants enter a water body and limit its use for drinking, fishing, swimming, or some other purpose (NRCS 1996).

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symptoms. Liver failure, nerve damage and death have occurred in rare situations where large amounts of contaminated water were directly ingested (RWQCB 2014a).

Scott River Watershed

The Scott River Watershed is an important cold-water tributary to the Klamath River Basin. The Scott River Watershed encompasses over 813 square miles in the Klamath Mountains flowing generally northward into the Klamath River. The watershed shares divides with the Shasta River to the east, the Trinity River to the south, and the Salmon River to the west (SWRCB 2005a). There are 16 subwatersheds in the Scott River watershed. The Project site is located in the Kidder Creek subwatershed which is approximately 9,298 acres in size (UC Davis 2013).

The Scott River a major tributary in the Middle Klamath water basin. It also has substantial cattle grazing industry irrigated extensively from streams in the watershed. Silvicultural activities on both USFS and private lands dominate the steep, highly erodible watersheds flowing into the valley floor. The Scott River alluvial gravels were mined extensively in the 1800's. That activity and more-recent channeling for flood control altered its morphological characteristics dramatically. The Scott River also supports substantial salmon runs. Small towns in the valley such as Etna, Fort Jones and Callahan support the timber and grazing dominated economies. There has been concern expressed that too much water is being used by agriculture at the expense of maintaining instream flows to the extent necessary to maintain a viable salmonid fishery. Another concern is recreational instream suction dredging for gold at the confluence of the Klamath River and possibly in other locations (SWRCB 2005b).

In 2006, the Environmental Protection Agency formally adopted a Total Maximum Daily Load (TMDL) for the Scott River, which lists the river as being impaired for elevated temperature and low dissolved oxygen levels. A TMDL establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality (EPA 2006).

Excessive sediment loads and elevated water temperatures have impaired many designated beneficial uses of the Scott River and its tributaries. Several of the primary beneficial uses impaired are those uses associated with the cold-water salmonid fishery. Salmonid populations in the Scott River watershed have declined significantly from historic levels and coho salmon are listed as threatened under the state and federal Endangered Species Acts. Excessive sediment loads and elevated water temperatures have resulted in the non-attainment of water quality objectives for sediment, suspended material, settleable material, and water temperature (SWRCB 2005a).

Scott River Adjudication

When water users within a basin are in dispute over legal rights to the water, a court can issue a ruling known as an adjudication to define the amount of water allowed for use per user. Adjudications can cover an entire basin, a portion of a basin, or a group of basins and all non-basin locations between. The Scott River system was adjudicated by the Siskiyou County Superior Court in Decree No. 30662 (DWR 1980). This adjudication allotted certain amounts of water to the various users of Scott River water and its tributaries. Both Kidder Creek and Barker Ditch were identified in this adjudication. Also, groundwater was discussed, and some users identified in the decree, but groundwater allotments were not adjudicated in

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the state at the time of the decree. Currently, the amount of groundwater allocated for use is not adjudicated in the Scott River Valley Groundwater Basin.

Groundwater

The Project site is located in the Scott River Valley Groundwater Basin, which is part of the North Coast Hydrologic Region. The Scott River Valley Groundwater Basin is a narrow alluvial floodplain about 28 miles long and ½- to 4 miles wide. The basin is bounded on the north and northwest by the Scott Bar Mountains, on the west and southwest by the Salmon Mountains, on the south and southeast by the Scott Mountains, and on the east by a northern extension of the Trinity Mountains (DWR 2004).

The Scott River Valley Groundwater Basin has a surface area of 63,900 acres (DWR 2004). The major source of recharge into stream channel and floodplain deposits between Etna and Fort Jones is underflows and surface runoff originating upstream of the vicinity of Etna. This is supplemented by underflow from the western tributaries. Groundwater storage capacity to a depth of 100 feet is estimated to be 400,000 acre-feet for a surface area of 39,900 acres with specific yield ranging from 5 to 15 percent (DWR 2004).

The California Department of Water Resources (DWR) (2018b) provides groundwater depths for seven wells within eight miles of the Project site. **Table 3.3-1** indicates the increase or decrease from the ground surface to the groundwater surface between the spring of 2007 and the spring of 2017. As shown, depth to groundwater varied between a decrease of 9.0 feet to an increase of 9.3 feet over the 10-year span.

Table 3.3-1. Change in Depth to Groundwater from Spring 2007 to Spring 2017

Well Number	Location	Distance from Project	Well Use	Change in Depth from Surface to Groundwater
43N09W02P002M	Fort Jones	7 miles northeast	Residential	-9.0 feet
44N09W29J001M	Scott River Road	7.6 miles northeast	Residential	+1.3 feet
43N09W23F001M	Scott Valley Airport	5.5 miles northeast	Unknown	+1.9 feet
43N09W24F001M	Eastside Road	6.6 miles northeast	Irrigation	+9.3 feet
413348N1225123W001	Scott Valley Airport	5.5 miles northeast	Other	+3.3 feet ¹
42N09W27N002M	Etna	6 miles southeast	Residential	-0.6 feet
412990N1225279W001	Holzhauser Road	4.2 miles southeast	Residential	+1.6 feet ¹

Source: DWR 2018a, 2018b

Notes: Well information only available from 5/2012 to 3/2017

The DWR Sustainable Groundwater Management Program (SGMA) is an on-line interactive program open to the public which provides a multitude of groundwater and surface water information including well drilling information. According to this program, there have been multiple wells drilled within 1.6 miles of the Project site since 1976. **Table 3.3.2** identifies 22 of those wells and indicates that ground surface to water surface ranges between 15 feet to 53 feet and is purely dependent on location of the well.

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Table 3.3.2. Local Well Depth

Year	Location	Depth to 1 st Water Contact (feet)	Year	Location	Depth to 1 st Water Contact (feet)
1974	N. Kidder Creek Road	17	2000	S. Kidder Loop Road S. Kidder Loop Road	50 50
1976	N. Kidder Creek Road	24	2001	Jaygene Court	50
1978	N. Kidder Creek Road N. Kidder Creek Road	42 29	2002	S. Kidder Creek Road	50
1979	N. Kidder Creek Road S. Kidder Creek Road	42 20	2005	S. Kidder Loop Road S. Kidder Loop Road S. Kidder Loop Road	50 50 53
1992	N. Kidder Creek Road	10	2006	N. Kidder Road	21
1993	N. Kidder Creek Road	23	2007	N. Kidder Road	22
1994	Simpson Way	20	2010	Kellems Lane	50
1995	N. Kidder Creek Road N. Kidder Creek Road S. Kidder Creek Road	15 15 22	2012	N. Kidder Creek Road	15
1997	N Kidder Creek Road S. Kidder Creek Road S. Kidder Creek Road	24 51 50	2013	Hard Rock Road	30
1998	S. Kidder Creek Road	50	2014	S. Kidder Creek Road S. Kidder Creek Road Quartz Valley Road	16 15 17
1999	S. Kidder Creek Road S. Kidder Creek Road	20 20	2015	Hard Rock Road	25

Source: DWR 2018a

In 2008, the University of California, Davis prepared a report titled the Scott River Community Groundwater Study Plan (UC Davis 2008). This Plan provided information about the Scott River Groundwater Basin and its interaction with the Scott River Valley Watershed. Among other things, the Plan identified historic groundwater levels and fluctuations for five wells in the Scott Valley. According to this Plan groundwater levels drop each summer and then recover the following fall/winter for the wells that have long-term records, which is typical for this region. For the wells shown, groundwater levels have remained fairly constant over the last 40 years and have recharged for the most part each year for monitoring wells (UC Davis 2008).

In 2015, Normandeau Associates, Inc authored the Scott River Hydrology and Integrated Surface Water / Groundwater Modeling study. According to this study, groundwater use in the Scott Valley has increased dramatically over the last few decades. In the year 2000, DWR estimated that 45 percent of the irrigated acres in the Scott Valley were using groundwater, compared to two percent just over 30 years ago. Although there is no regulation or quantification of the extraction of water from wells, groundwater levels have remained fairly constant over the last 40 years and have recharged for the most part each year (Normandeau Associates, Inc 2015).

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Flooding

The FEMA Flood Insurance Rate Map for the Project area (Map No. 06093C2000D) shows that the Project site is in Unshaded Flood Zone X, indicating that the site is an area of minimal flood hazard. Unshaded Flood Zone X includes areas outside the Special Flood Hazard Area (SFHA) and higher than the elevation of the 0.2-percent-annual-chance flood (FEMA 2011).

3.3.2 Regulatory Framework

Federal

Clean Water Act

The United States EPA is the federal agency responsible for water quality management. The Federal Water Pollution Control Act of 1948 was the first major United States (U.S.) law to address water pollution. As amended in 1972, the law became commonly known as the Clean Water Act (CWA). The CWA establishes the basic structure for regulating discharges of pollutants in the Waters of the U.S. and regulating quality standards for surface waters.

Section 401. Section 401 of the federal CWA requires that any applicant for a federal permit or license that may result in a discharge to waters of the U.S. must obtain certification from the State. The certification declares that the discharge will comply with applicable provisions of the Act, including water quality standards requirements. Most projects receiving a U.S. Army Corps of Engineers (USACE) nationwide permit also need individual Section 401 certification. The State Water Resource Control Board (SWRCB), through the Regional Water Quality Control Board (RWQCB) Los Angeles Region, administers these permits.

Section 402

The National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the U.S. The State of California is authorized to administer various aspects of the NPDES permit under Section 402 of the CWA. The General Construction Permit treats any construction activity over one acre as an industrial activity, requiring a permit under the State's General NPDES permit. The SWRCB administers these permits.

Section 404. In 1972

Section 404 of the federal CWA established a program to regulate the discharge of dredged or fill material into waters of the U.S. The CWA defines Waters of the U.S. to include tributaries to navigable waters, interstate wetlands, wetlands which could affect interstate or foreign commerce, and wetlands adjacent to other Waters of the U.S.

The program is jointly administered by the USACE and the EPA. The USACE is responsible for the day-to-day administration and permit review and the EPA provides program oversight. The fundamental rationale of the program is that no discharge of dredged or fill material should be permitted if there is a practicable alternative that would be less damaging to aquatic resources or if significant degradation would occur to

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the nation's waters. Permit review and issuance follows a sequence process that encourages avoidance of impacts, followed by minimizing impacts and, finally, requiring mitigation for unavoidable impacts to the aquatic environment. The sequence is described in the guidelines at Section 404(b)(1) of the CWA.

Proposed activities are regulated through a permit review process. An individual permit is required for potentially significant impacts. Individual permits are reviewed by the USACE, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the Section 404(b)(1) guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or state basis particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met.

State

Fish and Game Code Section 1602

The California Department of Fish and Wildlife (CDFW) requires notification before beginning an activity that will substantially modify a river, stream, or lake. If CDFW determines that the activity could substantially adversely affect an existing fish and wildlife resource, a Lake or Streambed Alteration Agreement is required.

Local

Siskiyou County General Plan

The County of Siskiyou General Plan has objectives and policies designed to reduce potential for hydrology and water quality issues in the County. While many of these policies and action items require the County to take certain actions, they are not related to development of a particular project. Objectives and policies that pertain to the Proposed Project are listed below.

Conservation Element

Objective: To preserve the quality of the existing water supply in Siskiyou County and adequately plan for the expansion and retention of valuable water supplies for future generations and to provide for a comprehensive program to sustain multiple use of watershed lands through reduction of fire hazards, erosion control and type conversion of vegetation where desirable and feasible.

Land Use Element

Policy 41.5: All development will be designed so that every proposed use and every individual parcel of land created is a buildable site, and will not create erosion, runoff, access, fire hazard or any other resources or environmentally related problems.

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Policy 41.7: Evidence of water quality and quantity acceptable to the Siskiyou County Health Department must be submitted prior to development approval.

Scott Valley Area Plan

Section 6, *Water Management*, of the Scott Valley Area Plan (SVAP) addresses development in the Scott Valley area and the Scott River watershed. Specific polices include areas related to agriculture, critical deer habitat, flooding, landslides, and excessive slopes. Polices related to hydrology would be those flooding policies listed in the SVAP. The following are those hydrological/water quality policies that would pertain to the Proposed Project.

Policy 8: No development shall be allowed within the designated floodways, and any development within the 100-year flood hazard boundary outside of designated floodways shall be in accordance with the requirements of the county's flood plain management ordinance. Proof that is not within the designated floodway can only be made when so indicated by the county engineer. The county engineer must take this determination prior to any action by the county on any proposed development.

Policy 9: Only agricultural, residential, open space, and small scale commercial, industrial, recreational uses, and public or quasi public uses may be permitted [within flood areas].

Policy 10: Residential, small scale commercial, industrial, recreational uses, and public or quasi public uses may only be permitted when they are clearly compatible with the surrounding and existing uses of the land [within flood areas].

3.3.3 Environmental Impacts

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would have significant effect on the hydrology and water environment if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;

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- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows; or
- 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.

Methodology

The evaluation of potential hydrology and water quality impacts is based on several documents and available information, including the County of Siskiyou General Plan, the FEMA Flood Insurance Rate Map, the DWR Water Data Library, and UC Davis.

Project Impacts Analysis

Impact 3.3.1: Water Quality Standards/Waste Discharge Requirements

<i>Threshold: Would the project violate any water quality standards or waste discharge requirements?</i>

Stormwater runoff from the Project site discharges to the existing ponds, drainage channels, Barker Ditch, and Kidder Creek or percolates into the groundwater basin. Polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Runoff pollution may include a wide array of environmental, chemical, and biological compounds from both point and nonpoint sources. On the Project site, stormwater characteristics depend on site conditions (e.g., land use and impervious cover), rain events (duration, amount of rainfall, intensity, and time between events), soil type and particle sizes, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition.

Short-Term Construction

The potential impacts of construction activities on water quality focus primarily on sediments, turbidity, and pollutants that might be associated with sediments (e.g., phosphorus and legacy pesticides). Construction-related activities that are primarily responsible for sediment releases are related to exposing soils to potential mobilization by rainfall/runoff and wind. Such activities include removal of vegetation, grading of the site for new buildings, construction of new buildings, associated infrastructure including internal roads and parking areas, and the creation of a 7-acre pond and drainage channel. Non-sediment-related pollutants that are also of concern during construction include waste construction materials; chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment; and concrete-related waste streams.

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Projects that disturb one or more acres of soil or projects that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). Therefore, the Proposed Project would be subject to the requirements of a General Permit. Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities. The General Permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would list Best Management Practices (BMPs) to prevent construction pollutants and products from violating any water quality standard or waste discharge requirement.

Mitigation measure **MM 4.5** of the Initial Study, and incorporated by reference into this EIR, requires a SWPPP to be completed by a Qualified SWPPP Developer for the Proposed Project. This mitigation also requires that any stormwater associated with newly created impervious surfaces shall be retained, detained, or directed away from said waterways or water bodies.

With the implementation of mitigation measure **MM 4.5**, water quality impacts from the Proposed Project during construction would be *less than significant*.

Long-Term Operations

Implementation of the Proposed Project would develop the Project site and would result in an alteration to the existing site conditions. This conversion would increase the impervious surface area of the site through the introduction of 65,384 square feet of new buildings (see **Table 2-2**) and other hard surfaces. Additionally, the Proposed Project would increase the RV camping and parking areas. An increase in impervious surface areas, RV camping and parking lots would increase runoff potentially containing oil and grease, heavy metals, chemicals, and other pollutants. Runoff from the Project site would be a contributing factor to water quality degradation and the introduction of pollutant sources. However, mitigation measure **MM 4.5** requires that all stormwater associated with newly created impervious surfaces to be retained, detained, or directed away from said waterways or water bodies. This measure would ensure that runoff from any RV camping areas and parking lots impervious surfaces would not allow for contaminated water to flow into the existing waterways. This would be a *less than significant* impact.

The use of the seven-acre pond would include swimming, fishing, and use of large pond toys and non-motorized vessels such as kayaks and canoes. However, none of these activities are known to be substantial sources of water pollution. As such the use of the pond would not violate any water quality standards.

The Project site currently disposes of wastewater through nine County-approved septic systems. It is anticipated that the expansion of facilities would be accommodated through conventional septic systems. However, the central dining facility may require an alternative system. Depending on the wastewater flows of the central dining facility, a waste discharge permit through the North Coast RWQCB may be necessary if average flows exceed 1,500 gallons per day. As the improvements are developed, adequate wastewater disposal systems would be required and approved by the Siskiyou County Environmental Health Division

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and the North Coast RWQCB (as necessary) prior to issuance of a building permit for a specific improvement. Approval by these entities would assure that the Proposed Project would not exceed any wastewater discharge requirements. The Project would have a **less than significant** impact in this area.

Impact 3.3.2: Groundwater

Threshold: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

With development of the Project, some of the pervious soils on the site will be replaced with impervious surfaces such as paving and buildings. The addition of impervious surfaces would decrease the area available for water penetration, thereby reducing local groundwater recharge potential. However, all rain water from those impervious surfaces would flow onto the adjacent soil and into the existing natural drainage on the Project site. This would allow the rain water to percolate into the groundwater basin as it currently does. Therefore, the Project site would not substantially interfere with groundwater recharge.

The applicant has determined that at least one new groundwater well will be required with the proposed expansion. Additionally, a water storage and delivery system will be constructed to accommodate projected daily demand plus required storage for fire suppression. The camp is currently regulated by the State Office of Drinking Water (ODW), and would continue to be permitted, monitored, and inspected by ODW.

The only potable water supply for the KCOC is from groundwater. On average, each person at a youth camp consumes approximately 45 gallons per day (gpd) of water² (Siskiyou County 2018). **Table 3.3-3** illustrates the estimated groundwater demand to serve the existing uses and Proposed Project. Currently, based on 310 persons occupying the camp, approximately 13,920 gpd of water are utilized. At full buildout of the Project, the estimated maximum occupancy is 844 during summer time (peak season, a period of approximately 12 weeks per year). At a full occupancy of 844 occupants, approximately 37,980 gpd of water would be utilized during the summer months³. Spring and fall occupancy are reduced to a potential of 588 depending on seasonal access. During this time, approximately 26,460 gpd would be utilized. This results in an annual demand of 8,181,000 gallons or an increase of 6,617,700 gallons over existing conditions.

² Water demand was determined by the Siskiyou County Environmental Health Department based on the following: The EPA Design Manual has gallon usage listings. For campground development: 31.7 gallons of water per day (gpd) per person. Day camp (no meals): 13.2 gpd per person. This results in 45 gpd/person.

³ 45 gpd/person X 844 persons = 37,980 gpd.

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Table 3.3-3. Project Groundwater Demand

Time Period	Existing		Proposed Project at Buildout			Difference			
	Occupancy	Daily Demand (gal)	Annual Demand (gal)	Occupancy	Daily Demand (gal)	Annual Demand (gal)	Occupancy	Daily Demand (gal)	Annual Demand (gal)
Spring/Fall 180 days	38	1,710	307,800	588	26,460	4,762,800	550	24,750	4,455,000
Summer 90 days	310	13,920	1,255,500	844	37,980	3,418,200	534	24,030	2,162,700
Total			2,575,800			8,181,000			6,617,700
Acre Feet ¹			4.8			25.1			20.3
Special Events									
Event	Time Period	Total Events	Attendance per Event	Total Attendance	Water Demand per Event (gal) ²	Total Per Year (gal)	Total Per year (acre-feet)		
Private	1 per month	7	250	1,750	3,750	26,250	0.08		
Public	1 per month	7	250	1,750	3,750	26,250	0.08		
Fall Festival	1 per year	1	1,250	1,250	18,750	18,750	0.06		
Total		15		4,750	26,250	71,250	0.2		

Note:

1) One-acre foot equals 325,851 gallons.

2) Based on 15 gallons for 8-hour period. (Special events last from 3 to 8 hours. Average water demand is 45 gallons per 24-hour period per person. 8-hour per = 15 gallons per person)

DWR estimates that the Scott River Valley Groundwater Basin has approximately 400,000 acre-feet of groundwater storage. As shown in **Table 3.3-3**, the Proposed Project's estimated annual groundwater demand is estimated to increase by 20.5-acre feet (20.3 acre feet for camp and .02 acre feet for special events) over current conditions. This increase represents 0.005 percent⁴ of the available groundwater in the Scott River Valley Groundwater Basin. Additionally, as discussed previously, records from DWR shown in **Table 3.3-1** and the studies completed by UC Davis and Normandeau Associates indicate that there has not been a substantial decrease in available groundwater since 2007 and groundwater levels have remained fairly constant over the last 40 years.

The common law public trust doctrine in California derives from the State's role as trustee over tidelands, submerged lands, and lands underlying inland navigable waters, which the State and its grantees hold for public trust purposes. Such trust purposes were traditionally confined to navigation, commerce, and fisheries, but later extended to include recreation and preservation of trust lands in their natural state. In 1983, the California Supreme Court applied the public trust doctrine for the first time to potentially limit the appropriation of water from navigable streams and nonnavigable tributaries. Specifically, the Court held that "[t]he state has an affirmative duty to take the public trust into account in the planning and allocation of water resources" and to "preserve" those resources to the extent "feasible." (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446-447.) What is "feasible" in a particular

⁴ 20.5 acre feet / 400,000 acre feet = 0.005 percent.

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instance, however, is a matter for the trustee agency to determine in light of the “public interest.” (*Id.*; see also *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 777-778 (State fulfilled its public trust duties in implementing water quality control plan under state clean water laws).) Thus, as the Supreme Court noted, the State may “approve appropriations despite foreseeable harm to public trust uses” so long as it “consider[s] the effect of the taking on the public trust” and finds that such taking is “consistent with the public interest...” (*National Audubon Society v. Superior Court, supra*, 33 Cal.3d at 446-447.) Accordingly, the State may authorize non-trust activities even if they impair trust uses, so long as it balances trust values against the general public interest in non-trust purposes. (*Id.*)

While the public trust doctrine has no direct application to groundwater, the Third Appellate District recently extended *National Audubon*, holding that the doctrine applies to the extraction of groundwater where it adversely impacts public trust uses and values in navigable waterways. (*Environmental Law Foundation v. State Water Resources Control Board (“ELF v. SWRCB”)* (2018) 26 Cal.App.5th 844; compare *Santa Teresa Citizens Action Group v. City of San Jose* (2003) 114 Cal.App.4th 689, 709 (the public trust doctrine “has no direct application to groundwater.”) The Third District also held that counties, as legal subdivisions of the state, “share responsibility for administering the public trust” and “may not approve of destructive activities without giving due regard to the preservation of those resources.” (*ELF v. SWRCB, supra*, 26 Cal.App.5th at 867-868.) In turn, the test for determining whether a particular activity is inconsistent with the trust is whether the activity will substantially impair or impede public trust uses or values (e.g., commerce, navigation, fisheries, recreation, or ecological uses). (*World Business Academy v. California State Lands Commission* (2018) 24 Cal.App.5th 476, 509-510; see also *National Audubon*, 33 Cal.3d at 439, citing *Boone v. Kingsbury* (1928) 206 Cal. 148, 192-193.)

Here, the Initial Study and Draft EIR chapters address the direct, indirect, and cumulative effects associated with the Project, including the effects that additional groundwater pumping might have on the aquifer and interconnected surface waters. The DEIR has fully evaluated the Proposed Project’s impacts, including the impact of the Proposed Project on the condition of the Scott River Valley Groundwater Basin. Although the Proposed Project involves the expansion of impervious surface area, which will decrease the area available for water penetration, the Proposed Project will not substantially interfere with groundwater recharge because all water from those impervious surfaces will flow onto the adjacent soil and into the site’s natural drainage. Further, while the Proposed Project involves an increase in groundwater extraction, the increase in estimated annual groundwater demand represents only .005 percent of the available groundwater in the Scott River Valley Groundwater Basin - a Basin that fluctuates and has been at its highest level in years. This very low level of increased pumping is determined to have a less than significant impact on groundwater recharge and supply and is therefore not expected to impair the watershed on an individual or cumulative level (DEIR, 3.3-11). Because the level of pumping will have an insignificant impact on the watershed, it will not impair or interfere with instream public trust uses or values such as recreation or fishing on an individual or a cumulative level. Indeed, the DEIR has also fully evaluated the impacts of the Proposed Project on recreation and has determined that the project’s impact on recreational values will be *insignificant*. (DEIR, Recreation.) Therefore, the Proposed Project will not substantially impair the public’s right to navigation or fishing or substantially interfere with the public trust needs or values related to the Scott River. Therefore, the potential impact on local groundwater recharge and supplies from operation of the Proposed Project would be **less than significant**.

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Impact 3.3.3: Drainage Patterns

Threshold: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, or flooding on- or off-site?

Figure 8. Natural Drainage illustrates the various natural drainages on the Project site. As shown, one stream, Kidder Creek, and three drainage ditches have flowing water at any one time. All other drainages are intermittent and only have water in them during a storm event. The majority of the proposed facilities would be constructed within or along existing roadways, roadway shoulders, or on access roads along flood control channels. During construction, grading of project sites would be required; however, drainage patterns would not be significantly altered from the existing conditions. Furthermore, the Proposed Project would be required to comply with mitigation measure **MM 4.5**. This mitigation measure requires a SWPPP and any stormwater associated with newly created impervious surfaces to be retained, detained, or directed away from said waterways or water bodies. These measures would ensure that no substantial erosion, siltation, or flooding on- or off-site would occur. Impacts would be **less than significant**.

The Project also proposes a new seven-acre pond east of the existing pond. The proposed pond would impound approximately 36 AF and have an average depth of 6 feet. The addition of a seven-acre pond would alter the existing drainage pattern to the extent of water that would be taken from the Barker Ditch until the pond is full. This removal of this water would only occur during the rainy season when water extraction would not affect downstream flow.

A preliminary design for the pond was submitted with the original use permit application in 2011. Subsequently, the applicant purchased additional land, which has been included in a revised application submittal and is now part of this Project. The pond was modified to move it away from wetlands; the overall volume will stay the same and the depth of the dam will stay the same. Construction of the pond would also be required to comply with mitigation measure **MM 4.5**. Implementation of this mitigation during construction of the pond would ensure that no substantial erosion, siltation, or flooding on- or off-site would occur. Impacts would be **less than significant**.

As discussed in **Section 2.0 Project Description**, an analysis of water rights to fill and store water from Barker Ditch for the new pond was completed by Alan B. Lilly, Attorney, from the Bartkiewicz, Kronick and Shanahan law firm. This analysis (see **Appendix C**) determined that because the water diverted from Kidder Creek, via the Barker Ditch, into the new pond would be stored in the pond for a maximum of 30 days before being conveyed down the ditch, such temporary storage would be a reasonable "Regulatory Storage" under the Scott River Adjudication decree (Siskiyou County Superior Court No. 30662). Also, because the pond would be lined to eliminate percolation losses, this storage would not reduce the amounts of water that other water users on Barker Ditch would receive. The Proposed Project applicant has made arrangements with the other users on Barker Ditch to temporarily store water in the new pond from the ditch. Therefore, the use and storage of water would not affect downstream water availability.

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Impact 3.3.4: Stormwater Runoff and Flow Rates

Threshold: Would the project create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As described above, the Proposed Project would convert naturally vegetated open space to 65,384 square feet of new buildings (see **Table 2-2**) and other hard surfaces. This conversion would substantially increase the impervious surface area of the site through the introduction of parking areas, rooftops, and other surfaces. An increase in impervious surface area would substantially increase runoff. However, all drainage on the site is from natural drainage and therefore would not impact an existing or planned stormwater drainage system implemented by the County. In addition, because the Proposed Project is located on a large area (580 acres), the impervious surfaces represent an extremely small portion of the area and any increase in runoff would be contained by the existing drainages in the area. Impacts would be **less than significant**.

Impact 3.3.5: Water Quality

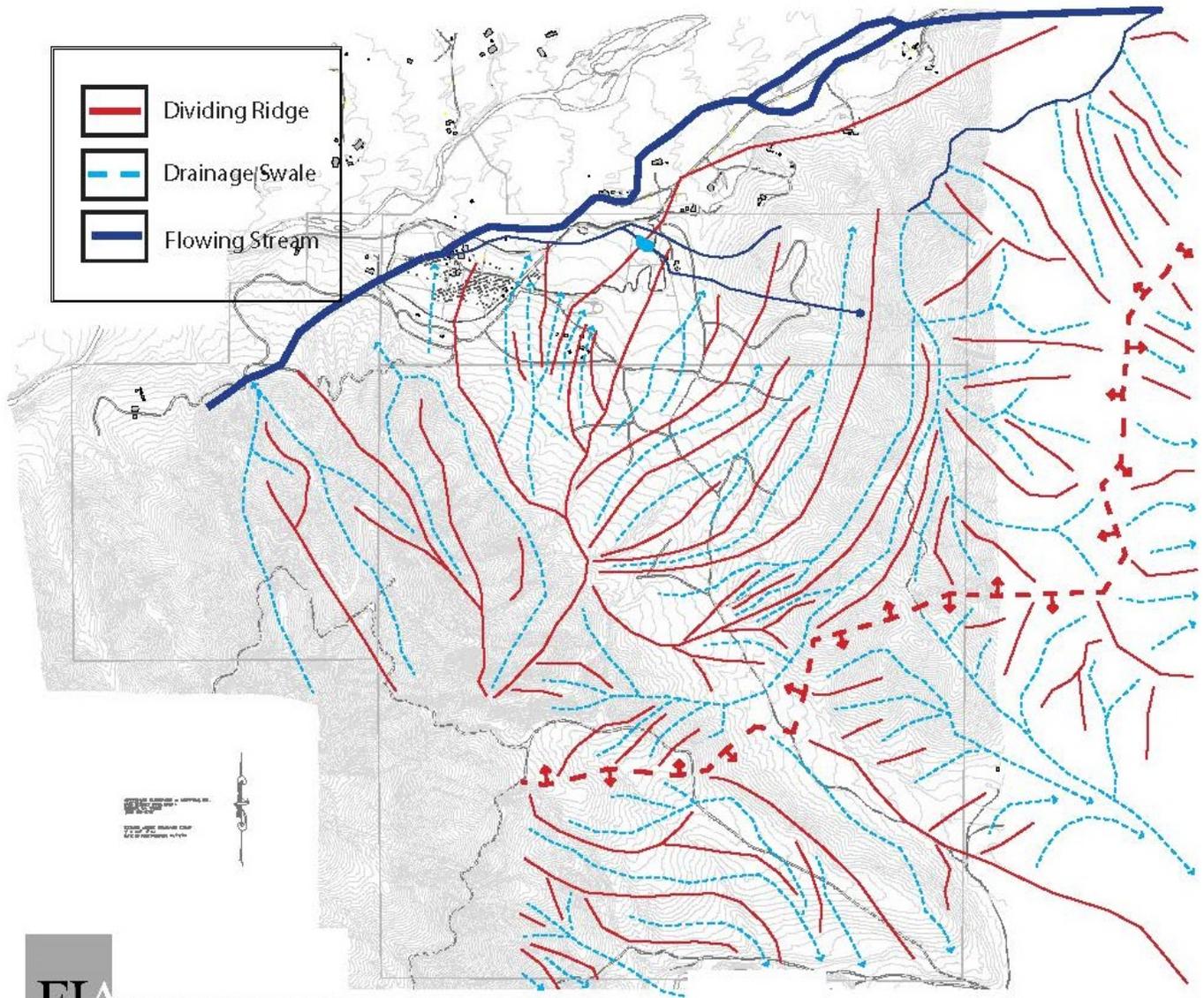
Threshold: Would the project otherwise substantially degrade water quality?

The causes of water pollution vary and may be both natural and human activities. However, the most common causes of water pollution are related to human activities including:

<ul style="list-style-type: none"> • Agriculture runoff, stormwater runoff 	<ul style="list-style-type: none"> • Burning of fossil fuels 	<ul style="list-style-type: none"> • Improper disposal of batteries
<ul style="list-style-type: none"> • Accidental leaks and spills 	<ul style="list-style-type: none"> • Plastic materials/waste in contact with water 	<ul style="list-style-type: none"> • Leaking landfills
<ul style="list-style-type: none"> • Deliberate/illegal discharges of waste 	<ul style="list-style-type: none"> • Disposal of personal care products and household chemicals 	<ul style="list-style-type: none"> • Animal waste

The Proposed Project does include the majority of these activities. For things such as accidental leaks and spills, mitigation measure **MM 4.5** of the Initial Study, and incorporated by reference into this EIR, requires a SWPPP to be completed by a Qualified SWPPP Developer for the Proposed Project. Implementation of this mitigation measure would assist in the protection of water

The SWRCB and the California Department of Toxic Substances Control (DTSC) are the two California governmental agencies that maintain lists of accidental hazardous materials releases and sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites.



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Figure 8. Natural Drainages
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SWRCB's GeoTracker is the data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as leaking underground storage tank (UST) Sites, Department of Defense Sites, and Cleanup Program Sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities including: Irrigated Lands, Oil and Gas production, operating Permitted USTs, and Land Disposal Sites.

EnviroStor is the DTSC data management system for tracking cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further.

A search of the DTSC (2019) and SWRCB (2019) databases indicate that the existing KCOC operation has not been identified as having a hazardous materials release which resulted in water quality impact. While the Proposed Project would result in an expanded camp and recreational facilities, this expansion, with incorporation of mitigation measure **MM 4.5**, would continue to operate in a manner similar in use to the existing KCOC and would not substantially degrade water quality. As such, the Proposed Project would have a **less than significant** impact in this area,

Impact 3.3.6: 100-Year Flood Hazard Area

Threshold: Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The FEMA Flood Insurance Rate Map for the Project area (Map No. 06093C2000D) shows that the Project site is in Flood Zone X, indicating that the site is an area of minimal flood hazard. Flood Zone X includes areas outside the Special Flood Hazard Area (SFHA) and higher than the elevation of the 0.2-percent-annual-chance flood. Therefore, since the Project site is outside of a designated floodplain, the site is subject to a minimal risk of flooding and the impact is **less than significant**.

Impact 3.3.7: Flooding as a Result of the Failure of a Levee or Dam

Threshold: Would the project 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?

There are no levees or dams adjacent to or upstream of the Project site. The Project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of an existing levee or dam. There would be **no impact** in this area.

The Project proposes a seven-acre pond which will have a water barrier not to exceed six feet at the spillway point. Initial Study mitigation measure **MM 9.1** (as shown below) requires all aspects of the pond, including the six-foot water barrier, are required to be designed by a qualified engineer and approved by the County. Design and approval would ensure that the pond water barrier would not fail and expose people or structures to a significant risk of loss, injury or death involving flooding. This would be a **less than significant** impact.

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3.3.4 Mitigation Measures

MM 9.1 Prior to any land disturbance activities associated with the construction of the proposed seven-acre pond, the following shall be completed:

- 1) If the dam necessary to impound the proposed pond is subject to DWR, Division of Safety of Dams jurisdiction, proof of full compliance with the required permitting and plan approval shall be provided to the Siskiyou County Community Development Department – Planning Division; or
- 2) If the dam necessary to impound the proposed pond is not subject to the Department of Water Resources, Division of Safety of Dams jurisdiction, the applicant shall submit plans to the County stamped by a qualified engineer registered in the State of California detailing the structural design of the dam. The County will review and approve said plans to ensure that the proposed dam is structurally adequate and is not a hazard. The applicant shall be responsible for paying all costs associated with the County’s review of said plans. The County retains the right to hire a third-party engineering firm to review the required plans.

Timing/Implementation: Prior to land disturbance activities associated with pond construction

Enforcement/Monitoring: Siskiyou County Community Development - Planning Division

3.3.5 Residual Impacts After Mitigation

Implementation of mitigation measure **MM 9.1** would ensure the Project site is appropriately investigated and mitigated to minimize risks associated with the potential for flooding impacts from dam failure. Therefore, with implementation of mitigation measure **MM 9.1**, this impact would be **less than significant**.

3.3.6 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The cumulative setting for hydrology and water quality includes the Kidder Creek subwatershed as described in the Environmental Setting subsection above.

Cumulative Impacts to Hydrology and Water Quality

Impact 3.3.8: Cumulative Hazardous Materials and Emergency Response Impacts

Threshold: Would the Proposed Project, in combination with other existing, proposed, and reasonably foreseeable future development in the area, alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts?

The Proposed Project, when considered in combination with existing, approved, proposed, and reasonably foreseeable development in the watershed, would alter cumulative drainage conditions, rates, volumes,

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and water quality, which could result in potential flooding and stormwater quality impacts within the overall watershed. However, as discussed in **Impacts 3.3.1, 3.3.3, and 3.3.5**, implementation of mitigation measure **MM 4.5** would reduce the Project's contributions to water quality and runoff impacts to levels that are less than significant. **MM 4.5** requires that stormwater associated with newly created impervious surfaces to be retained, detained, or directed away from said waterways or water bodies. This requirement helps to remove contaminants and debris from the stormwater and retains/detains stormwater before it enters the Kidder Creek watershed. As such, the Project is rendered noncontributory to cumulative hydrology impacts. The Proposed Project's contribution to cumulative water quality, runoff, and downstream flooding impacts is considered to be **less than cumulatively considerable**.

Cumulative Mitigation Measures

No significant cumulative impacts were identified. No cumulative mitigation measures are required.

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3.3.7 References

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SECTION 3.4 NOISE

This section discusses the existing noise setting, identifies potential noise impacts associated with implementation of the Proposed Project, and prescribes mitigation measures to address potential impacts. This section is based on the *Kidder Creek Orchard Camp Use Permit Application – UP 11-15 Environmental Noise Assessment* prepared by Bollard Acoustical Consultants, Inc. (2017). This report is attached as **Appendix E**.

3.4.1 Technical Background

Acoustic Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound is mechanical energy transmitted in the form of a wave because of a disturbance or vibration. Sound levels are described in terms of both amplitude and frequency. Amplitude is defined as the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 65-dB source of sound, such as a truck, when joined by another 65-dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10-dB increase in amplitude with a perceived doubling of loudness and establish a 3-dB change in amplitude as the minimum audible difference perceptible to the average person.

The frequency of a sound is defined as the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sounds of different frequencies. For instance, the human ear is more sensitive to sound in the higher portion of this range than in the lower, and sound waves below 16 Hz or above 20,000 Hz cannot be heard at all. To approximate the sensitivity of the human ear to changes in frequency, environmental sound is usually measured in what is referred to as A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA (EPA 1971). The most common sounds vary between 40 dBA (very quiet) and 100 dBA (very loud). Normal conversation at 3 feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA, which can cause serious discomfort. Common community noise sources and associated noise levels, in dBA, are depicted in **Table 3.4-1**.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates at a rate between 3.0 and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (EPA 1971).

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Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the “line of sight” between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise but are less effective than solid barriers.

Table 3.4-1. Representative Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock band
Jet flyover at 1,000 feet	—105—	
	—100—	
Gas lawn mower at 3 feet	—95—	
	—90—	
Diesel truck at 50 mph at 50 feet	—85—	Food blender at 3 feet
	—80—	Garbage disposal at 3 feet
Noisy urban area, daytime	—75—	
Gas lawn mower at 100 feet	—70—	Vacuum cleaner at 10 feet
Commercial area	—65—	Normal speech at 3 feet
Heavy traffic at 300 feet	—60—	
	—55—	Large business office
Quiet urban daytime	—50—	Dishwasher in next room
	—45—	
Quiet urban nighttime	—40—	Theater, large conference room (background)
Quiet suburban nighttime	—35—	
	—30—	Library
Quiet rural nighttime	—25—	Bedroom at night, concert hall (background)
	—20—	
	—15—	Broadcast/recording studio
	—10—	
	—5—	
Lowest threshold of human hearing	—0—	Lowest threshold of human hearing

Source: Bollard Acoustical Consultants, Inc. (2017)

Noise Descriptors

Environmental noise descriptors are generally based on average, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in dBA. The L_{eq} represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. In addition, the hourly L_{eq} is the noise metric used to collect short-term noise level measurement samples and to estimate the 24-hour Community Noise Equivalent Level (CNEL). CNEL is the weighted average of the intensity of a sound with corrections for time of day and averaged over 24 hours. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure. The time of day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7 p.m. to 10 p.m. and the addition of 10 decibels to dBA L_{eq} sound levels at night

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between 10 p.m. and 7 a.m. These additions are made to account for the noise-sensitive periods during the evening and night hours when sound is perceived to be louder. Common noise level descriptors are summarized below.

- L_{eq} , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time; thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{dn} , the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. and an additional 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
- L_{min} , the minimum instantaneous noise level experienced during a given period of time.
- L_{max} , the maximum instantaneous noise level experienced during a given period of time.
- L_n , the A-weighted noise levels that are exceeded 1 percent, 10 percent, 50 percent, and 90 percent (L_{01} , L_{10} , L_{50} , L_{90} , respectively) of the time during the measurement period.

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. The acceptability of noise and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels.

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called “ambient” environment. In general, the more a new noise exceeds the previously existing ambient noise level, the

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less acceptable the new noise will be judged. Regarding increases in A-weighted noise levels, knowledge of the following relationships will be helpful in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial.
- A 10 dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

A limitation of using a single noise-level increase value to evaluate noise impacts, as discussed above, is that it fails to account for pre-development noise conditions. With this in mind, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that take into account the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL, L_{dn}). FICON-recommended noise evaluation criteria are summarized in **Table 3.4-2**.

Table 3.4-2. FICON-Recommended Criteria for Evaluation of Increases in Ambient Noise Levels

Ambient Noise Level Without Project	Increase Required for Significant Impact
<60 dB	5.0 dB, or greater
60–65 dB	3.40 dB, or greater
>65 dB	1.5 dB, or greater

Source: Bollard Acoustical Consultants, Inc. (2017)

As depicted in **Table 3.4-2**, an increase in the noise level of 5.0 or greater, would typically be considered to result in increased levels of annoyance where existing ambient noise levels are less than 60 dB. In areas where the ambient noise level ranges from 60 to 65 dB, increased levels of annoyance would be anticipated at increases of 3 dB, or greater. Increases of 1.5 dB, or greater, could result in increased levels of annoyance in areas where the ambient noise level exceeds 65 dB. The rationale for the FICON-recommended criteria is that as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant increases in annoyance (FICON 2000).

Effects of Noise on Human Activities

The extent to which environmental noise is deemed to result in increased levels of annoyance, activity interference, and sleep disruption varies greatly from individual to individual depending on various factors, including the loudness or suddenness of the noise, the information value of the noise (e.g., aircraft overflights, child crying, fire alarm), and an individual's sleep state and sleep habits. Over time, adaptation to noise events and to increased levels of noise may also occur. In terms of land use compatibility, environmental noise is often evaluated in terms of the potential for noise events to result in increased

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levels of annoyance, sleep disruption, or interference with speech communication, activities, and learning. Noise-related effects on human activities are discussed in more detail below.

Speech Communication

For most noise-sensitive land uses, an interior noise level of 45 dB L_{eq} is typically identified for the protection of speech communication in order to provide for 100 percent intelligibility of speech sounds. Assuming an average 20-dB reduction in sound level between outdoors and indoors (which is an average amount of sound attenuation that assumes windows are closed), this interior noise level equates to an exterior noise level of 65 dBA L_{eq} . For outdoor voice communication, an exterior noise level of 60 dBA L_{eq} allows normal conversation at distances up to 2 meters with 95 percent sentence intelligibility (EPA 1971). Based on this information, speech interference begins to become a problem when steady noise levels reach approximately 60 to 65 dBA. Within interior noise environments, an average-hourly background noise level of 45 dBA L_{eq} is typically recommended for noise-sensitive land uses, such as educational facilities (Caltrans 2002).

Annoyance and Sleep Disruption

With regard to potential increases in annoyance, activity interference, and sleep disruption, land use compatibility determinations are typically based on the use of the cumulative noise exposure metrics (i.e., CNEL or L_{dn}). Perhaps the most comprehensive and widely accepted evaluation of the relationship between noise exposure and the extent of annoyance was one originally developed by Theodore J. Schultz in 1978. Schultz's research findings provided support for L_{dn} as the descriptor for environmental noise. His research identified a correlation between the cumulative noise exposure metric and individuals who were highly annoyed by transportation noise. When expressed graphically, this relationship is typically referred to as the Schultz curve. The Schultz curve indicates that approximately 13 percent of the population is highly annoyed at a noise level of 65 dBA L_{dn} . It also indicates that the percentage of people describing themselves as being highly annoyed accelerates smoothly between 55 and 70 dBA L_{dn} . A noise level of 65 dBA L_{dn} is a commonly referenced dividing point between lower and higher rates of people describing themselves as being highly annoyed (Caltrans 2002).

The Schultz curve and associated research became the basis for many of the noise criteria subsequently established for federal, state, and local entities. Most federal and California regulations and policies related to transportation noise sources establish a noise level of 65 dBA CNEL/ L_{dn} as the basic limit of acceptable noise exposure for residential and other noise-sensitive land uses. For instance, with respect to aircraft noise, both the Federal Aviation Administration (FAA) and the State of California have identified a noise level of 65 dBA L_{dn} as the dividing point between normally compatible and normally incompatible residential land use generally applied for determination of land use compatibility. For noise-sensitive land uses exposed to aircraft noise, noise levels in excess of 65 dBA CNEL/ L_{dn} are typically considered to result in a potentially significant increase in levels of annoyance (Caltrans 2002).

Allowing for an average exterior-to-interior noise reduction of 20 dB, an exterior noise level of 65 dBA CNEL/ L_{dn} would equate to an interior noise level of 45 dBA CNEL/ L_{dn} . An interior noise level of 45 dB CNEL/ L_{dn} is generally considered sufficient to protect against activity interference at most noise-sensitive land uses, including residential dwellings, and would also be sufficient to protect against sleep

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interference (EPA 1971). In California, the California Building Code establishes a noise level of 45 dBA CNEL as the maximum acceptable interior noise level for residential uses (other than detached single-family dwellings). Use of the 45 dBA CNEL threshold is further supported by recommendations provided in the Governor's OPR's General Plan Guidelines, which recommend an interior noise level of 45 dB CNEL/ L_{dn} as the maximum allowable interior noise level sufficient to permit "normal residential activity" (OPR 2003).

The cumulative noise exposure metric is currently the only noise metric for which there is a substantial body of research data and regulatory guidance defining the relationship between noise exposure, people's reactions, and land use compatibility. However, when evaluating environmental noise impacts involving intermittent noise events, such as aircraft overflights and passing trains, the use of cumulative noise metrics may not provide a thorough understanding of the resultant impact. The general public often finds it difficult to understand the relationship between intermittent noise events and cumulative noise exposure metrics. In such instances, supplemental use of other noise metrics, such as the L_{eq} or L_{max} descriptor, may be helpful as a means of increasing public understanding regarding the relationship between these metrics and the extent of the resultant noise impact (Caltrans 2002).

Sound Propagation and Attenuation

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level decreases (attenuates) at a rate of approximately 6 decibels for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 decibels for each doubling of distance from a line source, depending on ground surface characteristics. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or a body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 decibels per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation for soft surfaces results in an overall attenuation rate of 4.5 decibels per doubling of distance from the source.

Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) from a highway due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

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Noise Reduction

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in minimum 5 dB of noise reduction. Taller barriers provide increased noise reduction.

Noise reductions afforded by building construction can vary depending on construction materials and techniques. Standard construction practices typically provide approximately 15 dBA exterior-to-interior noise reductions for building façades, with windows open, and approximately 20 to 25 dBA with windows closed. With compliance with current Title 24 energy efficiency standards, which require increased building insulation and inclusion of an interior air ventilation system to allow windows on noise-impacted façades to remain closed, exterior-to-interior noise reductions typically average approximately 25 dBA. The absorptive characteristics of interior rooms, such as carpeted floors, draperies, and furniture, can result in further reductions in interior noise.

Additional noise control techniques commonly used for transportation noise sources include traffic control, such as prohibiting heavy-duty trucks and reducing speed limits along primarily affected corridors. However, an approximately 20-mile-per-hour reduction in speed would typically be required to achieve a noticeable decrease in noise levels. In some instances, the use of noise-reducing pavements, such as rubberized asphalt, has also been used to reduce traffic noise. However, when compared with hard site surfaces (i.e., asphalt, concrete, stone, and very hard packed earth), soft site surfaces or natural surfaces (i.e., earth and ground vegetation covers) are the most effective method used to reduce traffic-associated noise by resulting in a drop-off rate of 4.5 dBA per doubling of distance (Caltrans 2013) and thus are better at reflecting traffic-associated noise levels. Hard site surfaces typically result in a 3.0 dBA drop-off rate (Caltrans 2013).

Fundamentals of Environmental Groundborne Vibration

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or manmade causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 3.4-3 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or

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the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment.

Table 3.4-3. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Human Reaction	Effect on Buildings
0.006–0.019	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	Vibration acceptable only if there are an infrequent number of events per day.	Vibrations unlikely to cause damage of any type
0.1	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.2	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.4–0.6	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings
0.006–0.019	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

Source: Bollard Acoustical Consultants, Inc. (2017)

3.4.2 Environmental Setting

Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

Due to the substantial size of the Project area, many of the camp facilities and activities are, or will be, located hundreds to thousands of feet from the nearest noise sensitive receptors (residences). However, some proposed camp facilities and activities, such as the proposed 7-acre pond, will be located in relatively close proximity to some existing residences. The existing residences are located primarily to the

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north of the KCOC boundaries, as well as along South Kidder Creek Road. The locations of the twelve nearest residences to the Project site are shown on **Figure 9. Noise Measurement Locations**.

Existing Noise Conditions

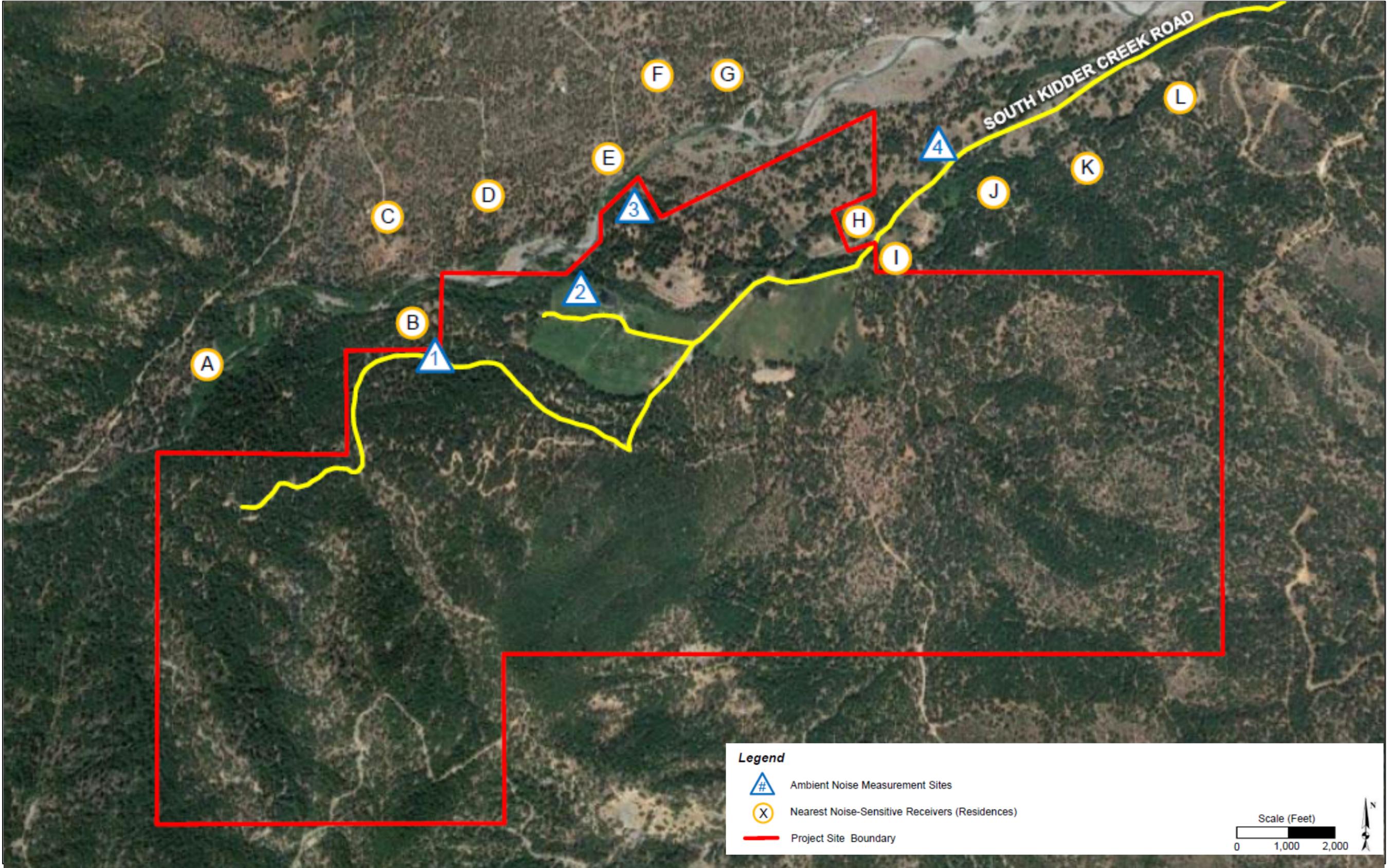
The existing noise environment within the overall Project area varies depending on proximity to Kidder Creek (water noise), South Kidder Creek Road (traffic noise), or various camp activities. To quantify the existing ambient noise environment at locations representative of the noise environment on the Project site and at the nearest sensitive receptors to the Project site, long-term noise level measurements were conducted at four locations at various times between June 15 and June 30, 2017, for a total monitoring period of 18 days (See **Figure 9** for noise monitoring locations and nearest sensitive receptors). During the noise monitoring period, camp staff reported that normal camp operations currently allowed under existing conditions were in effect. See **Appendix E** for noise output files.

Noise Measurement Site 1 was intended to be representative of existing ambient conditions at Receptor B, which was located in close proximity. Noise Measurement Site 1 was also intended to be representative of ambient conditions at Receptors C, D, F & G (see **Figure 9**), which are located roughly comparable distances from water noise generated by Kidder Creek flow.

Noise Measurement Site 2 was specifically selected to capture the noisiest onsite aspects of camp operations. Specifically, Site 2 was located 130 feet from the center of the existing pond where swimming activities currently occur, and 270 feet from the center of the soccer field. This data was used to project noise impacts at the nearest residences resulting from both existing operations and the creation of the new pond area.

Noise Measurement Site 3 was specifically selected to be representative of average ambient conditions at Receptor E, as that receptor and the sound level meter at Site 3 were located equal distances from Kidder Creek generated flow noise. Because there was no camp or other typical human activity in the vicinity of Site 3, maximum noise levels measured at that location are believed to be lower than maximum noise levels occurring at Receptor E. As a result, maximum noise level data collected at noise measurement Site 1 was used to assess noise impacts at Receptor E relative to CEQA guidelines.

Location: N:\2016\2016-130 MedMen Cultivation\MAPS\Borders\MedMen Site Plan.mxd(44)-mapping_gues9/1/3/2016



Map Date: 9/13/2016
Photo (or Base) Source: Tectonics Design Group 2016

Figure 9. Noise Measurement Locations

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Noise Measurement Site 4 was specifically selected to capture traffic noise on South Kidder Creek Road. The microphone located at Measurement Site 4 was approximately 100 feet from the centerline of South Kidder Creek Road. That data was used to extrapolate existing ambient conditions at the existing residences located along that roadway.

Measured ambient noise levels over the measurement period were averaged are summarized in **Table 3.4-4**.

Table 3.4-4. Summary of Measured Ambient Noise Levels

Site	Average Noise Level (dB Leq)		Maximum Noise Level (dB Lmax)		Day-Night Average (dB Ldn)
	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. – 7:00 a.m.)	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. – 7:00 a.m.)	
1	44	42	64	52	49
2	54	52	69	56	60
3	49	50	53	50	56
4	44	43	61	53	50

Source: Bollard Acoustical Consultants, Inc. (2017)

The **Table 3.4-4** data indicate that typical measured average noise levels were generally comparable at Sites 1 and 4, and highest at Site 2. The elevated noise levels at Site 2 were due to activities at the existing small pond area and soccer field.

3.4.3 Regulatory Framework

State

California Building Code

Title 24 of the California Code of Regulations (CCR) contains standards for allowable interior noise levels associated with exterior noise sources (California Building Code [CBC], 1998 edition, Volume 1, Appendix Chapter 12, Section 1208A). The standards apply to new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family residences. The standards state that the interior noise level attributable to exterior sources cannot exceed 45 dBA in any habitable room. Proposed residential structures to be located where the annual L_{dn} or CNEL exceeds 60 dBA require an acoustical analysis showing that the proposed building design would achieve the prescribed allowable interior noise standard. The noise metric (measurement period, such as hourly or daily) is either the day-night average sound level (L_{dn}) or the CNEL, consistent with the noise element of the local general plan. Worst-case noise levels, either existing or future, are used as the basis for determining compliance with these standards (Caltrans 2002).

Local

Siskiyou County General Plan Noise Standards

The Siskiyou County General Plan Noise Element contains ranges of acceptable noise levels for a variety of land use types. That table, which is reproduced below as **Table 3.4-5**, identifies acceptable noise environments of 60 dB Ldn for residential land uses. In addition, the Noise Element also identifies that

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interior CNEL, with windows closed, attributable to exterior sources, shall not exceed a CNEL of 45 dB in any habitable room.

Table 3.4-5. Siskiyou County Land Use Compatibility for Exterior Community Noise

Land Use Category	Noise Ranges (Ldn)			
	1	2	3	4
Auditoriums, concert halls, amphitheaters, music halls Passively-used open space (quiet or contemplation areas of public parks)	50	50-55	55-70	70
Residential. All Dwellings including single-family, multifamily, group quarters, mobile homes, etc. Transient lodging, hotels, motels. School classrooms, libraries, churches. Hospitals, convalescent homes, etc. Actively utilized playgrounds, neighborhood parks, golf courses.	60	60-65	65-75	75
Office buildings, personal business and professional services. Light commercial. Retail, movie theaters, restaurants. Heavy commercial. Wholesale, industrial, manufacturing, utilities, etc.	65	65-70	70-75	75

Source: Siskiyou County General Plan Noise Element, Table 13

Note:

Noise Range 1: Acceptable land use. No special noise insulation or noise abatement requirements unless the proposed development is itself considered a source of incompatible noise for a nearby land use (i.e., and industry locating next to residential uses).

Noise Range 2: New construction or development allowed only after necessary noise abatement features are included in design. Noise studies may be required if the proposed development is itself considered a source of incompatible noise for a nearby land use.

Noise Range 3: New construction or development should generally be avoided unless a detailed analysis of noise reduction requirements is completed and needed noise abatement features included in design.

Noise Range 4: New construction or development generally not allowed.

3.4.4 Environmental Impacts

Thresholds of Significance

Criteria for determining the significance of noise impacts were developed based on information contained in CEQA Guidelines Appendix G. According to those guidelines, a project may have a significant effect on the environment if it would result in the following conditions:

1. Would the project result in the exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or of applicable standards of other agencies?
2. Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
3. Would the project result in the substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
4. Would the project result in the substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
5. For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project result in the exposure of people residing or working in the project area to excessive noise levels?

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6. For a project in the vicinity of a private airstrip, would the project result in the exposure of people residing or working in the project area to excessive noise levels?

Impacts Not Further Evaluated

The Project is not located in the vicinity of either public or private use airports. Therefore, standards of significance 5 and 6 are not addressed further in this EIR.

Methodology

This analysis of the existing and future noise environments is based the Environmental Noise Assessment prepared by Bollard Acoustical Consultants, Inc. (2017). As defined in the County's General Plan Noise Element, noise-sensitive land uses include public schools, hospitals, and institutional uses such as churches, museums, and private schools. Typically, residential uses are also considered noise-sensitive receptors. The General Plan established noise standards that represent the maximum acceptable exterior noise level, as measured at the property boundary, which is used to determine noise impacts. Therefore, for the purposes of this analysis, the nearest sensitive receptors to the Project site would be the residential uses identified in **Figure 9**.

Long-Term Operational Camp Activity Noise

Predicted noise levels associated with on-site noise sources for the Project were calculated by Bollard Acoustical Consultants, Inc. (2017). Operational noise levels were predicted assuming an average noise attenuation rate of 6 dB per doubling of distance from the source. Operational noise levels were calculated at the Project site and nearby land uses for comparison to the County's noise standards.

Long-Term Traffic Noise

Traffic noise levels at the nearest residences were calculated by Bollard Acoustical Consultants, Inc. using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model based on traffic volumes obtained from the Traffic Impact Analysis (TIA) prepared for the Proposed Project. The TIA forecast future traffic volumes on South Kidder Creek Road based on an assumed 844 persons at the camp, including guests and staff. Based on 844 persons present at the camp, the TIA computed that the peak Saturday Project trip generation would be 1,448 daily trips.

Groundborne Vibration

Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment, obtained from the Caltrans guidelines. Potential groundborne vibration impacts related to structural damage and human annoyance were evaluated taking into account the distance from construction activities to nearby land uses and typically applied criteria for structural damage and human annoyance.

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Short-Term Construction Noise

Predicted noise levels at nearby noise-sensitive land uses were calculated using typical noise levels and usage rates associated with construction equipment, derived from representative data obtained from similar construction projects. Construction noise levels were predicted assuming an average noise attenuation rate of 6 dB per doubling of distance from the source.

Project Impact Analysis

Impact 3.4.1: Exposure to Noise Levels in Excess of Standards

<i>Threshold:</i>	<i>Would the project result in the exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or of applicable standards of other agencies?</i>
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General Plan Compatibility

The ambient noise level data presented in **Table 3.4-4** indicate that measured existing ambient noise levels at Sites 1, 3 and 4, which are considered representative the nearest residences to the Project site, were all below the Siskiyou County General Plan noise level standard of 60 dB L_{dn}. Because the measurement results included noise generated by existing camp activities, it can be concluded that existing camp activities were within compliance with the applicable County noise standards.

Construction Noise Level Impacts

During Project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the Project site would also vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and trucks, would likely be used for this work.

The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is presented in **Table 3.4-6**. The noise values represent maximum noise generation, or full power operation of the equipment. As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources.

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Table 3.4-6. Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA L _{max}) 50 Feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jackhammer	88
Loader	85
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76

Source: Bollard Acoustical Consultants, Inc. (2017)

As depicted in **Table 3.4-6**, noise levels generated by individual pieces of construction equipment typically range from approximately 74 dBA to 88 dBA L_{max} at 50 feet (Federal Transit Administration [FTA] 2006). Short-term increases in vehicle traffic, including worker commute trips and haul truck trips, may also result in temporary increases in ambient noise levels at nearby receptors.

The closest receivers are located approximately 400+ feet from proposed construction activities on the Project site. The noise levels from construction operations decrease at a rate of approximately 6 dB per doubling of distance from the source. At the nearest residence, located approximately 400 feet away, maximum noise levels from construction activities would attenuate to approximately 70 dBA L_{max}. The County does not regulate construction noise. Therefore, the Project would result in noise levels beyond County standards and the impact is **less than significant**.

Operational Noise Level Impacts

Large Pond Area Activities

The main noise source of concern for this Project is noise generated from the proposed large pond area at the northern end of the Project site. The nearest noise sensitive uses to the proposed pond are identified on **Figure 9** as being Receptors D-G. The primary noise source associated with the proposed large pond area will be shouting campers. For the assessment of large pond area noise generation relative to the Siskiyou County General Plan, the long-term ambient data from Measurement Site 2 was utilized, reported in **Table 3.4-4**. As mentioned previously, noise level measurements at Site 2 were intended to be representative of noise generated from camp activities at the existing small pond area at the north end of the Project area.

Ambient noise levels measured at Site 2 ranged from 55 to 66 dB L_{dn} (average of 59 dB L_{dn}) at a distance of approximately 130 feet from the center of the existing small pond area (See **Appendix E**). According to information obtained from the Project applicant, the capacity for activities at the large pond will be larger than those currently occurring at the small pond. To account for the increase in future activities at the

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large pond area, an upward adjustment of +3 dB was conservatively applied to the measured ambient noise levels measured levels at Site 2. Assuming standard spherical spreading loss (-6 dB per doubling of distance), future noise exposure was projected from the center of the proposed large pond area to the nearest noise-sensitive uses (residences). The results of those projections are presented in **Table 3.4-7**.

Table 3.4-7. Predicted Noise Generation at Nearest Residences & County Standards- Large Pond Area

Receptor	Distance to Center of Large Pond & Recreation Area (feet)	Predicted Exterior Noise Level, Ldn/CNEL (dBA) ¹	Siskiyou County Exterior Noise Standard (Residential) ²	Exceedance of County Noise Standard?
D	1,500	42	60	No
E	900	46	60	No
F	1,500	42	60	No
G	1,400	42	60	No

Source: Bollard Acoustical Consultants, Inc. (2017)

Notes:

Distances measured from center of proposed large pond area to nearest receivers.

Predicted levels are based on a sound attenuation rate of 6 dB per doubling of distance and a reference noise level of 63 dB Ldn at a distance of 130 feet.

The **Table 3.4-7** data indicate that predicted noise exposure from the proposed large pond area would satisfy the Siskiyou County 60 dB L_{dn} exterior noise level standard at each of the nearest residences. As a result, no additional consideration of large pond area exterior noise mitigation measures would be warranted for this Project relative to the Siskiyou County General Plan.

As indicated in **Table 3.4-7**, exterior noise levels from the proposed large pond area are predicted to range from 42-46 dB L_{dn} at the nearest residences. Standard construction (wood or stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), results in an exterior to interior noise reduction of at least 25 dB with windows closed and approximately 15 dB with windows open. As a result, noise levels from the proposed large pond area are also predicted to satisfy the Siskiyou County 45 dB CNEL interior noise level standard within those nearest residences by a wide margin even with windows in the open configuration.

Amphitheater Activities

The Master Plan identifies future amphitheatres at two locations on the Project site. The closest proposed amphitheater location would be on the southwest side of the proposed new pond, approximately 1,100 feet from the nearest residence (Receptor E). The other amphitheater location is identified as being approximately 700 feet further south, or 1,800 feet from the nearest residence (Receptor E). Both amphitheater locations indicate that the sound system (presumably a public address [P/A] system), would face away from the nearest residences.

Based on the Project Site Plan (**Figure 5**), the seating area of the amphitheatres would be approximately 50 feet deep. According to Bollard Acoustical Consultants, given the relatively small size of the amphitheatres, it is likely that the P/A system associated with either amphitheater would generate maximum noise levels of approximately 80 dBA at a distance of 50 feet from amphitheater speakers. Because the amphitheater speakers would face away from the nearest residences, a noise reduction of at least 10 dB can conservatively be assumed due to the directionality of P/A speakers.

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Based on a sound level decay rate of 6 dB per doubling of distance from the speakers, sound generated by the amphitheater P/A system (70 dBA at 50 feet) would attenuate to approximately 43 dBA L_{max} at the nearest residence from the closest amphitheater and approximately 39 dBA at the further amphitheater location. These predicted sound levels do not include any downward adjustments for shielding by intervening topography.

A computed maximum sound level of approximately 43 dBA at the nearest residence would translate to an L_{dn} of below 40 dBA, which would be well within compliance with County noise standards. However, to limit the potential for adverse noise impacts associated with either amphitheater location, implementation of Initial Study mitigation measure **MM 12.1** (which is restated under in **Section 1.0 Introduction** of this EIR) is required.

Offsite Vehicular Traffic

The Project TIA forecast future traffic volumes on South Kidder Creek Road based on an assumed 844 persons at the Camp, including guests and staff. Based on 844 persons present at the camp, the TIA computed that the peak Saturday Project trip generation would be 1,448 daily trips.

The FJWA Traffic Noise Prediction Model was used to predict the traffic noise levels at the nearest residences to both the Project site (Receptors H through L (see **Figure 9**), as well as the closest residence to that roadway (70 feet from the centerline). The FHWA Model Inputs and predicted levels are provided in **Appendix E**.

As shown in **Appendix E**, the results of the FHWA traffic noise prediction modeling indicate that the worst-case traffic noise exposure at the nearest residence to South Kidder Creek Road (70 feet from the centerline), would be approximately 52 dB L_{dn} . At Receptors H – L (see **Figure 9**), the predicted Project-generated traffic noise levels range from 39 to 44 dB L_{dn} . Each of these levels is well below the Siskiyou County 60 dB L_{dn} exterior noise level standard for residential uses.

Impact 3.4.2: Exposure to Excessive Groundborne Vibration or Noise Levels

Threshold: Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction Vibration Level Impacts

During Project construction, the heavy equipment would be used for grading excavation, paving, and building construction, would generate very localized vibration in the immediate vicinity of the construction. Based on the Project site plan, the distances from the onsite construction activity and nearest existing residences to the Project area would be approximately 400+ feet.

To quantify reference vibration levels commonly generated by construction equipment, the publication, *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013), was utilized. Table 18 of that publication, which is reproduced below as **Table 3.4-8**, contains reference peak particle velocity data for such equipment. This impact discussion utilizes Caltrans' (2002) recommended standard of 0.2 inch per second (in/sec) PPV with respect to the prevention of structural damage for normal buildings and annoyance to humans.

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Table 3.4-8. Representative Vibration Source Levels for Construction Equipment

Equipment	Approximate Peak Particulate Velocity (in/sec)
	50 Feet
Large Bulldozer	0.042
Caisson Drilling	0.042
Loaded Trucks	0.035
Jackhammer	0.016
Small Bulldozer/Tractor	0.001

Source: Bollard Acoustical Consultants, Inc. (2017)

Based on the vibration levels presented in **Table 3.4-8**, ground vibration generated by heavy-duty equipment at 50 feet would not be anticipated to exceed approximately 0.042 in/sec PPV. Therefore, the use of virtually any type of construction equipment would most likely not result in a groundborne vibration velocity level above 0.2 in/sec and predicted vibration levels at the nearest structures would not exceed recommended criteria. Additionally, this would be a temporary impact and would cease completely when construction ends. No construction-generated vibration mitigation measures would be warranted for this Project. The Project would have a **less than significant** impact regarding construction vibration levels.

Operational Vibration Level Impacts

Once operational, the Project would not be a source of groundborne vibration. The Project would have **no impact** regarding operation vibration levels.

Impact 3.4.3: Permanent Increase in Ambient Noise Levels

Threshold: Would the project result in the substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Large Pond Area Activities

The primary noise source associated with the proposed large pond area will be shouting campers. Ambient noise levels measured at Site 2 ranged from 55 to 66 dB L_{dn} (average of 59 dB L_{dn}) at a distance of approximately 130 feet from the center of the existing small pond area (See **Appendix E**). According to information obtained from the Project applicant, the capacity for activities at the large pond will be larger than those currently occurring at the small pond. To account for the increase in future activities at the large pond area, an upward adjustment of +3 dB was conservatively applied to the measured ambient noise levels measured levels at Site 2. Assuming standard spherical spreading loss (-6 dB per doubling of distance), future noise exposure was projected from the center of the proposed large pond area to the nearest noise-sensitive uses (residences) to the west and north. The results of those projections are presented in **Table 3.4-9**.

Table 3.4-9 shows the predicted noise levels from large pond area activities at the nearest existing noise-sensitive receivers to the Project site. **Table 3.4-9** also shows existing ambient conditions, existing ambient conditions plus predicted large pond area noise levels, and the increases in ambient noise levels which would result from activities at the large pond area.

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Table 3.4-9. Predicted Noise Generation at Nearest Residences & Project-Related Increases- Large Pond Area

Receptor	Existing Ambient, dBA			Existing Plus Project, dBA			Project-Related Increase		
	L _{eq}	L _{max}	L _{dn}	L _{eq}	L _{max}	L _{dn}	L _{eq}	L _{max}	L _{dn}
	44	64	49	45	66	50	1	2	1
D	49	53	56	50	67	56	1	3	0
E	44	64	49	45	66	50	1	2	1
F	44	64	49	45	66	50	1	2	1

Source: Bollard Acoustical Consultants, Inc. (2017)

As mentioned previously, it is generally recognized that a 3 dB or greater increase in noise levels due to a project would be considered significant where exterior noise levels would exceed 60 dB (for residential uses), or a 5 dB increase where pre-project ambient conditions are at or below 60 dB (see **Table 3.4-2**). As shown in **Table 3.4-9**, increases in ambient noise levels at the nearest residences were below 3 dB relative to measured existing conditions. As a result, no significant impacts from increases in ambient noise levels at the nearest residences would result from activities at the proposed large pond area.

Amphitheater Activities

As previously discussed in **Impact 3.4.1**, the Master Plan identifies future amphitheaters at two locations on the Project site. The closest proposed amphitheater location would be on the southwest side of the proposed new pond, approximately 1,100 feet from the nearest residence (Receptor E). The other amphitheater location is identified as being approximately 700 feet further south, or 1,800 feet from the nearest residence (Receptor E). Both amphitheater locations indicate that the sound system (presumably a P/A system), would face away from the nearest residences.

A computed maximum sound level of approximately 43 dBA at the nearest residence would translate to an L_{dn} of below 40 dBA. The predicted maximum noise levels would be below existing maximum sound levels currently experienced at the nearest residences. However, to limit the potential for ambient noise level impacts associated with either amphitheater location, implementation of Initial Study mitigation measure **MM 12.1** (which is restated in **Section 1.0** of this EIR) is required.

Offsite Vehicular Traffic

The FHWA Traffic Noise Prediction Model was used to predict the traffic noise levels at the nearest residences to both the Project site, as well as the closest residence to that roadway (70 feet from the centerline). The FHWA Model Inputs and predicted levels are provided in **Appendix E**.

As shown in **Appendix E**, the results of the FHWA traffic noise prediction modeling indicate that the worst-case traffic noise exposure at the nearest residence to South Kidder Creek Road (70 feet from the centerline), would be approximately 52 dB L_{dn}. At Receptors H – L (see **Figure 9**), the predicted Project-generated traffic noise levels range from 39 to 44 dB L_{dn}.

As indicated in **Table 3.4-4**, the computed average existing L_{dn} at Noise Measurement Site 4, which was located 100 feet from the centerline of South Kidder Creek Road, was 50 dB L_{dn}. At the nearest residence from that roadway, located at a distance of approximately 70 feet, the computed ambient level from the Site 4 Measurement results is 52 dB L_{dn}. As a result, at even the closest residence to South Kidder Creek Road, a substantial increase in ambient noise levels resulting from the proposed expansion of the camp

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would not occur. As a result, traffic noise impacts resulting from the proposed expansion are predicted to be ***less than significant***.

Impact 3.4.4: Temporary Increase in Ambient Noise Levels

Threshold: Would the project result in the substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction noise represents a short-term impact on the ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators, can reach high levels, typically greater than ambient noise levels. Because the area in the vicinity of the Proposed Project site is already developed, it is possible that construction noise will result in a short-term increase in ambient noise. Noise levels associated with typical construction equipment were previously summarized in **Table 3.4-6**. As noted earlier, the closest receivers are located approximately 400+ feet from proposed construction activities on the Project site. The noise levels from construction operations decrease at a rate of approximately 6 dB per doubling of distance from the source. At the nearest residence, located approximately 400 feet away, maximum noise levels from construction activities would attenuate to approximately 70 dBA L_{max} . This level is expected to exceed existing maximum noise levels currently received by nearby residences. Therefore, to reduce the potential for annoyance at those nearby residences during construction activities to a less than significant level, the Project shall adhere to mitigation measure **MM 12.2** listed in the Initial Study and shown in **Section 1.0** of this EIR.

3.4.5 Mitigation Measures

Implement mitigation measures **MM 12.1** and **MM 12.2**.

3.4.6 Residual Impacts After Mitigation

Implementation of mitigation measures **MM 12.1** and **MM 12.2** would ensure the Project would not exceed the noise standards established by the County during construction and operation. Therefore, with implementation of mitigation measures **MM 12.1** and **MM 12.2**, these impacts would be ***less than significant***.

3.4.7 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. For construction impacts, only the immediate area around the Proposed Project site would be included in the cumulative context. For operational/roadway related impacts, the context is buildout of the Siskiyou County General Plan, including existing and future development of cumulative projects in Siskiyou County, as well as adjacent communities that would be potentially impacted. This cumulative impact analysis considers development of the Proposed Project, in conjunction with other development in the vicinity of the Proposed Project site in Siskiyou County and surrounding jurisdictions. Noise is by definition a localized phenomenon and significantly reduces in magnitude as distance from the source

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increases. Consequently, only projects and growth in the Siskiyou County area would be likely to contribute to cumulative noise impacts.

Cumulative Impacts and Mitigation Measures

Impact 3.4.6: Contribution to Cumulative Noise Levels

<i>Threshold</i>	<i>Would the project, in combination with existing, approved, proposed, and reasonably foreseeable development in nearby areas, result in the direct or indirect in a substantial contribution to cumulative noise levels?</i>
------------------	--

Cumulative Construction Noise

Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the Proposed Project was determined to be less than significant following compliance with mitigation measure **MM 12.2**. Therefore, the Project would not contribute to cumulative impacts and impacts in this regard are ***less than cumulatively considerable***.

Cumulative Operational Noise

Long-term noise sources associated with of the development at the Project, including vehicular traffic and camp activities, combined with other cumulative projects could cause local noise level increases. Noise levels associated with the Proposed Project and related cumulative projects together could result in higher noise levels than considered separately. However, related cumulative projects would be required to comply with the County’s noise level standards and include mitigation measures if this standard is exceeded. Therefore, cumulative noise impacts from stationary noise sources would be ***less than cumulatively considerable***.

Cumulative Mitigation Measures

None required.

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3.4.8 References

Bollard Acoustical Consultants, Inc.

- 2017 *Environmental Noise Assessment for Kidder Creek Orchard Camp Use Permit Application – UP 11-15.*

[Caltrans] California Department of Transportation

- 2002 *Transportation Related Earthborne Vibrations.*
- 2004 *Transportation- and Construction-Induced Vibration Guidance Manual.*
- 2013 *Technical Noise Supplement: A Technical Supplement to the Traffic Noise Analysis Protocol.*
http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf.

[EPA] US Environmental Protection Agency

- 1971 *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.*

[FICON] Federal Interagency Committee on Noise

- 2000 *Discussion of Methodologies of Measuring Noise Impact.*

[FTA] Federal Transit Administration

- 2006 *Transit Noise and Vibration Impact Assessment.*

[OPR] Governor's Office of Planning and Research

- 2003 *General Plan Guidelines.*

SECTION 3.5 TRANSPORTATION/TRAFFIC

This section presents a summary of the Traffic Impact Study (TIS) prepared by Traffic Works, LLC (2015) for the Proposed Project. **Appendix F** includes this TIS. The TIS evaluated the potential impacts to traffic and circulation on local roadways and intersections associated with expansion and increased guest and staff occupancy of the Proposed Project.

The study locations provided in the TIS were selected through consultation with Siskiyou County staff and deemed as those most likely to be affected by the Project. The following intersection was analyzed:

- Highway 3 / South Kidder Creek Road

The following roadway segments were analyzed:

- South Kidder Creek Road (at west end)
- South Kidder Creek Road (at east end)

The TIS includes analysis of the weekend day and weekend peak hour as the peak traffic conditions currently occur on the weekends and are expected to be during the same time period in the future. The evaluated development scenarios are below:

- Existing Conditions (no project)
- Existing Plus Project Conditions
- Cumulative Plus Project Conditions

3.5.1 Environmental Setting

Existing Conditions

Local Roadway Network

South Kidder Creek Road is a Siskiyou County-maintained rural two-lane east-west roadway that begins at Highway 3 and effectively ends at the KCOC camp entrance (end of pavement) where it transitions to a private road. South Kidder Creek Road has a paved roadway width of 20-24 feet, with a narrowest paved width of 19 feet at the camp entrance. The speed limit is 55 miles per hour, consistent with all un-posted County roads.

Highway 3 is a Caltrans-managed two-lane north-south State Highway with a posted speed limit of 55 miles per hour. The Highway 3 / South Kidder Creek Road intersection is a "T" configuration with STOP control on the South Kidder Creek Road approach. The intersection has single-lane approaches on all three legs.

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Traffic Volumes

Daily traffic volumes were collected at two locations on South Kidder Creek Road: at the west end near the Kidder Creek Orchard Camp entrance and at the east end near Highway 3. Data collection was performed from Friday, July 24, 2015 through Sunday, July 26, 2015. The counts were intentionally collected during one of the highest camp activity weekends of the year. The peak hours were identified using outputs of the daily volume counts. The peak hour chosen for analysis occurs from 10:20 a.m. to 11:20 a.m. on Saturday. Although the Sunday peak hour volume is slightly higher than the Saturday peak hour volume, the Saturday peak hour was chosen for analysis since Saturday has the highest outbound (eastbound) volume on South Kidder Creek Road at Highway 3. The Saturday peak time period and associated traffic flows demonstrate the most potential impact at the study intersection since the eastbound approach is STOP- controlled and would incur the greatest level of delay. This provides the most conservative analysis.

The existing Saturday peak hour traffic volumes and existing lane configurations are shown on **Figure 10. Existing Traffic Volumes**. The existing daily traffic volumes are shown in **Table 3.5-1**.

Table 3.5-1. Existing Daily & Peak Hour Traffic Volumes

Date	Day	West End of S. Kidder Creek Road			East End of S. Kidder Creek Road		
		Daily Volume	Peak		Daily Volume	Peak	
			Hour	Total		Hour	Total
7/24/2015	Friday	138	8:02-9:01	17	281	16:31- 17:30	30
7/25/2015	Saturday	338	9:52- 10:51	65	414	10:21-11:20	67
7/26/2015	Sunday	275	15:43-16:42	68	390	15:36-16:35	73

Source: Traffic Works 2015

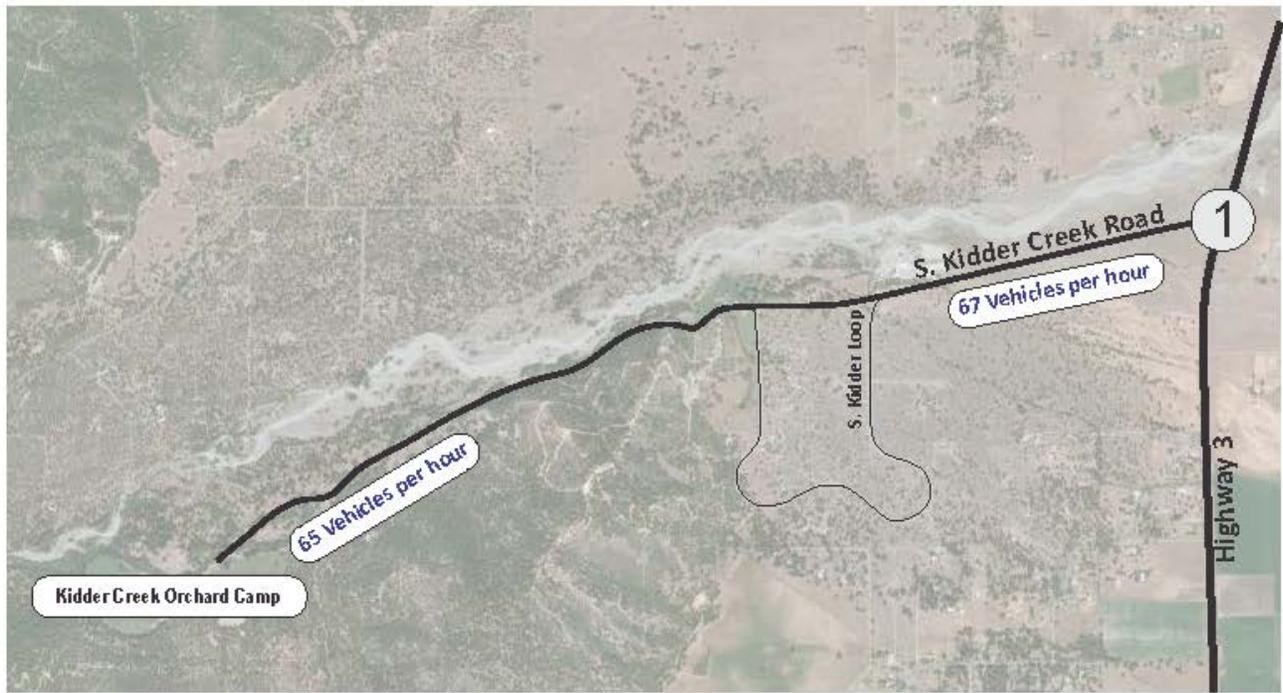
Intersection Level of Service

Intersection level of service (LOS) was determined for the existing Saturday peak hour condition. LOS calculations were performed using the existing traffic volumes, lane configurations, and traffic controls. The results are presented in **Table 3.5-2** and the calculation sheets are provided in **Appendix F**. The study intersection currently operates at LOS "B".

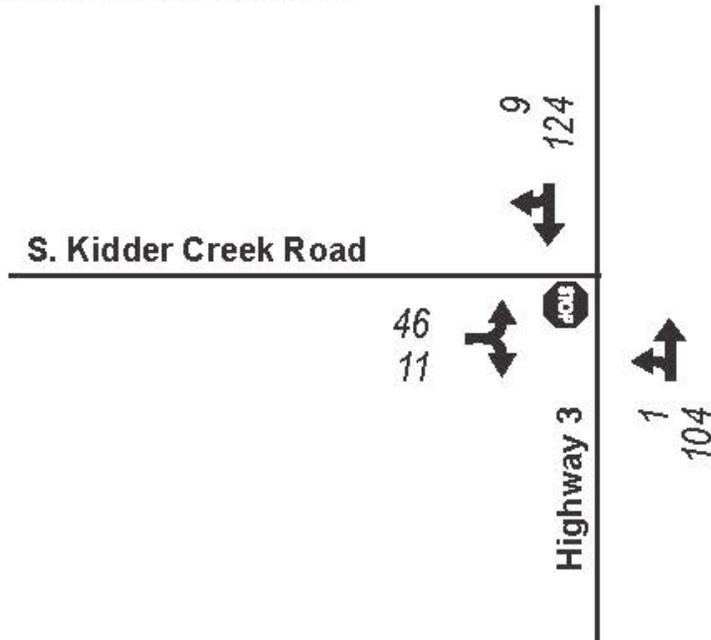
Table 3.5-2. Existing Conditions Intersection Level of Service Summary

Intersection	Worst Approach	Existing	
		LOS	Delay (Seconds)
Highway 3/S. Kidder Creek Rd	Eastbound	B	10.3

Source: Traffic Works 2015



① Highway 3/S. Kidder Creek Road



LEGEND

- xx - Weekend Peak Hour Volumes
- xxx - Segment Peak Hour Volume
- ← - Lane Configuration
- STOP - STOP Sign



Figure 2

Kidder Creek Orchard Camp
Traffic Impact Study
Existing Traffic Volumes

Figure 10. Existing Traffic Volumes
2018-123 Kidder Creek Orchard Camp

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Existing Roadway Level of Service

Table 3.5-3 summarizes the existing roadway operating conditions. LOS was calculated based on the existing volume data including a peak hour 85 percent/15 percent directional split, 0.87 Peak Hour Factor, two percent Heavy Vehicles, one percent Recreational Vehicles (conservative estimate), 20 percent No-Passing Zone (very conservative estimate), 10 access points per mile (conservative estimate) and flat terrain. South Kidder Creek Road currently operates at LOS "A" in both the east and westbound directions.

Applying the procedure outlined in the 2010 Highway Capacity Manual (HCM, Transportation Research Board 2010), Chapter 15, Equation 15-13, the two-way capacity of South Kidder Creek Road is estimated to be 2,000 vehicles per hour. The peak hour traffic volumes during a peak summer weekend, are currently at approximately 3.5 percent of the roadway's capacity.

Table 3.5-3. Existing Conditions Roadway Level of Service Summary

Roadway Segment	Existing			
	Daily Volume	Peak Hour Volume	LOS (west bound)	LOS (east bound)
S. Kidder Creek Rd (West End)	338	65	A	A
S. Kidder Creek Rd (East End)	414	67	A	A

Source: Traffic Works 2015

Transit Service

Siskiyou Transit and General Express (STAGE) is the public transportation provider in Siskiyou County. It operates Monday through Friday except for 12 County holidays including Christmas, Thanksgiving and Independence Day. STAGE operates as an intercity fixed route, and a flag down service. This means that at some stops passengers can wave down the bus driver to let the driver know they would like to ride the bus. This is only done at stops where it is safe for the bus to pull over and stop without impairing traffic. Some other stops are done on an on-call basis, where passengers must call the STAGE office to schedule a pick-up. All STAGE buses are equipped with a wheelchair lift, or ramp to serve the needs of the disabled within Siskiyou County. Bicycle racks are also available from March through November.

STAGE service is provided to nine destinations via six service corridors. These corridors are: North and South County (Routes 1, 2 and 3), Scott Valley and North County (Route 4), Orleans, Happy Camp and Yreka (Route 5) and Lake Shastina to Mt. Shasta (Route 6) which also serves the City of Dunsmuir. Schedules for these routes can be found on the STAGE website.

The Scott Valley corridor runs west along Highway 3 and links Yreka, Montague and Hornbrook with Fort Jones, Greenview and Etna (Siskiyou County 2015). The closest bus stop to the Proposed Project is located at the Greenview Post Office, approximately three miles northeast of the Project site.

3.5.2 Regulatory Framework

State

Department of Transportation

Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the state's boundaries. Alone and in partnership with Amtrak, Caltrans is also involved in the support of intercity passenger rail service in California and is a leader in promoting the use of alternative modes of transportation.

Transportation facilities under the jurisdiction of Caltrans within the vicinity of the Project site include Highway 3.

Regional

Siskiyou County Local Transportation Commission

The Siskiyou County Local Transportation Commission (SCLTC) was created pursuant to Title 3 of G.C. Section 2935 in 1972. The SCLTC is the Regional Transportation Planning Agency (RTPA) responsible for transportation planning and funding throughout Siskiyou County. SCLTC is responsible for the development and option of the Regional Transportation Plan (RTP, Siskiyou County 2011) and Regional Transportation Improvement Program as required by State law.

Local

County of Siskiyou General Plan

The General Plan (1997) Circulation Element includes goals, objectives and policies that have been established to promote a street network that moves people and goods safely and efficiently throughout the County. The policies that pertain to the Proposed Project are listed below.

Road Rights-of-Way

- Policy 1: The County shall require rights-of-way consistent with Plate I of the Circulation Element for public roads. Construction of roads within the right-of-way may be required depending upon the intensity and density of proposed development. The county shall require private roads consistent with Plates II through IV of the Circulation Element for all developments.

The Planning Commission is empowered to reduce the Plate Standard required to a lesser Plate Standard when the request is supported by facts indicating the size relationship to other developments planned or projected maximum usage of the roadway and the environmental setting warrant such a reduction and is consistent with the maximum usage prescribed. Reductions in indicated rights-of-way width may be allowed by the Planning Commission when the requested width is supported by engineering design

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clearly showing that the required road and all of its elements can be included in the lesser right-of-way. Variation is not allowed below the lowest right-of-way or roadbed width.

Public and Private Road Sections

Policy 2: The following sections shall be the designated private road typical sections "Plates 2 through 4". These sections shall be provided on all developments not otherwise regulated by the land development manual. Subdivisions requiring final maps, industrial and commercial development shall conform to the Land Development standards.

3.5.3 Environmental Impacts

Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. Transportation impacts are considered significant when the project would result in any of the following:

1. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?
2. Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standard and travel demand measure or other standards established by the county congestion management agency for designated roads or highways?
3. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
4. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
5. Would the project result in inadequate emergency access?
6. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Methodology

LOS is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates vehicle operations and traffic flow characteristics to letter grades "A" through "F" with "A" representing optimum conditions and "F" representing breakdown or over capacity flows. The complete methodology is established in the HCM, 2010, published by the Transportation Research Board.

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Intersection LOS Thresholds

Table 3.5-4 identifies the delay thresholds for each level of service grade at un-signalized and signalized intersections. The LOS for a Two-Way STOP Control (TWSC) intersection is defined by the worst minor approach delay.

LOS calculations were performed for the study intersection using the *Synchro 8* software package with analysis and results reported in accordance with the 2010 HCM methodology.

Table 3.5-4. Level of Service Definitions for Intersections

Level of Service	Brief Description	Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	≤10.0	<10.0
B	Stable conditions with some affect from other vehicles.	>10.0 to ≤20.0	>10.0 to ≤15.0
C	Stable conditions with significant affect from other vehicles.	>20.0 to ≤35.0	>15.0 to ≤25.0
D	High density traffic conditions still with stable flow.	>35.0 to ≤55.0	>25.0 to ≤35.0
E	At or near capacity flows.	>55.0 to ≤80.0	>35.0 to ≤50.0
F	Over capacity conditions.	>80.0	>50.0

Source: Traffic Works 2015

Roadway LOS Methodology

Roadway LOS was calculated based on the procedures outlined in Chapter 15 – “Two-Lane Highways” of the HCM, 2010 edition. Chapter 15 of the HCM defines Class II Two-Lane Highways as the following:

“Class II two-lane highways are highways where motorists do not necessarily expect to travel at high speeds. Two-lane highways functioning as access routes to Class I facilities, serving as scenic or recreational routes (and not as primary arterials), or passing through rugged terrain (where high-speed operation would be impossible) are assigned to Class II. Class II facilities most often serve relatively short trips, the beginning or ending portions of longer trips, or trips for which sightseeing plays a significant role”.

The HCM states that most collectors and local roadways are considered as Class II Highways for the purposes of capacity and LOS analysis.

Consistent with this definition, South Kidder Creek Road was classified as a Class II Highway for the calculations performed in the TIS. While it is recognized that South Kidder Creek Road is not officially classified as a “highway” by the County, it operates as a two-lane highway as defined by the HCM, and it has a speed limit of 55 mph consistent with all unposted County roads. Hence, the roadway LOS and capacity were calculated in accordance with the procedures outlined for Class II two-lane highways in Chapter 15 (Exhibit 15-3 and Equation 15- 10) of the 2010 HCM.

The LOS for Class II two-lane highways is calculated based on the Percent Time Spent Following (PTSF) which according to the 2010 HCM:

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"...represents the freedom to maneuver and the comfort and convenience of travel. It is the average percentage of time that vehicles must travel in platoons behind slower vehicles due to the inability to pass. Because this characteristic is difficult to measure in the field, a surrogate measure is the percentage of vehicles traveling at headways of less than 3.0 s at a representative location within the highway segment. PTSF also represents the approximate percentage of vehicles traveling in platoons."

Table 3.5-5 presents the LOS criteria for Class II two-lane highways.

Table 3.5-5. Level of Service Criteria for Class II Highways

Level of Service	PTSF (%)
A	≤40.0
B	>40.0 to 55.0
C	>55.0 to 70.0
D	>70.0 to 85.0
E	>85.0

Source: Traffic Works 2015

Level of Service Policy

The LOS policy for Siskiyou County roadways and intersections was obtained from the Siskiyou County 2010 RTP and the Siskiyou County General Plan Circulation Element (March 1988). The Circulation Element states - "The County should not accept a normal level of service of less than Level C". Siskiyou County describes LOS "C" as:

"Stable flow, but speeds and maneuverability are more closely controlled by higher volumes; still fairly comfortable; recommended for urban design standards."

The RTP (Part 7b of "Local Roadway System" on page 43) states the objective to "Maintain an LOS of C outside of urban areas." The 1988 Circulation Element Level of Service for *Two-Lane Rural Highways* recommends a LOS "B" for rural design standards (page 6). The Planning Commission and Board of Supervisors may consider this recommended LOS regarding the Project.

The LOS policy for Caltrans facilities (Highway 3) was obtained from the *Caltrans Guide for the Preparation of Traffic Impact Studies* (December 2002). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D".

Considering both agency's standards, the LOS threshold used for this study is LOS "C" for the South Kidder Creek Road segments and also for the Highway 3 / South Kidder Creek Road intersection.

Trip Generation of Proposed Project

Trip generation for a proposed project is typically calculated using the nationally recognized Trip Generation Manual published by the Institute of Transportation Engineers (ITE). However, neither the Trip Generation Manual nor Siskiyou County Development Code provide any trip generation information for a

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“Summer Camp” type land use as it is unique and trip generation values are specific to the actual activities at a particular camp. In this case, Project specific trip estimates must be developed.

A Project-specific daily trip rate was determined by comparing the 338 counted daily vehicle trips at the west end of South Kidder Creek Road (near the camp entrance) to the number of guests (123) plus the number of staff (74) who were present at the camp on that peak Saturday in July. The resultant rate is 1.72 daily trips/person (338 divided by 197). Applying the derived trip rate of 1.72 trips/person to the proposed number of persons at maximum occupancy (844) yields 1,448 daily trips on a peak summer weekend day.

The Project is anticipated to increase the peak daily traffic volume on South Kidder Creek Road by up to 1,110 trips compared to the existing peak July weekend. It should be noted that significantly fewer trips would be generated by the Project on weekdays and particularly during the remainder of the year (outside of summer months).

Applying the same methodology to determine a peak hour trip rate, with the proposed expansion at full capacity, the Project would generate 278 trips during the weekend peak hour (approximately 20 percent of the daily volume). The project is anticipated to increase the summer Saturday peak hour traffic volume on South Kidder Creek Road by up to 213 trips. Again, the number of new trips would be considerably less on weekdays and during off-season periods. The Proposed Project trip generation rates and calculations are shown in **Table 3.5-6**.

Table 3.5-6. Proposed Project Trip Generation Rates

	Time		New Trips (Summer Saturday)
	7/25/2015	Future	
	Saturday Peak	Saturday Peak	
# Campers	123	746	
# Staff	74	98	
Total Persons	197	844	
Daily Trips (west end of S. Kidder)	338	1,448	1,110
Daily Trips/Person (rate)	1.715	1.715	
Peak Hour Trips (west end of S. Kidder)	65	278	213
Peak Hour Trips/Person	0.33	0.33	

Source: Traffic Works 2015

Trip Distribution and Assignment

New traffic generated by the Project was distributed to the road network based on the location of the Project, relative to the highway system, and current travel patterns. The following percentages were used for distributing the Project generated traffic:

- 82 percent to/from the north via Highway 3
- 18 percent to/from the south via Highway 3

Project generated trips were then assigned to the adjacent roadway system and study intersection based on the distribution outlined above.

Project Impact Analysis

Impact 3.5.1: Substantial Increase in Traffic Volume – Existing Plus Project

<i>Threshold:</i>	<i>Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?</i>
<i>Threshold:</i>	<i>Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standard and travel demand measure or other standards established by the county congestion management agency for designated roads or highways?</i>

Existing Plus Project Conditions

Traffic Volumes

Existing plus project traffic volumes were developed by adding the Project-generated trips (**Figure 11. Project Trip Assignment**) to the existing traffic volumes (**Figure 10**) and are shown on **Figure 12. Plus Project Peak Hour Volumes**, attached. The “Plus Project” condition Peak Hour Factors (PHF), vehicle mix, flow characteristics, and travel patterns were assumed to remain the same as those used in the existing conditions analysis.

Intersection Level of Service Analysis

Table 3.5-7 presents the level of service analysis summary for the “Plus Project” scenario during the summer Saturday peak hour. Detailed calculation sheets are provided in **Appendix F**.

Table 3.5-7. Plus Project Intersection Level of Service Summary

Intersection	Worst Approach	Existing		Plus Project	
		LOS	Delay	LOS	Delay
Hwy 3/South Kidder Creek Rd	Eastbound	B	10.3	B	12.9

Source: Traffic Works 2015

As shown, the Proposed Project is anticipated to have very little effect on the Highway 3 / South Kidder Creek Road intersection operations. As shown in **Table 3.5-7**, the study intersection is anticipated to operate at the same level of service as it does today (LOS “B”) and well within the County’s LOS thresholds. The average delay is anticipated to increase by less than 3.0 seconds per vehicle with the addition of the Project traffic.

Roadway Level of Service Analysis

The highest future daily traffic volume is anticipated to occur on a summer Saturday. Hence, the “Plus Project” conditions roadway LOS was calculated for that condition. The highest counted daily traffic volume under existing conditions is 338 vehicles per day near the KCOC entrance and 414 vehicles per

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day at the east end of South Kidder Creek Road. Daily traffic could potentially increase to about 1,448 vehicles per day near the KCOC entrance and 1,524 vehicles per day near Highway 3 with the addition of the Project traffic. **Table 3.5-8** summarizes the roadway LOS analysis.

Table 3.5-8. Plus Project Roadway Level of Service Summary

Roadway Segment	Existing				Plus Project			
	Volume		LOS		Volume		LOS	
	Daily	Peak Hour	WB	EB	Daily	Peak Hour	WB	EB
S. Kidder Creek Rd. (West End)	338	65	A	A	1,448	278	A	B
S. Kidder Creek Rd. (East End)	414	67	A	A	1,524	180	A	B

Source: Traffic Works 2015

Notes: WB = West Bound, EB = East Bound

South Kidder Creek Road will continue to operate at LOS "B" or better conditions with the addition of the Project traffic, well within the LOS thresholds.

As previously stated, the two-way capacity of South Kidder Creek Road is estimated to be 2,000 vehicles per hour based on 2010 HCM methodology. With the camp in fully session and an occupancy of 844 persons, the Saturday peak hour traffic volumes are anticipated to be at approximately 14 percent of the roadway's capacity.

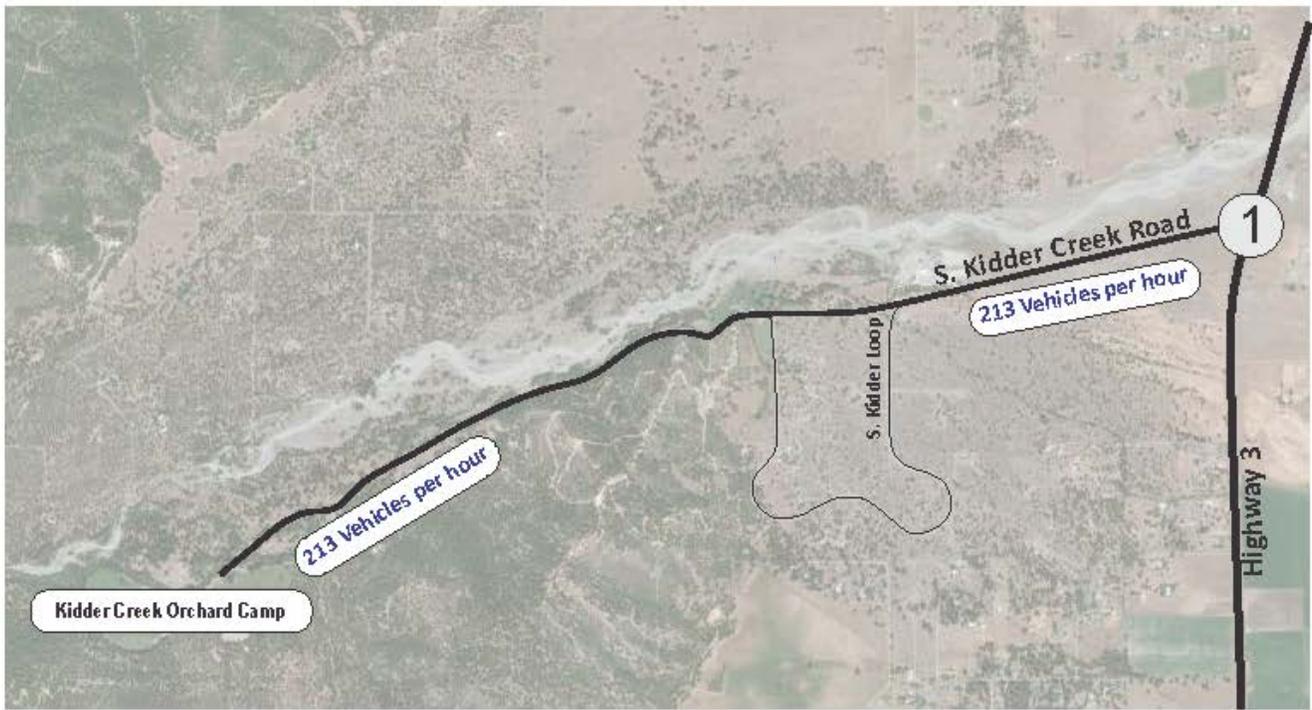
Conclusion

As indicated above, the development of the Project would not result in an LOS on South Kidder Creek Road and at the Highway 3 / South Kidder Creek Road intersection beyond those allowed by the County. As such, the Proposed Project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system nor conflict with any applicable congestion management program or level of service standard. The Project would have a **less than significant** impact in this area.

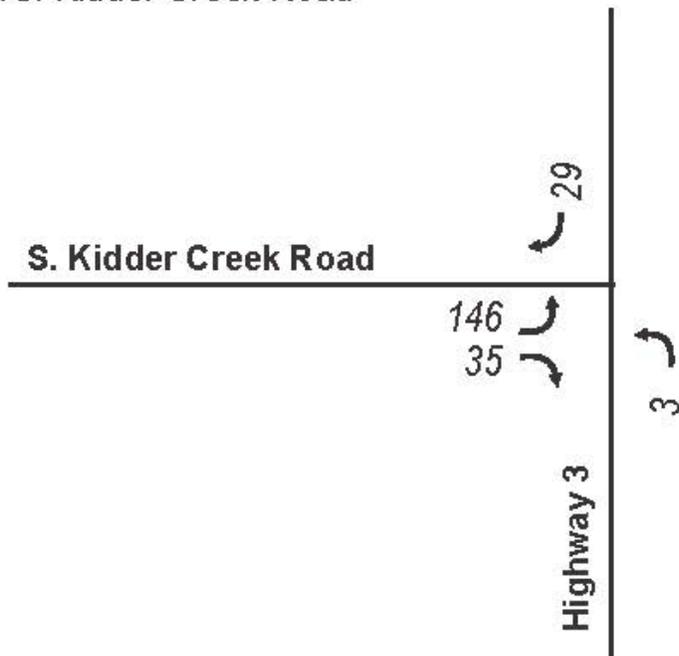
Impact 3.5.2: Change in Air Traffic Patterns

Threshold: Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The closest public airport to the Project site is the Scott Valley Airport, located approximately five miles from the Project site. The Project would not change air traffic patterns or affect air travel safety as there are no extraordinarily tall Project components or activities beyond normal recreational/residential type land development. As such, there would be **no impact**.



① Highway 3/S. Kidder Creek Road



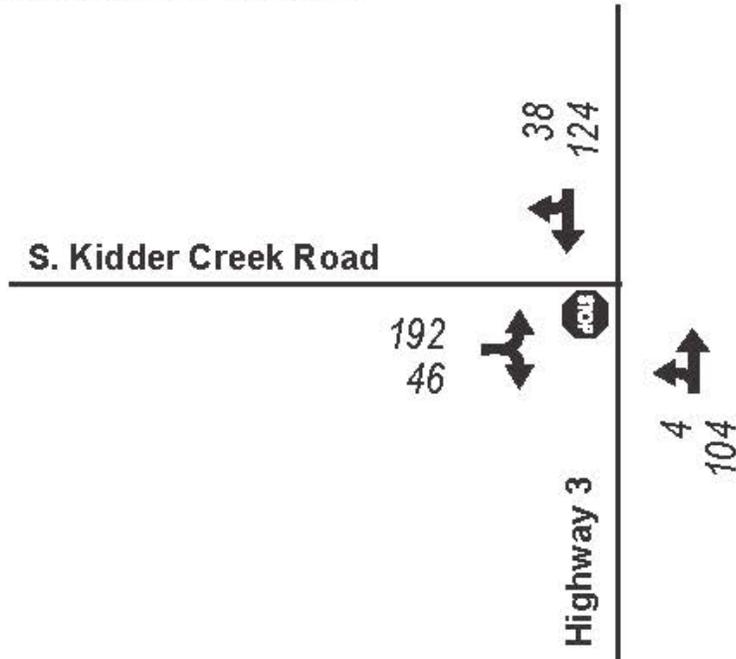
LEGEND
 XX - Peak Hour Project Trips
 XXXX - Peak Hour Segment Project Trips



Figure 4
 Kidder Creek Orchard Camp
 Traffic Impact Study
 Project Trip Assignment



① Highway 3/S. Kidder Creek Road



LEGEND
 XX - Weekend Peak Hour Traffic Volumes
 XXX - Weekend Peak Hour Segment Volume
 ← - Lane Configuration STOP - STOP Sign

NO SCALE

Figure 5
 Kidder Creek Orchard Camp
 Traffic Impact Study
 Plus Project Peak Hour Traffic Volumes

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Impact 3.5.3: Increase Roadway Hazards Due to a Design Feature

Threshold: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project does not propose changes to the existing public roadways in the area. No new design features are suggested by the Project on the area's roadways. A safety analysis South Kidder Creek Road was performed by Traffic Works as a part of the TIS. This analysis determined that South Kidder Creek Road satisfies the County's minimum roadway width requirements of "having a minimum of 18 feet of paved traveled way" as stated in the Siskiyou County General Plan Circulation Element. South Kidder Creek Road has a paved roadway width of more than 18 feet from Highway 3 to the Kidder Creek Orchard Camp entrance (end of County road). The following table shows the existing roadway widths at various locations along South Kidder Creek Road.

Table 3.5-9. Roadway Widths Along South Kidder Creek Road

Location/Mile Point (miles from Highway 3)	Paved Roadway Width (feet)	Location/Mile Point (miles from Highway 3)	Paved Roadway Width (feet)
0.1	23.00	1.2	20.50
0.2	22.00	1.3	20.50
0.3	23.00	1.4	20.50
0.4	24.00	1.5	20.50
0.5	24.50	1.6	21.00
0.6	24.00	1.7	20.50
0.7	24.50	1.8	20.50
0.8	25.00	1.9	21.00
0.9	24.75	2.0	20.00
1.0	24.00	2.1	19.00
1.1	21.50		

Source; Traffic Works 2015

Stopping Sight Distance (SSD) is the viewable distance required for a driver to see an object in the roadway, react, and make a complete stop in the event of an unanticipated hazard. SSD is made up of two components: braking distance and perception-reaction time. South Kidder Creek Road was reviewed for adequate SSD as a part of the TIS analysis. The TIS determined that South Kidder Creek Road has sufficient SSD and it meets the minimum required SSD criteria specified in *Exhibit 5-2 Design Controls for Stopping Sight Distance and for Crest and Sag Vertical Curves* published in "A Policy on Geometric Design of Highways and Streets, 2004" by the American Association of State Highway and Transportation Officials (AASHTO).

The curvilinear segment of South Kidder Creek Road (approximately mile post 1.0 to 1.5) has a posted advisory speed of 20 miles per hour. The SSD for a 20-mph travel speed is 115 feet. The shortest measured sight line on the tightest curve identified along South Kidder Creek Road is 125 feet, which provides at least the minimum SSD. All the other curves within the curvilinear segment of South Kidder Creek Road also satisfy the requirements as they have more than 115 feet of SSD.

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Crash data for South Kidder Creek Road from January 2005 to December 2014 was obtained by Traffic Works from the Statewide Integrated Traffic Records System (SWITRS) Caltrans database and Transportation Injury Mapping System mapping function. Based on the data obtained, three crashes were reported on South Kidder Creek Road between January 2005 and December 2014.

It should be noted that there were no reported collisions within the most recent five year period (2010 to 2014). The past incidents occurred at three different locations along South Kidder Creek Road. Since the incidents were at three different locations, no patterns or specific safety concerns associated with the roadway itself can be identified. All three reported collisions involved a single vehicle hitting a "Fixed Object", which is a common accident type in rural, low traffic volume environments. There were no vehicle to vehicle collisions reported during the 2005 to 2014 time period.

A driving road safety assessment was also performed by Traffic Works' Principal Engineer who is an FHWA-trained Road Safety Auditor. The review did not identify any significant safety concerns for the project's ingress and egress route as the roadway configuration and conditions are typical of rural county roadways and the sight line/sight distance criteria were found to be met. The reviewer's only notable finding was that vegetation along the sides of the roadway should be regularly cut back from the edge of pavement. This was noted as an ongoing roadway maintenance item that would be the responsibility of Siskiyou County. Being a typical maintenance item on an existing public roadway, this is not considered a Project impact.

Because the Proposed Project does not include any changes to South Kidder Creek Road, the roadway meets County roadway widths standards, and there appear to be no existing inherent dangerous design features on South Kidder Creek Road, the Project would have **no impact** in this area.

Impact 3.5.4: Inadequate Emergency Access

<i>Threshold: Would the project result in inadequate emergency access?</i>
--

The County requires at least two points of access to the Project site for safety. As shown on **Figure 6** and discussed in **Section 2.0 Project Description**, the Project proposes an emergency access which will be required to comply with CAL FIRE's Fire Safe regulations. While portions of the emergency access road are not on property owned by KCOC, KCOC has existing easements on these properties (including KCOC, EcoTrust, and Rhodes) to allow the use and upkeep of the roadway by KCOC to the point where it connects with Patterson Creek Road. While property ownership may have changed when these easements occurred, the easements are still in effect as they are bound, as with most easements, to the property, not the owner.

Patterson Creek Road (also known as Forest Service Road 42N07) is a County public road for the first approximately ½ mile from the Highway 3 / Patterson Creek Road intersection. From that point it becomes a U.S. Forest Service (USFS) road for the remaining length of the road. While this road passes through private property beyond the County public road portion, the road right-of-way is owned by the USFS. This road is identified by the USFS as a roadway open to all vehicles (USFS 2015).

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As a part of Project review, CAL FIRE on April 11, 2014 and again on October 31, 2018, inspected the proposed emergency access and determined that once the improvements required by CAL FIRE were made to the road, it would serve as an adequate secondary access to the camp property. However, to ensure that the emergency access is adequate and maintained according to CAL FIRE requirements, mitigation measure **MM 8.1**, as discussed in **Section 3.2**, is required. The Project would have a **less than significant** impact in this area.

Impact 3.5.5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities

Threshold: Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

There are no existing or planned bicycle or pedestrian facilities on South Kidder Creek Road or Highway 3 within the vicinity of the Project site. The County does not have any adopted policies, plans, or programs regarding bicycle, or pedestrian facilities in the Project area. The County's *Coordinated Public Transit – Human Services Transportation Plan* identifies strategies for the STAGE regional bus service. The nearest STAGE bus stop is in Greenview approximately three miles from the Project site. However, development of the Proposed Project would not affect bus service to the area or conflict with the *Coordinated Public Transit – Human Services Transportation Plan*. The Project would have **no impact** in this area.

3.5.4 Mitigation Measures

Implement mitigation measure **MM 8.1**.

3.5.5 Residual Impacts After Mitigation

Implementation of mitigation measure **MM 8.1** would ensure the Project site is appropriately investigated and mitigated to minimize risks associated with the potential for hazards related to emergency access. Therefore, with implementation of mitigation measure **MM 8.1**, this impact would be **less than significant**.

3.5.6 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

A cumulative conditions analysis was provided in the TIS to evaluate long-term development conditions in the Project area and the resulting total traffic volumes that could be anticipated in a 20-year horizon. There are an estimated 17 legal lots that access South Kidder Creek Road currently vacant but that could be developed under existing zoning policy. These parcels can all be permitted with one single-family dwelling unit. In addition, the County also allows second dwellings where parcels are over five acres in size and there is adequate space for necessary septic/leach fields/well separation.

It can be assumed that within the phased Kidder Creek Orchard Camp build-out time-frame (10 to 20 years), homes could be constructed on the 17 vacant lots. It was estimated that 10 percent of the 52 total

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lots that access South Kidder Creek Road would have a second dwelling unit. The cumulative conditions analysis therefore includes 23 additional single-family residential units in the Project area.

Traffic Volumes

Trip generation rates for new residential units were obtained from the Trip Generation Manual, 8th Edition, published by the ITE. Traffic generated by the potential 23 single-family units (17 vacant lots and 6 second dwellings) was added to the “Existing Plus Project Conditions” daily volumes to determine the “Cumulative Plus Project Conditions” daily volumes. The buildable lots are anticipated to generate 248 vehicles per day on South Kidder Creek Road on a Saturday, increasing the total volume to 1,772 vehicles per day at the east end of South Kidder Creek Road. The buildable lots are anticipated to generate 21 trips during the Saturday peak hour. Note that very few new residential based trips would be added at the west end of the roadway since it ends at the Kidder Creek Orchard Camp and there are few developable lots west of the South Kidder Loop. The cumulative conditions residential based trip assignment is shown in **Figure 13. Residential Units Peak Hour Trip Assignment** and the Saturday peak hour cumulative conditions volumes are shown in **Figure 14. Cumulative Peak Hour Traffic Volumes**.

It should be noted that the 1980 Circulation Element estimates an average of 7.5 total trips for each dwelling per day for residential development. The ITE standard rate used in this study (9.57 trips per day per residence) provides a higher estimate and conservative analysis. A background growth rate of one percent per annum was applied for northbound and southbound through movements on Highway 3. Historic counts obtained from the Caltrans Traffic Census Program show a stagnant or negative growth rate on Highway 3 over the past 10 years. However, a one percent per annum conservative growth rate was applied to through movements on Highway 3 for the purposes of cumulative conditions analysis.

Cumulative Impacts and Mitigation Measures

Impact 3.5-6: Cumulative Traffic Impacts on Local Roadways

Threshold: Would the project, in combination with existing, proposed, planned, and approved development in the region, contribute to cumulative traffic volumes that result in significant impacts to level of service and operations on local roadways?

Table 3.5-10 identifies the LOS analysis summary for the “Cumulative Plus Project” scenario during the future Saturday peak hour. Detailed calculation sheets are provided in **Appendix F**.

Table 3.5-10: Cumulative Plus Project Intersection Level of Service Summary

Intersection	Worst Approach	Existing		Plus Project		Cumulative Plus Project	
		LOS	Delay	LOS	Delay	LOS	Delay
Hwy 3/S. Kidder Creek Rd.	Eastbound	B	10.3	B	12.9	B	14.2

Source: Traffic Works 2015

The Highway 3 / South Kidder Creek Road intersection is anticipated to operate at acceptable level of service conditions (LOS “B”). The average delay is anticipated to increase by less than 1.5 second per

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vehicle compared to “Plus Project” conditions. This small change in delay would not be perceived by most drivers. The total increase in delay of 4 seconds is not significant within acceptable LOS categories (LOS “C” or better). The Project would have a **less than cumulatively considerable** impact in this area.

Roadway Level of Service Analysis

Table 3.5-11 compares roadway LOS between the Existing, Plus Project, and Cumulative Plus Project conditions on South Kidder Creek Road. As shown, South Kidder Creek Road is anticipated to operate at LOS “B” conditions under the “Cumulative Plus Project” scenario. Under “Cumulative Plus Project” conditions the peak hour traffic volumes are anticipated to reach approximately 15 percent of the roadway’s capacity.

Table 3.5-11. Cumulative Plus Project Roadway Level of Service Summary

Roadway Segment	Existing				Plus Project				Cumulative Plus Project			
	Volume		LOS		Volume		LOS		Volume		LOS	
	Daily	Peak Hour	WB	EB	Daily	Peak Hour	WB	EB	Daily	Peak Hour	WB	EB
S. Kidder Creek Rd. (West end)	338	65	A	A	1,448	278	A	B	1,448	278	A	B
S. Kidder Creek Rd. (East end)	414	67	A	A	1,524	280	A	B	1,772	301	A	B

Source: Traffic Works 2015

Notes: EB = east bound, WB = west bound

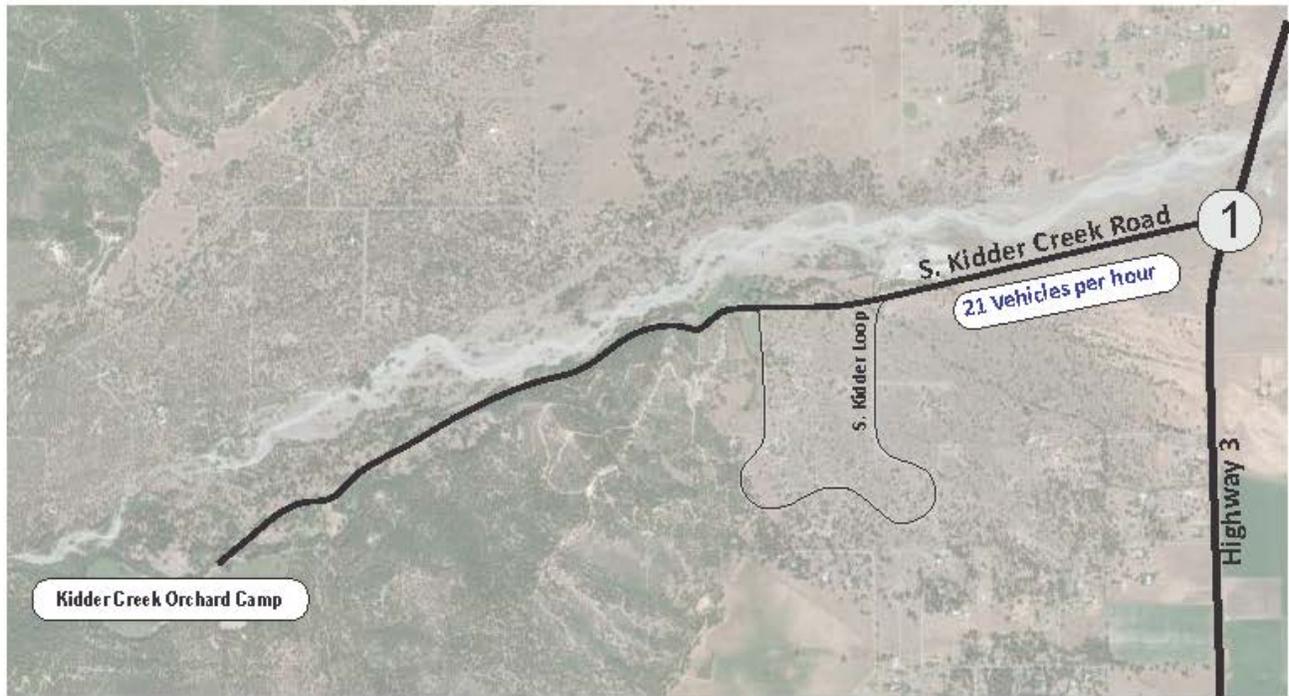
Based on the information provided in the TIS as shown in **Tables 3.5-9** and **3.5-10** and the County’s roadway LOS standards, the Proposed Project would have a less than cumulatively considerable impact to South Kidder Creek Road and the Highway 3 / South Kidder Creek Road intersection. Therefore, no mitigation is required. The Project would have a **less than cumulatively considerable** impact in this area.

Mitigation Measures

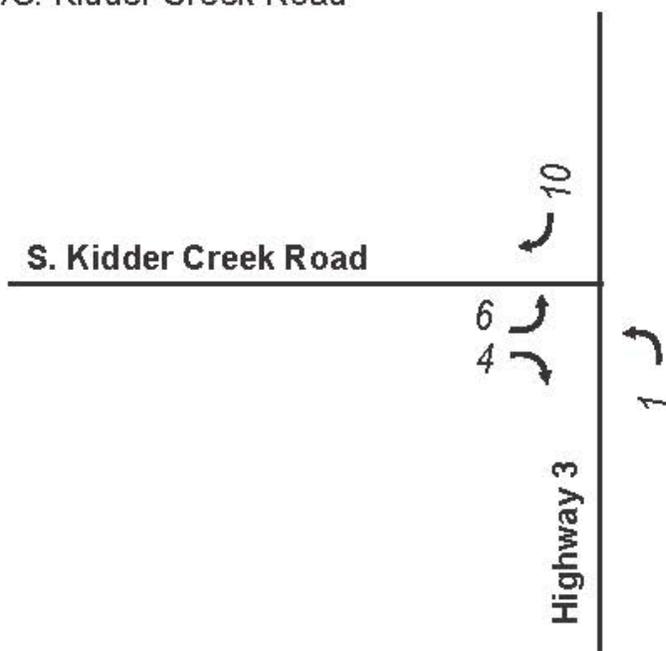
None required.

Residual Impacts After Mitigation

No mitigation measures are required under cumulative conditions therefore, no residual impacts would occur.



1 Highway 3/S. Kidder Creek Road



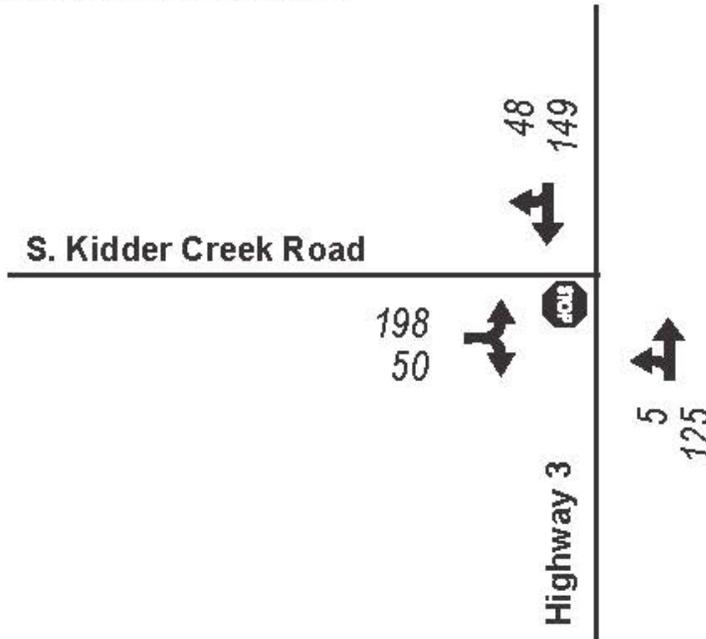
LEGEND
 XX - Peak Hour Trips
 XXX - Peak Hour Segment Trips



Figure 6
 Kidder Creek Orchard Camp
 Traffic Impact Study
Residential Units Peak Hour Trip Assignment



① Highway 3/S. Kidder Creek Road



LEGEND
 XX - Weekend Peak Hour Traffic Volumes
 (XXX) - Weekend Peak Hour Segment Volume
 ← - Lane Configuration STOP - STOP Sign

NO SCALE

Figure 7

Kidder Creek Orchard Camp
 Traffic Impact Study
Cumulative Peak Hour Traffic Volumes

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3.5.7 References

[AASHTO] American Association of State Highway and Transportation Officials

- 2004 A Policy on Geometric Design of Highways and Streets. Exhibit 5-2 Design Controls for Stopping Sight Distance and for Crest and Sag Vertical Curves.

[Caltrans] California Department of Transportation

- 2002 Caltrans Guide for the Preparation of Traffic Impact Studies. December.

Siskiyou County

- 1997 Siskiyou County General Plan. <http://www.co.siskiyou.ca.us/content/planning-division-siskiyou-county-general-plan>.
- 2010 Regional Transportation Plan – April 2011, Siskiyou County Local Transportation Commission
- 2015 Coordinated Public Transit – Human Services Transportation Plan Siskiyou County - Final Draft Plan. January 28, 2015. <http://www.co.siskiyou.ca.us/content/local-transportation-commission>.

[Traffic Works] Traffic Works, L.L.C.

- 2015 Traffic Impact Study for Kidder Creek Orchard Camp (Z-14-01 & UP-11-15). December 22, 2015.

Transportation Research Board

- 2010 Highway Capacity Manual – 2010, Chapter 15, Equation 15-13.

[USFS] United States Forest Service

- 2015 Motor Vehicle Use Map Klamath National Forest Scott River Ranger District. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5376647.pdf

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SECTION 3.6 EMERGENCY ACCESS ROAD EXTENSION

The Proposed Project includes an emergency access roadway. While the majority of the roadway was analyzed under the previous Initial Study, a small section was not as the need for this extension was unknown at the time of the original Initial Study. However, due to the inability to acquire access easements over the southern portion of the existing emergency access road to the Kidder Creek site, a new road over a newly acquired access easement was required. As such, the new emergency access road extension is analyzed for impacts to the physical environment using the complete issue areas identified in the 2019 CEQA Guidelines Appendix G in the following section with the exception of those areas analyzed in this EIR relating to wildland fires, hydrology and water quality, noise, and traffic. This is because the road extension “project”, although added after the Initial Study completion, is a part of the “whole of the Project” and, therefore, considered as a part of the Project when analysis for these areas were completed in this EIR.

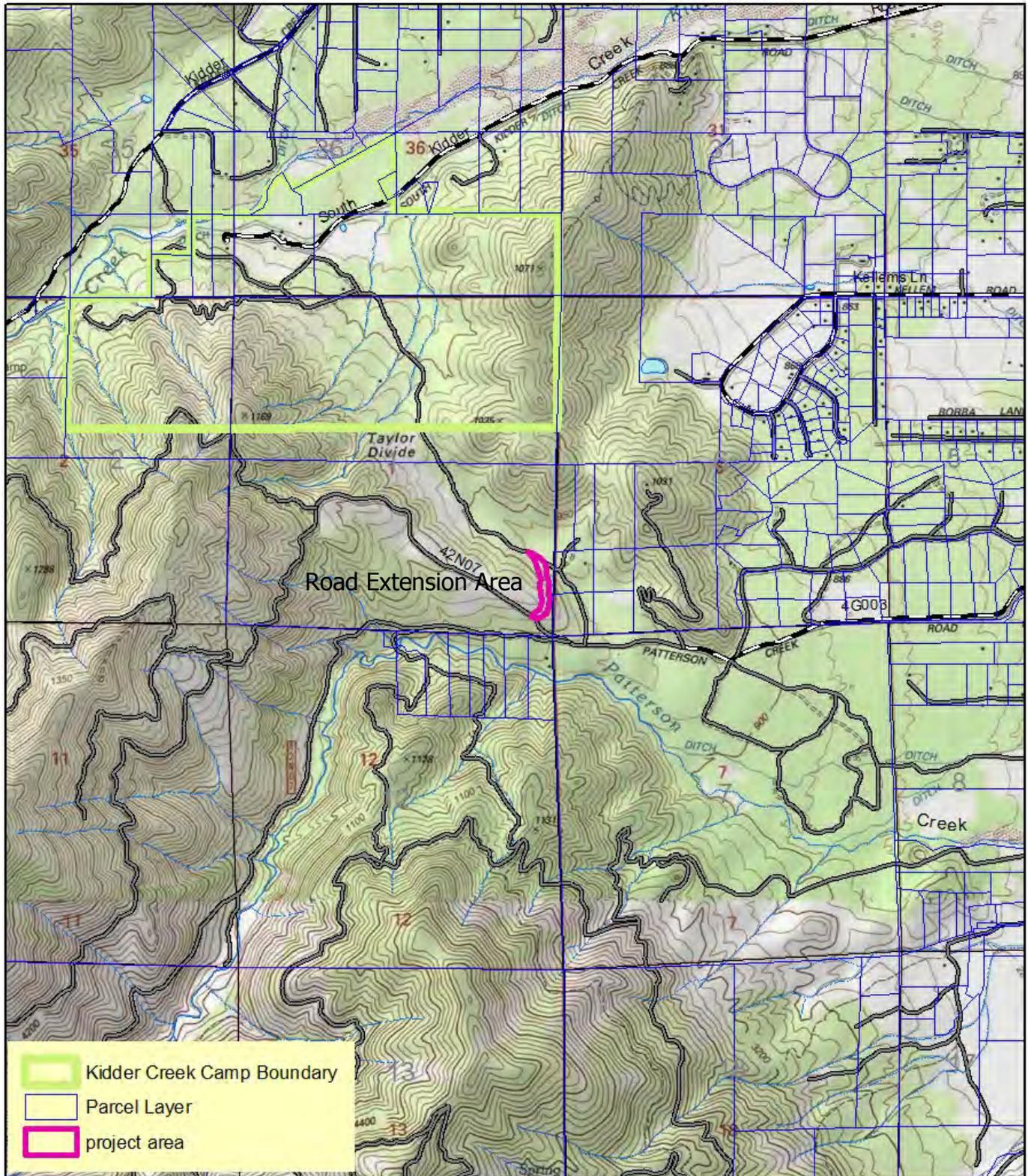
Because the new road extension analyzes all issue areas identified in Appendix G except for those identified above, the format for the following section differs slightly from the previous analysis sections (**Sections 3.1 through 3.5**).

3.6.1 *Environmental Setting*

The proposed emergency access road extension project (road extension, road extension project) would provide a connection to the existing emergency access road (known as Taylor Divide Road) for the KCOC. This extension would consist of approximately 1,400 to 1,500 feet of newly developed road. The road extension would connect to the Taylor Divide Road approximately ¼ mile north of the Taylor Divide Road/Patterson Creek Road intersection. From that point the new road will traverse in a southwesterly direction approximately 1,400 to 1,500 feet, where it will connect to an existing dirt road. See **Figure 15. Emergency Access Road Extension**. The road extension will be required to conform with CAL FIRE and the County roadway standards as far as width, slope, road construction, and improvements. An access easement has been provided by Ecotrust and Rhodes in a previous agreement. See **Section 2.4.2** for a discussion on emergency access and ownership.

The emergency access road extension area is dominated by secondary succession pine dominant forest structure with bordering oak savannas. The area falls within the area described in the *Jepson Manual* (Baldwin et al. 2012) as the California Floristic Province, more specifically the Klamath Ranges. The majority of the proposed emergency access roadway extension area lies within an area of preexisting timber harvests. The proposed road improvement area is primarily composed of granitic parent material with cobble and sand creating poor soil structure. This results in sparse vegetation growth typical to south east facing minor ridges in this part of Siskiyou County.

Kidder Creek Orchard Camp Inc. Emergency Access Road Extension



0.2 0.1 0 0.2 Miles

1:24,000

Northern California Resource Center
530.468.2888
Jan 2019



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

**Figure 15. Emergency
Access Road Extension**
2018-123 Kidder Creek Orchard Camp

3.6.2 *Environmental Impacts*

Thresholds of Significance

The impact analysis provided below is based on the 2019 CEQA Guidelines Appendix G thresholds of significance. Each individual analysis area identifies the thresholds specific to that area and provides a determination as to the level of potential impact. If the impact is considered significant, mitigation is provided to reduce this impact and a determination of the level of impact post mitigation is provided.

Methodology

The methodology for analysis varies depending on issue area. Each individual issue area section provides information about the setting and the methods of analysis particular to that issue area.

Aesthetics

Environmental Setting

The road extension project site is located approximately 1.25 miles south of the KCOC campus and approximately 1.5 miles west of the Patterson Creek Road/State Highway 3 intersection. The road extension is in the foothills of the Marble Mountains, a sub-range of the Klamath Mountains. The highest peak in the Marble Mountains is Boulder Peak at 8,299 feet, located approximately eight miles northwest of the Camp.

State Scenic Highways

The intent of the California Scenic Highway Program is to protect and enhance the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. There are no officially designated State scenic highways in the road extension project vicinity; however, the segment of Highway 3 two miles east of the site is eligible for designation as a State Scenic Highway (Caltrans 2019) and is identified as a scenic highway in the *Scenic Highways Element* of the Siskiyou County General Plan (Siskiyou County 1997).

Visual Character of the Project Site

The majority of the proposed emergency access road extension area lies within an area of preexisting timber harvests with a pine-dominant forest structure with bordering oak savannas. The proposed road improvement area is primarily composed of granitic parent material with cobble and sand creating poor soil structure. This results in sparse vegetation growth typical to southeast-facing minor ridges in this part of Siskiyou County.

The road extension site has elevations ranging from approximately 3,060 to 3,185 feet above mean sea level (AMSL) over the 1,400- to 1,500-foot-long roadway. No natural waterways such as rivers or creeks or wetlands exist on the site.

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Project Impact Analysis

Impact 3.6.1a: Substantial Adverse Effect on a Scenic Vista

Threshold: Would the project have a substantial adverse effect on a scenic vista?

The proposed road extension project would result in the clearing and grading of approximately 30,000 square feet¹ of land to provide a 20-foot-wide, 1,500-foot-long roadway. While this would change the view of this area, the area is not identified as a scenic vista in the County's General Plan. Additionally, this road extension would be similar to the other numerous dirt roads in the area and as such would be consistent with the scenic qualities of the area. Therefore, the road extension project would have a **less than significant** impact on scenic vistas.

Impact 3.6.1b: Substantially Damage Scenic Resources within a State Scenic Highway

Threshold: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The proposed project is not located within the vicinity of an officially designated scenic highway. **No impact** would occur.

Impact 3.6.1c: Substantially Damage Scenic Resources within a State Scenic Highway

Threshold: Would the project in a non-urbanized area substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed road extension project is located in a non-urbanized area. However, the road extension project would result in the clearing and grading of approximately 30,000 square feet² of land to provide a 20-foot-wide, 1,500-foot-long roadway. While this would change the view of this area, this road extension would be similar to the other numerous dirt roads in the area and, as such, would be consistent with the scenic qualities of the area and therefore would not degrade the existing visual character of the area. The road extension project would have a **less than significant** impact in this area.

¹ 1,500 foot length X 20 foot width = 30,000 sq. ft.

² 1,500 foot length X 20 foot width = 30,000 sq. ft.

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Impact 3.6.1d: Create a New Source of Substantial Light or Glare

<i>Threshold: Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?</i>

No lighting is proposed for the road extension project. The road extension project is the construction of a dirt road to provide secondary emergency access for the KCOC. No sources of glare would occur with implementation of the project. The road extension project would have **no impact** in this area.

Agriculture and Forestry Resources

Environmental Setting

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. Farmland is classified using a system of five categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The classification of farmland as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance is based on the suitability of soils for agricultural production, as determined by a soil survey conducted by the Natural Resources Conservation Service (NRCS). The DOC manages an interactive website, the California Important Farmland Finder, which can be used to identify the farmland classification of a specific area. This website program identifies the lands in the road extension project site as being within an area identified as Farmland of Local Importance (DOC 2019a). Neither the site nor adjacent lands are subject to a Williamson Act contract (DOC 2016). The project site is within an area that contains forest or timber resources and is zoned Timberland Production (TPZ) by the County.

Project Impact Analysis

Impact 3.6.2a: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland)

<i>Threshold: Would the project 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?</i>

According to the DOC (2019), site is identified as being within an area identified as Farmland of Local Importance. The road extension project would have **no impact** to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland).

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Impact 3.6.2b: Conflict with Existing Zoning for Agricultural Use, or a Williamson Act contract

Threshold: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

There are no Williamson Act-contracted lands within the vicinity of the road extension project site (DOC 2016). The site is not zoned for agricultural use. The road extension would have **no impact** in this area.

Impact 3.6.2c: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land

Threshold: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The road extension project site is located in an area zoned as TPZ. However, access roads area allowed in this area and would not result in a conflict with or a change to existing zoning. The road extension project would have **no impact** in this area.

Impact 3.6.2d: Loss of Forest Land or Conversion of Forest Land to Non-Forest Use

Threshold: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The road extension project is located in an area that would meet the definition of forest land as defined by PRC Section 12220(g). However, the construction of this roadway and the use of the roadway in an emergency situation would not result in the loss of forest land or conversion of forest land to a non-forest use. While the road extension would remove existing vegetation for an approximately 1,400 to 1,500 foot long by 20-foot-wide area, use of the surrounding forest land would continue as it does presently with the implementation of the road extension. The project would have **no impact** in this area.

Impact 3.6.2e: Involve Other Changes Which Could Result in Conversion of Farmland or Forest Land

Threshold: Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

There are no agricultural uses adjacent to the site. As discussed above, the construction of the proposed road extension and the use of the roadway in an emergency situation would not result in the conversion of forest land. There would be **no impact** in this area.

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Air Quality

Environmental Setting

The California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) focus on the following criteria pollutants to determine air quality: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead. In Siskiyou County, the majority of criteria pollutant emissions come from mobile sources.

Toxic air contaminants (TACs) are distinguished from criteria air pollutants and are separated into categories of carcinogens and noncarcinogens. Carcinogens, such as diesel particulate matter (diesel PM), are considered dangerous at any level of exposure. Noncarcinogens, however, have a minimum threshold for dangerous exposure. Common sources of TACs include, but are not limited to: gas stations, dry cleaners, diesel generators, ships, trains, construction equipment, and motor vehicles.

Topography and Air Quality

The road extension project site is located in a region identified as the Northeast Plateau Air Basin (NPAB), which principally includes Siskiyou, Modoc, and Lassen counties. The characteristics of the NPAB and the surrounding region are generally mountainous and rural, buffering them from the influence from outside pollutant transport. This larger air basin is divided into local air districts, which are charged with the responsibility of implementing air quality programs. The local air quality agency affecting the area is the Siskiyou County Air Pollution Control District (SCAPCD). Within the area administered by SCAPCD, the primary sources of air pollution are wood-burning stoves, wildfires, farming operations, unpaved road dust, managed burning and disposal, and motor vehicles.

The SCAPCD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates agricultural and nonagricultural burning. Other district responsibilities include monitoring air quality, preparing air quality plans, and responding to citizen air quality complaints.

Ambient Air Quality Standards

Air quality standards are set at both the federal and state levels of government. The federal Clean Air Act (CWA) requires the EPA to establish ambient air quality standards for six criteria air pollutants: O₃, CO, NO₂, SO₂, lead, PM₁₀, and PM_{2.5}. The California Clean Air Act also sets ambient air quality standards. The state standards are more stringent than the federal standards, and they include other pollutants in addition to those regulated by the federal standards. When the concentrations of pollutants are below the maximum allowed standards in an area, that area is considered to be in attainment of the standards. The County of Siskiyou has been designated as an attainment area for all six criteria air pollutants as the air quality meets all state and federal standards.

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Project Impact Analysis

Impact 3.6.3a: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

<i>Threshold:</i>	<i>Would the project conflict with or obstruct implementation of the applicable air quality plan?</i>
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The road extension site lies within the boundaries of the NPAB. While the other counties in the air basin are identified as currently being in nonattainment for exceeding state criteria pollutant levels for particulate matter, Siskiyou County is identified as being in attainment or unclassified for all federal and state air quality standards (CARB 2017). As such, Siskiyou County is not subject to an air quality plan. **No impact** would occur.

Impact 3.6.3b: Result in a Cumulatively Considerable net Increase of any Criteria Pollutant

<i>Threshold:</i>	<i>Would the project 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?</i>
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By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable.

As noted above, Siskiyou County is in attainment or unclassified for federal and state air quality standards. However, the proposed project could result in the emission of criteria air pollutants during construction and operation.

Construction Impacts

The road extension project would result in short-term emissions from construction activities. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur. Emissions commonly associated with construction activities include fugitive dust from soil disturbance. During construction, fugitive dust, the dominant source of particulate matter emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities.

Siskiyou County is in attainment or is identified as unclassified for all monitored air quality standards. Additionally, because the road extension project is a part of the greater Kidder Creek Orchard Camp project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measure **MM 3.1** includes the requirement of a dust control plan for erosion control during construction

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activities (see **Table ES-1**). Once construction of the road extension project is completed, construction source emissions would cease. Therefore, no cumulatively considerable net increase of criteria pollutant will result from construction and a **less than significant** impact would occur.

Operational Impacts

Operational air quality impacts would predominantly be associated with motor vehicle use. However, as the road extension project would only be used in an emergency situation, motor vehicle emissions would be negligible. Thus, cumulative operational air quality impacts are **less than significant**.

Impact 3.6.3c: Expose Sensitive Receptors to Substantial Pollutant Concentrations

<i>Threshold: Would the project expose sensitive receptors to substantial pollutant concentrations?</i>

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the project site is a residence located approximately 650 feet from the southwestern terminus of the road extension site.

Construction Impacts

Construction-related activities would result in temporary, short-term project-generated emissions of diesel particulate matter (DPM) exhaust from the use of off-road, heavy-duty diesel equipment. The project would also result in volatile organic compound emissions from the use of hot asphalt during paving, as well as from the application of architectural coatings. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted, the maximum construction-related daily emissions of exhaust PM_{2.5}, considered a surrogate for DPM, would be 1.23 pounds/day during construction activity (see **Appendix G**). (PM_{2.5} exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM_{2.5}), according to CARB. Most PM_{2.5} derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) Even during the most intense month of construction, emissions of DPM would be generated from different locations on the road extension site, rather than a single location, because different types of construction activities (e.g., site preparation, building construction) would not occur at the same place at the same time. DPM emissions rapidly dissipate and are substantially diluted over short distances by the atmosphere downwind of the emission sources.

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The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or 9-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the road extension project. Consequently, an important consideration is that the use of off-road heavy-duty diesel equipment would be limited to the short period of construction for the road extension. Therefore, considering the relatively low mass of DPM emissions that would be generated during even the most intense season of construction, the short duration of construction activities, and the highly dispersive properties of DPM, construction-related TAC emissions would not expose sensitive receptors to substantial amounts of air toxics. The impact is ***less than significant***.

Operational Impacts

As the roadway would only be used during an emergency situation, pollution concentrations from the use of the road would be negligible. Therefore, the road extension project would not result in operational air quality impacts.

Impact 3.6.3d: Result in Other Emissions Adversely Affecting a Substantial Number of People

Threshold: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may

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use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Construction Impacts

During construction, the road extension project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would result in a **less than significant** impact related to odor emissions.

Operational Impacts

As the roadway would only be used during an emergency situation, emissions from the use of the road would be negligible. Therefore, the operation road extension project would have **no impact** in this area.

Biological Resources

The following biological resources information is based on the Botanical Resource Survey and the Wildlife Resources Biological Assessment completed by Resource Management in March of 2019. These studies are included in **Appendix H** of this EIR.

Environmental Setting

The road extension project area falls within the area described floristically in the Jepson Manual as the California Floristic Province, more specifically the Klamath Ranges. This project is located at the foot of the Marble Mountain Wilderness in the Siskiyou subrange of the Klamath (Cascades) Range. This area can be described as a Cismontane Woodland. The project area is located south of Kidder Creek and north of Patterson Creek, both creeks drain easterly into the Scott River. A large fire of record was the 1955 Kidder Creek fire, which occurred only a few months before the December 1955 flood. Adjacent portions of the Patterson Creek drainage were also burned at that time. The massive fires of 1987 did not burn any significant acreage in the upper Scott River watershed. Part of the project area has also been previously thinned or logged with an old skid road still visible. The dominant tree in the area is the Ponderosa pine (*Pinus ponderosa*), which is mostly small in diameter with a thick layer of needles on the rocky dry ground, there is an occasional small Douglas fir (*Pseudotsuga menziesii*), and knobcone pine (*Pinus attenuata*) which would indicate a previous fire situation. Scattered black oak (*Quercus kelloggii*) and an infrequent white oak (*Quercus garryana*) and a few shrubs, grasses and almost devoid of herbaceous plants describe the flora of the area. Ponderosa pine is typically dominant on warm, dry sites with a short growing season and very low summer precipitation. No water sources are located in the Area of Potential Effect (APE); there is evidence of runoff onto the road and a small dry drainage that only has moisture during a heavy

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rain (approximately 1 foot wide and 6 inches deep). The ground tends to be a hard dry, almost reddish orange color (Resource Management 2019a).

The U.S. Fish and Wildlife Service (USFWS), CDFW, and California Native Plant Society (CNPS) document species that may be rare, threatened, or endangered. Federally listed species are fully protected under the mandates of the federal Endangered Species Act (ESA). "Take" of listed species incidental to otherwise lawful activity may be authorized by either the USFWS or the National Marine Fisheries Service (NMFS), depending on the species.

Under the California ESA, the CDFW has the responsibility for maintaining a list of threatened and endangered species. The CDFW also maintains lists of "candidate species" and "species of special concern," which serve as "watch lists." State-listed species are fully protected under the mandates of the California ESA. Take of protected species incidental to otherwise lawful management activities may be authorized under Section 2081 of the California Fish and Game Code.

Under Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (raptors) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

The Native Plant Protection Act (California Fish and Game Code Sections 1900-1913) prohibits the take, possession, or sale within the state of any rare, threatened, or endangered plants as defined by the CDFW. Project impacts on these species would not be considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with the project.

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Impact 3.6.4a: Have a Substantial Adverse Effect on Any Species Identified as a Candidate, Sensitive, or Special Status Species

Threshold: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (USFWS)?

As stated previously, a Botanical Resource Survey and a Wildlife Resources Biological Assessment were completed for the proposed road extension project to determine the potential to impact special status species. Both of these studies determined that the road extension project would have no effect on plant or animal special status species listed under the federal and California ESAs or on their designated critical habitat in accordance with the ESA. For further information, refer to **Appendix H** of this EIR. As such, the proposed road extension project would have a ***less than significant*** impact in this area.

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Impact 3.6.4b: Have a Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community

Threshold: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or USFWS?

The road extension project site is not located in a riparian area. No sensitive natural communities were identified in the Botanical Resource Survey. The road extension project would have **no impact** in this area.

Impact 3.6.4c: Have a Substantial Adverse Effect on State or Federally Protected Wetlands

Threshold: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No wetlands are located in the road extension project area. The road extension project would have **no impact** in this area.

Impact 3.6.4d: Interfere Substantially with the Movement of Any Native Resident or Migratory Fish or Wildlife Species

Threshold: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The road extension project would result in short-term construction activities to build the road. No fencing or other barriers will be constructed that would limit the ability for migratory animals to cross the site. The road extension project would have **no impact** in this area.

Impact 3.6.4e: Conflict with Local Policies or Ordinances Protecting Biological Resources

Threshold: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The road extension project is located in the TPZ zoning. However, the construction and use of the road would not limit the ability to use the area for timber harvesting. There are currently no adopted or proposed local policies or ordinances protecting biological resources that affect the road extension project. Therefore, **no impact** would occur.

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Impact 3.6.4f: Conflict with an Adopted Habitat Conservation Plan or Natural Community Conservation Plan

<i>Threshold: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i>

There are no adopted habitat conservation plans, natural community conservation plans, or any adopted biological resources recovery or conservation plans in the road extension area. As such, **no impact** would occur.

Cultural Resources

The following cultural resources information is based on the Archaeological Resource Survey Report completed by Resource Management in March 2019. Generally, cultural resources surveys are confidential due to the sensitivity and the potential for destruction of cultural resources once the location is made public. However, no cultural resources locations were identified in the study completed for the road extension project. As such, this study is included in **Appendix I** of this EIR.

Environmental Setting

The road extension project area is located within the historically documented Shasta territory. A large portion of Siskiyou County was the traditional area of the Shasta, a Hokaan-speaking people. The Shasta people enjoyed an area that was geographically diverse. By most accounts it is archaeologically accepted that the Shasta Indians occupied the lands in the watersheds of the Klamath, Shasta, Salmon, New, Scott, and Rouge rivers, additionally at the headwater portion of the Sacramento River. Traditionally the northeast boundary is a point just below Klamath Falls in the Upper Klamath River Canyon, which extends into Oregon (Resource Management 2019c).

Possibly the first known Euro American travelers to Scott Valley were the Hudson Bay Trappers. Most notable was the contact with Thomas McKay in 1836 and his company of trappers who worked the rich beaver streams of the Scott Valley. Scott Valley was named for John Scott, the man who discovered gold at Scott Bar in 1850 (Resource Management 2019c).

Improved irrigation development after World War II enabled ranchers to raise alfalfa and other hay crops for commercial sale. Agriculture and recently increased settlement, mostly by modest-income retirees, now dominate Scott Valley (Resource Management 2019c).

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Project Impact Analysis

Impact 3.6.5a: Cause A Substantial Adverse Change in the Significance of a Historical Resource

<i>Threshold:</i>	<i>Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</i>
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According to the Archaeological Resource Survey Report, no historic sites were observed during the survey of the site and surrounding area. However, there is a potential to uncover unknown historic resources during project grading. Because the road extension project is a part of the greater KCOC project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measure **MM 5.1** include mitigation to protect unknown historic resources if they are discovered during project construction (see **Table ES-1**). Implementation of this mitigation measure would reduce the impact to a **less than significant level**.

Impact 3.6.5b: Cause A Substantial Adverse Change in the Significance of an Archaeological Resource

<i>Threshold:</i>	<i>Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</i>
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According to the Archaeological Resource Survey Report, no archaeological sites were observed during the survey of the site and surrounding area. However, there is a potential to uncover unknown archaeological resources during project grading. Because the road extension project is a part of the greater Kidder Creek Orchard Camp project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measure **MM 5.1** includes mitigation to protect unknown archaeological resources if they are discovered during project construction (see **Table ES-1**). Implementation of this mitigation measure would reduce the impact to a **less than significant level**.

Impact 3.6.5c: Disturb Human Remains

<i>Threshold:</i>	<i>Would the project disturb any human remains, including those interred outside of dedicated cemeteries?</i>
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According to the Archaeological Resource Survey Report, no human remain sites were observed during the survey of the site and surrounding area. However, there is a potential to uncover unknown human remain during project grading. Because the road extension project is a part of the greater Kidder Creek Orchard Camp project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measure **MM 5.3** includes mitigation to protect unknown human remains if they are discovered during project construction (see **Table ES-1**). Implementation of this mitigation measure would reduce the impact to a **less than significant level**.

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Energy

The Proposed Project’s energy consumption, including the road extension project, is included in **Section 5.3** of this EIR. Please refer to that section for the energy analysis and determination of significance.

Geology and Soils

Environmental Setting

Geomorphic Setting

The project site is located in Klamath Mountains geomorphic province of California. The Klamath Mountains have rugged topography with prominent peaks and ridges reaching 6,000-8,000 feet above sea level. In the western Klamath, an irregular drainage is incised into an uplifted plateau called the Klamath peneplain. The uplift has left successive benches with gold-bearing gravels on the sides of the canyons. The Klamath River follows a circuitous course from the Cascade Range through the Klamath Mountains. The province is considered to be a northern extension of the Sierra Nevada. (California Geological Survey [CGS] 2002).

Site Soils

According to the NRCS Web Soil Survey website (NRCS 2019), two soil units, or types, have been mapped within the project site as shown in **Table 3.6-1**. These are Boomer loam, cool, 5 to 30 percent slopes and Marpa-Kinkel-Boomer, cool complex, 15 to 50 percent slopes. Among many soil related attributes, the Web Soil Survey identifies drainage, flooding, erosion, runoff, and the linear extensibility potential for the Project soils. According to this survey, the Project is predominately underlain by soils that are well-drained and have a moderate runoff potential. The Project site soils have a severe erosion potential and a low to moderate linear extensibility (shrink-swell) (NRCS 2019).

Table 3.6-1. Access Road Extension Soil Characteristics

Soil	Percentage of Site	Drainage	Flooding Frequency Class	Erosion Hazard ¹	Runoff Potential ²	Linear Extensibility (Rating) ³	Frost Action ⁴
Boomer loam, cool, 5 to 30 percent slopes	13.8%	Well drained	None	Severe	C (Moderate)	4.3% (Moderate)	Moderate
Marpa-Kinkel-Boomer, cool complex, 15 to 50 percent slopes	86.2%	Well drained	None	Severe	C (Moderate)	1.5% (Low)	Moderate

Source: NRCS 2019

Notes:

1. The hazard is described as "slight," "moderate," "severe," or "very severe." A rating of "slight" indicates that erosion is unlikely under ordinary climatic conditions; "moderate" indicates that some erosion is likely and that erosion-control measures may be needed; "severe" indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and "very severe" indicates that significant erosion is expected, loss of soil productivity and offsite damage are likely, and erosion-control measures are costly and generally impractical.
2. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation. Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. Group B. Soils having a moderate infiltration rate when thoroughly wet. Group C. Soils having a slow infiltration rate when thoroughly wet. Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.

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3. Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent, moderate if 3 to 6 percent, high if 6 to 9 percent, and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.
4. Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Regional Seismicity and Fault Zones

In California, special definitions for active faults were devised to implement the Alquist-Priolo Earthquake Fault Zoning Act of 1972, which regulates development and construction in order to avoid the hazard of surface fault rupture. The State Mining and Geology Board established policies and criteria in accordance with the act, which defined an active fault as one which has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault was considered to be any fault that showed evidence of surface displacement during Quaternary time (last 1.6 million years). Because of the large number of potentially active faults in California, the State Geologist adopted additional definitions and criteria to limit zoning to only those faults with a relatively high potential for surface rupture. Thus, the term "sufficiently active" was defined as a fault for which there was evidence of Holocene surface displacement. This term was used in conjunction with the term "well-defined," which relates to the ability to locate a Holocene fault as a surface or near-surface feature (CGS 2010).

According to the CGS Fault Activity Map of California (2019), the nearest fault is the Scott Valley Fault directly east of the road extension site along Taylor Divide. The nearest potentially active fault, as identified by the CGS, is the Yellow Butte fault which is a Quaternary fault. This fault is approximately 36 miles east of the road extension site (CGS 2019). The Project site is not located within an Alquist-Priolo earthquake hazard zone (CGS 2019).

Paleontological Resources

A paleontological records search was completed using the University of California Museum of Paleontology (UCMP) informational database on January 2, 2019. The search included a review of the institution's paleontology specimen collection records for Siskiyou County, including the Project area and vicinity. In addition, a query of the UCMP catalog records; a review of regional geologic maps from the California Geological Survey; a review of local soils data; and a review of existing literature on paleontological resources of Siskiyou County by ECORP. The purpose of the assessment was to determine the sensitivity of the Project area, whether or not known occurrences of paleontological resources are present within or immediately adjacent to the Project area, and whether or not implementation of the project could result in significant impacts to paleontological resources. Paleontological resources include mineralized (fossilized) or unmineralized bones, teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains.

The results of the search of the UCMP indicated that 96 paleontological specimens were recorded from 15 identified localities and 55 unidentified localities in Siskiyou County. Paleontological resources include fossilized remains of plants, mammals, fish, mollusks, and microfossils. No paleontological resources have been previously recorded within or near the proposed project site (UCMP 2019).

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Project Impact Analysis

Impact 3.6.6a: Expose People or Structures to Potential Seismic Effects

<i>Threshold:</i>	<i>Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</i>
<i>i)</i>	<i>Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</i>
<i>ii)</i>	<i>Strong seismic ground shaking?</i>
<i>iii)</i>	<i>Seismic-related ground failure, including liquefaction?</i>
<i>iv)</i>	<i>Landslides?</i>

- i) The Proposed Project site is not located within an Alquist-Priolo Earthquake Zone (CGS 2019). There would be no impact related to fault rupture.
- ii) According to CGS’s Earthquake Shaking Potential for California mapping, the Proposed Project site is located in an area which is distant from known, active faults and will experience lower levels of ground-shaking less frequently. In most earthquakes, only weaker masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking in the area (CGS 2016). The Emergency access road extension project does not include any structures. The roadway would be required to comply with the Siskiyou County improvement standards, including any required seismic mitigation standards. Because of the required compliance and the distance from active faults, the Proposed Project would have a less than significant impact related to strong ground shaking.
- iii) Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Liquefaction can result in the following types of seismic-related ground failure:
 - Loss of bearing strength – soils liquefy and lose the ability to support structures
 - Lateral spreading – soils slide down gentle slopes or toward stream banks
 - Flow failures – soils move down steep slopes with large displacement
 - Ground oscillation – surface soils, riding on a buried liquefied layer, are thrown back and forth by shaking
 - Flotation – floating of light buried structures to the surface
 - Settlement – settling of ground surface as soils reconsolidate

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- Subsidence – compaction of soil and sediment

Liquefaction potential has been found to be greatest where the groundwater level and loose sands occur within a depth of about 50 feet or less. DOC provides mapping for area susceptible to liquefaction in California. According to this mapping, the road extension site is not located in an area of liquefaction (DOC 2019b). As such, the road extension would result in **less than significant** impacts with regard to seismic-related ground failure, including liquefaction.

- iv) The road extension project is the development of a 1,400- to 1,500-foot dirt emergency access road. This road would follow the existing contours of the hillsides in order to minimize the amount of earth moving activities as much as possible. While there is a possibility a landslide could occur because of these activities, no people or structures would be exposed to adverse effects of this landslide potential as the road would only be used in an emergency evacuation situation and no structures would be constructed as a part of the road extension project. Additionally, the road will be required to be designed and constructed according to County and CAL FIRE roadway standards including slope stabilization as necessary. Therefore, the road extension project would have a **less than significant impact** in this area.

Impact 3.6.6b: Result in Substantial Soil Erosion or the Loss of Topsoil

<i>Threshold: Would the project result in substantial soil erosion or the loss of topsoil?</i>
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As shown in **Table 3.6-1**, the project soils have a severe erosion potential. A rating of "severe" indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised.

Because the road extension project is a part of the greater KCOC project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measure **MM 6.1** includes mitigation to reduce the potential erosion and **MM 4.5** requires the completion of a stormwater pollution prevention plan (SWPPP) (see **Table ES-1**). Both of these mitigation measures would effectively minimize erosion and the loss of top soil from the development of the road extension project. As such, this impact would be **less than significant**.

Impact 3.6.6c: Unstable Geologic Unit

<i>Threshold: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</i>

As discussed previously, the project site would result in a **less than significant** impact concerning landslides.

Lateral spreading is a form of horizontal displacement of soil toward an open channel or other "free" face, such as an excavation boundary. Lateral spreading can result from either the slump of low cohesion and unconsolidated material or, more commonly, by liquefaction of either the soil layer or a subsurface layer underlying soil material on a slope, resulting in gravitationally driven movement. One indicator of

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potential lateral expansion is frost action. Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing (NRCS 2019). As indicated in **Table 3.6-1**, the Web Soil Survey identifies the Project site as having soils with moderate frost action potential. However, since the road extension project does not include the construction of buildings or other structures and is basically a dirt road only used in emergency situations, lateral spreading would have little or no impact to the roadway. As such, the potential for impacts due to lateral spreading would be **less than significant**.

With the withdrawal of fluids, the pore spaces within the soils decrease, leading to a volumetric reduction. If that reduction is significant enough over an appropriately thick sequence of sediments, regional ground subsidence can occur. This typically only occurs within poorly lithified sediments and not within competent rock.³ No oil, gas, or high-volume water extraction wells are known to be present in the road extension project area. According to the U.S. Geological Survey (USGS), the road extension site is not located in an area of land subsidence (USGS 2019). As such, the potential for impacts due to subsidence would be **less than significant**.

Collapse occurs when water is introduced to poorly cemented soils, resulting in the dissolution of the soil cementation and the volumetric collapse of the soil. In most cases, the soils are cemented with weak clay (argillic) sediments or soluble precipitates. This phenomenon generally occurs in granular sediments situated within arid environments. Collapsible soils will settle without any additional applied pressure when sufficient water becomes available to the soil. Water weakens or destroys bonding material between particles that can severely reduce the bearing capacity of the original soil resulting in damage to buildings and foundations. Since the road extension project does not include the construction of buildings or other structures, is required to comply with the County's and CAL FIRE's roadway standards, and the distance of the road extension project from active faults, the potential for that settlement/collapse at the site is considered unlikely. As such, the potential for impacts due to collapse would be **less than significant**.

Impact 3.6.6d: Expansive Soils

<i>Threshold: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</i>

Expansive soils are types of soil that shrink or swell as the moisture content decreases or increases. Structures built on these soils may experience shifting, cracking, and breaking damage as soils shrink and subside or expand. Expansive soils can be determined by a soil's linear extensibility. There is a direct relationship between linear extensibility of a soil and the potential for expansive behavior, with expansive soil generally having a high linear extensibility. Thus, granular soils typically have a low potential to be expansive, whereas clay-rich soils can have a low to high potential to be expansive.

According to the NRCS, linear extensibility values for the Project site are low to moderate as noted in **Table 3.6-1**. If the linear extensibility is considered moderate, shrinking and swelling can cause damage to

³ The processes by which loose sediment is hardened to rock are collectively called lithification.

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buildings, roads, and other structures and to plant roots. As shown in **Table 3.6-1**, approximately 14 percent of the Project site soils have a moderate shrink-swell potential. Because the road is dirt, any damage to the road because of expansive soils can be easily repaired with little cost or time required. As such, the Project would have a **less than significant** impact in this area.

Impact 3.6.6e: Septic Systems

Threshold: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The road extension project would not require any wastewater disposal system. The road extension project would have **no impact** in this area.

Impact 3.6.6f: Paleontological Resources

Threshold: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No known paleontological resources sites were identified during the cultural field survey of the road expansion site. Additionally, a search of the UCMP failed to indicate the presence of paleontological resources in the road expansion area. Although paleontological resources sites were not identified in the road expansion area, there is the possibility that unanticipated paleontological resources will be encountered during ground-disturbing project-related activities. However, Initial Study mitigation measure **MM 5.2** includes mitigation to reduce the potential for impacts to unknown paleontological resources (see **Table ES-1**). As such, this impact would be **less than significant**.

Greenhouse Gas Emissions

Environmental Setting

Greenhouse gases (GHG) are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps approximately 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂ (CARB 2018). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

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Project Impact Analysis

Impact 3.6.7a: Generate Greenhouse Gas Emissions

<i>Threshold:</i>	<i>Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>
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GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

Construction Impacts

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the road extension site, and off-road construction equipment (e.g., dozers, loaders, excavators). Significance thresholds for GHG emissions resulting from land use development projects have not been established in Siskiyou County. In the absence of any GHG emission significance thresholds, the projected emissions are compared to the South Coast Air Quality Management District’s (SCAQMD’s) recommended threshold of 3,000 metric tons of CO₂e annually. While significance thresholds used in Southern California are not binding in Siskiyou County, they are instructive for comparison purposes.

Construction-generated GHG emissions associated the road extension project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Predicted maximum annual construction-generated emissions for the Proposed Project are summarized in **Table 3.6-2**.

Table 3.6-2. Construction-Related Greenhouse Gas Emissions

Construction Year	Carbon Dioxide Equivalents (CO ₂ e) (metric tons)
Construction	
Year 2020	6.4
<i>SCAQMD Significance Threshold</i>	<i>3,000</i>
Exceed Threshold?	No

Source: CalEEMod version 2016.3.2. Refer to **Appendix G** for Model Data Outputs.
Notes: Building construction, paving, and architectural coating assumed to occur simultaneously.

As shown in **Table 3.6-2**, GHG emissions would remain well below the significance threshold during project construction. Construction-generated GHG emissions would be ***less than significant***.

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Operational Impacts

The road expansion project will not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable GHG emissions from Project operations. The Project does not propose any buildings and therefore no permanent source or stationary source emissions. Once the Project is completed, there will be no resultant increase in automobile trips to the area because the improved facilities will not require daily visits. While it is anticipated that the road extension may require intermittent maintenance to be conducted by KCOC staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Impacts in this regard would be **less than significant**.

Impact 3.6.7b: Conflict with an Applicable Greenhouse Gas Plan, Policy or Regulation

<i>Threshold: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i>

The road expansion project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions. As identified above, project-generated GHG emissions would not surpass GHG significance thresholds, which were prepared with the purpose of complying with California GHG reduction goals. Therefore, the road expansion project would not conflict with California GHG reduction goals. **No impact** would occur.

Hazards and Hazardous Materials

Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, § 25501 as follows:

"Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in Title 22, § 662601.10, of the California Code of Regulations as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

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The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies.

Under Government Code § 65962.5, both the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC (2019) and SWRCB (2019) lists identified no open cases of hazardous waste violations on, or within ½ mile of the road extension site.

The EPA maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about EPA-regulated facilities. Facilities included on the site are Clean Air Act stationary sources; CWA facilities with direct discharge permits, under the National Pollutant Discharge Elimination System (NPDES); generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act; and public drinking water systems, regulated under the Safe Drinking Water Act. ECHO also includes information about EPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other EPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the road extension project site is not listed as having a hazardous materials violation (EPA 2019).

Project Impact Analysis

Impact 3.6.8a: Create a Significant Hazard to the Public or the Environment

<i>Threshold:</i>	<i>Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i>
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The road extension project would create an emergency access road to the KCOC. No operational hazardous materials would be used at the site once fully developed. The road extension project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, the Project would have **no impact** in this area.

Impact 3.6.8b: Release of Hazardous Materials into the Environment

<i>Threshold:</i>	<i>Would the project 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?</i>
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As discussed in Issue a), the road extension project would not result in the routine transport, use, disposal, handling, or emission of any hazardous materials that would create a significant hazard to the public or the environment during operation. Potential construction-related hazards could be created during the course of the road extension construction, given that construction activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable

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substances. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law. Because any hazardous materials used during construction would be in small quantities, long-term impacts associated with handling, storing, and disposing of hazardous materials from project operation would be **less than significant**.

Impact 3.6.8c: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials Within One-Quarter Mile of a School

<i>Threshold: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</i>
--

There are no schools within ¼ mile of the road extension site. Additionally, as discussed previously, the road extension project would not handle hazardous or acutely hazardous materials, substances, or waste. The road extension project would have **no impact** in this area.

Impact 3.6.8d: Located on a Site Which is Included on a List of Hazardous Materials Sites

<i>Threshold: Would the project 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?</i>

Under Government Code § 65962.5, both the DTSC and the SWRCB are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations on the road extension project site. Therefore, the site and the road extension project are not on a parcel included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 (DTSC 2019; SWRCB 2019). As a result, this would not create a significant hazard to the public or to the environment and would have **no impact**.

Impact 3.6.8e: Cause an Airport Hazard

<i>Threshold: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</i>

The Scott Valley Airport is approximately 5.25 miles northeast of the road extension site. The project is the construction of an emergency access road extension. No buildings or other structures which would cause a safety hazard or impede aircraft operations for the Scott Valley Airport. Thus, **no impact** would occur.

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Impact 3.6.8f: Emergency Response and/or Evacuation

<i>Threshold: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</i>
--

The proposed road extension project is being developed in order to improve emergency access to the KCOC site. While there is an existing access road to the KCOC, which has been in use for many years, KCOC has recently been denied access to a portion of this roadway by the property owners on which this road passes through. As such, the road extension project is being proposed to link the remaining existing roadway, for which KCOC has easement access, to Paterson Creek Road. This new road construction will reestablish emergency access to the KCOC.

The road extension project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. All construction activities would not impede the use of surrounding roadways in an emergency evacuation. Implementation of the proposed road extension project would result in **no impact** in this area.

Impact 3.6.8g: Emergency Response and/or Evacuation

<i>Threshold: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</i>
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Development of the road extension, in and of itself, would have **no impact** in this area. In fact, the construction of the road extension project would allow an additional emergency evacuation route in case of a wildland fire. For a full discussion of the potential for wildland fire impacts, refer to **Section 3.2** of this EIR.

Hydrology and Water Quality

The Proposed Project's, including the road extension project, potential for hydrology and water quality impacts, is discussed in **Section 3.3** of this EIR. Please refer to that section for the proposed project's, including the road extension project, hydrology and water quality impacts and determination of significance.

Land Use and Planning

Environmental Setting

The road extension project site is within the County's SVAP as identified in the Siskiyou County General Plan. The County's zoning map identifies the project site as being within the TPZ zoning district.

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Project Impact Analysis

Impact 3.6.9a: Physically Divide an Established Community

Threshold: Would the project physically divide an established community?

The road extension project site is located in an area of undeveloped forest land. The road extension project would not divide an established community. Therefore, implementation of the proposed project would have **no impact** in this area.

Impact 3.6.9b: Conflict with a Land Use Plan, Policy, or Regulation

Threshold: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The road extension project is for the development of an emergency access road extension to an existing road. These types of uses are allowed in the TPZ zoning district. The road extension would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **No impact** would occur.

Mineral Resources

Environmental Setting

The State-mandated Surface Mining and Reclamation Act of 1975 (SMARA) requires the identification and classification of mineral resources in areas within the State subject to urban development or other irreversible land uses that could otherwise prevent the extraction of mineral resources. These designations categorize land as Mineral Resource Zones (MRZ-1 through MRZ-4).

The road extension area is not identified as being within a mineral resource area in the Siskiyou County General Plan, the SVAP, or by the state. Additionally, there are currently no existing mining activities occurring within the road extension project vicinity.

Project Impact Analysis

Impact 3.6.10a: Loss of Availability of a Known Mineral Resource

Threshold: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

As discussed above, the Siskiyou County General Plan, the SVAP, and the state does not identify any mineral resources in the road extension project vicinity, including on the project site. Therefore, **no impacts** would occur to mineral resources.

Impact 3.6.10b: Loss of Availability of a Locally-Important Mineral Resource Recovery Site

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Threshold: Would the project 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?

The project site is not identified as a mineral resource recovery site in the Siskiyou County General Plan or the SVAP. There would be **no impact** in this area.

Noise

Potential noise impacts for the Proposed Project, including the road extension project, is discussed in **Section 3.4** of this EIR. Please refer to that section for noise impacts and determination of significance for the proposed project, including the road extension project.

Population and Housing

Environmental Setting

The road extension project site is located in a sparsely populated area. The only residential units within the area are a few single-family homes located south and east of the road extension site. The nearest population center recognized by the U.S. Census is the Greenview CDP (Census Designated Place). U.S. Census data shows that the Greenview CDP decreased by 12.9 percent in the Greenview area between 2010 and 2017, from 201 to 175 (U.S. Census 2019).

Project Impact Analysis

Impact 3.6.11a: Induce Substantial Population Growth

Threshold: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The road extension project does not include the construction of any new homes or businesses. Therefore, direct or indirect increases in population growth would not occur as a result of the road extension and **no impact** would occur in this area.

Impact 3.6.11b: Displace Substantial Numbers of Existing Housing

Threshold: Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No residences would be removed as a result of the proposed road extension. The project would have **no impact** on existing housing.

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Impact 3.6.11c: Displace Substantial Numbers of People

<i>Threshold: Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</i>
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As discussed above, the road extension would not involve the removal or relocation of substantial number of housing and would therefore not displace a substantial number of people or necessitate the construction of any replacement housing. The road extension project would have **no impact** on existing housing.

Public Services

Environmental Setting

Public services include fire protection, police protection, parks and recreation, and schools. Generally, impacts in these areas are related to an increase in population from a residential development. Levels of service are generally based on a service to population ratio, except for fire protection, which is usually based on a response time. Police protection in the area is provided by the Siskiyou County Sheriff's Department and fire protection is provided by Siskiyou County Fire/CAL FIRE. The area is served by the Scott Valley School District for kindergarten through 12th grades.

Project Impact Analysis

Impact 3.6.12a: Required New or Expanded Government Facilities

<i>Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: police protection, fire protection, schools, parks, and other government services.</i>

The road extension project is the development of 1,400 to 1,500 feet of emergency access road to connect to an existing road. This road would not increase the population of the area or require new or expanded fire, police, schools, parks or other government facilities. The road extension would have **no impact** in this area.

Recreation

Environmental Setting

Recreational opportunities for both youth and adults are varied and plentiful in the project area. Nearby Scott River and its tributaries provide opportunities for water recreation, including swimming and fishing. There are also outdoor recreation opportunities located in the nearby national forests.

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Project Impact Analysis

Impact 3.6.13a: Increase use of Existing Recreational Facilities

<i>Threshold:</i>	<i>Would the project result in an increased of the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</i>
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The road extension project is the development of 1,400 to 1,500 feet of emergency access road to connect to an existing road. This road would not increase the population of the area or demand on existing recreational facilities. The road extension would have **no impact** in this area.

Impact 3.6.13b: Required New or Expanded Recreational Facilities

<i>Threshold:</i>	<i>Would the project Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?</i>
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The road extension project is the development of 1,400 to 1,500 feet of emergency access road to connect to an existing road. This road would not increase the population of the area or require new or expanded recreational facilities. The road extension would have **no impact** in this area.

Transportation

The potential for transportation impacts for the Proposed Project, including the road extension project, is discussed in **Section 3.5** of this EIR. Please refer to that section for the transportation impacts and determinations of significance for Proposed Project, including the road extension project.

Tribal Cultural Resources

The following cultural resources information is based on the Archaeological Resource Survey Report completed by Resource Management in March 2019. Generally, cultural resources surveys are confidential due to the sensitivity and the potential for destruction of cultural resources once the location is made public. However, no cultural resources locations were identified in the study completed for the road extension project. As such, this study is included in **Appendix I** of this EIR.

Letters of consultation dated October 9, 2014 were sent the Quartz Valley Indian Reservation (Fort Jones, CA); and to the Shasta Nation Cultural and Archaeological Resource. A letter was also sent to the Native American Heritage Commission (NAHC). These three letters requested information on any known archaeological or cultural sites or any unrecorded traditional cultural properties. As of this date, a single response has been received, from the NAHC, indicating a negative result for the presence of cultural sites or, specifically, known sacred lands or sacred sites.

Environmental Setting

The project area is located within the historically documented Shasta territory. A large portion of Siskiyou County was the traditional area of the Shasta who were Hokan speaking people. The Shasta people

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enjoyed an area that was geographically diverse. By most accounts it is archaeologically accepted that the Shasta Indians occupied the lands in the watersheds of the Klamath, Shasta, Salmon, New, Scott, and Rogue rivers, additionally at the headwater portion of the Sacramento River. Traditionally the northeast boundary is a point just below Klamath Falls in the Upper Klamath River Canyon, which extends into Oregon.

Project Impact Analysis

Impact 3.6.14a: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

<i>Threshold:</i>	<i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>
<i>i)</i>	<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), or</i>
<i>ii)</i>	<i>A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.</i>

No historic or Native American cultural resources were observed within the road extension project area during the pedestrian survey completed by as a part of the Archaeological Resource Survey Report. This was a surface survey; no surface survey can guarantee to have located subsurface archaeological materials if they are present. The possibility exists that unknown Native American cultural resources could be encountered during construction of the road extension project. As such, mitigation is required.

Because the road extension project is a part of the greater KCOC project, it is subject to those mitigation measures identified in the Initial Study. Initial Study mitigation measures **MM 5.1 through MM 5.3** include mitigation to protect unknown Native American cultural resources if they are discovered during project construction (see **Table ES-1**). Implementation of these mitigation measures would reduce the impact to a **less than significant** level.

Utilities and Service Systems

Environmental Setting

Water Service

No water service companies/agencies provide water to the road extension project area area. The water is provided to the KCOC site through onsite wells.

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Wastewater

No wastewater treatment and disposal are available to the road extension site. The KCOC Project would dispose of wastewater through onsite septic systems.

Storm Drainage

The road extension project is located in an area with no formal storm drainage system. Stormwater runoff would be managed through existing natural drainages and infiltration.

Solid Waste

The Siskiyou County Integrated Solid Waste Management Regional Agency manages solid waste and green waste collection and disposal in the county. As shown in **Table 3.6-3**, the majority of the County's solid waste is exported to Oregon.

**Table 3.6-3. Solid Waste Disposal Facilities Used by the
Siskiyou County Integrated Solid Waste Management Regional Agency**

Destination Facility	Solid Waste Disposal (tons/year)			Landfill Information		
	2015	2016	2017	Remaining Capacity (cubic yards)	Remaining Capacity Date	Cease Operation Date
Altamont Landfill	-	-	3.69	65,400,000	12/31/2014	1/1/2025
Anderson Landfill Inc.	72.42	262.09	149.61	7,184,701	3/1/2017	12/1/2023
Forward Landfill Inc.	5.60	10.81	-	22,100,000	12/3/2012	1/1/2020
McKittrick Waste Treatment	-	-	15.78	769,790	4/5/2012	12/31/2059
Potrero Hills Landfill	7.9	2.91	22.87	13,872,000	1/1/2006	2/14/2048
Recology Hay Road	5.33	18.18	67.36	30,433,000	7/28/2010	1/1/2077
Recology Ostrom Road LF Inc.	5.75	1.00	-	39,223,000	6/1/2007	12/31/2066
West Central Landfill	4.15	40.38	46.17	22,100,000	12/31/2012	1/1/2020
Exported to Oregon	35,204.56	37,090.34	40,264.40	N/A	N/A	N/A
Yearly Total	35,305.71	37,425.70	40,569.88			
Average per Resident (lbs/day)	4.3	4.6	N/A			
Average per Employee (lbs/day)	15.4	15.8	N/A			

Source: CalRecycle 2019a,b, and c

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Project Impact Analysis

Impact 3.6.15a: Relocation or Construction of New or Expanded Public Utilities

Threshold: Would the project require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The road extension project is the construction of a 1,400- to 1,500-foot dirt road to provide emergency access to the KCOC project. No water, wastewater, storm water drainage, electric power, natural gas, or telecommunications facilities would be required for the road extension. There would be **no impact** in this area.

Impact 3.6.15b: Have Sufficient Water Supplies

Threshold: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Refer to Item a) above.

Impact 3.6.15c: Have Adequate Wastewater Capacity

Threshold: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Refer to Item a) above

Impact 3.6.15d: Generate Solid Waste

Threshold: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The road extension project is the construction of a 1,400- to 1,500-foot dirt road to provide emergency access to the KCOC project. The road extension would not result in substantial, if any, solid waste. There would be **no impact** in this area.

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Impact 3.6.15e: Comply with Solid Waste Reduction Regulations

<i>Threshold:</i> <i>Would the project comply with federal, state, and local statutes and management and reduction regulations related to solid waste?</i>
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The road extension project is required to comply with all state and federal statutes regarding construction solid waste. There would be no solid waste from the road extension once construction is completed. This impact is considered ***less than significant***.

Wildfire

Because the KCOC Project was proposed prior to those wildland fire additions in the 2019 edition of the CEQA Guidelines, the KCOC Project itself, is not subject to the wildland fire additions. However, as stated previously, because the road extension project is new and was not addressed in the original IS, an analysis of those new wildland fire impact areas identified in the 2019 edition of the CEQA Guidelines Appendix G related to the road extension project are required to be analyzed and are discussed below. Thus, the reason for two wildland fire discussions with different issue areas (**Sections 3.2 and 3.6**) in this EIR.

Environmental Setting

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area-to-mass ratio and require more heat to reach the ignition point.

The road extension project site is in an area designated by CAL FIRE (2007) as a Very High Fire Hazard Severity Zone.

Project Impact Analysis

Impact 3.6.16a: Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan

<i>Threshold:</i> <i>Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?</i>
--

The proposed road extension project is being developed in order to improve emergency access to the KCOC site. While there is an existing access road to the KCOC, which has been in use for many years, KCOC has recently been denied access to a portion of this roadway by the property owners through which road passes. As such, the road extension project is being proposed to link the remaining existing roadway, for which KCOC has easement access, to Paterson Creek Road. This new road construction will reestablish emergency access to the KCOC.

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The road extension project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. All construction activities would not impede the use of surrounding roadways in an emergency evacuation. Implementation of the proposed road extension project would result in **no impact** in this area.

Impact 3.6.16b: Expose Project Occupants to Pollutant Concentrations From a Wildfire or the Uncontrolled Spread of a Wildfire

<i>Threshold:</i>	<i>Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</i>
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The road extension project is the development of a road extension to provide emergency access to the KCOC site. This construction would become a part of the KCOC emergency response plan. The road extension project would have **no impact** in this area.

Impact 3.6.16c: Exacerbate Wildfire Risks due to Maintenance Activities

<i>Threshold:</i>	<i>Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</i>
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The road extension project is the development of a road extension to provide emergency access to the KCOC site. This construction would become a part of the KCOC emergency response plan. Maintaining the roadway would be a part of the Proposed Project. However, this maintenance, including vegetation control and road repair, would only be done when permissible by CAL FIRE standards and not exacerbate the potential for fire risk over existing conditions. The road extension project would have **less than significant** impact in this area.

Impact 3.6.16d: Expose People or Structures to Significant Risks, as a Result of Runoff, Post-Fire Slope Instability, or Drainage Changes

<i>Threshold:</i>	<i>Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</i>
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The road extension project is the development of a road extension to provide emergency access to the KCOC site. The construction of this road extension would not expose persons or structures in the area to downslope or downstream flooding or landslides as no persons or structures are in the road extension project area. The road extension project would have **no impact** in this area.

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4.0 ALTERNATIVES TO THE PROPOSED PROJECT

The alternatives analysis consists of the following components: an overview of California Environmental Quality Act (CEQA) requirements for alternatives analysis, descriptions of the alternatives evaluated, a comparison between the anticipated environmental effects of the alternatives and those of the Proposed Project, and identification of an environmentally superior alternative.

4.1 Introduction

4.1.1 CEQA Requirements for Alternatives

CEQA requires that an EIR consider a reasonable range of alternatives to a proposed project that can attain most of the basic project objectives but has the potential to reduce or eliminate significant adverse impacts of the proposed project and may be feasibly accomplished in a successful manner, considering the economic, environmental, social, and technological factors involved. An EIR must evaluate the comparative merits of the alternatives (CEQA Guidelines § Section 15126.6(a), (d) and (e)). If certain alternatives are found to be infeasible, the analysis must explain the reasons and facts supporting that conclusion.

Section 15126.6(d) also requires that, if an alternative would cause one or more significant effects in addition to those caused by a proposed project, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. One of the alternatives analyzed must be the “No Project” alternative (CEQA Guidelines Section 15126.6(e)). The EIR must also identify alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and should briefly explain the reasons underlying the lead agency’s determination (CEQA Guidelines Section 15126.6(c)).

CEQA Guidelines Section 15126.6(e)(2) requires that the EIR identify the environmentally superior alternative. If that alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. The environmentally superior alternative is discussed in Section 4.5.

4.1.2 Development of Project Alternatives

This section discusses the reasoning for selecting and rejecting alternatives and summarizes the assumptions identified for the alternatives. The range of alternatives included for analysis in an EIR is governed by the “rule of reason.” The primary objective is formulating potential alternatives and choosing which ones to analyze to ensure that the selection and discussion of alternatives fosters informed decision making and informed public participation. This is accomplished by providing sufficient information to enable readers to reach conclusions themselves about such alternatives. This approach avoids assessing an unmanageable number of alternatives or analyzing alternatives that differ too little to provide additional meaningful insights about their environmental effects. The alternatives addressed in this Draft EIR were selected in consideration of one or more of the following factors:

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- The extent to which the alternative would avoid or reduce any of the identified significant effects of the project and yet would accomplish most of the basic objectives of the project.
- The feasibility of the alternative, taking into account site suitability and surrounding existing land uses, and consistency with applicable public plans, policies, and regulations.
- The appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice.

The alternatives analyzed in this Draft EIR were ultimately chosen based on each alternative's ability to feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects. The analysis provides readers with adequate information to compare the effectiveness of identified mitigation or significant adverse impacts and to enable readers to make decisions about the project. CEQA requires EIRs to address a reasonable range of reasonable alternatives, but not all potential alternatives.

4.1.3 *Project Objectives*

As noted above, an EIR must describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects (CEQA Guidelines Section 15126.6(a)). In identifying the range of alternatives for analysis in this EIR, the project objectives identified in **Section 2.0 Project Description** are reiterated below:

- 1) Provide improved facilities and accommodations to support and expand ministry.
- 2) Enhance the visual perception of the camp property.
- 3) Maximize the use and experience of water across the property.
- 4) Separate vehicle and pedestrian traffic.
- 5) Create a flexible layout that accommodates phased construction.

4.2 **Alternatives Descriptions and Analysis**

4.2.1 *Description of Alternatives*

Alternative 1: No Project

CEQA Guidelines Section 15126.6(e)(1) states that a No Project Alternative must be analyzed in every EIR. Alternative 1 evaluates the environmental impacts if the Project site were to remain in its current state as four camping areas, an RV camping area and five staff/guest homes. Based on the occupant levels for each area, the maximum daily occupancy is 310 persons in the summer months and approximately 150 persons in the fall and spring months. As discussed in **Section 2.0**, the existing Kidder Creek Orchard Camp (KCOC) occupies ±333 acres. The property has been used for camping for 40 years, and continues to be operated by Scott Valley residents, both paid and volunteer, with seasonal staff hired locally and

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outside the area. The existing use permit with an occupancy of 165 guests (310 including staff and volunteers) would remain as well as the existing zoning on the project site.

Alternative 2: No Pond

Alternative 2 would eliminate the proposed seven-acre pond from the Proposed Project. This alternative was chosen for analysis to determine if the elimination of the pond would reduce noise and water impacts from the site. All other proposed uses would be the same as the Proposed Project.

As with the Proposed Project, this alternative would require a new use permit to allow for a total occupancy of 844 persons and rezone to change the current TPZ zoning district to R-R-B-40.

Alternative 3: Reduced Project Development

The Reduced Project Development Alternative would include all of the proposed uses of the Project but would reduce the size of the Project to only accommodate 622 persons instead of the 844 persons for the Project. As with the Proposed Project, Alternative 3 would also require a rezone from TPZ to R-R-B-40 and a new use permit. The proposed seven-acre pond, amphitheaters, equestrian area, roadways, trails, and emergency access would be the same as the Proposed Project. Only the occupancy level and accommodations to support this occupation level would be reduced with this alternative. See **Table 4-1** for these changes.

The Proposed Project would increase the maximum occupancy over the existing KCOC by 508 persons. This, plus the existing maximum occupancy level of 310 persons results in the 844-total person occupancy. However, Alternative 3 would only add an additional 286 persons to the maximum occupancy level, which is a reduction of 43.7 percent over the Proposed Project and results in a maximum of 622-person occupancy level. Based on this, **Table 4-1** provides the uses and occupancy levels for Alternative 3.

Table 4-1. Alternative 3 Uses and Occupancy

Map ID#	Area	Estimated Building/ Area Size	Occupancy	
			Summer	Spring and Fall
New Structures				
1	Welcome Center and Dining	16,200 sq. ft. 3,000 sq. ft. deck	-	-
3	Equestrian Center	20,000 sq. ft.	-	-
6	The Pines	1,152 sq. ft. (each cabin)	10 cabins @ 16 (160 persons total)	176 persons
		576 sq. ft. (each cabin)	2 cabins @ 8 (16 persons total)	
7	Ranch Camp (relocated)	1,152 sq. ft. (each cabin)	4 cabins @ 16 persons (64 persons total)	80 persons
		576 sq. ft. (each cabin)	2 cabins @ 8 persons (16 persons total)	
10	High Adventure Camp #2	Tent structures	40 persons	0 persons
11	RV Area #2	12 spaces	24 persons	24 persons

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Map ID#	Area	Estimated Building/ Area Size	Occupancy	
			Summer	Spring and Fall
12	Staff housing/ Retreat Center #1	4,950 sq. ft.	40 persons	40 persons
12	Staff housing/ Retreat Center #2	4,950 sq. ft.	40 persons	40 persons
15	Adult Retreat Center #1	4,950 sq. ft.	40 persons	40 persons
Alternative 3 Total			440 persons	400 persons
Existing Structures				
10	High Adventure Camp #1	Tent Structures	120 persons	0
11	RV Area #1	12 spaces	24 persons	24 persons
14	Staff Residence #1	2,200 sq. ft.	6 persons	6 persons
14	Staff Residence #2	1,248 sq. ft.	6 persons	6 persons
13	Staff/Guest House #1	1,728 sq. ft.	10 persons	10 persons
13	Staff/Guest House #2	2,000 sq. ft.	10 persons	10 persons
13	Staff/Guest House #3	1,850 sq. ft.	6 persons	6 persons
<i>Existing Total</i>			<i>182 persons</i>	<i>62 persons</i>
Total:			622 persons	462 persons

Table 4-2 illustrates difference between the Proposed Project and Alternative 3 in regard to the square footage of the occupancy, structure and RV space. For example, The Pines (Map ID #6) will have five fewer cabins and will accommodate 72 fewer people than the Proposed Project.

Table 4-2. Comparison of Alternative 3 to Proposed Project

Map ID#	Area	Compared to Project, Alternative 3 Will Result In	
		Estimated Building/ Area Size	Occupancy (Based on Summer Occupancy)
1	Welcome Center and Dining	Same	-
3	Equestrian Center	Same	-
6	The Pines	Same	Same
		Total of 576 sq. ft. less of cabins (1 cabin)	(8 fewer persons)
7	Ranch Camp (relocated)	same	same
		Total of 576 sq. ft. less of cabins (1 cabin)	(8 fewer persons)
9	Base Camp #1 (relocated)	not relocated	not included
9	Base Camp #2	not included	not included
10	High Adventure Camp #2	same	same
11	RV Area #2	same	same
11	RV Area #3	not included	not included
12	Staff housing/ Retreat Center #1	same	same
12	Staff housing/ Retreat Center #2	same	same
15	Adult Retreat Center #1	same	same
15	Adult Retreat Center #2	not included	not included
15	Adult Retreat Center #3	not included	not included
14	Staff Residence #3	not included	not included

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Map ID#	Area	Compared to Project, Alternative 3 Will Result In	
		Estimated Building/ Area Size	Occupancy (Based on Summer Occupancy)
	Total:	12,902 sq. ft. less of building space, 12 fewer RV spaces, 2 fewer Adult Retreat Centers 1 fewer staff residence 2 fewer cabins 1 fewer base camp	222 fewer persons

A smaller project would generally have incrementally fewer air quality, GHG, noise, and traffic impacts as well as lower demand for water and wastewater services. Therefore, Alternative 3 was chosen for analysis to determine if this alternative would result in fewer impacts to the physical environment than the Proposed Project and still meet the majority of the Proposed Project’s objectives.

Alternatives Considered but Rejected as Infeasible

Alternate Site Alternative

An alternative with the Project on an alternate site in the general area of the Proposed Project was considered but rejected for a number of reasons: the ability to assemble and purchase acreages of the size of the Project would be cost prohibitive and infeasible; an alternate site would essentially double the number of camps as the existing camp would continue to operate and therefore would result in greater impacts than the Proposed Project site; insufficient vacant correctly zoned lots to accommodate the Project; and the Project site is already used for the proposed purpose and, therefore, the increase of this use would have less impact than the development of a new camp on vacant undisturbed land.

Significance Findings of the EIR

This EIR determined that the Proposed Project either resulted in no impacts or impacts that could be reduced to a less-than-significant level through implementation of mitigation measures. The alternatives discussion focuses on environmental impacts of the Proposed Project that either require mitigation measures or that could not be mitigated to less than significant. Please refer to **Table ES-2** in the Executive Summary for a complete listing of project impacts and mitigation measures.

4.2.2 Analysis of Alternatives

Because the Initial Study determined that only certain impact analysis areas were to be analyzed in this EIR, each alternative is compared to the Proposed Project using the analysis presented in this EIR as well as the analysis from the Initial Study. The Project alternatives are evaluated in less detail than those of the Proposed Project, and the impacts are described in terms of difference in outcome compared with implementing the Proposed Project. **Table 4-5** in **Section 4.3** provides an at-a-glance comparison of the environmental benefits and impacts of each alternative. **Table 4-6** compares the alternatives to the basic project objectives.

Alternative 1: No Project

Under the No Project Alternative, future development of the Proposed Project would not occur, and the Project site would remain as it currently exists, that of the KCOC with an occupancy maximum of 310 persons.

Aesthetics and Scenic Resources

The Initial Study completed for the Proposed Project determined that Project would not result in any significant impacts to aesthetics and scenic resources.

Alternative 1 would not result in the development of any new buildings or RV parking facilities on the site. The site would remain in its current condition and, therefore Alternative 1 would neither impact views of scenic resources nor substantially degrade the existing visual character or quality of the site. Also, Alternative 1 would not introduce new sources of light and glare, which would affect daytime or nighttime views in the area.

Impacts to aesthetics, including new structures from the Proposed Project, were determined as a part of the Initial Study analysis to be less than significant with no mitigation measures necessary. However, Alternative 1 would not alter the existing aesthetics and scenic resources in any way. Therefore, Alternative 1 is considered superior to the Proposed Project with regard to impacts to aesthetics and scenic resources.

Agriculture and Forestry Resources

As discussed in **Section 3.1**, the Proposed Project would not result in impacts to agricultural resources. The 24.8 acres identified as Prime Farmland by the DOC are located in the valley area of the Project site. The Project proposes a new Welcome Center (#32 on **Figure 5**) and an Amphitheater (#19 on **Figure 5**), located in the area identified as Prime Farmland by DOC. However, the construction of these uses would not remove the ability to use the remaining area as farmland, if so desired in the future, as these structures are relatively small in size and the construction sites are on the edge of the Prime Farmland area.

Alternative 1 includes a number of existing structures such as the Welcome Center (#2 on **Figure 2**), shop, staff house, food storage, snack shop, booster pump, group meeting area and storage barn (#18 on **Figure 2**) in the area. These are located in an area identified as Prime Farmland by the DOC. These uses would not be expanded in Alternative 1 and any issues related to agricultural resources would remain as they currently exist and would not expand. However, although the Proposed Project would have a less than significant impact to agricultural resources, the Proposed Project would increase the number of structures in the Prime Farmland area. As such, Alternative 1 is considered superior to the Proposed Project with regard to impacts to agricultural resources.

Alternative 1 would not result in the rezoning of 170 acres of timber production land to rural residential uses as proposed for the Project. The TPZ District uses will remain as they currently exist. As such,

Alternative 1 is considered superior to the Proposed Project with regard to impacts to forestry and timber resources.

Air Quality

As discussed in the Initial Study, the Project-generated air emissions would not exceed applicable air quality thresholds, not result in toxic air contaminant (TAC) impacts, and not conflict with regional air quality management planning. However, due to portions of the site being classified as high for erosion, there is the potential for fugitive dust during land disturbance activities. As such, implementation of mitigation measure **MM 3.1** was required to reduce this impact to a less than significant level.

Alternative 1 would not exceed any air quality thresholds as the site would remain in its existing condition and therefore no impact to air quality would occur. As such, the impacts to air quality under this alternative are less than the Proposed Project.

Biological Resources

The Proposed Project would result in potential impacts to special status species, riparian habitats, wetlands, migratory species. However, as defined in the Initial Study, mitigation measures **MM 4.1 through MM 4.6** would reduce these potential impacts to a less than significant level. As no new construction or other uses are proposed with Alternative 1, this alternative would not result in impacts to biological resources beyond those currently existing. However, the Proposed Project's mitigation measure does provide one mitigation that would be beneficial for implementation in Alternative 1. Mitigation measure **MM 4.1** requires interpretative signage to be placed in proximity to the plant populations to educate camp staff and visitors regarding the plants status as a special status species. This would assist in the education of camp visitors to the concerns for special status species. However, Alternative 1 is still considered superior to the Proposed Project with regard to impacts to biological resources as the impacts to these resources would be greater with the Proposed Project than with Alternative 1.

Cultural Resources

The Initial Study prepared for the Proposed Project determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological, paleontological and tribal resources. However, as defined in the Initial Study, mitigation measures **MM 5.1 through MM 5.3** would reduce these potential impacts to a less than significant level. As no new construction is proposed with Alternative 1, this alternative would not result in impacts to cultural resources. As such, the impacts to cultural resources under this alternative are less than the Proposed Project and Alternative 1 is considered superior to the Proposed Project with regard to impacts to cultural resources.

Geology and Soils

The Initial Study prepared for the Proposed Project determined that the Project would result in potential impacts due to a substantial amount of soil erosion. However, as defined in the Initial Study, mitigation measure **MM 6.1** would reduce this potential impact to a less than significant level. As no new structures or other uses are proposed with Alternative 1, this alternative would not result in soil erosion impacts. As

such, the impacts resulting from soil erosion under this alternative are less than the Proposed Project and Alternative 1 is considered superior to the Proposed Project with regard to impacts to geology and soils.

Greenhouse Gases and Climate Change

The Proposed Project's GHG emissions were determined to be less than significant as no GHG thresholds have been established for the Siskiyou County Air Pollution Control District (SCAPCD) and the Project would not produce large amounts of GHG emissions.

Although Alternative 1 currently produces GHG emissions from automobiles, campfires and other uses, Alternative 1 would have no additional development and therefore no increase of GHG emissions would occur. As such, Alternative 1 is considered superior to the Proposed Project with regard to impacts from GHG and climate change.

Hazards and Hazardous Materials

The Initial Study prepared for the Proposed Project determined that the Project would not result in any impact from hazardous materials. However, there is a potential for wildland fire hazards. This impact analysis area is discussed in this EIR and the Project site is within a Very High Fire Severity Zone according to CAL FIRE. As discussed in **Section 3.2**, existing regulation reduces the potential for wildland fire impacts on the Project site. Additionally, it has been determined that the site has roadway easements to provide emergency access to and from the site. Mitigation measure **MM 8.1** requires that the roadway be maintained by the Project and approved by the County and CAL FIRE on an annual basis. This mitigation would reduce wildland fire emergency access to a less than significant level.

Alternative 1 is in the same location and has the same uses, although to a lesser degree, as the Proposed Project. As such, this alternative would have the same result regarding hazardous materials sites and hazards from the site. Additionally, the potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires would be similar. However, the Proposed Project would potentially expose more people to this hazard due the greater number of people allowed at the site at any one time. As such, Alternative 1 is considered superior to the Proposed Project with regard to impacts from wildland fires.

Hydrology and Water Quality

The Proposed Project would have a less than significant impact to water quality with the implementation of mitigation measure **MM 4.5**. The Project site is not within a 100-year flood zone. Additionally, there is adequate groundwater within the Scott River Valley Groundwater Basin to serve the Project's additional water demand and not affect other groundwater users. The addition of a seven-acre pond would alter the existing drainage pattern to the extent of water that would be taken from the Barker Ditch until the pond is full. This removal of this water would only occur during the rainy season when water extraction would not affect downstream flow. The Proposed Project would have a less than significant impact in these areas. Development of the pond would require a dam to contain the pond water. Mitigation measure **MM 9.1** would ensure that this dam is constructed properly and the potential for impact would be less than significant.

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Alternative 1 would not result in the construction of new buildings, RV parking areas, roadways or the development of a pond. Alternative 1 would be the continuation of a use that currently exists and would not impact hydrology and water quality beyond those already existing. As such, Alternative 1 is considered superior to the Proposed Project with regard to impacts to hydrology and water quality.

Land Use

As with the Proposed Project, development of Alternative 1 would not result in the physical division of an established community or conflict with a habitat conservation plan or natural community conservation plan. The Proposed Project requires a zone change of 170-acres from TPZ to R-R-B-40. Alternative 1 would not result in any changes to the zoning for the Project site and therefore would not have any potential conflicts with existing Siskiyou County land use policies or regulations. As such, impacts on land use would be less for Alternative 1 than those anticipated under the Proposed Project.

Mineral Resources

The Initial Study determined that there were no impacts to mineral resources from development of the Proposed Project. Alternative 1 would have a similar impact.

Noise

The Proposed Project will create noise during construction and operation of the new facilities. Through mitigation measures **MM 12.1 and MM 12.2**, the Proposed Project's noise impacts would be mitigated to a less than significant level.

Section 3.4 identifies current noise levels at the Project site. Alternative 1 would not result in increased noise levels. Because Alternative 1 would not result in changes to the existing conditions of the site, no noise impacts would occur. Overall, Alternative 1 would have less of an impact related to noise than the Proposed project.

Population and Housing

As discussed in the Initial Study, the Proposed Project is not expected to result in a substantial increase in permanent population or new housing to the area and the impact is considered less than significant.

No additional development of the site would occur under Alternative 1. As such, Alternative 1 would not result in population growth. Neither the Proposed Project nor Alternative 1 would remove housing or displace persons. While the Proposed Project would result in only a temporary increase in population to the area during the spring, summer and fall months, Alternative 1 would have no impact regarding population and housing over existing conditions and therefore would have less impact than the Proposed Project.

Public Services

The Initial Study determined that implementation of the Proposed Project would result in less than significant impacts to law enforcement, fire protection, schools, and parks and recreation. While none of

the Proposed Project's impacts would require new or expanded facilities, the Proposed Project would increase the use of nearby recreation areas. However, this increase in use would not result in new or expanded facilities.

Alternative 1 would have no increase in development. The demand for public services would be the same as it currently exists. As such, continuation of the site for Alternative 1 would have no impact to public services. Alternative 1 would result in less impact when compared to the Proposed Project regarding public services.

Recreation

The Initial Study determined that the Proposed Project would have a negligible impact on local recreation facilities and would not cause deterioration or the need for expanded or new facilities.

Alternative 1 would have no increase in visitors to the site. The demand for recreational facilities would be the same as it currently exists. As such, continuation of the site for Alternative 1 would have no impact to recreation. Alternative 1 would result in less impact when compared to the Proposed Project regarding recreation.

Transportation and Circulation

The Traffic Impact Study prepared for the Proposed Project determined that the Project would increase daily traffic volume by 1,110 trips over existing conditions. However, based on the County's and Caltrans' level of service (LOS) for the area roadways, this increase would not exceed the roadway LOS thresholds. As such, the Project would not result in a significant impact. Additionally, the Proposed Project would not result in significant impacts to public transit or bicycle/pedestrian facilities.

Alternative 1 would result in no increases in traffic nor increases in the demand for public transit or bicycle/pedestrian facilities. While the Proposed Project would not result in a significant impact, the Project would substantially increase the number of vehicle trips to and from the Project site. As such, Alternative 1 would have less impact when compared to the Proposed Project regarding transportation and circulation.

Utilities

As determined in the Initial Study, the Proposed Project would result in less than significant impacts to water, wastewater, stormwater drainage, and solid waste capacity and facilities. Alternative 1 would have no increase in development. The demand for utilities would be the same as it exists currently. As such, continuation of the site for Alternative 1 would have no impact to utilities. Alternative 1 would result in less impact when compared to the Proposed Project regarding utilities.

To summarize, while Alternative 1 avoids all of the environmental impacts of the Proposed Project, it does not meet any of the five project objectives.

Alternative 2: No Pond

Under the No Pond Alternative, the proposed Project would be completed without the seven-acre pond. The area set aside for the pond would remain in its current state. All other development proposed as a part of the Project would be completed as proposed. This alternative would require a zone change and new use permit as required for the Proposed Project. The No Pond alternative was chosen for analysis because much of the noise and hydrological impacts are a result of development of the pond.

Aesthetics and Visual Resources

The Initial Study completed for the Proposed Project determined that Project would not result in any significant impacts to aesthetics and scenic resources.

Because this alternative would have the same occupancy level, same construction, with exception of the pond, same emergency access, same equestrian center, and same roadways/trails as the Proposed Project, Alternative 2 would have a similar impact to aesthetics and scenic resources as the Proposed Project impacts.

Agriculture and Forestry Resources

As discussed in **Section 3.1**, the Proposed Project would not result in impacts to agricultural resources. The 24.8 acres identified as Prime Farmland by the DOC are located in the valley area of the Project site. The Project proposes a new Welcome Center (#32 on **Figure 5**) and an Amphitheater (#19 on **Figure 5**), located in the area identified as Prime Farmland by DOC. However, the construction of these uses would not remove the ability to use the remaining area as farmland, if so desired in the future, as these structures are relatively small in size and the construction sites are on the edge of the Prime Farmland area.

Alternative 2 would also construct the Welcome Center and Amphitheater and in the same locations. As such, Alternative 2 would have the same impact to agricultural resources as the Proposed Project. Alternative 2 would also result in the rezoning of 170-acres of timber production land to rural residential uses as proposed for the Project. As such, Alternative 2 is considered equal to the Proposed Project with regard to impacts to forestry and timber resources.

Air Quality

As discussed in the Initial Study, the Project-generated air emissions would not exceed applicable air quality thresholds, not result in TAC impacts, and not conflict with regional air quality management planning. However, due to portions of the site being classified as high for erosion, there is the potential for fugitive dust during land disturbance activities. As such, implementation of mitigation measure **MM 3.1** was required to reduce this impact to a less than significant level.

Alternative 2 would also not exceed applicable air quality thresholds, not result in TAC impacts, and not conflict with regional air quality management planning. Mitigation measure **MM 3.1** would still be required for the alternative to reduce this potential impact. However, not creating a seven-acre pond

would also reduce the amount of fugitive dust from construction with this alternative. Although the Proposed Project's impact would be less than significant with implementation of mitigation measure **MM 3.1**, Alternative 2 would result in less area of erosion potential and therefore less fugitive dust requiring mitigation. While both the Proposed Project and Alternative 2 would result in a less than significant impact to air quality, Alternative 2 is considered superior to the Proposed Project with regard to impacts to air quality as Alternative would create less air quality emissions during construction.

Biological Resources

The Proposed Project would result in potential impacts to special status species, riparian habitats, wetlands, migratory species. However, as defined in the Initial Study, mitigation measures **MM 4.1 through MM 4.6** would reduce these potential impacts to a less than significant level.

Alternative 2 would not include the development of seven acres of land that are currently occupied by natural biological resources. The *Botanical Resource Survey Addendum* completed by Resource Management (2013) for the Proposed Project indicates that the area of the proposed pond is occupied by mixed conifer forest and barren ground¹. While the proposed pond area was not specifically surveyed for special status species and migratory species as a part of the Initial Study and while mitigation measures provided in the Initial Study reduced impacts to biological resources to a less than significant impact, no disturbance of the pond area, as would be the case in Alternative 2, would eliminate the potential for impacts to biological resources in this area. As such, Alternative 2 is considered superior to the Proposed Project with regard to impacts to biological resources.

Cultural Resources

The Initial Study identified that the Project site was surveyed for cultural and historical resources in 2010 and 2013 by Resource Management archaeologists (Siskiyou County 2016). No prehistoric or historic archaeological sites were identified during the surveys. The Initial Study determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological, paleontological and tribal resources. However, as defined in the Initial Study, mitigation measures **MM 5.1 through MM 5.3** would reduce these potential impacts to a less than significant level.

With exception of the seven-acre pond site, Alternative 2 would have similar development in the areas identified for development in the Proposed Project's site plan. As no cultural resources were found during the cultural resources survey, it can be assumed that this would be the same for Alternative 2.

Alternative 2 would also require mitigation for potential impacts to unknown/undiscovered historical, archaeological, paleontological and tribal resources. As with the Proposed Project, these mitigation measures would reduce the potential impacts of Alternative 2 to a less than significant level. However, implementation of Alternative 2 would result in less ground-disturbing activities than the Proposed

¹ See Initial Study Appendix C *Botanical Resource Survey Addendum* Proposed Plans for Site with Plant Communities in Background map.

Project and therefore, less potential to uncover unknown cultural resources. As such, Alternative 2 would be superior to the Proposed Project in the potential for impacting cultural resources.

Geology and Soils

The Initial Study prepared for the Proposed Project determined that the Project would result in potential impacts due to a substantial amount of soil erosion. However, as defined in the Initial Study, mitigation measure **MM 6.1** would reduce this potential impact to a less than significant level.

Alternative 2 would also have the potential for erosion impacts, which will require mitigation. However, due to elimination of the pond in Alternative 2, the land disturbance will be less than the Proposed Project. All other geology and soils impacts would be similar to the Proposed Project as Alternative 2 is located on the same site as the Proposed Project and geology and soils impacts are generally based on location.

Greenhouse Gases and Climate Change

The Proposed Project's GHG emissions were determined in the Initial Study to be less than significant as no GHG thresholds have been established for the SCAPCD and the Project would not produce large amounts of GHG emissions.

GHG emissions from the Proposed Project would come from car and truck emissions during construction, car and truck emissions during operation, campfires, fireplaces, waste disposal, energy use, and other GHG-producing activities. Alternative 2 would not include the construction of the seven-acre pond. This would eliminate the GHG emissions from the vehicles and worker trips used during this construction. All other GHG emissions would be the same as the Proposed Project. As such, Alternative 2 is considered superior to the Proposed Project with regard to impacts to from GHG emissions and climate change. In any case, as a mitigation measure is not required to reduce GHG emissions, both Alternative 2 and the Proposed Project would have a less than significant GHG and Climate Change impact.

Hazards and Hazardous Materials

The Initial Study prepared for the Proposed Project determined that the Project would not result in any impact from hazardous materials. However, there is a potential for wildland fire hazards. This impact analysis area is discussed in this EIR and the Project site is within a Very High Fire Severity Zone according to CAL FIRE. As discussed in **Section 3.2**, existing regulation reduces the potential for wildland fire impacts on the Project site. Additionally, it has been determined that the site has roadway easements to provide emergency access to and from the site. Mitigation measure **MM 8.1** requires that the roadway be maintained by the Project and approved by the County and CAL FIRE on an annual basis. This mitigation would reduce wildland fire emergency access to a less than significant level.

Alternative 2 is in the same location and has the same uses, with the exception of the pond, as the Proposed Project. As such, this alternative would have the same result regarding hazardous materials sites and hazards from the site. Additionally, the potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires would be similar. The elimination of the pond would not

reduce the number of persons allowed on the site at any one time. As such, Alternative 2 is considered be equal to the Proposed Project with regard to impacts from wildland fires.

Hydrology and Water Quality

The Proposed Project would have a less than significant impact to water quality with the implementation of mitigation measure **MM 4.5**. The Project site is not within a 100-year flood zone. Additionally, there is adequate groundwater within the Scott River Valley Groundwater Basin to serve the Project's additional water demand and not affect other groundwater users. The addition of a seven-acre pond would alter the existing drainage pattern to the extent of water that would be taken from the Barker Ditch until the pond is full. This removal of this water would only occur during the rainy season when water extraction would not affect downstream flow. The Proposed Project would have a less than significant impact in these areas. Development of the pond would require a dam to contain the pond water. Mitigation measure **MM 9.1** would ensure that this dam is constructed properly and the potential for impact would be less than significant.

Alternative 2 would be comparable to the Proposed Project regarding water quality impacts. Alternative 2 would also require mitigation to protect water quality such as mitigation measure **MM 4.5**. However, elimination of the pond would lessen the potential for water quality issues during construction as the pond would not be developed. Additionally, Alternative 2 would not require 36 AF of water or the alteration of the existing drainage pattern to fill the pond. However, Alternative 2 would not meet one of the main objectives of the Proposed Project, that of "maximize the use and experience of water across the property". Further, an argument can be made that the addition of a seven-acre pond on the site would add to the visual character of the property. Thus, elimination of the pond would also not meet another Project objective, that of "enhance the visual perception of the camp property".

On a purely environmental basis, Alternative 2 would be the superior project. However, CEQA Guidelines Section 15126.6 requires that an alternative should "attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project". Because Alternative 2 does not meet two of the five Project objectives, and **Section 3.3 Hydrology and Water Quality** identifies that all water quality and hydrology impacts from the proposed Project are less than significant or can be mitigated to less than significant level, the Proposed Project is superior to Alternative 2.

Land Use

As with the Proposed Project, development of Alternative 2 would not result in the physical division of an established community or conflict with a habitat conservation plan or natural community conservation plan. The Proposed Project requires a zone change of 170 acres from TPZ to R-R-B-40. As such, impacts to land use would be the same for Alternative 2 as the Proposed Project.

Mineral Resources

The Initial Study determined that there were no impacts to mineral resources from development of the Proposed Project. Alternative 2 would have a similar impact.

Noise

The Proposed Project will create noise during construction and operation of the new facilities. Through mitigation measures **MM 12.1 and MM 12.2**, the Proposed Project's construction noise and noise from the amphitheaters would be reduced to a less than significant level.

As with the Proposed Project, Alternative 2 would include the development of two amphitheaters. Noise from the amphitheaters would be subject to mitigation measure **MM 12.1**, which would eliminate nighttime noise from the amphitheaters. The Alternative 2 would result in similar construction, although without the pond, the construction period would be shorter. As with the proposed Project, Alternative 2's construction noise would be mitigated through mitigation measure **MM 12.2**.

One of the main noise sources of concern for the Proposed Project is noise generated from the seven-acre pond. The primary noise source associated with the proposed large pond area will be shouting campers. As discussed in **Section 3.4 Noise**, exterior noise levels from the proposed large pond area are predicted to range from 42-46 dB L_{dn} at the nearest residences. Standard construction (wood or stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), results in an exterior-to-interior noise reduction of at least 25 dB with windows closed and approximately 15 dB with windows open. As a result, noise levels from the proposed large pond area are also predicted to satisfy the Siskiyou County 45-dB CNEL interior noise level standard within those nearest residences by a wide margin even with windows in the open configuration. Additionally, increases in ambient noise levels due to the pond at the nearest residences were below 3 dB relative to measured existing conditions. As a result, no significant impacts from increases in ambient noise levels at the nearest residences would result from activities at the proposed large pond area.

Alternative 2 would eliminate the potential for noise from the proposed pond. However, as discussed above, noise from pond activities would not exceed the County's noise standards at the nearest residential unit. As shown in **Table 3.4-9**, the development of the pond would raise the ambient noise level in the area and therefore, Alternative 2 would have less impact with regard to noise when compared to the Proposed Project. In any case, as a mitigation measure is not required to reduce noise from the pond, both Alternative 2 and the Proposed Project would have a less than significant noise impact.

Population and Housing

As discussed in the Initial Study, the Proposed Project is not expected to result in a substantial increase in permanent population or new housing to the area and the impact is considered less than significant. Alternative 2 would have the same impact to population and housing.

Public Services

The Initial Study determined that implementation of the Proposed Project would result in less than significant impacts to law enforcement, fire protection, schools, and parks and recreation. While none of the Proposed Project's impacts would require new or expanded facilities, the Proposed Project would increase the use of nearby recreation areas. However, this increase in use would not result in new or

expanded facilities. Alternative 2 would have the same impact to law enforcement, fire protection, schools, and parks and recreation as the Proposed Project.

Recreation

The Initial Study determined that the Proposed Project would have a negligible impact on local recreation facilities and would not cause deterioration or the need for expanded or new facilities. Alternative 2 would have a similar negligible impact.

Transportation and Circulation

The Traffic Impact Study prepared for the Proposed Project determined that the Project would increase daily traffic volume by 1,110 trips over existing conditions as shown in **Table 3.5-6**. However, based on the County's and Caltrans' LOS for the area roadways, this increase would not exceed the roadway LOS thresholds. As such, the Project would not result in a significant impact. Additionally, the Proposed Project would not result in significant impacts to public transit or bicycle/pedestrian facilities.

Alternative 2 would have the same maximum occupancy level as the Proposed Project. Therefore, Alternative 2 would be equal to the Proposed Project regarding transportation and circulation.

Utilities

As determined in the Initial Study, the Proposed Project would result in less than significant impacts to water, wastewater, stormwater drainage, and solid waste capacity and facilities. Alternative 2 would have the same development potential as the Proposed Project. Therefore, Alternative 2 would also have a less than significant impact to water, wastewater, stormwater drainage, and solid waste capacity and facilities. Alternative 2 would equal to the Proposed Project with regard to impacts to utilities.

Alternative 3: Reduced Project Development

The Reduced Project Development Alternative would include all of the proposed uses of the Proposed Project but would reduce the development and occupation levels by approximately 44 percent. Alternative 3 would accommodate a maximum occupancy of 622 persons instead of the 844 persons for the Project. As with the Proposed Project, Alternative 2 would also require a rezone from TPZ to R-R-B-40 and a new use permit. The proposed seven-acre pond, amphitheaters, equestrian area, roadways, trails, and emergency access would be the same as the Proposed Project. Only the occupancy level and accommodations to support this occupation level would be reduced with this alternative.

Aesthetics and Visual Resources

The Initial Study completed for the Proposed Project determined that Project would not result in any significant impacts to aesthetics and scenic resources.

Alternative 3 would construct fewer buildings, smaller buildings and fewer RV parking spaces than the Proposed Project. However, the construction and use of these facilities does not necessarily result in fewer impacts to aesthetics and scenic resources than the Proposed Project as Alternative 3 would still

place these structures in areas that do not currently have them. As discussed in the Initial Study, the Proposed Project with its the greater amount of facilities, does not result in an impact to aesthetics and visual resources.

Alternative 3, with fewer buildings and RV spaces, would also result in less potential for new sources of light and glare than the Proposed Project which would affect daytime or nighttime views in the area. The Initial Study determined that the Proposed Project would have a less than significant impact in this area as the Project would be subject to Section 10-6.5602 of the Siskiyou County Code, which requires that exposed sources of light, glare, or heat be shielded so as not to be directed outside the premises. Alternative 3 would also be required to comply with this ordinance.

Therefore, Alternative 3 is considered to be equal to the Proposed Project with regard to impacts to aesthetics and scenic resources.

Agriculture and Forestry Resources

As discussed in **Section 3.1**, the Proposed Project would not result in impacts to agricultural resources. The 24.8 acres identified as Prime Farmland by the DOC are located in the valley area of the Project site. The Project proposes a new Welcome Center (#32 on **Figure 5**) and an Amphitheater (#19 on **Figure 5**) which are located in the area identified as Prime Farmland by DOC. However, the construction of these uses would not remove the ability to use the remaining area as farmland, if so desired in the future, as these structures are relatively small in size and the construction sites are on the edge of the Prime Farmland area.

Alternative 3 would also construct the Welcome Center and Amphitheater and in the same locations. As such, Alternative 3 would have the same impact to agricultural resources as the Proposed Project. Alternative 3 would also result in the rezoning of 170-acres of timber production land to rural residential uses as proposed for the Project. As such, Alternative 3 is considered equal to the Proposed Project with regard to impacts to forestry and timber resources.

Air Quality

The Proposed Project's air emissions would not exceed applicable air quality thresholds, not result in TAC impacts, and not conflict with regional air quality management planning. However, due to portions of the site being classified as high for erosion, there is the potential for fugitive dust during land disturbance activities. As such, implementation of mitigation measure **MM 3.1** was required to reduce this impact to a less than significant level.

The total square footage for Alternative 3 would be 12,902 square feet less and 12 RV parking spaces fewer than the Proposed Project. This reduction would result in less area being graded for building pads and parking spaces. This in turn would result in less soil being exposed to erosion and thereby reduce the potential for fugitive dust. In any case, mitigation measure **MM 3.1** would still be required for Alternative 3 to reduce the fugitive dust from Alternative 3's other construction. However, with implementation of this mitigation measure the Proposed Project would not exceed air quality emissions exceeded federal or state air quality thresholds and result in a less than significant impact in this area.

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While Alternative 3 would also result in a less than significant impact, Alternative 3 would be superior to the Proposed Project in this area because would have less fugitive dust it.

Biological Resources

The Proposed Project would result in potential impacts to special status species, riparian habitats, wetlands, and migratory species. However, as defined in the Initial Study, mitigation measures **MM 4.1 through MM 4.6** would reduce these potential impacts to a less than significant level.

Alternative 3 would be an approximately 26 percent smaller project than the Proposed Project in occupancy, 14 percent smaller in building square footage, one less RV Area and one less base camp. The Initial Study provides mitigation to protect special status species, migratory birds, water quality, and wetlands. While Alternative 3 would reduce the size of the Proposed Project, Alternative 3, would be required to provide mitigation to protect these biological resources, similar to if not the same, as the Proposed Project. As with the Proposed Project, these mitigation measures for Alternative 3 would reduce any impacts to biological resources to a less than significant level. Biological resources impacts are generally based on the location of the project and the locations of ground disturbance activities. Generally, a reduced development would impact less ground and, in turn, have less potential for impacts to biological resources. As such, Alternative 3 would be superior to the Proposed Project in this area.

Cultural Resources

The Initial Study identified that the project site was surveyed for cultural and historical resources in 2010 and 2013 by Resource Management (2014) archaeologists. No prehistoric or historic archaeological sites were identified during the surveys. The Initial Study determined that the Project would result in potential impacts to unknown/undiscovered historical, archaeological, paleontological and tribal resources. However, as defined in the Initial Study, mitigation measures **MM 5.1 through MM 5.3** would reduce these potential impacts to a less than significant level.

Alternative 3 would have similar development in the areas identified for development in the Proposed Project's site plan. As no cultural resources were found during the cultural resources survey, it can be assumed that this would be the same for Alternative 3. Alternative 3 would also require mitigation for potential impacts to unknown/undiscovered historical, archaeological, paleontological and tribal resources. As with the Proposed Project, these mitigation measures would reduce Alternative 3's potential impacts to a less than significant level. As such, Alternative 3 would be equal to the Proposed Project in the potential for impacting cultural resources.

Geology and Soils

The Initial Study prepared for the Proposed Project determined that the Project would result in potential impacts due to a substantial amount of soil erosion. However, as defined in the Initial Study, mitigation measure **MM 6.1** would reduce this potential impact to a less than significant level.

Alternative 3 would also have the potential for erosion impacts which will require mitigation. However, due to the reduced amount of structures to be built in Alternative 3, the land disturbance will be less than

the Proposed Project. All other geology and soils impacts would be similar to the Proposed Project as Alternative 3 is located on the same site as the Proposed Project and geology and soils impacts are generally based on location.

Greenhouse Gases and Climate Change

The Proposed Project's GHG emissions were determined to be less than significant as no GHG thresholds have been established for the SCAPCD and the Project would not produce large amounts of GHG emissions.

Alternative 3 would have fewer visitors and less construction to the site than the Proposed Project, which would mean fewer vehicles, campfires, and less energy and other GHG-generating uses. As such, Alternative 3 is considered superior to the Proposed Project with regard to impacts from GHG and climate change.

Hazards and Hazardous Materials

The Initial Study prepared for the Proposed Project determined that the Project would not result in any impact from hazardous materials. However, there is a potential for wildland fire hazards. This impact analysis area is discussed in this EIR and the Project site is within a Very High Fire Severity Zone according to CAL FIRE. As discussed in **Section 3.2**, existing regulation reduces the potential for wildland fire impacts on the Project site. Additionally, it has been determined that the site has roadway easements to provide emergency access to and from the site. Mitigation measure **MM 8.1** requires that the roadway be maintained by the Project and approved by the County and CAL FIRE on an annual basis. This mitigation would reduce wildland fire emergency access to a less than significant level.

Alternative 3 is in the same location and has the same uses, although to a lesser degree, as the Proposed Project. As such, this alternative would have the same result regarding hazardous materials sites and hazards from the site. Additionally, the potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires would be similar. However, the Proposed Project would potentially expose more people to this hazard due the greater number of people allowed at the site at any one time. As such, Alternative 3 is considered superior to the Proposed Project with regard to impacts from wildland fires.

Hydrology and Water Quality

The Proposed Project would have a less than significant impact to water quality with the implementation of mitigation measure **MM 4.5**. The Project site is not within a 100-year flood zone. Additionally, there is adequate groundwater within the Scott River Valley Groundwater Basin to serve the Project's additional water demand and not affect other groundwater users. The addition of a seven-acre pond would alter the existing drainage pattern to the extent of water that would be taken from the Barker Ditch until the pond is full. This removal of this water would only occur during the rainy season when water extraction would not affect downstream flow. The Proposed Project would have a less than significant impact in these areas. Development of the pond would require a dam to contain the pond water. Mitigation measure

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MM 9.1 would ensure that this dam is constructed properly and the potential for impact would be less than significant.

Alternative 3 would result in a smaller number of new buildings and RV parking areas and visitors to the Proposed Project. However, the development of the seven-acre pond would still be a part of this alternative. As shown in **Table 3.3-3**, the Alternative 3 would require an estimated 19.2 AF of groundwater annually or 5.9 AF less than the Proposed Project. Alternative 3 would also be required to implement mitigation measure **MM 4.5** for the protection of water quality. Additionally, Alternative 3 would require mitigation measure **MM 9.1**. Both of these mitigations would reduce Alternative 3's impacts to hydrology and water quality to a less than significant level, as would be the case for the Proposed Project. However, because the potential for water quality impacts and groundwater demand is less with Alternative 3, Alternative 3 is the superior project.

Table 4-3. Alternative 3 Water Demand

Time Period	Proposed Project at Buildout			Alternative 3 at Buildout			Difference		
	Occupancy	Daily Demand (gal)	Annual Demand (gal)	Occupancy	Daily Demand (gal)	Annual Demand (gal)	Occupancy	Daily Demand (gal)	Annual Demand (gal)
Spring/Fall 180 days	588	26,460	4,762,800	462	20,790	3,742,200	-126	- 5,670	- 1,020,600
Summer 90 days	844	37,980	3,418,200	622	27,990	2,519,100	-222	-9,990	-899,100
Total			8,181,000			6,261,300			- 1,919,700
Acre Feet ¹			25.1			19.2			-5.9

Note: One acre foot = 325,851 gallons.

Land Use

As with the Proposed Project, development of Alternative 3 would not result in the physical division of an established community or conflict with a habitat conservation plan or natural community conservation plan. The Proposed Project requires a zone change of 170-acres from TPZ to R-R-B-40. As such, impacts to land use would be the same for Alternative 3 as the Proposed Project.

Mineral Resources

The Initial Study determined that there were no impacts to mineral resources from development of the Proposed Project. Alternative 3 would have a similar impact.

Noise

The Proposed Project will create noise during construction and operation of the new facilities. Through mitigation measures **MM 12.1 and MM 12.2**, the Proposed Project's noise impacts would be mitigated to a less than significant level.

Alternative 3 would also create noise during construction although because of less construction, the duration of this noise would be shorter. Alternative 3 would also be subject to mitigation measure **MM 12.2** which limits the construction period and days of the week for construction. As with the Proposed Project, implementation of this mitigation would reduce Alternative 3's construction noise impact to less than significant. Operational noise for Alternative 3 would be the same as the Proposed Project. The main sources of noise from the Project would be from the seven-acre pond and the amphitheaters. Alternative 3 includes both of these features in the same size, location and configuration as the Project. As such, Alternative 3 would be subject to the same mitigation measure (**MM12.1**) as the Project and would have the same result. Because Alternative 3 would have a shorter construction period resulting less potential for noise impacts, Alternative 3 would be superior to the Proposed Project in regard to noise.

Population and Housing

As discussed in the Initial Study, the Proposed Project is not expected to result in a substantial increase in permanent population or new housing to the area and the impact is considered less than significant. Alternative 3 would have the same impact to population and housing.

Public Services

The Initial Study determined that implementation of the Proposed Project would result in less than significant impacts to law enforcement, fire protection, schools, and parks and recreation. While none of the Proposed Project's impacts would require new or expanded facilities, the Proposed Project would increase the use of nearby recreation areas. However, this increase in use would not result in new or expanded facilities. Alternative 3 would have the same impact to law enforcement, fire protection, schools, and parks and recreation as the Proposed Project.

Recreation

The Initial Study determined that the Proposed Project would have a negligible impact on local recreation facilities and would not cause deterioration or the need for expanded or new facilities. Alternative 3 would have a similar negligible impact although with slightly less use of the facilities due to the smaller occupancy limit.

Transportation and Circulation

The Traffic Impact Study prepared for the Proposed Project determined that the Project would increase daily traffic volume by 1,110 trips over existing conditions as shown in **Table 3.5-6**. However, based on the County's and Caltrans' LOS for the area roadways, this increase would not exceed the roadway LOS thresholds. As such, the Project would not result in a significant impact. Additionally, the Proposed Project would not result in significant impacts to public transit or bicycle/pedestrian facilities.

Table 4-4 shows Alternative 3's vehicle trip generation and a comparison to the existing conditions as well as the Proposed Project during the highest travel time. As shown, Alternative 3 would result in a total of 1,067 vehicle trips at full occupancy of 622 persons if all vehicles were to arrive on a particular Saturday.

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This would result in 729 new trips over existing conditions or 381 trips less than the Proposed Project's new trips of 1,110.

Table 4-4. Alternative 3 Vehicle Trip Generation

	Time – Saturday Peak Time			New Trips Over Existing		Alternative 3 vs Project
	Existing	Proposed Project	Alternative 3	Proposed Project	Alternative 3	
Total Persons	197	844	622	647	425	-222
Daily Trips (west end of S. Kidder)	338	1,448	1,067	1,110	729	-381
Daily Trips/Person (rate)	1.715	1.715	1.715			
Peak Hour Trips (west end of S. Kidder)	65	278	205	213	140	-73
Peak Hour Trips/Person	0.33	0.33	0.33			

While the Proposed Project would result in a less than significant impact to transportation and circulation, Alternative 3 would have less traffic because of a smaller number of visitors to the site. As such, Alternative 3 would be superior to the Proposed Project regarding transportation and circulation.

Utilities

As determined in the Initial Study, the Proposed Project would result in less than significant impacts to water, wastewater, stormwater drainage, and solid waste capacity and facilities. Alternative 3 would have a reduced development potential compared to the Proposed Project. Therefore, Alternative 3 would also have a less than significant impact to water, wastewater, stormwater drainage, and solid waste capacity and facilities. Because all utilities, with the exception of solid waste disposal, would be provided for or collected by on-site facilities, the only impact area to affect offsite facilities would be solid waste. Alternative 3, with its reduced occupancy level, would produce less solid waste than the Proposed Project and therefore have less impact to the solid waste collection and disposal system. As a result, Alternative 3 would be slightly superior to the Proposed Project with regard to solid waste impacts.

4.3 Environmentally Superior Alternative

Table 4.0-5 summarizes the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the Proposed Project. **Table 4-6** identifies how well an alternative meets the Project objectives. Based on the evaluation contained in **Subsection 4.2**, Alternative 1 would have fewer adverse environmental impacts than the Proposed Project and was determined to have the fewest adverse impacts on the physical environment. However, CEQA requires that when the environmentally superior is the no project alternative, another alternative be identified as the environmentally superior alternative [CEQA Guidelines section 15126.6(e)(2)].

Table 4-5. Alternatives Impacts Comparison

Environmental Issue	Proposed Project Impact Finding (Mitigated)	Alternatives		
		1	2	3
Aesthetics and Visual Resources	Less Than Significant	-	=	=
Agriculture and Forestry Resources	Less Than Significant	-	=	=
Air Quality	Less Than Significant	-	-	-
Biological Resources	Less Than Significant	-	-	-
Cultural Resources	Less Than Significant	-	-	=
Geology and Soils	Less Than Significant	-	-	=
Greenhouse Gases and Climate Change	Less Than Significant	-	-	-
Hazards and Hazardous Materials	Less Than Significant	-	=	-
Hydrology and Water Quality	Less Than Significant	-	-	-
Land Use	Less Than Significant	-	=	=
Mineral Resources	Less Than Significant	=	=	=
Noise	Less Than Significant	-	-	-
Population and Housing	Less Than Significant	-	=	=
Public Services	Less Than Significant	-	=	=
Recreation	Less Than Significant	-	=	-
Transportation and Circulation	Less Than Significant	-	=	-
Utilities	Less Than Significant	-	=	-
Overall Determination		-	-	-

- Impacts less than those of the proposed project
 +Impacts greater than those of the proposed project
 = Impacts similar to those of the proposed project, or no better or worse

An EIR must describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives while avoiding or reducing one or more of the project’s significant effects (CEQA Guidelines Section 15126.6(a)). The Proposed Project has five objectives. **Table 4-6** illustrates a comparison of the alternatives to the basic project objectives. As shown in this table, Alternative 1 does not meet any of the Project objectives and Alternative 2 does not meet two of the five Project objectives. Alternative 3 does meet all of the Project objectives. As such, Alternative 3, Reduced Project Development, would be the environmentally superior alternative, as it would result in fewer impacts to 10 resource categories when compared to the Proposed Project and still meet the majority of Project objectives.

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Table 4-6. Comparison of Alternatives by Project Objectives

	Proposed Project	Alternatives		
		1	2	3
Provide improved facilities and accommodations to support and expand ministry.	=	-	=	=
Enhance the visual perception of the camp property.	=	-	-	=
Maximize the use and experience of water across the property.	=	-	-	=
Separate vehicle and pedestrian traffic.	=	-	=	=
Create a flexible layout that accommodates phased construction.	=	-	=	=

= Meets project objective

- Does not meet project objective

4.4 References

Siskiyou County

2016 Kidder Creek Orchard Camp Zone Change (Z-1 4-01) And Use Permit (Up-11-15) Draft Initial Study/Mitigated Negative Declaration. September 2016.

Resource Management

2013 Botanical Resource Survey Addendum for Kidder Creek Orchard Camp Land Use Permit Application. May 23, 2014.

5.0 OTHER CEQA ANALYSIS

This section discusses additional topics statutorily required by the California Environmental Quality Act (CEQA), including growth inducement, irreversible changes, and energy conservation.

5.1 Growth-Inducing Impacts

5.1.1 Introduction

The CEQA Guidelines Section 15126.2(d) requires that an EIR “discuss the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Growth-inducing impacts can occur in a variety of ways, including the construction of new homes and businesses and the extension of urban services, such as utilities and improved roads, to previously undeveloped areas.

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as a project providing the extension of water supply lines to an area where the lack of water service historically limited the growth in the area.

CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

CEQA Guidelines Section 15126.2[d] states that it is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment. However, growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the affected area. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service. A project that would induce “disorderly” growth (growth that conflicts with local land use plans) could indirectly cause additional adverse environmental impacts and other public services impacts. Thus, to assess whether a growth-inducing project would result in adverse secondary effects, it is important to assess the degree to which the growth accommodated by a project would or would not be consistent with applicable land use plans.

5.1.2 *Project-Specific Growth-Inducing Impacts*

Construction of the Proposed Project would result in the further development of a currently recreational site into additional recreational uses. Development of the Proposed Project would not bring any public services to the area that are not already available. No new public roadways or public infrastructure is proposed or needed for development of the Project. Additionally, the Project would not result in a substantial increase in employment opportunities resulting in increased growth. While vacant land is available in the area, the infrastructure required to feasibly develop this land is already in place and, as such, this vacant land could be developed regardless of the Proposed Project. For these reasons, the Proposed Project would **not result in significant growth** inducement.

5.2 Significant Irreversible Environmental Changes

CEQA Guidelines require that an EIR identify and focus on significant environmental effects, including significant irreversible environmental changes that would be caused by the Project should the Project be implemented.

CEQA Guidelines Section 15126.2 (c) state that “uses of nonrenewable resources during the initial and continued phases of the Proposed Project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts, and particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area), generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitment of resources should be evaluated to assure that such current consumption is justified.”

5.2.1 *Nonrenewable Resources*

Implementation of the Proposed Project would result in an irretrievable commitment of renewable and nonrenewable resources including land, water, energy resources, and construction materials. Development consistent with the Proposed Project would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure. Nonrenewable and limited resources that would likely be consumed as part of Project site development would include, but are not limited to, oil, natural gas, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar conventional building materials.

The new buildings will require utility services, as well as raw material resources for construction. However, the amount of resources to be committed is not considered to be significant and are comparable to other developments of this type. No special construction materials or resources are anticipated to be needed as part of the Project.

5.3 Energy Conservation

5.3.1 *Introduction*

Energy consumption is analyzed in this EIR due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (e.g., oil,

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natural gas, coal) and emissions of pollutants during both the construction and long-term operational phases.

5.3.2 Existing Setting

Electricity/Natural Gas Services

Pacific Power, a subsidiary of PacifiCorp, provides electricity to the Project area through State-regulated public utility contracts. Pacific Power's ability to provide its services concurrently for each project is evaluated during the development review process. The utility company is bound by contract to update its systems to meet any additional demand. PacifiCorp, a regulated utility based in Portland, Oregon, serves 1.9 million customers across 141,000 square miles in six western states. The company comprises two business units that generate and deliver electricity to its customers. Pacific Power serves customers in Oregon, Washington and California. Rocky Mountain Power serves customers in Utah, Wyoming and Idaho (PacifiCorp 2018)

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption in Siskiyou County from 2012 to 2017 is shown in **Table 5-1**. As indicated, the demand has fluctuated from year to year between 2012 and 2017, but overall increased by 3.01 percent between 2012 and 2017.

Table 5-1. Electricity Consumption in Siskiyou County 2012–2017

Year	Total Electricity Consumption (kilowatt hours)	Annual Percent Change	Percent Change Since 2012
2017	500,141,693	2.7%	3.1%
2016	487,042,597	-0.6%	0.4%
2015	490,177,305	1.8%	1.0%
2014	481,554,260	-3.1%	-0.8%
2013	497,120,325	2.4%	2.4%
2012	485,319,452	-	-

Source: ECDMS 2017

Natural gas is not available to the Project or surrounding area. Any gas heating or cooking would be provided through propane. Propane is available through a number of companies in Siskiyou County.

Automotive fuel consumption in Siskiyou County from 2012 to 2017 is shown in **Table 5-2**. As shown, gasoline fuel consumption has decreased in the County since 2012. However, diesel fuel consumption has increased.

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Table 5-2. Automotive Fuel Consumption in Siskiyou County 2012–2017

Year	Gasoline Fuel			Diesel Fuel		
	Consumption (gallons)	Annual Percent Change	Percent Change Since 2012	Consumption (gallons)	Annual Percent Change	Percent Change Since 2012
2017	49,212,757	-0.9%	-1.3%	25,001,121	1.1%	8.9%
2016	49,659,638	-0.2%	-0.4%	24,718,305	2.4%	7.6%
2015	49,766,932	-0.2%	-0.2%	24,128,955	2.9%	5.1%
2014	49,877,738	0.3%	0.0%	23,442,503	1.1%	2.1%
2013	49,744,114	-0.2%	-0.2%	23,189,783	1.0%	1.0%
2012	49,857,774	-	-	22,963,599	-	-

Source: CARB 2014

5.3.3 Regulatory Framework

State

California Energy Efficiency Standards for Residential & Nonresidential Buildings (Title 24)

Title 24, California’s energy efficiency standards for residential and nonresidential buildings, were established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California’s energy consumption and provide energy efficiency standards for residential and nonresidential buildings. California’s energy efficiency standards are updated on an approximate three-year cycle. In 2016, the CEC updated Nonresidential Title 24 standards with more stringent requirements. The 2016 standards, which went into effect on January 1, 2017, are expected to substantially reduce the growth in electricity and natural gas use.

California Green Building Standards

The California Green Building Standards Code (CCR, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also has voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2016 and went into effect on January 1, 2017.

Senate Bill 1368

On September 29, 2006, then Governor Arnold Schwarzenegger signed into law Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the State's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the California Public Utilities Commission (CPUC).

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The CEC has designed regulations that:

- establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds carbon dioxide per megawatt-hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of greenhouse gas emissions;
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the State's standards for environmental impact; and
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (EPS) (Perata, Chapter 598, Statutes of 2006).

Renewable Energy Sources

Established in 2002 under SB 1078, and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 Renewables Portfolio Standard (RPS) to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal, landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator (CAISO) into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the CAISO to those markets, pursuant to a specified process.

Recent CEQA Litigation

Recent case law has clarified the requirements to satisfy PRC § 21100(b)(3) and CEQA Guidelines Appendix F, holding that an EIR must quantify energy use during construction and operations, including energy associated with transportation associated with the Project, and also consider the availability of measures to reduce reliance on fossil fuels. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173.) Mere reliance on compliance with the CBC and other green building requirements is not sufficient to meet an agency's burden under Appendix F and PRC § 21100(b)(3).

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Local

County of Siskiyou General Plan

The County's General Plan includes an Energy Element, which contains goals and policies that promote energy efficiency. While many of these policies and action items require the County to take certain actions, they are not related to development of a particular project. The following policies from the Energy Element are potentially relevant to the Project:

- Policy 7: Land development shall be encouraged to use natural land forms to enhance building energy efficiency, including techniques such as use of south-facing slopes for optimum solar exposure and use of topography and existing vegetation for shielding buildings from winter winds.

- Policy 15: Landscaping shall be encouraged as a means of enhancing building energy, including winter wind shielding and summer shading.

5.3.4 Standards of Significance

The impact analysis focuses on the three sources of energy relevant to the Proposed Project: electricity, the construction equipment fuel necessary for Project construction, and the automotive fuel necessary for Project operations. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed residential land use. For the purposes of this analysis, the amount of electricity and fuel necessary for Project construction and operations are quantified and compared to that consumed in Siskiyou County as a whole.

5.3.5 Methodology

Because of the unique nature of the Proposed Project, that of a recreational summer camp, the analysis of electricity usage is based on the electricity per capita consumption in California provided by the CEC. According to the CEC in 2016, Californians used approximately 6,536 kWh per person per year (CEC 2016). **Table 2-4 in Section 2.0 Project Description** illustrates the anticipated growth in occupation over a 20-year period. The existing occupation number of 310 persons was deducted from this growth to provide the actual increase in occupation as a result of Project implementation. The increase was multiplied by the average kWh per person reported above. The product was then used as the potential increase in electricity use over the 20-year span.

Gasoline consumption projections are based on modeling provided by the CARB EMFAC2014 Web Database. This online database identified the estimated air emissions and fuel use for all counties in California, including Siskiyou County, from 2020 to 2050. The program is designed to include reductions in emission and fuel use as automobiles and trucks become more efficient and less polluting in the next 30 years.

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5.3.6 Energy (Fossil Fuel) Consumption

Electricity consumption associated with the Proposed Project is summarized in **Table 5-3**. As shown in **Table 5-3**, based on 2017 consumption amounts, after five years, the Proposed Project would increase electricity use in the County by 0.15 percent and at full buildout of the Project (20 years), the Project will increase electricity use by 0.52 percent. This assumes that electricity use in the County will remain at 2017 levels over the next 20 years.

The Project would be required by the County to adhere to all federal, state, and local requirements for energy efficiency, including the Title 24 standards. The Project would be required to comply with Title 24 building energy efficiency standards, which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. With implementation of these standards the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

Table 5-3. Proposed Project Electricity Consumption

Implementation Period	Total Increased Project Occupancy	Project kWh per Year ¹	Percent of 2017 County Electricity Use
After 5 years	150	735,300	0.15
10 years	290	1,421,580	0.28
15 years	414	2,029,428	0.41
20 years	534	2,617,668	0.52

Note: ¹Based on a 9-month occupancy period. Average per capita electricity use for 9-months is 4,902 kWh based on 6,536 kWh per year per capita from CEC 2016.

The amount of operational fuel use was estimated using the CARB's EMFAC2014 computer program, which provides projections for typical daily fuel usage in Siskiyou County. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to Siskiyou County. As indicated in **Table 5-4**, with the increase in guests, after five years the Project operation is estimated to consume approximately 62,311 gallons of automotive fuel per year. Based on the 2017 automotive fuel use as shown in **Table 5-2**, this would increase the county-wide automotive fuel consumption by 0.31 percent. At full buildout of the Project (20 years), the Project would represent an increase of 0.84 percent over 2017 county-wide consumption numbers.

Table 5-4. Proposed Project Automotive Fuel Consumption

Energy Type	Total Increased Project Occupancy	Project Annual Fuel Consumption ¹	County Annual Fuel Consumption	Percent of County Fuel Use
After 5 years	150	62,311	20,138,696	0.31
10 years	290	82,247	16,267,561	0.51
15 years	414	104,495	15,288,902	0.68
20 years	534	126,163	14,935,711	0.84

Source: EMFAC2014 (CARB 2014)

Note: ¹Based on a nine-month occupancy period.

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Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would conserve the use of their supplies to minimize costs to their profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

The Project would not result in any unusual characteristics that would result in excessive long-term operational automotive fuel consumption. Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

The Project would not cause a substantial increase in demand or transmission service that would result in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure. This impact would continue to be less than significant.

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5.4 References

[CARB] California Air Resources Board

2014 EMFAC2014 Emissions Model.

[CEC] California Energy Commission

2016 U.S. Per Capita Electricity Use By State.
http://www.energy.ca.gov/almanac/electricity_data/us_per_capita_electricity.html.

[ECDMS] California Energy Consumption Data Management System

2017 Website: Electricity and Natural Gas Consumption by County.
<http://www.ecdms.energy.ca.gov/>.

PacifiCorp

2018 Just the Facts.
http://www.pacificorp.com/content/dam/pacific_power/doc/About_Us/Company_Facts/2018_Just-The-Facts_PacifiCorp.pdf.

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7.0 ACRONYMS AND ABBREVIATIONS

ABBREVIATION/ACRONYM	DEFINITION
AASHTO	American Association of State Highway and Transportation Officials
AG-2	Non-Prime Agriculture
AMSL	above mean sea level
APE	Area of Potential Effect
APNs	Assessor Parcel Numbers
BLM	Bureau of Land Management
BMPs	best management practices
BMPs	Best Management Practices
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Place
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH ₄	methane
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalents
County	County of Siskiyou
CPUC	California Public Utilities Commission
CWA	Clean Air Act
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DEIR	Draft Environmental Impact Report
diesel PM	diesel particulate matter
DOC	Department of Conservation
DPM	diesel particulate matter
Draft EIR	Draft Environmental Impact Report
DSD	Division of Safety of Dams
DTSC	California Department of Toxic Substances Control
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
ECHO	Enforcement and Compliance History Online
ELF v. SWRCB	Environmental Law Foundation v. State Water Resources Control Board

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ABBREVIATION/ACRONYM	DEFINITION
EPA	U.S. Environmental Protection Agency
EPS	emissions performance standard
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
General Permit	General Permit for Discharges of Storm Water Associated with Construction Activity
GHG	Greenhouse gases
gpd	gallons per day
HCM	Highway Capacity Manual
Hz	Hertz
in/sec	inches per second
IS/MND	Draft Initial Study/Mitigated Negative Declaration
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
KCOC	Kidder Creek Orchard Camp
kWh	kilowatt-hours
L_{eq}	equivalent level
LESA	Land Evaluation and Site Assessment
LIM	Land Inventory and Monitoring
LOS	level of service
LRA	Local Responsibility Area
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NPAB	Northeast Plateau Air Basin
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
O ₃	ozone
ODW	Office of Drinking Water
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
P/A	public address
PA	public address

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ABBREVIATION/ACRONYM	DEFINITION
PHF	Peak Hour Factors
PM ₁₀	coarse particulate matter
PM _{2.5}	Fine particulate matter
PPV	peak particle velocity
PRC	Public Resources Code
PRC	Public Resources Code
Project; Proposed Project	Kidder Creek Orchard Camp Project
PTSF	Percent Time Spent Following
QSD	Qualified Storm Water Pollution Prevention Plan Developer
RMS	root mean square
road extension, road extension project	proposed emergency access road extension project
RPS	Renewables Portfolio Standard
R-R-B-10	Rural Residential Agricultural 10-acre minimum
R-R-B-40	Rural Residential Agricultural 40-acre minimum
R-R-MH-B-5	Rural Residential Agricultural – Mobile Home 5-acre minimum
RTPA	Regional Transportation Planning Agency
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAPCD	Siskiyou County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District's
SCH	State Clearinghouse
SCLTC	Siskiyou County Local Transportation Commission
SFHA	Special Flood Hazard Area
SGMA	Sustainable Groundwater Management Program
SMARA	Surface Mining and Reclamation Act of 1975
SO ₂	sulfur dioxide
SSD	Stopping Sight Distance
STAGE	Siskiyou Transit and General Express
SVAP	Scott Valley Area Plan
SVP	Scott Valley Area Plan
SWITRS	Statewide Integrated Traffic Records System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TAC	toxic air contaminant
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TPZ	Timberland Production Zone
TWSC	Two-Way STOP Control
UC	University of California
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service

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ABBREVIATION/ACRONYM	DEFINITION
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank



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