

3.3 BIOLOGICAL RESOURCES

This section summarizes the common and sensitive vegetation, terrestrial wildlife, and aquatic biological resources that are known or have the potential to occur on the proposed Project site and the Alternative A site. Biological resources include common vegetation and habitat types, sensitive plant communities, and special-status plant and animal species. Federal, Tahoe Regional Planning Agency (TRPA), state, and local regulations related to biological resources are summarized below. Potential direct, indirect, and cumulative impacts of the proposed Project and Alternative A are analyzed, and mitigation measures are provided for those impacts determined to be significant.

The primary issues raised during scoping that pertain to biological resources included:

- ▶ effects on plant and animal species, including protected species;
- ▶ analysis and permits for wetland impacts; and
- ▶ effects related to tree removal and disturbances to seasonal streams.

For this analysis, information about common and sensitive biological resources known or with potential to occur in the proposed Project site and Alternative A site is based on reconnaissance-level surveys of both sites and review of the following existing sources: TRPA and U.S. Forest Service (USFS) survey and GIS data; a records search of the California Natural Diversity Database (CNDDDB 2019); California Native Plant Society Online Inventory or Rare and Endangered Plants (CNPS 2016); a list of federally proposed, candidate, threatened, and endangered species that may occur in the Project region obtained from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system (USFWS 2019); USFS Region 5 EVeg land cover data (USFS 2014); USFWS National Wetlands Inventory (updated July 2016) (USFWS 2016); Section 3.10, "Biological Resources," of the Regional Plan Update Environmental Impact Statement (TRPA 2012a); and high resolution aerial imagery. A reconnaissance survey of the proposed Project site and Alternative A site was conducted by an Ascent biologist on November 26, 2018. On March 4, 2020, a registered professional forester and a wildlife biologist from the California Tahoe Conservancy (Conservancy) conducted a second reconnaissance survey of both sites. No additional focused or protocol-level surveys for any species were conducted; the habitat assessments conducted as part of the reconnaissance surveys were adequate to identify potential Project-related effects on biological resources.

Section 3.3.2, "Environmental Setting," addresses the special-status plant and animal species evaluated in this analysis, and Table B-1 in Appendix B summarize the potential for each of these species to occur on the proposed Project site and Alternative A site. Generally, those plant and animal species not expected to regularly occur, or with a low probability to occur (because of a lack of suitable habitat, existing disturbance levels, or lack of occurrence records), are not addressed further in the impact analysis. Implementation of the proposed Project or Alternative A are not expected to considerably affect those species, including any species listed, proposed for listing, or designated as a candidate for listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA).

No sensitive habitats or biological communities such as wetlands, streams, riparian vegetation, stream environment zone (SEZ), or late seral/old growth forest are present on the proposed Project or Alternative A sites. Therefore, neither the proposed Project nor Alternative A would disturb sensitive habitats. Additionally, neither the proposed Project or Alternative A evaluated herein would be constructed or operated within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan. Therefore, implementation of the proposed Project or Alternative A would not conflict with the provisions of an adopted conservation plan and this issue is not evaluated further.

Changing the pattern of ownership of parcels as part of the larger land exchange being contemplated by TCPUD and the Conservancy by itself would have no impact related to biological resources. The potential environmental effects from construction and operation of the proposed Project on a portion of APN 093-160-064, currently owned by the Conservancy, are assessed in this section and other resource sections in Chapter 3, "Environmental Setting," Environmental Impacts, and Mitigation Measures, and in Chapter 5, "Other CEQA-Mandated Sections," of this EIR.

The purpose of the land exchange is to consolidate ownership and increase land management efficiencies for the agencies and no other physical changes are proposed for the affected parcels.

3.3.1 Regulatory Setting

FEDERAL

Federal Endangered Species Act

Pursuant to the federal ESA (16 US Code [USC] Section 1531 et seq.), USFWS and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) regulate the taking of species listed in the ESA as threatened or endangered. In general, persons subject to ESA (including private parties) are prohibited from “taking” endangered or threatened fish and wildlife species on private property, and from “taking” endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under Section 9 of the ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take.

Two sections of the ESA address take. Section 10 regulates take if a non-federal agency is the lead agency for an action that results in take and no other federal agencies are involved in permitting the action. However, if a project would result in take of a federally-listed species and federal discretionary action (even if a non-federal agency is the overall lead agency) is involved (i.e., a federal agency must issue a permit), the involved federal agency consults with USFWS under Section 7 of the ESA. Section 7 of the ESA outlines procedures for federal interagency cooperation to protect and conserve federally listed species and designated critical habitat. Section 7(a)(2) requires federal agencies to consult with USFWS and NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

Clean Water Act

Section 404 of the Clean Water Act (CWA) (33 USC Section 1251 et seq.) requires a project applicant to obtain a permit before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States that has the effect of replacing any portion of waters of the United States with dry land or changing the bottom elevation of any portion of waters of the United States. Waters of the United States include navigable waters; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; relatively permanent tributaries to any of these waters; and wetlands adjacent to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands typically must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of the CWA pending U.S. Army Corps of Engineers verification.

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state’s water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine regional water quality control boards (RWQCBs).

Bald and Golden Eagle Protection Act

Under the Bald and Golden Eagle Protection Act (16 USC Section 668 et seq.), it is illegal to take bald eagles, including their parts, nests, or eggs unless authorized. “Take” is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (16 USC Section 668c). “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment (50 Code of Federal

Regulations [CFR] Section 22.3). In addition to immediate impacts, this definition also addresses impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC Section 703 et seq.), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations (CFR), Section 10.13 (50 CFR 10.13). The list includes nearly all birds native to the United States.

Executive Order 13112—National Invasive Species Management Plan

Executive Order 13112 directs all federal agencies to prevent the introduction and control the spread of invasive species in a cost-effective and environmentally sound manner to minimize economic, ecological, and human health impacts. It established a national Invasive Species Council made up of federal agencies and departments and a supporting Invasive Species Advisory Committee composed of state, local, and private entities. The Invasive Species Council and advisory committee oversee and facilitate implementation of the executive order.

TAHOE REGIONAL PLANNING AGENCY

TRPA implements its authority to regulate growth and development, and manage fish, wildlife, and vegetation resources, in the Lake Tahoe region through the Regional Plan. The Regional Plan includes Resolution 82-11, the Environmental Threshold Carrying Capacities (threshold standards), Goals and Policies, Code of Ordinances, and other guidance documents.

Thresholds

The TRPA thresholds include standards and indicators that have been developed to focus management efforts and provide a measure of progress for vegetation, wildlife, and fisheries in the Tahoe region. The TRPA threshold standards for vegetation, wildlife, and fisheries, and the attainment status for each are summarized in Table 3.3-1 (TRPA 2016). Specific targets and indicators used to evaluate the standards can be found in the TRPA 2015 Threshold Evaluation Report (TRPA 2016), available online at: <http://www.trpa.org/regional-plan/threshold-evaluation/>.

Table 3.3-1 TRPA Vegetation, Wildlife, and Fisheries Resource Threshold Standards and their Attainment Status

TRPA Threshold Reporting Category and Standard	2015 Attainment Status
Vegetation	
Common Vegetation:	
Vegetation Community Richness	At or Somewhat Better than Target
Relative Abundance of Red Fir Forest in Seral Stages Other Than Mature	Considerably Worse than Target
Relative Abundance of Yellow Pine Forest in Seral Stages Other Than Mature	Considerably Worse than Target
Relative Abundance of Meadow and Wetland Vegetation	Somewhat Worse than Target
Relative Abundance of Shrub Vegetation	Considerably Better than Target
Relative Abundance of Deciduous Riparian Vegetation	Considerably Worse than Target
Size of Forest Openings and Juxtaposition of Vegetation Communities – Management Standard	Implemented
Consistency with Baily Land Capability System	Implemented
Nondegradation of Stream Environment Zones	Implemented
Appropriate Management Practices	Implemented
Uncommon Plant Communities:	
Upper Truckee Marsh	Somewhat Worse than Target
Taylor Creek Marsh	Insufficient Data to Determine Status
Pope Marsh	Insufficient Data to Determine Status
Osgood Swamp	Insufficient Data to Determine Status
Hell Hole	Insufficient Data to Determine Status
Grass Lake	Insufficient Data to Determine Status
Freel Peak Cushion Plant Community	Somewhat Worse than Target
Deep-Water Plants	Considerably Worse than Target
Sensitive Plants:	
Tahoe Yellow Cress	Considerably Better than Target
Tahoe Draba	Considerably Better than Target
Long-petaled Lewisia	Considerably Better than Target
Cup Lake Draba	Considerably Better than Target
Galena Creek Rockcress	Considerably Worse than Target
Late Seral/Old Growth Ecosystems Overall and in Montane, Upper Montane, and Subalpine Elevation Zones	Considerably Worse than Target (in all elevation zones)
Wildlife	
Special Interest Species:	
Northern Goshawk Population Sites	Insufficient Data to Determine Status
Osprey	Considerably Better than Target
Nesting Bald Eagle Population	At or Somewhat Better than Target
Wintering Bald Eagle Population Sites	Considerably Better than Target
Golden Eagle Population Sites	Insufficient Data to Determine Status

Table 3.3-1 TRPA Vegetation, Wildlife, and Fisheries Resource Threshold Standards and their Attainment Status

TRPA Threshold Reporting Category and Standard	2015 Attainment Status
Peregrine Falcon Population Sites	Considerably Better than Target
Waterfowl Population Sites	Somewhat Worse than Target
Deer	Insufficient Data to Determine Status
Disturbance Free Zones Management Standards	Implemented
Habitats of Special Significance:	
Riparian Habitat	Implemented
Fisheries	
Stream Habitat:	
Miles of Stream Habitat in Excellent Condition	Considerably Better than Target
Miles of Stream Habitat in Good Condition	Considerably Worse than Target
Miles of Stream Habitat in Marginal Condition	Considerably Worse than Target
Instream Flow:	
Nondegradation Standard for Instream Flow	Implemented
Divert Stream Intakes to Lake Sources	Implemented
Lahontan Cutthroat Trout	Implemented
Lake Habitat:	
Acres of "Prime" Fish Habitat	At or Somewhat Better than Target
Source: TRPA 2016	

Goals and Policies

The Conservation Element of the TRPA Goals and Policies document establishes goals for the preservation, development, utilization, and management of natural resources within the Tahoe region. These goals and policies are designed to achieve and maintain adopted threshold standards and are implemented through the Code.

The Conservation Element includes 10 subelements that address the range of Lake Tahoe's natural and historical resources. The applicable subelements and goals are discussed in this section. Policies associated with each goal can be found in the TRPA Goals and Policies document online at: <http://www.trpa.org/regional-plan/goals-policies/>.

Chapter 4 of the Goals and Policies identifies the following six goals for vegetation in the Tahoe region:

GOAL Veg-1: Provide for a wide mix and increased diversity of plant communities;

GOAL Veg-2: Provide for the protection, maintenance, and restoration of such unique ecosystems as wetlands, meadows, and other riparian vegetation;

GOAL Veg-3: Conserve threatened, endangered, and sensitive plant species and uncommon plant communities of the Lake Tahoe Region;

GOAL Veg-4: Provide for and increase the amount of late seral/old growth stands within the Lake Tahoe Region;

GOAL Veg-5: The appropriate stocking level and distribution of snags and coarse woody debris shall be retained in the Region's forests to provide habitat for organisms that depend on such features and to perpetuate natural ecological processes; and

GOAL Veg-6: TRPA shall work with fire protection agencies in the Region to reduce the risk of catastrophic wildfire.

The two goals identified for wildlife are as follows:

GOAL WL-1: Maintain suitable habitats for all indigenous species of wildlife without preference to game or nongame species through maintenance and improvement of habitat diversity, and

GOAL WL-2: Preserve, enhance, and where feasible, expand habitats essential for threatened, endangered, rare, or sensitive species found in the Region.

Code of Ordinances

The applicable provisions of the TRPA Code regarding vegetation and wildlife are summarized below.

Protection and Management of Vegetation

The Code requires the protection and maintenance of all native vegetation types. Chapter 61, Vegetation and Forest Health, Section 61.3, Vegetation Protection and Management, provides for the protection of SEZ vegetation, other common vegetation, uncommon vegetation, and sensitive plants in SEZs (TRPA 2012b). TRPA defines an SEZ as an area that owes its biological and physical characteristics to the presence of surface water or groundwater. (Neither the proposed Project site nor the Alternative A site contains SEZ.) TRPA can require the preparation and implementation of a remedial vegetation management plan, where the need has been identified, for the purposes of threshold standard maintenance or attainment. In addition, Chapter 61, Section 61.4, Revegetation, specifies minimum criteria for revegetation programs.

Protection of Sensitive and Uncommon Plants

Code Chapter 61, Section 61.3.6, Sensitive and Uncommon Plant Protection and Fire Hazard Reduction, establishes standards for preserving and managing sensitive plants and uncommon plant communities, as referenced above in Thresholds. Projects and activities that are likely to harm, destroy, or otherwise jeopardize sensitive plants or their habitat must fully mitigate their significant adverse effects. Measures to protect sensitive plants and their habitat include:

- ▶ fencing to enclose individual populations or habitat,
- ▶ restricting access or intensity of use,
- ▶ modifying project design as necessary to avoid adverse impacts,
- ▶ dedicating open space to include entire areas of suitable habitat, and
- ▶ restoring disturbed habitat.

Tree Removal

TRPA regulates the management of forest resources in the Tahoe Basin to achieve and maintain the threshold standards for species and structural diversity, to promote the long-term health of the resources, and to create and maintain suitable habitats for diverse wildlife species. Tree removal is subject to review and approval by TRPA (TRPA 2012b). Provisions for tree removal are provided in the following chapters and sections of the TRPA Code: Chapter 61, Vegetation and Forest Health, Section 61.1, Tree Removal, Section 61.3.6, Sensitive and Uncommon Plant Protection and Fire Hazard Reduction, and Section 61.4, Revegetation; Chapter 36, Design Standards; and Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection During Construction.

Applicants must obtain a tree removal permit from TRPA for cutting of live trees 14 inches diameter at breast height (dbh) or greater. However, trees of any size marked as a fire hazard by a fire protection district or fire department that operates under a memorandum of understanding with TRPA can be removed without a separate tree permit.

TRPA Code Section 61.1.4, Old Growth Enhancement and Protection, prohibits, with limited exceptions, the removal of trees greater than 30 inches dbh in westside forest types for forest management activities and projects located in lands classified by TRPA as conservation or recreation land use or SEZ. Code Section 61.1.4 provides for eleven (11) exceptions to this prohibition, which includes a Private Landowner exception provided the landowner follows one of the planning processes identified in that section of the Code.

In addition, trees and vegetation not scheduled to be removed must be protected during construction in accordance with Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection during Construction. If a project would result in substantial tree removal, a tree removal or harvest plan must be prepared by a qualified forester. The required elements of this plan, and TRPA's review process for tree removal plans, are described in Chapter 61, Section 61.1.5 of the Code. Substantial tree removal is defined under Code Section 61.1.8 as activities on project areas of three acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger. Chapter 62 also provides quantitative requirements for retention and protection of snags and coarse woody debris by forest type, in terms of size, density, and decay class.

Wildlife

TRPA sets standards for preserving and managing wildlife habitats, with special emphasis on protecting or increasing habitats of special significance, such as deciduous trees, wetlands, meadows, and riparian areas (Code Chapter 62). Specific habitats that are protected include riparian areas, wetlands, and SEZs; wildlife movement and migration corridors; important habitat for any species of concern; critical habitat necessary for the survival of any species; nesting habitat for raptors and waterfowl; fawning habitat for deer; and snags and coarse woody debris. In addition, TRPA-designated special-interest species (also referred to as "threshold species"), which are locally important because of rarity or other public interest, and species listed under the ESA or CESA are protected from habitat disturbance by conflicting land uses.

TRPA-designated special-interest wildlife species are northern goshawk (*Accipiter gentilis*), osprey (*Pandion haliaetus*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus anatum*), mule deer (*Odocoileus hemionus*), and waterfowl species.

The Code includes the following requirements for protection of wildlife movement and migration corridors.

- ▶ SEZs adjoining creeks and major drainages that link islands of habitat will be managed, in part, for use by wildlife as movement corridors. Structures, such as bridges, proposed within these movement corridors will be designed to avoid impairment of wildlife movement.
- ▶ Projects and activities in the vicinity of deer migration areas will be required to mitigate or avoid significant adverse impacts.

The Code also contains several provisions regarding critical habitat. TRPA defines critical habitat as any element of the overall habitat for any species of concern that, if diminished, could reduce the existing population or impair the stability or viability of the population. This applies also to habitat for special-interest species native to the Tahoe Basin whose breeding populations have been extirpated, but could return or be reintroduced. The Code includes the following critical-habitat provisions.

- ▶ No project or activity will cause, or threaten to cause, the loss of any habitat component considered critical to the survival of a particular wildlife species.
- ▶ No project or activity will threaten, damage, or destroy nesting habitat of raptors and waterfowl or fawning habitat of deer.
- ▶ Wetlands shall be preserved and managed for their ecological significance, including their value as nursery habitat to fishes, nesting and resting sites for waterfowl, and as a source of stream recharge, except as permitted pursuant to Chapter 30 of the TRPA Code.

Fish Resources

Chapter 63, Fish Resources, of the TRPA Code of Ordinances (TRPA Code), includes provisions to ensure the protection of fish habitat and to provide for the enhancement of degraded habitat. The chapter applies to all projects and activities that could interfere with the health of fish populations in Lake Tahoe, its tributaries, and other lakes in the region. Provisions for the protection or enhancement of fish habitat shall be included for all new uses, projects and activities within fish habitat as identified by TRPA fish habitat maps or a qualified biologist. Fish habitat consists of a complex set of elements, such as spawning and nursery areas, food supply, and escape cover.

For instream habitats, protection provisions in Chapter 63 include prohibiting stream channel alterations, facilitating fish movement at stream crossings, removing barriers to fish movement, mitigating impacts on fish habitat from development, maintaining instream flows, preventing sediment entry into the stream system, and encouraging native vegetative cover.

Aquatic Invasive Species

Chapter 63.4, Aquatic Invasive Species, discusses that aquatic invasive species (AIS) pose a serious threat to the waters of the Tahoe region and can disrupt the ecology and economy of the region. Chapter 63.4.1 prohibits the transport or introduction of AIS into the Tahoe region.

Placer County Tahoe Basin Area Plan

The Placer County Tahoe Basin Area Plan (Area Plan) is a joint TRPA/Placer County plan, adopted in 2016 by the Placer County Board of Supervisors and in 2017 by the TRPA Governing Board. The plan incorporates TRPA goals and regulations but also includes additional land use regulations to implement and achieve the environmental improvement and redevelopment goals of the Lake Tahoe Regional Plan while also addressing local goals. The following policies from the Placer County Tahoe Basin Area Plan apply to vegetation, wildlife, and fisheries and aquatic resources.

Vegetation Policies

- ▶ **Policy VEG-P-1:** Pursue vegetation enhancement projects in coordination with the EIP and TMDL programs, the California Tahoe Conservancy, and other partner agencies. Priority will be given to disturbed sites with rare or threatened vegetation, in high pollution loading catchments, and in SEZs.
- ▶ **Policy VEG-P-2:** Support forest enhancement projects being completed by land management agencies and fire districts, including selective cutting and controlled burning projects that improve forest health and reduce the risk of catastrophic wildfire.
- ▶ **Policy VEG-P-3:** Accelerate the restoration of native vegetation by implementing incentives for redevelopment within Town Centers and the transfer of development from SEZs and other sensitive lands to Town Centers in accordance with the Regional Plan.
- ▶ **Policy VEG-P-4:** All TRPA policies, ordinances and programs related to vegetation will remain in effect.

Wildlife Policies

- ▶ **Policy SE-P-1:** Pursue wildlife habitat enhancement projects in coordination with the EIP program, the California Tahoe Conservancy, and other partner agencies.
- ▶ **Policy SE-P-2:** Coordinate with partner agencies to manage bear populations and minimize conflicts with people. Programs should emphasize public education and expand the use of bear-proof solid waste enclosures.
- ▶ **Policy SE-P-3:** All TRPA policies, ordinances and programs related to wildlife will remain in effect.

STATE

California Endangered Species Act

Pursuant to CESA, a permit from California Department of Fish and Wildlife (CDFW) is required for projects that could result in the "take" of a plant or animal species that is listed by the state as threatened or endangered. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the CESA definition of take does not include "harm" or "harass," like the ESA definition does. As a result, the threshold for take is higher under CESA than under ESA. Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2081 incidental take permit.

California Native Plant Protection Act

In addition to CESA, the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.) provides protection to endangered and rare plant species, subspecies, and varieties of wild native plants in California. The California Native Plant Protection Act definitions of “endangered” and “rare” closely parallel the CESA definitions of endangered and threatened plant species. (Cal. Code. Regs., tit. 14, Section 786.9). A species or subspecies is considered “rare” if it is not presently threatened with extinction but is in such small numbers throughout its range that it may become endangered if its present environment worsens. (Cal. Fish and Game Code, Section 1901).

California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young

California Fish and Game Code Fully Protected Species

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. CDFW has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species.

Section 1602 of the California Fish and Game Code

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1600 et seq. of the California Fish and Game Code. Under Section 1602, it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by CDFW, or use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing such activity. CDFW’s jurisdiction in altered or artificial waterways is based on the value of those waterways to fish and wildlife.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (Section 7 of the California Water Code) requires that each of the nine Regional Water Quality Control Boards (RWQCBs) prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB’s jurisdiction includes waters of the United States, as well as areas that meet the definition of “waters of the state.” “Waters of the state” is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under CWA Section 404 provided they meet the definition of waters of the state and the State Water Resources Control Board published a new set of procedures for discharges of dredged or fill material into waters of the state on March 22, 2019. Mitigation requiring no net loss of wetlands functions and values of waters of the state typically is required by the RWQCB.

The State Water Resources Control Board has adopted the following definition of wetlands:

An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes the area lacks vegetation.

LOCAL

Placer County General Plan

The General Plan includes Goal 6.C, to protect restore, and enhance habitat that support fish and wildlife species so as to maintain populations at viable levels, and Goal 6.D, to preserve and protect the valuable vegetation resources of Placer County.

Placer County Code

Article 12.20. Tree Preservation in Area East of Sierra Summit

Placer County Code, Article 12.20, addresses tree preservation in the county east of the Sierra summit. The ordinance is applicable to all trees east of the Sierra summit that are 6 inches diameter or greater at breast height, excluding lands devoted to the growing and harvesting of timber for commercial purposes. A Timber Harvest Plan must be prepared and considered by the California Department of Forestry and Fire Protection before the removal of timberland, and a tree permit must be obtained before removal of trees over 6 inches dbh.

3.3.2 Environmental Setting

The following sections summarize the biological resources in the study area that are most relevant to the significance criteria and impact analysis for the Project, which are provided in Section 3.3.3, Environmental Impacts and Mitigation Measures.

VEGETATION AND HABITAT TYPES

The proposed Project site and the Alternative A site are located at 6,636 and 6,560 feet, respectively, above mean sea level. Land cover and habitat types on these sites were mapped and classified according to the California Wildlife Habitat Relationships system (CDFW 2015), with modifications to account for local variability. The 5.2 acres on the proposed Project site are composed of Sierran mixed conifer (4.3 acres) and perennial grassland (0.9 acre) (Table 3.3-2). The Alternative A site encompasses 3.6 acres composed of three land cover types: Sierran mixed conifer (1.7 acres), ruderal (1 acre), and developed (0.9 acre) (Table 3.3-2). Two reconnaissance-level surveys have been completed, one by an Ascent biologist and one by a Conservancy wildlife biologist. The surveys focused on identifying habitats, current conditions, and the biological setting of the proposed Project site and the Alternative A site.

Overall, the natural vegetation types on the proposed Project site (i.e., Sierran mixed conifer and perennial grassland) provide habitat value for common and native species, but they are fragmented and disturbed; and, the quality of habitat for native species is limited by existing disturbances and degradation from residential, recreation, and commercial uses on and near the site; adjacent roads; and associated edge effects. Foraging and breeding habitat for common bird and mammal species exists but is limited by the amount of habitat fragmentation and disturbance. In addition, a portion of the proposed Project site was graded and planted for a golf course fairway and still has buried irrigation pipes on the site. The Alternative A site has also experienced grading, golf course and other restoration planting, and irrigation.

Registered professional foresters have conducted multiple reconnaissance-level tree surveys of the proposed Project and Alternative A sites, which inform the biological effects analysis related to tree removal. The trees proposed for removal for the Proposed Project or the Alternative A Project, including trees larger than 30 inches dbh, include common species associated with upland habitat types that are predominantly Jeffrey pine, white fir, and lodgepole pine. These tree species are part of Sierran mixed conifer habitats that are relatively abundant in the Tahoe Basin. Furthermore, some of the larger trees proposed for removal are diseased. The TCPUD and Conservancy have completed various mechanical thinning projects in the area to reduce wildfire risk and severity within the last 15 years. However, untreated clusters of tightly-spaced trees exist at the proposed Project site and Alternative A site, and therefore, some tree removal would likely be proposed in this area regardless of the Project.

Table 3.3-2 Vegetation and Habitat Types on the Proposed Project Site and Alternative A Site

Land Cover/Habitat Type	Proposed Project Site (acres)	Alternative A Site (acres)
Sierran mixed conifer	4.3	1.7
Perennial grassland	0.9	-
Ruderal	-	1.0
Developed	-	0.9
TOTAL	5.2	3.6

Source: Compiled by Ascent Environmental in 2018

SPECIAL-STATUS SPECIES

Plants and animals may be considered special-status species due to declining populations, vulnerability to habitat change, or restricted distributions. Special-status species include those species legally protected under CESA, ESA, the TRPA Code of Ordinances, or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. In this document, special-status species are defined as plants and animals in the following categories.

- ▶ Species listed or proposed for listing as threatened or endangered under ESA (50 CFR Sections 17.12 [listed plants], 17.11 [listed animals]) or candidates for possible future listing as threatened or endangered under ESA (75 CFR Section 69222).
- ▶ Species listed or candidates for listing by the State of California as threatened or endangered under CESA (14 Cal. Code Regs., Section 670.5).
- ▶ Animals fully protected under the California Fish and Game Code (FGC) (Section 3511 for birds, Section 4700 for mammals, Section 5050 for reptiles and amphibians, and Section 5515 for fish).
- ▶ Plants and animals designated as a sensitive, special interest, or threshold species by TRPA (TRPA Code of Ordinances, Chapters 61, 62, and 63).
- ▶ Plants listed as rare under the California Native Plant Protection Act (FGC Section 1900 et seq.).
- ▶ Plants considered by CDFW to be "rare, threatened or endangered in California" (California Rare Plant Ranks of 1A, presumed extinct in California and either rare or extinct elsewhere; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California but common elsewhere; and 2B, considered rare or endangered in California but more common elsewhere). Note, that while these rankings do not afford the same type of legal protection as ESA or CESA, the uniqueness of these species requires special consideration under CEQA.
- ▶ Animals identified by CDFW as species of special concern (CDFW 2019).
- ▶ Species considered locally significant, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (State CEQA Guidelines Section 15125 (c)) or is so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines, Appendix G).
- ▶ Species that otherwise meets the definition of rare or endangered under CEQA Section 15380.

A preliminary list of special-status plant and animal species with potential to occur on the proposed Project site and Alternative A site was developed based on the reconnaissance survey and a review of the existing data sources described previously. No special-status plant or animal species have been documented on either the proposed Project site or Alternative A site; however, focused surveys for special-status species have not been conducted for the proposed Project or Alternative A.

The data review preliminarily identified 26 special-status animal species and 30 special-status botanical species known or with potential to occur in the Lake Tahoe Basin and that could occur on the proposed Project and Alternative A sites, if suitable habitats were present. Table B-1 (Appendix B) summarizes the regulatory status, habitat associations, and potential for occurrence on the proposed Project site and Alternative A site for each special-status botanical and animal species evaluated during this analysis. Of these 56 animal and plant species, three have a moderate likelihood to occur (mule deer [*Odocoileus hemionus*], Davy's sedge [*Carex davyi*], and short-leaved hulsea [*Hulsea brevifolia*]), and the remainder have a low (or no) potential and are not expected to occur (Table B-1 in Appendix B). These determinations were based on the types, extent, and quality of habitats in the Project area determined during the reconnaissance-level field surveys; the proximity of the sites to known occurrences of the species; and the regional distribution and abundance of the species.

An osprey nest site is located approximately 0.25 mile northeast of the Alternative A site. This nest site has not been documented as active in recent years. The TRPA Code requires a non-degradation standard for habitat within a 0.25-mile buffer zone ("disturbance zone") around active and inactive osprey nest sites in nonurban Plan Areas. The edge of this osprey disturbance zone intersects just inside the northeast-corner boundary of the Alternative A site along Country Club Drive. Although osprey is not expected to use the proposed Project or Alternative A sites due to the lack of suitable habitat (Table B-1 in Appendix B), Project-related effects on the TRPA-designated osprey disturbance zone near the Alternative A site are discussed below.

SENSITIVE NATURAL COMMUNITIES AND HABITATS

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, the TRPA Goals and Policies and TRPA Code, Section 1602 of the California Fish and Game Code, Section 404 of the CWA, the state's Porter-Cologne Water Quality Control Act, and other applicable regulations. Sensitive natural habitat may be of special concern to agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species. Examples of sensitive habitats in the Lake Tahoe Basin include montane riparian, wet meadow, riverine (streams and rivers), and lacustrine (open water). No sensitive habitats are present on the proposed Project site or the Alternative A site. As described previously, land cover and habitat types on the proposed Project and Alternative A sites are common and include Sierran mixed conifer, perennial grassland, ruderal, and developed areas and these natural vegetation types are fragmented and highly disturbed by existing land uses.

3.3.3 Environmental Impacts and Mitigation Measures

METHODS AND ASSUMPTIONS

Potential impacts of the proposed Project and Alternative A on vegetation and wildlife resources were initially identified by overlaying GIS layers of Project components on land cover maps of the proposed Project and Alternative A sites and maps of sensitive biological resources. Any natural community and wildlife habitat that overlapped with an area of proposed modification was considered to be directly affected during Project construction. Short-term construction impacts would occur where natural vegetation would be removed to construct new features and facilities or modify existing features. Construction-related impacts could affect biological resources through stormwater runoff, erosion, and the introduction of invasive or non-native species. Long-term impacts to biological resources would occur in or adjacent to habitats that would experience a permanent conversion in land use and cover (i.e., conversion of natural vegetation to paved areas, other facilities, and landscaping).

As described in Chapter 2, "Project Description," to minimize and avoid potential construction-related loss of active bird nests and comply with California Fish and Game Code Sections 3503 and 3503.5 and the Migratory Bird Treaty Act, a qualified biologist would conduct preconstruction surveys and implement protective measures, if needed, for nesting birds. This measure is incorporated into the project. Therefore, potential project-related effects on nesting birds are not discussed further in this section.

SIGNIFICANCE CRITERIA

CEQA Criteria

In accordance with Appendix G of the State CEQA Guidelines, the Project would result in a significant impact if it would:

- ▶ have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- ▶ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS; or 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;
- ▶ 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;
- ▶ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- ▶ conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

TRPA Criteria

Based on the TRPA Initial Environmental Checklist, impacts on biological resources may be significant if the Project would:

- ▶ remove native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system;
- ▶ remove riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table;
- ▶ remove stream bank and/or backshore vegetation, including woody vegetation such as willows;
- ▶ introduce new vegetation that would require excessive fertilizer or water, or would provide a barrier to the normal replenishment of existing species;
- ▶ remove any native live, dead, or dying trees 30 inches or greater in dbh within TRPA's conservation or recreation land use classifications;
- ▶ introduce new species of animals into an area, or result in a barrier to the migration or movement of animals;
- ▶ change the diversity or distribution of species, or number of any species of plants or animals;
- ▶ reduce the numbers of any unique, rare, or endangered species of plants or animals;
- ▶ change the natural functioning of an old growth ecosystem; or
- ▶ deteriorate existing fish or wildlife habitat quantity or quality.

ENVIRONMENTAL EFFECTS OF THE PROJECT

Impact 3.3-1: Disturbance or Loss of Special-Status Plants and Wildlife

Implementing the proposed Project or Alternative A would result in construction and operation of new facilities in habitats that may provide suitable habitat for special-status plants. If special-status plants are present in the proposed Project or Alternative A sites, Project construction could cause the disturbance or loss of those species. Loss of special-status plants would be a **potentially significant** impact. For special-status animals, although implementation of the proposed Project or Alternative A could disturb individuals and a small amount of potential habitat locally, the magnitude and intensity of potential adverse effects would be minor and are not expected to affect the species' distribution, active breeding sites, breeding productivity, viability, or regional populations.

Proposed Project

Special-Status Plants

No special-status plants have been documented on the proposed Project site through the review of existing data or during the reconnaissance surveys conducted for the Project. Two special-status plant species – Davy's Sedge and short-leaved hulsea – were identified as having potential to occur in upland conifer forest on the proposed Project site (Table B-1 [Appendix B]). Although Davy's sedge and short-leaved hulsea have not been documented in the Project vicinity, and conifer forest habitat on the proposed Project site is degraded and not expected to support these species, a detailed habitat assessment or focused surveys to confirm the presence or absence of these or other special-status species have not been conducted. Therefore, this analysis conservatively assumes that Davy's sedge and short-leaved hulsea could potentially occur on the proposed Project site; and, Project construction and operation could disturb or remove special-status plants, if they are present.

With the proposed Project, site preparation activities, construction of the Schilling Lodge and associated facilities, and associated recreation uses could directly remove individuals and habitat for special-status plants, if they are present. Additionally, plants could suffer other direct physical damage, including breaking, crushing/trampling, and burying; and deposition of dust or debris, soil compaction, or disturbance to root systems. Damaged plants may experience altered growth and development, or reduced or eliminated seed-set and reproduction; and mortality of individuals or population declines can eventually result.

Special-Status Wildlife

No special-status wildlife species have been documented on the proposed Project site through the review of existing data or during the reconnaissance surveys conducted for the Project in November 2018 and March 2020; however, focused surveys for special-status species have not been conducted for the proposed Project. One special-status wildlife species – mule deer, which is designated by TRPA as "special interest" – was identified as having a moderate potential to occur on the proposed Project site (Table B-1 [Appendix B]).

Deer are not expected to fawn on or regularly use the proposed Project site due to existing human disturbance levels; lack of high-quality forage and cover; and habitat fragmentation and degradation from residential, recreation, commercial, and other uses on and near the site, and adjacent roads and associated edge effects. However, mule deer may occasionally migrate through or forage on the Project site. (Effects on mule deer migration and movement corridors specifically are discussed in detail in Impact 3.3-4, Potential Degradation or Loss of Wildlife Movement Corridors, below.) Construction-related activities could cause mule deer to avoid or move out of the areas immediately surrounding work areas. This could result in temporary impacts to foraging, movement, or sheltering behavior. Because mule deer are highly mobile and adaptive, potential effects of temporary construction activities would be minor. Construction of the proposed Project would not create any temporary or permanent barriers to movement that would redirect migration during non-working hours; during construction, deer could move around areas of construction through nearby coniferous forest and other natural habitats. Because the study area is outside of mule deer winter range, winter habitat or access to winter grounds would not be affected by Project implementation. Additionally, the amount of foraging or corridor habitat permanently removed as a result of the proposed Project would be minor

relative to the amount of habitat available in the surrounding landscape; and this small amount of natural vegetation is currently subjected to considerable disturbances and is relatively low quality.

No substantial permanent impacts to mule deer fawning, important foraging, or core movement routes are anticipated as a result of Project implementation, and no habitat loss would occur within any known fawning areas. No other special-status wildlife species are expected to regularly use the proposed Project site due to existing disturbance levels, degraded habitat conditions, and/or lack of suitable habitat for special-status species known to occur in the Tahoe Basin. Therefore, potential impacts to other special-status species are not expected or would be minor.

Impact Summary

If special-status plant species are present on the proposed Project site, the potential loss or injury of them as a result of implementing the proposed Project would be **potentially significant**. Any potential disturbances to mule deer or other special-status animal species would be minor and not substantial, for the reasons described above.

Alternative A

Special-Status Plants

No special-status plant species have been documented on the Alternative A site; however, focused or protocol-level surveys for any special-status species have not been conducted for this Project alternative. The potential for Davy's sedge and short-leaved hulsea to occur on the Alternative A site is similar to that described for the proposed Project site, although the Alternative A site contains slightly less natural vegetation and potential habitat. The Alternative A site does not provide suitable habitat for other special-status plants. For the same reasons discussed for the proposed Project, implementation of Alternative A could cause potential disturbance and loss of special-status plants if they are present; however, the potential for and magnitude of this impact may be less than that for the proposed Project. Implementation of Alternative A would require less ground disturbance and native vegetation removal, possibly resulting in a lower risk or magnitude of potential disturbance to special-status plants.

Special-Status Wildlife

No special-status wildlife species have been documented on the Alternative A site. The potential for mule deer to occasionally forage or move through the Alternative A site is similar to that described for the proposed Project site, although the Alternative A site contains slightly less natural vegetation and potential habitat. No other special-status wildlife species are expected to regularly use the Alternative A site due to existing disturbance levels, degraded habitat conditions, and/or lack of suitable habitat.

An osprey nest site is located approximately 0.25 mile northeast of the Alternative A site. Osprey is designated as a special interest species by TRPA. This nest site has not been documented as active in recent years. The TRPA Code requires a non-degradation standard for habitat within a 0.25-mile buffer zone ("disturbance zone") around active and inactive osprey nest sites in nonurban Plan Areas. The edge of this osprey disturbance zone intersects just inside the northeast-corner boundary of Alternative A along Country Club Drive. This small area includes the driveway entrance to the existing lodge, the shoulder of Country Club Drive, and some disturbed upland vegetation, and is not suitable for osprey nesting or foraging. Because of the existing disturbance levels and degraded habitat conditions on the Alternative A site, Project activities associated with Alternative A would not measurably change potential habitat conditions for osprey or disturb future nesting activity at the nest site located approximately 0.25 mile away.

For the same reasons discussed for mule deer with the proposed Project site, and because Project construction and operation would not further degrade habitat conditions within the TRPA osprey disturbance zone measurably above existing disturbance levels, potential effects on special-status wildlife species with Alternative A would be minor. The potential for and magnitude of disturbances to mule deer may be less than that for the proposed Project, and Alternative A would require less ground disturbance and native vegetation removal, possibly resulting in a lower risk or magnitude of potential disturbance to mule deer.

Impact Summary

If special-status plant species are present on the Alternative A site, the potential loss or injury of them as a result of implementing the Alternative A would be **potentially significant**. Any potential disturbances to mule deer, osprey, or other special-status animal species would be minor and not substantial, for the reasons described above.

Mitigation Measures

Mitigation Measure 3.3-1: Avoid, Minimize, and Compensate for Disturbance or Loss of Special-Status Plants

This mitigation measure would apply to the proposed Project and Alternative A.

The Project applicant shall implement the following measures to reduce potential impacts on special-status plants:

- ▶ Before commencement of any Project construction for each phase of construction and during the blooming period for the special-status plant species with potential to occur on the Project site, a qualified botanist shall conduct protocol-level surveys for special-status plants in areas that were not surveyed previously and where potentially suitable habitat would be removed or disturbed by Project activities.
- ▶ If no special-status plants are found, the botanist shall document the findings in a letter report to TCPUD and CDFW and no further mitigation will be required.
- ▶ If special-status plant species are found outside the Project footprint, the locations of these occurrences will be clearly marked with fencing, staking, flagging, or another appropriate material. All Project personnel and equipment will be excluded from these areas.
- ▶ If special-status plant species are found that cannot be avoided during construction, the Project applicant shall consult with TRPA and/or CDFW, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of Project construction and will implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, preserving and enhancing existing populations, creating offsite populations on Project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. Potential mitigation sites could include suitable locations within or outside of the Project area. A mitigation and monitoring plan shall be developed by the Project applicant describing how unavoidable losses of special-status plants will be compensated.
- ▶ If seed collection or transplantation are selected as appropriate mitigation actions, then the following measures will apply.
 - A qualified botanist will collect any plants or mature seeds from the affected plants and store them at an appropriate native plant nursery or comparable facility.
 - Upon the completion of work, a qualified botanist will redistribute the seeds within the original location of the occurrence if not directly within the Project footprint. If the original occurrence is within the Project footprint, then the Project applicant will consult with CDFW and/or TRPA to establish a suitable location for distribution of seeds or transplantation of individual plants.
- ▶ If relocation efforts are part of the mitigation plan, the plan shall include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements.
- ▶ Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.

- Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when:
 - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the Project vicinity.
- If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-1 would reduce potentially significant impacts on special-status plant species to a **less-than-significant** level because it would require that any special-status plants are avoided and protected from construction activities, or that the applicant compensates for those plants that are removed.

Impact 3.3-2: Tree Removal

Construction of the proposed Project and Alternative A would require the removal of an estimated 183 and 79 total trees, respectively.

Because Project construction would be focused within areas subject to considerable levels of existing disturbances and habitat fragmentation, Project-related removal of native trees would not substantially affect common or sensitive biological resources or the surrounding environment. Because tree removal for the proposed Project and Alternative A would not substantially degrade biological resources or conflict with TRPA's threshold standard for late seral/old growth ecosystems, tree removal required for the proposed Project and Alternative A would not substantially affect the quality or viability of biological resources. However, the removal of 15 trees greater than 30 inches dbh under the current proposed Project design, and the removal of seven trees in this size class for Alternative A, could conflict with TRPA policy to prohibit the removal of trees larger than 30 inches dbh in westside forest types in lands classified as recreation, without appropriate mitigation and approval by TRPA. This impact would be **potentially significant** for the proposed Project and Alternative A.

Proposed Project

Construction of the proposed Project would require the removal of approximately 183 total trees (Tieslau Civil Engineering, Inc. 2020) including 15 trees larger than 30 inches dbh. Table 3.3-3 presents the quantity, size, and species of trees proposed for removal. The trees proposed for removal are largely common species. One sugar pine tree (measuring 32 inches dbh)—a species of limited occurrence as defined in TRPA Code Section 61.1.4.B(1)(d)—would be removed as part of the proposed Project. A representative of TRPA confirmed that the agency does not prohibit the removal of species of limited occurrence, including sugar pine trees (Nielsen, pers. comm., 2020).

Tree removal would not occur within late seral/old growth forest habitat, remove riparian vegetation or other sensitive habitat, or occur in areas outside of the permitted development footprint. The proposed Project site is not located within late seral/old growth forest, and therefore no impacts to this habitat type would result from the proposed Project. Vegetation removal for the proposed Project does not include riparian, wetland, or other sensitive vegetation types because they are not present within the construction footprint. Tree removal on the proposed Project site would not substantially affect breeding productivity or population viability of any species or cause a change in species diversity locally or regionally. The proposed Project would not reduce the numbers of any unique, rare, or endangered species of plants or animals because the tree removal would not occur in sensitive habitats or result in substantial impacts to sensitive species during construction. As required by TRPA, no tree removal would occur outside of the permitted development footprint and trees would only be removed as necessary to construct the proposed Project.

Habitat for common bird and mammal species does exist on the proposed Project site, but the proposed Project would not substantially affect common species. Tree removal at the proposed Project site would not substantially affect the amount of foraging and breeding habitat for common bird and mammal species because the habitat type at the proposed Project site is common and widespread in the immediate vicinity, including hundreds of acres of undeveloped lands at nearby Burton Creek State Park and the Conservancy's "Dollar Parcel." Thus, the proposed Project would not cause a significant impact on any wildlife species populations. Because proposed Project construction would be focused within areas subject to considerable levels of existing disturbances and habitat fragmentation, the removal of native trees would have a relatively minor effect on the surrounding environment. Also, the proposed Project would be constructed in areas that support common tree species such as Jeffrey pine, white fir, and/or lodgepole pine. Stands that consist of these species and their biological functions, particularly those that are disturbed and within developed or semi-urban landscapes, are not considered threatened or vulnerable to decline in the Tahoe region. These trees or stands are not considered critical or limiting to the presence or viability of common or sensitive biological resources in the region. Additionally, tree removal or other vegetation disturbances would not substantially reduce the size, continuity, or integrity of any common vegetation community or habitat type or interrupt the natural processes that support common vegetation communities on the proposed Project site. The proposed Project would also not substantially change the structure or composition of forest habitat in the proposed Project vicinity.

Regardless of the proposed Project, tree removal could be proposed in the future at the site due to existing tree densities in certain locations and for forest health reasons. Several of the trees proposed for removal under the proposed Project, including some that are larger than 30 inches dbh, are diseased and potentially hazardous. Because the project site contains untreated clusters of tightly-spaced trees, tree removal could be proposed in the future to reduce fuels and improve forest health, even if the proposed Project does not move forward at this location.

Regardless of the magnitude or biological effects of tree removal, native trees are protected in the Tahoe region. TRPA regulates the management of forest resources in the Tahoe Basin to achieve and maintain the threshold standards for species and structural diversity, to promote the long-term health of the resources, and to create and maintain suitable habitats for diverse wildlife species. Tree removal is subject to review and approval by TRPA (TRPA 2012b).

TRPA's existing policies and Code provisions address tree removal through site-specific environmental review and permitting; require development and implementation of Project-specific measures to minimize or avoid impacts through the design, siting, and the permitting process; and require compensatory or other mitigation for any significant effects as a condition of Project approval. Specifically, the TRPA Goals and Policies and Code of Ordinances include provisions limiting tree removal and protecting late seral/old growth forests, and TRPA's Rules of Procedure require mitigation for any significant impact as a condition of Project approval. Additionally, TRPA cannot approve projects that would cause a significant adverse effect on the late seral/old growth ecosystem threshold standard without appropriate mitigation. Specific provisions for tree removal in the Tahoe Basin are provided in the following chapters and sections of the TRPA Code: Chapter 61, Vegetation and Forest Health, Section 61.1, Tree Removal, Section 61.3.6, Sensitive and Uncommon Plant Protection and Fire Hazard Reduction, and Section 61.4, Revegetation; Chapter 36, Design Standards; Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection During Construction; and Chapter 62, Wildlife Resources.

Removal of trees greater than 14 inches dbh requires review and approval by TRPA. Specifically, applicants must obtain a tree removal permit from TRPA prior to removing trees greater than 14 inches dbh, except for certain cases exempt by the TRPA Code (for example, trees of any size marked as a fire hazard by a fire protection district or fire department that operates under a memorandum of understanding with TRPA can be removed without a separate tree permit). A harvest or tree removal plan is required by TRPA where implementation of a project would cause substantial tree removal. Substantial tree removal is defined in Chapter 61 of the TRPA Code as activities on project areas of 3 acres or more and proposing: (1) removal of more than 100 live trees 14 inches dbh or larger, or (2) tree removal that, as determined by TRPA after a joint inspection with appropriate state or federal forestry staff, does not meet the minimum acceptable stocking standards set forth in Chapter 61. The proposed Project would likely involve substantial tree removal based on the quantity of trees greater than 14 inches dbh to be removed (see Table 3.3-3) and would, therefore, require a harvest or tree removal plan approved by TRPA. In addition, trees and vegetation

not scheduled to be removed must be protected during construction in accordance with TRPA Code Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection During Construction.

Table 3.3-3 Tree Removal Associated with the Proposed Project and Alternative A¹

Size Class (inches dbh)	Number of Trees to Be Removed by Species							
	Proposed Project				Alternative A			
	Fir	Pine	Species of Limited Occurrence ²	Subtotal	Fir	Pine	Species of Limited Occurrence ²	Subtotal
<14	10	18		28	16	19		35
14 – <24	48	55		103	5	18		23
24 – <30	14	23		37		12	2	14
≥30	7	7	1	15		7		7
TOTAL	79	103	1	183	21	56	2	79
Specific Size Class Details for Trees to Be Removed that Measure Greater than 30 Inches dbh								
30	3	2		5		1		1
31	1	1		2		1		1
32	1	2		3				0
33				0		1		1
34	1	1		2		1		1
35	1	2		3				0
36				0		1		1
37				0		1		1
43				0		1		1
TOTAL	7	8	0	15	0	7	0	7

¹ Tree removal details obtained from tree survey data provided by TTCSEA in 2020.

² The proposed Project would result in the removal of one sugar pine tree. Alternative A would result in the removal of two incense cedar trees. These species are categorized as species of limited occurrence in the TRPA Code.

Source: Tieslau Civil Engineering, Inc. 2020

The proposed Project site is not located within late seral/old growth forest, but rather contains patches of open to moderately dense mid-seral forest; and the removal of trees required for the Project would not substantially change the structure or composition of forest habitat in the Project vicinity. Therefore, the Project would not conflict with TRPA threshold standards for protecting late seral/old growth forest. However, for the purpose of late seral/old growth ecosystem protection, TRPA Code Section 61.1.4, Old Growth Enhancement and Protection, prohibits, with limited exceptions, the removal of trees larger than 30 inches dbh in westside forest types for forest management activities and projects located in lands classified by TRPA as conservation or recreation land use or SEZ. The proposed Project would be implemented within an area designated as a westside forest type and on lands classified as recreation by TRPA. The Code provides an exception to this prohibition for private landowners provided they prepare and receive TRPA approval of a limited forest plan according to the requirements of TRPA Code Section 61.1.4.C. The removal of trees larger than 30 inches dbh for any project is specifically addressed in TRPA's Initial Environmental Checklist for project review and is a significance criterion for this analysis of the proposed Project.

As part of the required TRPA approval and permitting process for the proposed Project, the Project applicant would complete the applicable TRPA application and review procedures and secure TRPA approval for all proposed tree removal. For substantial tree removal (as defined in the TRPA Code), the standard review process established in TRPA Code Section 61.1.8, Substantial Tree Removal, would be followed, including preparation of a harvest or tree removal plan for review and implementation of the plan upon approval. For the removal of trees larger than 30 inches dbh,

the project applicant would be required to prepare a limited forest plan according to Section 61.1.4.C, Alternative Private Landowner Process, for review and implementation of the plan upon approval. Therefore, if these procedures are followed the proposed Project-related tree removal would not conflict with the applicable tree removal and protection provisions of the TRPA Code.

Impact Conclusion

Because Project construction would be focused within areas subject to considerable levels of existing disturbances and habitat fragmentation, Project-related removal of native trees would not substantially affect common or sensitive biological resources or the surrounding environment. Because tree removal for the proposed Project would not substantially degrade biological resources or conflict with TRPA's threshold standard for late seral/old growth ecosystems, tree removal required for the proposed Project would not substantially affect the quality or viability of biological resources. However, the removal of 15 trees greater than 30 inches dbh under the current proposed Project design could conflict with TRPA policy to prohibit the removal of trees larger than 30 inches dbh in westside forest types in lands classified as recreation, without appropriate mitigation and approval by TRPA. This impact would be **potentially significant** for the proposed Project.

Alternative A

Construction of Alternative A would require the removal of approximately 79 total trees, including seven trees larger than 30 inches dbh. Table 3.3-3 presents the quantity, size, and species for all trees proposed for removal. The trees proposed for removal with Alternative A are largely common species. Two incense cedars (24 and 26 inches dbh) would be removed with Alternative A. Incense cedars are defined as species of limited occurrence in TRPA Code Section 61.1.4.B(1)(d). A representative of TRPA confirmed that the agency does not prohibit the removal of species of limited occurrence, including incense cedars (Nielsen, pers. comm., 2020).

The potential biological effects and TRPA review and permitting requirements related to tree removal, and the applicant's compliance with those requirements and applicable policies, would be similar to those described for the proposed Project. However, construction of Alternative A would require the removal of an amount of trees that would not qualify as substantial tree removal as defined in the TRPA Code and, therefore, a harvest or tree removal plan may not be required. For the same reasons described for the proposed Project, the removal of trees for Alternative A would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-2: Minimize Tree Removal, Develop and Implement a Tree Removal and Management Plan

This mitigation measure would apply to the proposed Project and Alternative A.

- ▶ Where feasible, the Project will avoid and minimize the removal of trees, especially those larger than 30 inches dbh. This avoidance and minimization will be achieved through Project design to the greatest extent feasible and during the TRPA permitting process. This process typically includes:
 - Minor realignment and reconfiguration of parking, traffic circulation, walkways, sidewalks, patios and other site amenities.
 - A reduction in the parking requirements if approved by the regulatory agencies and acceptable to the project goals.
 - Focusing on retaining healthy trees instead of diseased trees and removing smaller trees instead of larger trees; or attempting to prune trees if possible.
 - Attempting to retain trees that enhance or provide additional scenic and sound barriers to the nearby neighborhood.
- ▶ For any residual removal of trees larger than 30 inches dbh and for any tree removal determined to be substantial tree removal by TRPA, the following measures will be implemented:

- For trees larger than 30 inches dbh to be removed, a limited forest plan pursuant to TRPA Code Section 61.1.4.C will be prepared by a qualified forester, vegetation ecologist, or other qualified environmental professional. TRPA approval of the limited forest plan will be required before permit issuance and project implementation. The plan will be submitted to a TRPA Registered Professional Forester (RPF) or other qualified TRPA professional for review, input, and approval, and will be implemented prior to or during the project. The limited forest plan will include the following elements:
 - An assessment of the condition and health of trees greater than 30 inches dbh proposed for removal; this condition and health assessment will provide the basis for any compensatory measures that may be required.
 - Specifications for removal and retention of trees greater than 30 inches dbh, including provisions for vegetation retention and protection during construction to avoid temporary disturbances in accordance with Chapters 33 and 36 of the TRPA Code and with industry standards and recommended practices.
 - Feasible measures to compensate for the removal of trees larger than 30 inches dbh, such as implementation of forest enhancement actions to facilitate growth and development of large trees in appropriate locations on- or offsite, or enhancement of existing late seral/old growth forest stands offsite.
 - Management actions, such as fuels and vegetation treatments, to facilitate and enhance large-tree and/or old-growth habitat development within potential treatment areas.
 - A clear description of how the Project shall contribute to achieving TRPA threshold standards for late seral/old growth forest enhancement, identification of priority locations where forest enhancement actions could be implemented to achieve the plan's objectives, and a funding component (e.g., for late seral/old growth forest enhancement projects) to ensure plan implementation. Appropriate compensatory actions that meet these standards will be identified and developed in coordination with TRPA.
 - A detailed description of performance standards for any compensatory measures included in the plan and how they will be implemented.
- If a timber harvesting plan is required to be submitted to California Department of Forestry and Fire Protection and that timber harvesting plan meets the requirements of the limited forest plan described in this mitigation measure, the timber harvesting plan may be submitted to TRPA for review and approval in lieu of a separate limited forest plan.
- If a separate tree harvest plan is required by TRPA for overall tree removal on the site because the removal would qualify as "substantial," as defined in Section 61.1.8 (Substantial Tree Removal) of the TRPA Code as determined by TRPA, the elements of the limited forest plan described in this mitigation measure may be integrated into the TRPA tree harvest plan.
- All tree protection obligations required in the limited forest plan and/or the tree harvesting or harvest plan will be incorporated into construction contracts. Tree protection measures will be in accordance with TRPA Code and be installed and inspected by staff from TRPA before issuance of a grading permit.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-2 would ensure compliance with existing TRPA regulations and policies to identify potentially significant tree removal and would minimize or avoid those impacts through the design and permitting process. Therefore, the potentially significant impact related to tree removal would be reduced to a **less-than-significant** level.

Impact 3.3-3: Potential Establishment and Spread of Invasive Plants

Construction of the Schilling Lodge and associated facilities for the proposed Project and Alternative A have the potential to introduce and spread noxious weeds and other invasive plants during construction and revegetation periods. These activities would temporarily create areas of open ground that could be colonized by nonnative, invasive plant species from inside or outside of the proposed Project site. Noxious weeds and other invasive plants could inadvertently be introduced or spread on the proposed Project site during grading and construction activities,

if nearby source populations passively colonize disturbed ground, or if construction and personnel equipment is transported to the site from an infested area. Soil, vegetation, and other materials transported to the proposed Project site from offsite sources for best management practices (BMPs), revegetation, or fill for Project construction could contain invasive plant seeds or plant material that could become established on the proposed Project site. Additionally, invasive plant species currently present on or near the proposed Project site have the potential to be spread by construction disturbances. The introduction and spread of invasive species would degrade terrestrial plant and wildlife habitats on or near the proposed Project site. The TRPA Code specifically prohibits the release of nonnative species in the Tahoe Basin because they can invade important wildlife habitats and compete for resources. The potential introduction and spread of invasive plant species as a result of the proposed Project or Alternative A would be a **potentially significant** impact.

Proposed Project

Surveys for invasive plant species have not been conducted on the proposed Project site. However, several invasive plant species are present in the Placer County Tahoe Basin Area Plan boundaries; some of these species could occur on or adjacent to the proposed Project site. Table 3.3-4 lists several invasive plants that have been documented in the Area Plan boundaries.

Table 3.3-4 Name and Status of Several Invasive Plant Species Known to Occur in the Placer County Tahoe Basin Area Plan Boundaries

Common Name and <i>Scientific Name</i>	LTBWCG ¹	CDFA ²	Cal-IPC ³	LTBMU ⁴
Cheatgrass, <i>Bromus tectorum</i>	-	-	High	Low
Bull thistle, <i>Cirsium vulgare</i>	Group 2	-	Moderate	High
Poison hemlock, <i>Conium maculatum</i>	-	-	Moderate	Medium
Scotch broom, <i>Cytisus scoparius</i>	Group 2	C	High	Medium
Klamath weed, <i>Hypericum perforatum</i>	Group 1	C	Moderate	Medium
Dyer's woad, <i>Isatis tinctoria</i>	-	B	Moderate	Medium
Broadleaved pepperweed, <i>Lepidium latifolium</i>	Group 2	B	High	Medium
Oxeye daisy, <i>Leucanthemum vulgare</i>	Group 2	-	Moderate	Medium
Dalmatian toadflax, <i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Group 2	A	Moderate	High
Butter and eggs, <i>Linaria vulgaris</i>	Group 2	-	Moderate	Medium
Eurasian water milfoil, <i>Myriophyllum spicatum</i>	-	C	High	N/A
Scotch thistle, <i>Onopordum acanthium</i> ssp. <i>acanthium</i>	Group 1	A	High	High
Russian thistle, <i>Salsola tragus</i>	-	C	Limited	-
Woolly mullein, <i>Verbascum thapsus</i>	-	-	Limited	-

¹ Lake Tahoe Basin Weed Coordinating Group (LTBWCG) prioritizes invasive weeds of concern by management group. Group 1: watch for, report, and eradicate immediately. Group 2: manage infestations with the goal of eradication.

² The California Department of Food and Agriculture's (CDFA) noxious weed list (<http://www.cdфа.ca.gov/phpps/іpc/>) List A: eradication or containment is required at the state or county level; List B: eradication or containment is at the discretion of the County Agricultural Commissioner; List C: eradication or containment only when found in a nursery or at the discretion of the County Agricultural Commissioner.

³ California Invasive Plant Council (Cal-IPC) (<http://www.cal-іpc.org/ip/inventory/weedlist.php>) High: these species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure; Moderate: these species have substantial and apparent, but generally not severe, ecological impacts on physical processes, plant and animal communities, and vegetation structure; Limited: these species are invasive but their ecological impacts are minor on a statewide level.

⁴ The Lake Tahoe Basin Management Unit (LTBMU) High: species that have a large ecological impact and/or invasive potential and are easily controlled; Medium: species that have a medium ecological impact and/or invasive potential and medium ability to be controlled; Low: species that have a low ecological impact and/or invasive potential and are not easily controlled; species with an N/A were not evaluated.

Source: Compiled by Ascent Environmental in 2019

Construction of the Schilling Lodge and associated facilities for the proposed Project could result in the spread of noxious weeds and other invasive plants that may be present on the proposed Project site. Additionally, new noxious weed species and other invasive plants could be introduced into the proposed Project site during construction. Construction would involve ground-disturbing activities in disturbed and native vegetation types, and would temporarily create areas of open ground that could be colonized by invasive plant species from inside or outside of the proposed Project site. Invasive plants could inadvertently be introduced or spread on the proposed Project site during grading and construction activities, if nearby source populations passively colonize disturbed ground, or if weed seeds or propagules are inadvertently transported and distributed by construction equipment and personnel from an infested area. Standard project BMPs required by TRPA would reduce the potential for introducing or spreading invasive plant populations on the proposed Project site by reducing the amount of open ground during construction; however, the potential for this effect would still exist. Erosion-control materials, seed mixes, and unwashed construction equipment can transport propagules of invasive plants to construction sites where disturbed areas can provide ideal conditions for their establishment and aid their spread into adjacent native plant communities.

Once established, invasive plant species can alter ecosystem processes and cause serious deleterious effects on native biological communities. Potential impacts to native species and ecosystems include altered hydrologic patterns, fire cycles, and soil chemistry; reduced nutrient, water, and light availability; and reduced biodiversity (Coblentz 1990, Vitousek et al. 1996, CallPC 2006). The effects of invasive plant species can also decrease wildlife habitat values. Nonnative terrestrial and aquatic invasive species compete with native plant and animal species; their introduction and proliferation in ecosystems can substantially alter the dynamics of native aquatic and terrestrial communities. This conversion can indirectly affect wildlife and fish species by changing and often reducing food sources and habitat structure and can lead to competition between native plant species and the weeds, often resulting in loss of native vegetation.

The TRPA Code specifically prohibits the release of nonnative species in the Tahoe Basin because they can invade important wildlife habitats and compete for resources. Any introduction or spread of invasive plants would degrade plant and wildlife habitat on or near the proposed Project site. This construction-related impact would be **potentially significant**.

Alternative A

The potential construction-related introduction and spread of invasive species with Alternative A would be similar to that described for the proposed Project, because Project construction and ground disturbance for Alternative A would be located in the same general vicinity and would include the same impact mechanisms and construction effects as the proposed Project. For the reasons discussed above, this impact would be **potentially significant**. The potential for and magnitude of this impact may be less than that for the proposed Project in that Alternative A would require less ground disturbance and native vegetation removal, possibly resulting in a lower risk or magnitude of invasive plant introduction and spread.

Mitigation Measures

Mitigation Measure 3.3-3: Implement Invasive Plant Management Practices During Project Construction

This mitigation measure would apply to the proposed Project and Alternative A.

In consultation with TCPUD and/or TRPA, the Project applicant shall implement appropriate invasive plant management practices during Project construction. Recommended practices include the following:

- ▶ A qualified biologist will conduct a preconstruction survey to determine whether any populations of invasive plants are present within areas proposed for ground-disturbing activities. This could be conducted in coordination with the focused special-status plant survey recommended above under Mitigation Measure 3.3-1.
- ▶ Before construction activities begin, invasive plant infestations will be treated where feasible. Treatments will be selected based on each species ecology and phenology. Control measures may include herbicide application, hand removal, or other means of mechanical control. This would help eliminate the threat of spreading the species

throughout the Project site and adjacent areas. All treatment methods—including the use of herbicides—will be conducted in accordance with the law, regulations, and policies governing the land owner. As required by Section 60.1.7, Pesticide Use, of the TRPA Code, any use of herbicides shall be consistent with the TRPA Handbook of Best Management Practices to protect water quality. Land owners will be notified prior to the use of herbicides for invasive plant treatment. In areas where treatment is not feasible, noxious weed areas will be clearly flagged or fenced to clearly delineate work exclusion. Treatments will be implemented by a qualified biologist or other qualified specialist approved by TCPUD and/or TRPA.

- ▶ Vehicles and equipment will arrive at the Project site clean and weed-free. All equipment entering the Project site from weed-infested areas or areas of unknown weed status will be cleaned of all attached soil or plant parts before being allowed into the Project site. Vehicles and equipment will be cleaned using high-pressure water or air at designated weed-cleaning stations after exiting a weed-infested area. Cleaning stations will be designated by a botanist or noxious weed specialist and located away from aquatic resources.
- ▶ To ensure that fill material and seeds imported to the study area are free of invasive/noxious weeds, the Project will use onsite sources of fill and seeds whenever available. Fill and seed materials that need to be imported to the study area will be certified weed-free. In addition, only certified weed-free imported materials (or rice straw in upland areas) will be used for erosion control.
- ▶ If designated weed-infested areas are unavoidable, the plants will be cut, if feasible, and disposed of in a landfill in sealed bags or disposed of or destroyed in another manner acceptable to TCPUD, TRPA, or other agency as appropriate. If cutting weeds is not feasible, layers of mulch, degradable geotextiles, or similar materials will be placed over the infestation area to minimize the spread of seeds and plant materials by equipment and vehicles during construction. These materials will be secured so they are not blown or washed away.
- ▶ Locally collected native seed sources for revegetation shall be used when possible. Plant and seed material will be collected from or near the Project site, from within the same watershed, and at a similar elevation when possible and with approval of the appropriate authority (e.g., U.S. Forest Service [USFS] botanist for collection on USFS land).
- ▶ After construction is completed for each Project phase, the affected Project site shall be monitored on an annual basis for infestations of invasive weeds until the restored vegetation has become fully established. If new populations of invasive weeds are documented during monitoring, they will be treated and eradicated to prevent further spread. Monitoring by a qualified biologist shall occur for up to three years (as feasible) subsequent to Project implementation.

Significance after Mitigation

Implementing Mitigation Measure 3.3-1 would reduce potentially significant impacts from the spread of invasive plants to a **less-than-significant** level because invasive plant management practices would be implemented during Project construction, and the inadvertent introduction and spread of invasive plants from Project construction would be prevented.

Impact 3.3-4: Potential Degradation or Loss of Wildlife Movement Corridors

The sites for the proposed Project and Alternative A are not positioned within known important wildlife movement or migratory corridors. The proposed Project and Alternative A sites are not likely to function as important corridors due to existing disturbance levels and relatively low-quality habitat. However, vegetation removal and facility construction could disrupt potential wildlife movements in the region, particularly for mule deer. No substantial permanent impacts to mule deer fawning, important foraging, or core movement routes are anticipated as a result of implementing the proposed Project or Alternative A, and no habitat loss would occur within any known fawning areas. Therefore, implementation of the proposed Project or Alternative A is not expected to substantially affect important movement corridors for mule deer or other wildlife. Any potential impacts would be **less than significant**.

Proposed Project

The proposed Project would not impede fish passage and no Project work would occur within any fish bearing stream. Additionally, the proposed Project site is not positioned within known important wildlife movement or migratory corridors. This site is not likely to function as an important corridor due to existing human disturbance levels; lack of high-quality forage and cover; and habitat fragmentation and degradation from residential, recreation, commercial, and other uses on and near the site, and adjacent roads and associated edge effects. However, vegetation removal and facility construction could disrupt potential wildlife movements in the region, particularly for mule deer.

The Verdi sub-unit of the Loyalton-Truckee Deer Herd migrates from the eastern Sierra Nevada foothills outside of Reno, Nevada, southwest into eastern Sierra, Nevada, and Placer counties in California during the spring and summer months after breeding. As described in the Loyalton-Truckee Deer Herd Management Plan (CDFW 1982), individuals migrated along the northern and southern sides of Interstate 80 (I-80) southwest from the Truckee Meadows in Nevada. Deer moving along the southern side of I-80 then followed the Truckee River into the Martis Valley before diverging into the Donner Lake and west Lake Tahoe Basin areas. Because the 1982 Loyalton-Truckee Deer Herd Management Plan is 30 years old, deer migratory and fawning patterns have probably shifted since the Plan's completion due to development in the Truckee and Northstar region, the increased use of SR 267, and the expansion of I-80. The proposed Project site is located in the vicinity of the migration route along the Truckee River into the Lake Tahoe Basin.

Mule deer use early to mid-successional stages of several vegetation types, including riparian, meadow, and forest for summer range. Important habitat requirements for mule deer fawning include undisturbed meadow and riparian areas that provide hiding cover and forage. The proposed Project site includes potential foraging habitat but does not contain suitable fawning habitat for mule deer. Mule deer are highly mobile ungulates and may use habitats on the proposed Project site for foraging or movement occasionally during non-winter months. However, the proposed Project site is not expected to be within a core migration or movement corridor for mule deer. The proposed Project site is located in the southern extent of the herd's range and is not positioned between known fawning areas, or between winter habitat and known fawning areas. Mule deer numbers in the southern portion of the herd's range, particularly the Tahoe Basin, are relatively low. Also, the proposed Project site is presently subject to considerable levels of human disturbance due to the adjacent high school, residential development, presence of roads, maintenance activities, and recreational uses on or adjacent to the site, reducing its potential value as important migratory habitat. Additionally, the amount of foraging or movement habitat permanently removed as a result of the proposed Project would be minor relative to the amount available in the surrounding landscape; and this small amount of natural vegetation is currently subject to considerable disturbances and is relatively low quality.

As discussed previously for Impact 3.3-1, construction-related activities could cause mule deer to avoid or move out of the areas immediately surrounding work areas. This could result in temporary impacts to foraging, movement, or sheltering behavior. Because mule deer are highly mobile and adaptive, potential effects of temporary construction activities are expected to be minor. Construction of the proposed Project would not create any temporary or permanent barriers to movement that would redirect migration during non-working hours; during construction, deer could move around areas of construction through nearby coniferous forest and other natural habitats. Because the study area is outside of mule deer winter range, winter habitat or access to winter grounds would not be affected by proposed Project implementation.

No substantial permanent impacts to mule deer fawning, important foraging, or core movement routes are anticipated as a result of Project implementation, and no habitat loss would occur within any known fawning areas. Mule deer may occasionally migrate through or forage on the proposed Project site; if so, short-term construction and increased human disturbances there could disturb individuals. However, because the proposed Project site is not expected to support fawning mule deer or provide core migratory habitat, and Project implementation would not substantially affect the composition, structure, or abundance of core mule deer foraging or known important migratory routes, potential effects of the proposed Project would not be substantial. The proposed Project would not introduce any new large linear corridors or other structures that are expected to deter or prevent mule deer from using traditional areas or other presently-used core habitat locations throughout its range. Therefore, implementation of the proposed Project is not expected to substantially affect deer movements or migration routes. The proposed

Project site does not occur within any other known migration routes or native wildlife nursery sites and would not substantially interfere with the movement of any resident fish or wildlife species. Any potential impacts would be **less than significant**.

Alternative A

The potential disturbance to movement corridors for mule deer and other wildlife species with Alternative A would be similar to that described for the proposed Project because construction and ground disturbance for Alternative A would be located in the same general vicinity and would include the same impact mechanisms and construction effects as the proposed Project. For the reasons discussed above, this impact would be **less than significant**. The potential for and magnitude of this impact may be less than that for the proposed Project. Alternative A would require less ground disturbance and native vegetation removal, possibly resulting in a lower risk or magnitude of disturbance to mule deer and other wildlife movements locally.

Mitigation Measures

No mitigation is required for this impact.

CUMULATIVE IMPACTS

The geographic scope of cumulative impacts for biological resources is the Tahoe region. Biological resources in the Tahoe region have been subjected to multiple historic impacts that date back to the extensive logging during the Comstock era. Following that major disturbance, decades of fire suppression and development in the region have reduced the quality and quantity of habitats from pre-Comstock conditions. Past, present, and foreseeable future activities that have affected or may affect biological resources in the Tahoe region include logging, grazing, fuels management, recreational development and activities, urban and commercial development, and right-of-way maintenance and operation activities. Specific projects that may interact with the proposed Project or Alternative A on a cumulative basis are listed in Table 3.1-2.

The primary biological resource issues relevant to cumulative impacts, where the proposed Project or Alternative A have the potential to contribute to impacts generated by other projects, are effects related to special-status plant species (Impact 3.3-1), tree removal (Impact 3.3-2), invasive plant species (Impact 3.3-3), and wildlife movement (Impact 3.3-4). Past projects and activities have resulted in the decline of some native plant populations and rarity of some species, and the introduction and spread of various noxious weeds and invasive species in the Project region, resulting in habitat degradation and other adverse effects on biological resources. Existing and foreseeable future projects have the potential to continue this trend, although current policies, regulations, and programs currently minimize the potential for the further spread of noxious weeds and invasive species and loss of rare or special-status plants. The current presence and spread of noxious weeds and invasive species in the Project region, and the decline of some native plant populations and species, are considered significant cumulative impacts. The significance level of existing cumulative effects related to tree removal and wildlife movement generally in the Tahoe region is less clear.

Implementation of either the proposed Project or Alternative A would remove native trees and other vegetation, and could potentially cause disturbance or loss of special-status plants if they are present on the proposed Project site, establishment or spread of invasive plants, and disturbances to wildlife movement. However, natural vegetation types on the proposed Project and Alternative A sites (i.e., Sierran mixed conifer and perennial grassland) are fragmented and highly disturbed; and, the quality of habitat for native species is limited by existing disturbances and degradation from residential, recreation, and commercial uses on and near either site; adjacent roads; and associated edge effects. As described in detail for Impacts 3.3-1, 3.3-2, 3.3-3, and 3.3-4, direct or indirect effects on these biological resources as a result of the proposed Project or Alternative A would be relatively minor. Additionally, with implementation of Mitigation Measure 3.3-1, potential disturbances or loss of special-status plants would be avoided, minimized, or compensated for. With implementation of Mitigation Measure 3.3-3, invasive plant management practices would be implemented during Project construction and the inadvertent introduction and spread of invasive from Project construction would be prevented.

The proposed Project or Alternative A, when combined with past, present, and reasonably foreseeable future projects, would not substantially affect the distribution, breeding productivity, population viability, or the regional population of any common or special-status species; or cause a change in species diversity locally or regionally. Additionally, Project implementation, would not threaten, regionally eliminate, or contribute to a substantial reduction in the distribution or abundance of any native habitat type in the Tahoe region. Therefore, the Project **would not have a considerable contribution** to any significant cumulative impact related to biological resources.

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