5 REVISIONS TO THE DRAFT EIR/EIS/EIS

This chapter includes revisions to the text to the 2013 draft environmental impact report/environmental impact statement/environmental impact statement (Draft EIR/EIS/EIS) since publication and public review. The revisions have been made for one or more of the following reasons: in response to a comment on the Draft EIR/EIS/EIS, for correction of an error, and/or in relation to a change initiated by California Tahoe Conservancy (Conservancy) staff as further clarification or explanation of the analysis. Chapter 2 of this document provides the project description, which includes presentation of the Preferred Alternative which has been selected, , and developed in response to public and agency comment and feedback.

The changes are presented in the order in which the text appeared in the 2013 Draft EIR/EIS/EIS and are identified by page number(s). Revisions are shown as excerpts from the 2013 Draft EIR/EIS/EIS text, with strikethrough (strikethrough) text for deletions and underlined (underlined) text for additions.

5.1 GLOBAL REVISIONS

As requested by the California State Lands Commission, the text of the entire Draft EIR/EIS/EIS is revised as necessary to abbreviate the name of the commission as "CSLC."

5.2 REVISIONS TO CHAPTER 1, "INTRODUCTION AND STATEMENT OF PURPOSE AND NEED"

The list of regulatory actions/permits in Section 1.1.3, "Regulatory Requirements, Permits, And Approvals," on pages 1-4 and 1-5 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

FEDERAL ACTIONS/PERMITS

- Reclamation: The Record of Decision (ROD) will state the federal action to be implemented and will discuss all factors leading to the decision as to potentially, approval of funding for construction.
- ▶ <u>State Historic Preservation Office: Consultation for impacts on cultural resources pursuant to Section 106</u> of the National Historic Preservation Act (NHPA).
- ▶ **U.S. Army Corps of Engineers:** Department of the Army permit under Section 404 of the Clean Water Act (CWA) for discharges of dredged or fill material into waters of the United States.
- ▶ U.S. Environmental Protection Agency: Review of the EIS, and filing and noticing; concurrence with the Section 401 CWA permit.
- ▶ U.S. Fish and Wildlife Service: Consultation under the federal Endangered Species Act and issuance of incidental-take authorization for the take of federally listed endangered and threatened species, if take of a species is anticipated.

STATE ACTIONS/PERMITS

- ► California Department of Fish and Wildlife: Potential consultation under the California Endangered Species Act and issuance of take authorization, streambed alteration agreement, and protection of raptors (California Fish and Game Code Sections 2081, 1602, and 3503.5, respectively).
- ► California Department of Transportation: Possible encroachment permits for work involving the U.S. Highway 50 right-of-way.

▶ Lahontan Regional Water Quality Control Board (Region 6): National Pollutant Discharge Elimination System construction stormwater permit (notice of intent to proceed under general construction permit) for disturbance of more than 1 acre, discharge permit for stormwater, general order for dewatering, and Section 401 CWA certification or waste discharge requirements.

REGIONAL ACTIONS/PERMITS

► TRPA: Construction permits, including the Environmental Improvement Program (EIP) Permit, Land Capability and Coverage Verifications, and Historic Determination.

LOCAL ACTIONS/PERMITS

- ► El Dorado County Air Pollution Control District: Oversees Rule 223 for fugitive dust to reduce the amount of particulate matter entrained in the ambient air by anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.
- ► City of South Lake Tahoe: Regulates grading on both public and private property within the South Lake Tahoe city limits to safeguard life, limb, health, property, and public welfare and avoid pollution of watercourses caused by surface runoff, or by aerial deposition of pollutants generated from the permit area on or across the permit area.

5.3 REVISIONS TO SECTION 3.3, "CULTURAL RESOURCES"

The text of Section 3.3.1, "Affected Environment," on page 3.3-7 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows in response to comments by the Wahoe Tribe of Nevada and California:

Unlike Native Americans in many other regions of California, even into the 20th century, the Washoe were not completely displaced from their traditional lands. In 1917, the Washoe Tribe began reacquiring a small part of their traditional lands (Nevers 1976:90–91). The Washoe remain a tribe recognized by the U.S. government and have maintained an established land base. Its 1,600 tribal members are governed by a tribal council that consists of members of the is elected by tribal members who live in one of the four communities of Carson, Dresslerville, Woodfords, and Reno-Sparks—Indian colonies—, as well as members from nonreservation areas. The contemporary Washoe have developed a comprehensive land use plan (Washoe Tribal Council 1994) that identifies the goals of reestablishing a presence in the Tahoe region and revitalizing Washoe heritage and cultural knowledge, including the harvest and care of traditional plant resources and the protection of traditional properties in the cultural landscape (Rucks 1996:3).

5.4 REVISIONS TO SECTION 3.4, "BIOLOGICAL RESOURCES: VEGETATION AND WILDLIFE"

In March 2010, the CDFW changed the name of the "California Native Plant Society [CNPS] List" or "CNPS Ranks" to "California Rare Plant Rank" (or CRPR). This change was made to reduce confusion over the fact that CNPS and CDFW jointly manage the Rare Plant Status Review groups (300+ botanical experts from government, academia, nongovernmental ogranizations, and the private sector) and that the rank assignments are the product of a collaborative effort and not solely a CNPS assignment. Therefore, any reference to the CNPS List or CNPS listing status in the 2013 Draft EIR/EIS/EIS should be considered one and the same with the more current terminology of California Rare Plant Rank or CRPR.

The rare plant identified in the 2013 Draft EIR/EIS/EIS as American mannagrass (Glyceria grandis), with a CNPS listing status (now called CRPR) of 2, was misidentified. This plant was recently confirmed as fowl mannagrass (Glyceria elata), a common species that has no listing status in the CRPR system. This corrected identification came about as a result of focused surveys for American mannagrass conducted by AECOM

botanists in support of the Upper Truckee Marsh Sewer Facilities Adaptive Management Plan project on August 5, 2014 (AECOM 2014). As part of this survey, AECOM botanists visited the presumed American mannagrass stands identified by the 2007 rare plant survey documented in the 2013 Draft EIR/EIS/EIS and determined that the species was instead fowl mannagrass. These two species are very similar in appearance and the distinguishing characteristic (number of anthers per floret) is not referenced in the 1993 Jepson Manual, which was used as the primary reference for species identification during the 2007 rare plant survey. American mannagrass florets contain three anthers, whereas fowl mannagrass florets contain two anthers. Reexamination of a voucher specimen collected from the 2007 rare plant survey using the more recent and updated Jepson Manual (Baldwin et al. 2012), which includes reference to this distinguishing characteristic, also confirmed the identity of the mannagrass species in the proposed project study area as fowl mannagrass.

Recent changes have occurred in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS. As a result, the status of four species was elevated under the federal Endangered Species Act or the California Endangered Species Act (CESA): Yosemite toad, mountain yellow-legged frog (now Sierra Nevada yellow-legged frog), Townsend's big-eared bat, and Pacific fisher. The status of five species was modified relative to California's species of special concern or U.S. Forest Service sensitive species lists: northern leopard frog, osprey, northern goshawk, peregrine falcon, and western red bat; peregrine falcon was also delisted under the CESA. In addition, three wildlife species no longer have any special status as defined in the 2013 Draft EIR/EIS/EIS: Cooper's hawk, sharp-shinned hawk, and hoary bat. Although these latter three species are hereby removed from specific mention in the 2013 Draft EIR/EIS/EIS (see specific text changes identified below), Cooper's and sharp-shinned hawks are raptors that are still protected under the California Fish and Game Code (Sections 3503–3503.5), and bats, as an environmental resource, are protected generally under the California Environmental Quality Act (CEQA). The potential impacts on these species in the context of CEQA remain evaluated and considered in the 2013 Draft EIR/EIS/EIS.

Additionally, as a result of the federal listing of mountain yellow-legged frog (now Sierra Nevada yellow-legged frog) as endangered, a focused survey for this species in potentially suitable habitat within the study area was conducted in 2015 (Ascent 2015). The survey results have been incorporated into the 2013 Draft EIR/EIS/EIS (see specific text changes identified below).

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.1, "Affected Environment," on page 3.4-13 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

► The initial data review preliminarily identified 44 special-status plant, lichen, and fungi species that could occur in the region. Table 3.4-1 contains information on all special-status plant species previously recorded in the southern Tahoe Basin. Based on review of existing documentation and discussion with local botanists with extensive experience with the site, 2423 of these special-status plant species have the potential or are known to occur in the study area.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Table 3.4-1 in Section 3.4.1, "Affected Environment," on page 3.4-16 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Table 3.4-1 Special-Status Plant Species Known From or With Potential to Occur in the Upper Truckee River and Wetlands Restoration Project Study Area

Wolfands Rosio and Project Glady Anda							
Scientific and Common Name	Listing Status ¹			Habitat and Flowering Period	Potential for Occurrence		
	Federal	State	Local/CNPS	Habitat and Howering Feriod	Potential for Occurrence		
Glyceria grandis American mannagrass				Bogs and fens, meadows and seeps, and streambanks and lake margins of marshes and swamps; 49 to 6,496 ft. Blooming period: June–August	Known to occurNot present. Observed at Upper Truckee Marsh (EDAW and ENTRIX 2003) and during the 2007 rare plant survey Suitable habitat occurs in the		
					study area; however, the species was not detected during the 2007 rare plant survey.		

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.1, "Affected Environment," on page 3.4-20 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

During the special-status plant survey of the study area, one special status plant species, American mannagrass (*Glyceria grandis*), a CNPS List 2 species, was encountered that had not been previously reported from the study area (Table 3.4-1). The known populations of TYC at Cove East and Barton Beaches were visited during this survey. The locations of these TYC populations of special status species are shown in Exhibit 3.4-2 and are discussed in more detail below.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the subsection "American Mannagrass," comprising three paragraphs in Section 3.4.1, "Affected Environment," on page 3.4-20 of the 2013 Draft EIR/EIS/EIS is now irrelevant and has been entirely removed as follows:

American Mannagrass

American mannagrass is a rhizomatous grass (i.e., a grass with some below-ground stems) that is on CNPS List 2 (plants that are rare, threatened, or endangered in California but more common elsewhere) (CNPS 2010). The species is much more common outside of California; it is found from Alaska to Newfoundland in the north (including all of the northwestern, midwestern, mid-Atlantic, and northeastern states), in the mountains of Arizona and New Mexico in the southwest, and north of North Carolina and Tennessee in the southeastern United States. In California it is known from Fresno, Humboldt, Mendocino, Mono, Placer, and Tuolumne Counties. There are no previously documented occurrences of American mannagrass in El Dorado County.

American mannagrass grows in riparian habitats, on streambanks, at lake margins, in meadows, and in bogs and fens. It grows to a height of three feet tall and has a 7- to 15 inch long, egg-shaped inflorescence (i.e., arrangement of flowers) bearing small spikelets (i.e., small groups of inconspicuous flowers). The grass flowers between June and August. It is similar in overall appearance to fowl mannagrass (*Glyceria elata*), which is much more common throughout the Sierra Nevada. It can also be confused with pale fake mannagrass (*Torreyochloa pallida*). Photographs of American mannagrass can be found in Appendix G.

During AECOM's special status plant survey of the study area (July 25–27, 2007), American mannagrass was found in one location growing on a low mud bench within one of the active channels of Trout Creek just above the surface water. Associated species on the mud bench were pale fake mannagrass (*Torreyochloa pallida*), beaked sedge, Baltic rush, fringed willow herb (*Epilobium ciliatum*), and wild mint (*Mentha arvense*). Approximately 35 flowering stems were observed in a ten square foot area. Nearby mannagrass species, thought to be fowl mannagrass, had a very different appearance characterized by much greener lemmas and inflorescence, a slightly smaller inflorescence, and smaller, more rounded glumes.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the American mannagrass location identified in Exhibit 3.4-2, "Location of Special-Status Plant Species in the Study Area," of the 2013 Draft EIR/EIS/EIS has been removed.

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.1, "Affected Environment," on page 3.4-22 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

The initial data review preliminarily identified 2724 special-status wildlife species that could occur in or near the study area. TwelveFifteen of the species evaluated are not expected or have a low potential to occur in the study area, and 15nine have a moderate to high likelihood to occur in the study area and vicinity. This determination was based primarily on three factors: the types, extent, and quality of habitats in the study area; the proximity of the study area to known extant occurrences of the species; and the regional distribution and abundance of the species.

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS and the completion of focused surveys for the Sierra Nevada yellow-legged frog, as described above, the text of Table 3.4-2 in Section 3.4.1, "Affected Environment," on pages 3.4-24 through 3.4-31 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Table 3.4-2 Special-Status Wildlife Species Evaluated for the Upper Truckee River and Marsh Project					
Common Name and Regulatory Status		- Habitat Associations ¹	Delegible Commence		
Scientific Name	Federal	State	TRPA	Habitat Associations	Potential for Occurrence ²
Amphibians					
Yosemite toad Bufo canarus	FCFT, FSS	SC		Endemic California toad found in wet meadows between 4,000–12,000 feet in the Sierra Nevada from Alpine County south to Fresno County.	Not expected to occur. The study area is outside the known range of this species.
MountainSierra Nevada yellow-legged frog Rana muscosasierrae	FCFE, FSS	ST. SC	P	Occurs in upper elevation lakes, ponds, bogs, and slow-moving alpine streams. Most Sierra Nevada populations are found between 6,000 and 12,000 feet elevation. Almost always found within three ft. of water, and associated with montane riparian habitats in lodgepole pine, ponderosa pine, Jeffrey pine, sugar pine, white fir, whitebark pine, and wet meadow vegetation types. Alpine lakes inhabited by mountain yellow-legged frogs generally have grassy or muddy margin habitat, although below treeline sandy and rocky shores may be preferred. Suitable stream habitat can be highly variable, from high gradient streams with plunge pools and waterfalls, to low gradient sections through alpine meadows, but low gradient streams are generally unoccupied and have no potential breeding locations due to the lack of depth for overwintering and refuge (i.e., depths of several feet or more).	Low potential to occur. Potentially suitable habitat is present in the study area The species was not detected during a focused survey (including dipnetting) of potentially suitable habitat within the study area on September 29 and 30 and October 6 and 7, 2015 (Ascent 2015). This survey determined that habitat in the study area is not considered suitable for breeding and has very low potential to support nonbreeding (e.g., overwintering) individuals based on shallow water conditions, high vegetation density within and surrounding aquatic features in some locations, and the abundance of predators (including bullfrogs) throughout the survey area. AdditionallyHowever, the distance to known populations; presence of predators (e.g., bullfrogs), and high level of disturbance in the study area cause the potential of occurrence to be low.
Northern leopard frog Rana pipiens	FSS	SC		Usually occurs in permanent water with abundant aquatic vegetation. Associated with wet meadows, marshes, slow-moving streams, bogs, ponds, potholes, and reservoirs.	Not expected to occur. Potentially suitable habitat is present in the study area. However, there have been no documented occurrences in the region.

Special-Sta	Table 3.4-2 Special-Status Wildlife Species Evaluated for the Upper Truckee River and Marsh Project					
Common Name and	Regulatory Status			Habitat Associations ¹	Potential for Occurrence ²	
Scientific Name	Federal	State	TRPA	Habitat Associations	Fotential for Occurrence-	
Birds						
Osprey Pandion haliaetus		SC	SI	Associated strictly with large fish-bearing waters. Nest usually within 0.25 mile of fish-producing water, but may nest up to 1.5 mile from water. In the Tahoe Basin, osprey nests are distributed primarily along the Lake Tahoe shoreline at the northern portion of the east shore and southern portion of the west shore. Other osprey nest sites in the Basin occur along the shorelines of smaller lakes (e.g., Fallen Leaf Lake), and in forest uplands up to 1.5 miles from lakes.	Observed in study area (Foraging). Osprey have been observed in the study area. They are not known to nest in the study area, however good foraging habitat and perch sites are present in the area.	
Northern goshawk Accipiter gentilis	FSS	<u>sc</u>	SI	In the Sierra Nevada, generally requires mature conifer forests with large trees, snags, downed logs, dense canopy cover, and open understories for nesting; aspen stands are also used for nesting. Foraging habitat includes forests with dense to moderately open overstories, and open understories interspersed with meadows, brush patches, riparian areas, or other natural or artificial openings. Goshawks reuse old nest structures and maintain alternate nest sites.	Observed in study area (foraging). Potential foraging habitat is present in the study area. However the lack of suitable nesting habitat and high disturbance levels in the surrounding area (e.g., residential and commercial development) cause the study area to be rarely used and northern goshawk to have a low potential to occur in a given year. A northern goshawk was observed in the study area previously (1994–1996). However, the detection was made in September when individuals tend to be moving from summer areas (Global Environmental 1997). It could have been a young bird produced elsewhere in the Basin or a migrating bird. No northern goshawks have been documented in the study area in recent years (1997–2007).	

Common Name and	Regulatory Status				Delegalist for Occurrence 2	
Scientific Name	Federal	State	TRPA	Habitat Associations ¹	Potential for Occurrence ²	
Cooper's hawk Accipiter cooperii		SC		Nests in oak woodlands, other mixed evergreen forest, or coniferous forest. Forages in a variety of habitats from open areas to dense forests.	Observed in study area. Potentia nesting and foraging habitat exists within upland areas in the study area. The species has been documented foraging in the study area as recently as 2000 but has no been observed nesting (TRPA 2002). The level of disturbance in the study area reduces the potentia for this species to use the area for nesting to a low level.	
Sharp-shinned hawk <i>Accipiter striatus</i>		S€		Nests in coniferous or mixed forests, usually selecting a conifer for the nest tree. Forages in a wide variety of coniferous, mixed, or deciduous woodlands.	Observed in study area (Foraging). Potential nesting and foraging habitat exists within the upland areas in the study area. The species has been observed foraging in the study area as recently as 2000 but has not been observed nesting (TRPA 2002). The level of disturbance in the study area reduces the potential for this species to use the study area for nesting to a low level.	
Peregrine falcon Falco peregrines	FSS	SE, FP	SI	Nests and roosts on protected ledges of high cliffs, usually adjacent to water bodies and wetlands that support abundant avian prey.	Not expected to occur. Suitable habitat not present in the study area.	
Mammals		•				
Pale Townsend's big- eared bat Corynorhinus townsendii pallescens	FSS	SC <u>.</u> <u>C(T)</u>	SI	Ranges throughout California mostly in mesic habitats. Limited by available roost sites, such as caves, tunnels, mines, and buildings.	Not expected to occur. Suitable habitat not present in the study area. No occurrences reported within the Lake Tahoe Basin (Schlesinger and Romsos 2000).	
Western red bat Lasiurus blossevillii	FSS	SC		Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores).	High potential to occur. Suitable habitat is present in the study area and the species has been documented within 4 miles of the study area as recently as 2004 (Borgmann and Morrison).	
Hoary bat Lasiurus cinereus		SC		Diverse forest habitats with a mixture of forest and small open areas that provide edges. Solitary and primarily roost in foliage of both coniferous and deciduous trees.	Observed in study area. Suitable habitat is present and the species has been documented on the study area (Borgmann and Morrison).	
American Pacific marten <i>Martes</i> Americana caurina	FSS		P	Dense canopy conifer forest with large snags and downed logs. Prefers old growth stands with multiple age classes in vicinity.	Not expected to occur. Suitable habitat not present in the study area.	

Special-Sta	tus Wild	life Spe	cies Ev		3.4-2 r the Upper Truckee Ri	iver and Marsh Project
Common Name and	Regu	latory Sta	itus	Uak	oitat Associations ¹	Potential for Occurrence ²
Scientific Name	Federal	State	TRPA	Пак	ollal Associations.	Potential for Occurrence
Pacific-fisher—West Coast DPS MartesPekania pennanti pacifica	FCP(T), FSS	SC, C(T)	P	Inhabits stands of pine, Douglas fir, and true fir, in northwestern California and Cascade-Sierra ranges. Fishers are considered extirpated throughout much of the Central and Northern Sierra Nevada (Zielinski et al. 1995). Not expected to occur. No suitable habitat present. Species is considered extirpated from the Lake Tahoe Basin.		
1 Regulatory Status Definitions Federal—U.S. Fish and Wildlife Service (USFWS): FT = Threatened FE = Endangered P(T)FC = Candidate Proposed for listing under the federal Endangered Species Act as threatened FSS = USDA Region 5 Sensitive Species (FSM 2672) DPS = Distinct Population Segment TRPA SI = Special interest/threshold species P = Proposed by TRPA to be added as a special					ST = Threatened SE = Endangered FP = Fully Protected SC = Species of Species	ing under the California Endangered

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.1, "Affected Environment," on page 3.4-33 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Northern Goshawk, Cooper's Hawk, and Sharp-Shinned Hawk

The northern goshawk (*Accipiter gentilis*), Cooper's hawk (*A. cooperii*), and sharp shinned hawk (*A. striatus*) are is a forest raptor species that havehas been detected in the study area. Each of these This species is designated as a species of special concern by CDFW. The northern goshawk is also considered sensitive by USFS Region 5, and is considered a special-interest species by TRPA.

Northern goshawks generally require mature conifer forests with large trees, snags, downed logs, dense canopy cover, and open understories for nesting. Foraging habitat for this species includes forests with dense to moderately open overstories, and open understories interspersed with meadows, brush patches, riparian areas, or other natural or artificial openings. Forest habitat in the study area lacks the characteristics of suitable nesting habitat. A northern goshawk was previously observed in the study area. However, the detection was made in September, when individuals tend to move from summer areas (Conservancy 1997). Therefore, this bird may have been a dispersing juvenile or migrant. Although the goshawk has been observed in the study area, the lack of suitable nesting habitat in the study area and the high level of disturbance in the upland area limit the potential for the northern goshawk to nest there.

Cooper's hawks and sharp shinned hawks nest and forage in a variety of coniferous and mixed forest habitat types. Cooper's hawks will also forage in more open areas. Suitable foraging habitat exists in the study area in upland areas, as well as in willow scrub—wet meadow. However, the small patches of forested habitat in the study area may not be adequate for nesting. In addition, the level of disturbance, especially in and around the upland area, limits the potential for these two species to use the site for nesting. The Cooper's hawk and sharp shinned hawk have been detected in the study area as recently as 2000 (TRPA 2002a).

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.1, "Affected Environment," on page 3.4-36 of the 2013 Draft EIR/EIS/EIS has been entirely removed, as follows:

Hoary Bat

The hoary bat is designated as a species of concern by CDFG. It is associated with a diverse array of forest habitats that also contain open areas, which can provide edge habitat. Hoary bats are solitary and tend to roost in the foliage of both coniferous and deciduous trees. Suitable roosting habitat exists in the study area along the montane meadow/upland edge, and high quality foraging habitat is present throughout the study area. Hoary bats have been documented in various locations within the Tahoe Basin, including the study area, as recently as 2004 (Borgmann and Morrison 2004).

The Sierra Nevada snowshoe hare was identified as a species with low potential to occur in Table 3.4-2 on page 3.4-30 of the 2013 Draft EIR/EIS/EIS. Therefore, the subsection "Sierra Nevada Snowshoe Hare," comprising one paragraph in Section 3.4.1, "Affected Environment," on page 3.4-38 of the 2013 Draft EIR/EIS/EIS, is not relevant to the discussion of species with moderate to high potential to occur in the study area and has been entirely removed, as follows:

Sierra Nevada Snowshoe Hare

The Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*) is listed as a species of concern by CDFG. In the Sierra Nevada, this species in found only in boreal zones. Suitable habitat includes riparian communities with thickets of willows and alders, and conifer forests with abundant cover composed of shrubs or small trees. In the Tahoe Basin, snowshoe hares can be found in dense brush near the edges of meadows or riparian communities. Montane meadow habitat and the willow scrub—wet meadow habitat in the study area provide suitable habitat for this species. However, the distance of the study area from other suitable habitat and the level of disturbance in the study area may limit the potential of occurrence for this species.

As a result of an error in reference, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-44 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Section 3.4.2, "Environmental Setting," discusses all special-status plant and wildlife species evaluated in this analysis, and Tables 3.4-33.4-1 and 3.4-43.4-2 summarize the potential for each of these species to occur in the study area. With regard to sensitive species (significance criteria CEQA 1 and TRPA 5), those plant and wildlife species not expected or with a low probability to occur (because of a lack of suitable habitat, recent focused surveys that did not detect the species, or lack of other occurrence records) are not addressed further in this analysis. Implementation of this project is not expected to affect those species.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-46 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- IMPACT Damage to or Mortality of Special-Status Plants Resulting from Construction Activities.
- 3.4-3 (CEQA 1, 5; TRPA 5) Under Alternative 1, construction activities would not occur in occupied
- (Alt. 1) American mannagrass habitat. However, construction of the bridge and boardwalk would occur in and close to Tahoe yellow cress habitat that could be occupied. Thus, construction of these facilities could damage or kill Tahoe yellow cress plants. This impact would be potentially significant.

TwoOne special-status plant species werewas documented in the study area by the protocol-level plant survey: American mannagrass and TYC. Alternative 1 would not involve construction activities in the area along Trout

Creek occupied by American mannagrass. Thus, American mannagrass would not be affected by Alternative 1. However, a Under Alternative 1, a bridge and boardwalk would be constructed along the study area's Lake Tahoe shoreline under this alternative, and construction would also occur along the shoreline where the mouth of the Upper Truckee River would be modified. Footings for the bridge would be placed in beach and dune habitat where TYC is known to occur, and portions of the boardwalk would be located near beach and dune habitat where TYC is known to occur or could potentially be present. Similarly, river mouth modifications also would require construction activities and associated disturbance of beach and dune habitat. Therefore, construction of this bridge and boardwalk, and river mouth modification, could damage or kill TYC plants. This impact would be **potentially significant**.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-48 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Altered Extent of Special-Status Plant Habitat. (CEQA 1, TRPA 5) Under Alternative 1, lagoon restoration could increase the extent of habitat that may be physically suitable for American mannagrass. Also, the increased extent and inundation of willow scrub wet meadow under this alternative could increase the extent of habitat suitable for American mannagrass. However, both of these effects are uncertain and may not alter the extent of suitable habitat. Under Alternative 1, beach and dune restoration could increase the extent of habitat physically suitable for Tahoe yellow cress. The boardwalk would be located near the back beach-marsh transition, but as described in Chapter 2, in the final design it would be sited in the marsh outside of Tahoe yellow cress habitat. Potential changes in sediment supply would not be sufficient to substantially reduce areas physically suitable for Tahoe yellow cress. In summary, the effect on the extent of habitat for American mannagrass would be no effect to beneficial, and for Tahoe yellow cress, the effect would be less than significant. Therefore, this impact would be less than significant.

There are twoOne special-status plant species was documented in the study area: American mannagrass and TYC. The effect of implementing Alternative 1 could be an increase in the extent of habitat that may be physically suitable for American mannagrass, but could be a reduction in the extent of habitat that may be physically suitable for TYC. It would provide additional habitat potentially suitable for American mannagrass by restoring the lagoon behind East Barton Beach (Table 3.4-4). Also, the extent of habitat suitable for American mannagrass could be increased by the additional acreage of willow scrub wet meadow and more frequent overbanking of river flow into the marsh that would result from the river restoration included in Alternative 1. However, the specific microhabitat requirements of American mannagrass (e.g., mud benches along Trout Creek) are not known and thus river restoration may not increase the extent of this species.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-49 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

The effect of Alternative 1 on the function and extent of habitat for American mannagrass would be no effect to beneficial and on the function and extent of habitat for TYC would be less than significant. Thus, this impact would be less than significant.

IMPACT
3.4-5
Calculate Table 1 Damage to or Mortality of Special-Status Plants Resulting from Recreational Activities. (CEQA 1, 5; TRPA 5) Under Alternative 1, damage to or mortality of special-status plants resulting from recreational activities would increase. Under existing conditions, habitat occupied by American mannagrass is in a location that is not substantially disturbed by recreational activities, and implementing Alternative 1 would maintain this condition. Under Alternative 1, the existing Tahoe yellow cress management plan (including the Barton Beach exclosure and adaptive management) would continue to be implemented. However, Alternative 1 would construct a boardwalk in close proximity to habitat occupied by Tahoe yellow cress and increase recreational

use of potential and occupied habitat, and thus, would likely increase trampling of Tahoe yellow cress plants. Therefore, this impact would be **significant**.

Implementing Alternative 1 could change recreational activity in habitat suitable for the two special-status plant species documented in the study area: American mannagrass and TYC.

American mannagrass grows along Trout Creek in an area that is not disturbed by recreational activities under existing conditions and that is not likely to be disturbed in the future. Under Alternative 1, this area would be included in the core habitat in which recreational use would be reduced; therefore, there would be no substantial effect on American mannagrass.

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-51 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

3.4-8
(Alt. 1) Disruption of Wildlife Habitat Use and Loss of Wildlife Resulting from Construction Activities. (CEQA 1; TRPA 9, 10, 12) Under Alternative 1, construction activities could cause short-term disruption of wildlife use of the study area, cause the loss of wildlife, or both. Wintering bald eagle use of the study area does not occur during the construction season and thus would not be disrupted. However, construction of the restoration elements and recreation infrastructure of Alternative 1 could result in the harm or loss of individuals or nests or result in substantial disruptions to nesting attempts or other activities by three special-status bird species (yellow warbler, willow flycatcher, and long-eared owl) and would substantially affect nesting or other activities by one special-status guild (waterfowl). It also could result in abandonment or removal of active roost sites for, or harm or loss of, hoary bat or western red bat. A number of common wildlife species also would likely have their use of the study area disrupted. This impact would be significant.

Under Alternative 1, construction activities could cause short-term disruption of wildlife use of portions of the study area, cause the loss of wildlife, or both. Construction activities would affect both common and special-status wildlife species by the same mechanisms: (1) human disturbance (i.e., the sounds and motions of construction workers and machinery) that disrupts foraging, nesting attempts, or other wildlife use of the study area and concurrently causes physiological stress, energetic costs, and increased risk of predation and (2) damage and removal of vegetation by clearing and grubbing, stockpiling of materials and soil, off-road operation of vehicles and other machinery, and earthwork that destroys nests or roost sites or harms or kills wildlife.

FifteenNine special-status wildlife taxa/guilds either have been documented in the study area or have a moderate to high likelihood of being present (Table 3.4-2). Some of these species are wide-ranging raptors that may forage or perch in the study area but that are unlikely to nest in the study area (including osprey, bald eagle, and northern goshawk); these species would not be substantially affected by construction activities, and construction activities might even benefit some foraging activities. Wintering bald eagles that perch in the study area would not be affected because their use of the study area would not be during the construction season. Construction activities could disturb the foraging activities of raptors, particularly where these activities would occur near the Upper Truckee River. However, because existing recreation use is already a source of disturbance, additional construction-related disturbance might not substantially affect foraging patterns. Furthermore, abundant foraging habitat is available in other areas nearby. Construction activities associated with Alternative 1 also would not cause injury or mortality to individuals. Therefore, construction activities would not be sufficient to affect the population size or viability of these species.

However, the nesting or roosting of six-five special-status taxa/guilds in the study area could be adversely affected by the human disturbance or by the damage and removal of vegetation associated with construction:

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-52 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Western red bat and hoary bat. For both of these bat species, sSuitable roosting habitat exists in trees along forest edges bordering open habitats and in trees in riparian corridors of the study area, and high-quality foraging habitat is present throughout the study area. Western red bats have been detected at Tallac Marsh, less than four miles west of the study area (Borgmann and Morrison 2004). Hoary bats have been documented in the study area as recently as 2004 (Borgmann and Morrison 2004).

Construction of Alternative 1 would involve disturbance and removal of vegetation (including willow thickets and trees) from willow scrub-wet meadow, Jeffrey pine forest, and lodgepole pine forest that provides suitable nesting habitat for vellow warbler, potentially suitable nesting habitat for willow flycatcher and long-eared owl, and suitable roosting habitat for western red bat-and hoary bat. Construction would also disturb and remove dense herbaceous vegetation near the open water of lagoons and the Upper Truckee River that provides nesting habitat for waterfowl. Furthermore, construction activities would generate human disturbance (e.g., noise) near these nesting and roosting habitats.

Removing or disturbing occupied nesting habitat would result in a substantial effect on the yellow warbler, willow flycatcher, long-eared owl, or waterfowl if individuals were killed, otherwise harmed, deterred from occupying breeding and nesting locations, or caused to abandoned a nest (potentially resulting in mortality of eggs and chicks). Similarly, roost removal or disturbance causing roost abandonment would have a substantial effect on either bat species western red bat, particularly if individuals were killed or otherwise harmed. In addition, use of the study area by a number of common wildlife species would likely be disrupted. Therefore, the effect of construction activities on wildlife use of the study area would be **significant**.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-56 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- **IMPACT** Damage to or Mortality of Special-Status Plants Resulting from Construction Activities. (CEQA 1, 5;
- 3.4-3 TRPA 5) Under Alternative 2, construction activities related to recreation infrastructure would not occur in
- (Alt. 2) occupied American mannagrass habitat. However, construction activities associated with river restoration at the mouth of the Upper Truckee River would occur in or close to Tahoe yellow cress habitat that could be occupied. Thus, these construction activities could damage or kill Tahoe yellow cress plants. This impact would be potentially significant.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-57 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- **IMPACT** Altered Extent of Special-Status Plant Habitat. (NEPA) Under Alternative 2, lagoon restoration would 3.4-4 increase the extent of potential habitat for American mannagrass. Also, the restoration and increased
- inundation of willow scrub wet meadow under this alternative could increase the extent of habitat suitable for (Alt. 2) American mannagrass. However, both of these effects are uncertain and may not alter the extent of suitable habitat. Under Alternative 2, beach and dune restoration could and new river mouth construction likely would increase the extent of habitat suitable for Tahoe yellow cress, and potential changes in sediment supply would not be sufficient to substantially reduce Tahoe yellow cress habitat. In summary, the effect on the extent of habitat for American mannagrass would be no effect to beneficial and for Tahoe vellow cress would be beneficial. Therefore, this impact would be beneficial.

With regard to American mannagrass, this This impact is similar to Impact 3.4-4 (Alt. 1), except that under Alternative 2, the increase in the acreage of willow scrub-wet meadow would be slightly greater than under Alternative 1 (8.7 versus 8.2 acres) (Table 3.4-4), and increased inundation of willow scrub-wet meadow could also increase the extent of habitat. With regard to TYC, beach and dune restoration could and new river mouth construction likely would increase the extent of habitat suitable for TYC, and potential changes in sediment supply would not be sufficient to substantially reduce TYC habitat. This impact would be **beneficial**.

IMPACT
3.4-5
Damage to or Mortality of Special-Status Plants Resulting from Recreational Activities. (CEQA 1, 5;
TRPA 5) Under Alternative 2, damage to or mortality of special-status plants resulting from recreational activities would not be substantially altered. Under existing conditions, habitat occupied by American mannagrass plants is in a location that is not substantially disturbed by recreational activities, and implementing Alternative 2 would maintain this condition. Under Alternative 2, the existing Tahoe yellow cress management plan (including the Barton Beach exclosure and adaptive management) would continue to be implemented and protect habitat occupied by Tahoe yellow cress at Barton Beach. Also, implementing Alternative 2 would not substantially alter recreational use of Barton Beach or of habitat occupied by Tahoe yellow cress at Cove East Beach. Therefore, this impact would be less than significant.

Alternative 2 would not include the bridge and boardwalk components of Alternative 1 or other components that would increase recreational use of habitat occupied by TYC. Alternative 2 proposes the minimum level of recreation infrastructure with proposed infrastructure being located outside of areas that support TYC and American mannagrass. Under existing conditions, habitat occupied by American mannagrass plants is not substantially disturbed by recreational activities, and implementing Alternative 2 would maintain this condition. Under Alternative 2, the existing TYC management plan (including the Barton Beach exclosure and adaptive management) would continue to be implemented and protect habitat occupied by TYC at Barton Beach. Therefore, this impact would be **less than significant**.

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-58 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

IMPACT 3.4-8 Disruption of Wildlife Habitat Use and Loss of Wildlife Resulting from Construction Activities. (CEQA 1; TRPA 9, 10, 12) Under Alternative 2, construction activities could cause short-term disruption of wildlife use of the study area, cause the loss of wildlife, or both. Wintering bald eagle use of the study area does not occur during the construction season and thus would not be disrupted. However, construction of the restoration, recreation, public access, and habitat protection elements of Alternative 2 could result in the harm or loss of individuals or nests or result in substantial disruptions to nesting attempts or other activities by three special-status bird species (yellow warbler, willow flycatcher, and long-eared owl) and would affect one special-status guild (waterfowl). It also could result in abandonment or removal of active roost sites for, or harm or loss of, heary bat or western red bat. This impact would be significant.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-61 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- IMPACT Damage to or Mortality of Special-Status Plants Resulting from Construction Activities. (CEQA 1, 5;
- 3.4-3 TRPA 5) Under Alternative 3, construction activities related to recreation infrastructure would not occur in
- (Alt. 3) occupied American mannagrass habitat. However, construction activities associated with river restoration at the mouth of the Upper Truckee River would occur in or close to Tahoe yellow cress habitat that could be occupied. Thus, these construction activities could damage or kill Tahoe yellow cress plants. This impact would be potentially significant.

TwoOne special-status plant species werewas documented in the study area by the protocol-level plant survey: American mannagrass and TYC. This impact is similar to Impact 3.4-3 (Alt. 1), but the potential for construction activities to affect special-status plants is less under this alternative than under Alternative 1 and similar to Alternative 2. Construction under Alternative 3 would be limited to construction associated with the river mouth of the Upper Truckee River that would occur in or close to TYC habitat; it would not include construction of a boardwalk, bridge, and bike trail in the areas where TYC may occur. Similar to Alternative 1, this impact would be **potentially significant**.

- IMPACT Altered Extent of Special-Status Plant Habitat. (CEQA 1, 5; TRPA 5) Under Alternative 3, the extent of habitat for special-status plants would remain largely unaltered. Lagoon and beach and dune restoration would
- (Alt. 3) not be components of Alternative 3. The restoration and increased inundation of willow scrub wet meadow could increase the extent of habitat suitable for American mannagrass. However, both of these effects are uncertain and may not alter the extent of suitable habitat. Potential changes in sediment supply would not be sufficient to substantially reduce Tahoe yellow cress habitat. In summary, the effect on the extent of habitat for American mannagrass would be no effect to beneficial and for Tahoe yellow cress would be less than significant. Therefore, this impact would be less than significant.

Under Alternative 3, the extent of habitat for special-status plants (i.e., American mannagrass and TYC) would remain largely unaltered. Restoration of lagoon habitat potentially suitable for American mannagrass would not be a component of Alternative 3. The restoration and increased inundation of willow scrub wet meadow could increase the extent of habitat suitable for American mannagrass; however, because the microhabitat requirements of American mannagrass (e.g., mud benches along Trout Creek) are uncertain, habitat suitable for American mannagrass may not increase. Restoration of beach and dune habitat potentially suitable for TYC would not be a component of Alternative 3. Also, potential changes in sediment supply would not be sufficient to substantially alter TYC habitat. Therefore, the impact on the extent of habitat for American mannagrass and TYC would be less than significant.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-62 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- IMPACT Damage to or Mortality of Special-Status Plants Resulting from Recreational Activities. (CEQA 1, 5;
- 3.4-5 TRPA 5) Under Alternative 3, damage to or mortality of special-status plants resulting from recreational
- (Alt. 3) activities would not be substantially altered. Under existing conditions, habitat occupied by American mannagrass plants is in a location that is not substantially disturbed by recreational activities, and implementing Alternative 3 would maintain this condition. Under Alternative 3, the existing Tahoe yellow cress management plan (including the Barton Beach exclosure and adaptive management) would continue to be implemented and protect Tahoe yellow cress. Also, implementing Alternative 3 would not substantially alter recreational use of Barton Beach or habitat occupied by Tahoe yellow cress at Cove East Beach. Therefore, this impact would be less than significant.

Because of recent changes in the federal and state status of several wildlife species addressed in the DEIR, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-63 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

IMPACT 3.4-8 Disruption of Wildlife Habitat Use and Loss of Wildlife Resulting from Construction Activities. (CEQA 1; TRPA 9, 10, 12) Under Alternative 3, construction activities could cause short-term disruption of wildlife use of the study area, cause the loss of wildlife, or both. Wintering bald eagle use of the study area does not occur during the construction season and thus would not be disrupted. However, construction of the restoration, recreation, public access, and habitat protection elements of Alternative 3 could result in the harm or loss of individuals or nests or result in substantial disruptions to nesting attempts or other activities by three special-status bird species (yellow warbler, willow flycatcher, and long-eared owl) and would affect one special-status guild (waterfowl). It also could result in abandonment or removal of active roost sites for, or harm or loss of, heary bat or western red bat. This impact would be significant.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-65 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- IMPACT Damage to or Mortality of Special-Status Plants Resulting from Construction Activities. (CEQA 1, 5;
 - 3.4-3 TRPA 5) Under Alternative 4, construction activities would not occur in or near the habitat occupied by
- (Alt. 4) American mannagrass or in or near habitat occupied by or potentially suitable for Tahoe yellow cress. Therefore, this impact would be **less than significant**.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-66 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- Altered Extent of Special-Status Plant Habitat. (CEQA 1, 5; TRPA 5) Under Alternative 4, the extent of habitat for special-status plants would remain largely unaltered. Lagoon and beach and dune restoration would not be components of Alternative 4. The restoration and increased inundation of willow scrub wet meadow under this alternative could increase the extent of habitat suitable for American mannagrass. However, both of these effects are uncertain and may not alter the extent of suitable habitat. Potential changes in sediment supply would not be sufficient to substantially reduce Tahoe yellow cress habitat. In summary, the effect on the extent of habitat for American mannagrass would be no effect to beneficial and for Tahoe yellow cress would be less than significant. Therefore, this impact would be less than significant.
- IMPACT 3.4-5 Damage to or Mortality of Special-Status Plants Resulting from Recreational Activities. (CEQA 1, 5; TRPA 5) Under Alternative 4, damage to or mortality of special-status plants resulting from recreational activities would not be substantially altered. Under existing conditions, habitat occupied by American mannagrass is in a location that is not substantially disturbed by recreational activities, and implementing Alternative 4 would maintain this condition. Under Alternative 4, the existing Tahoe yellow cress management plan (including the Barton Beach exclosure and adaptive management) would continue to be implemented. Also, implementing Alternative 4 would not substantially alter recreational use of Barton Beach or of habitat occupied by Tahoe yellow cress at Cove East Beach. Therefore, this impact would be less than significant.

Because of recent changes in the federal and state status of several wildlife species addressed in the 2013 Draft EIR/EIS/EIS, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-67 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

IMPACT 3.4-8 Disruption of Wildlife Habitat Use and Loss of Wildlife Resulting from Construction Activities. (CEQA 1; TRPA 9, 10, 12) Under Alternative 4, construction activities could cause short-term disruption of wildlife use of the study area, cause the loss of wildlife, or both. Wintering bald eagle use of the study area does not occur during the construction season and thus would not be disrupted. However, construction of the restoration, recreation, public access, and habitat protection elements of Alternative 4 could result in the harm or loss of individuals or nests or result in substantial disruptions to nesting attempts or other activities by three special-status bird species (yellow warbler, willow flycatcher, and long-eared owl) and would affect one special-status guild (waterfowl). It also could result in abandonment or removal of active roost sites for, or harm or loss of, heary bat or western red bat. This impact would be significant.

As a result of the corrected identification of American mannagrass to Fowl mannagrass, the text of Section 3.4.2, "Environmental Consequences," on page 3.4-69 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

- IMPACT Damage to or Mortality of Special-Status Plants Resulting from Recreational Activities. (CEQA 1, 5;
- 3.4-5 TRPA 5) Under Alternative 5, recreational activities would remain comparable to existing conditions. Under
- (Alt. 5) existing conditions, habitat occupied by American mannagrass is in a location that is not substantially disturbed by recreational activities, However, visitors cause damage to and mortality of some Tahoe yellow cress. This existing adverse condition would continue. Thus, no impact would occur.

Under Alternative 5, recreational activities would remain comparable to existing conditions. Under existing conditions, habitat occupied by American mannagrass is in a location that is not substantially disturbed by recreational activities, However, visitors cause damage to and mortality of some TYC. This existing adverse condition would continue. Thus, **no impact** would occur.

5.5 REVISIONS TO SECTION 3.8, "HYDROLOGY AND FLOODING"

The text of Section 3.8.1, "Affected Environment," on pages 3.8-28 through 3.8-30 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

FEMA FLOODPLAIN

The regulatory floodplain identified by FEMA is land temporarily inundated by water overflowing from an adjacent or nearby river or stream during the identified "base flood," in this case the 100-year flood (1.0 percent annual chance flood).

The regulatory floodplain consists of the floodway and margins of the floodplain, which are called the flood fringe. The floodway is where the water is likely to be deepest and fastest, and is considered the zone of highest flood hazard. As specifically defined by FEMA (44 Code of Federal Regulations [CFR] 59.1[d]), a floodway is the channel of a river or other watercourse, and the adjacent land areas, that must be reserved to convey and discharge floodwaters. This area within the floodplain should be kept free of all obstructions to allow floodwaters to flow freely downstream. Therefore, development in or modification of a floodway is usually prohibited. The flood fringe is a zone of floodwater storage where water moves slowly or is ponded during flooding.

Development within the flood fringe is permitted by FEMA as long as the resulting water-surface profile of the 100-year flood is not increased by more than one foot at any location.

Floodplain Boundaries and Water <u>Surface</u> Elevations

The boundaries of the 100-year floodplain and floodway, and estimated water-surface elevations and floodway boundaries in the study area (Exhibits 3.8-14a and 3.8-14b) are from FEMA's 2008 Flood Insurance Rate Maps effective April 3, 2012, (FEMA 2008a, 2008b, 2008c). This regulatory floodplain is are used by FEMA and CSLT in implementing to implement floodplain management. In 2008 FEMA compiled previous existing data and converted the data to digital format. development regulations. The mapping reflects revisions to the 1978 FIRM following Various land use changes in and around the study area, including improvements to the U.S. 50 bridges at the Upper Truckee River and Trout Creek crossings, additional urban development, record peak flood events (1997), and restoration of the LWS-Restoration Area. Additionally, a Letter of Map Revision (LOMR) was prepared in 2009 on the basis of updated topographic information for the Tahoe Keys and Lake Tallac area (FEMA 2009). The LOMR revised flood zone mapping in the northwest corner of the study area but did not revise the base flood elevations, wetland had occurred over the decades since the initial maps were produced in 1981 and 1995. Base topography for these most recent FEMA studies came from several sources (including the 2002 1-foot-interval Light Detection and Ranging [LiDAR] from the CSLT). The vertical datum was updated to North American Vertical Datum (NAVD) 88 in 2010. The recent FEMA Flood Insurance Study (FIS) updated hydrology to use 100-year peak flows of 7,376 cubic feet per second (cfs) on the Upper Truckee River and 948 cfs on Trout Creek (FEMA 2012). These values are 274 cfs lower and 48 cfs higher, respectively, than those listed in Table 3.8-3. FEMA delineated the floodplain boundaries using two sources of 1-foot contours. supplemented with USGS 7.5-minute topographic quadrangle map contours (FEMA 2012).

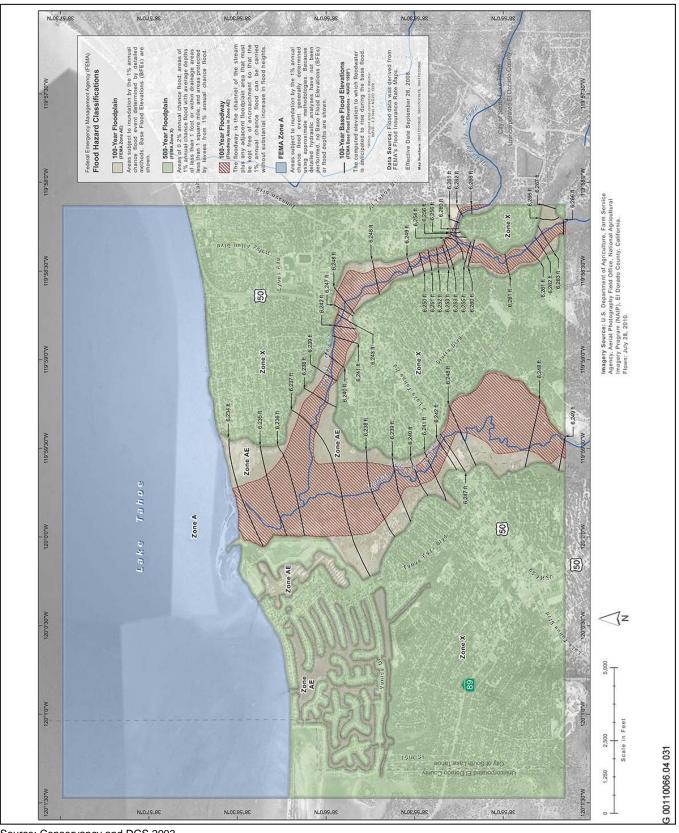
Nearly all of the study area is within in the effective FEMA 100-year floodplain, except the uplands areas adjacent to the Highland Woods subdivision, between Cove East Beach and the Sailing Lagoon, and along the margins of the Tahoe Keys Marina (Exhibit 3.8-14a and 3.8-14b). The Upper Truckee River and Trout Creek channels, adjacent areas, and the shared floodplain in the central meadow are in the designated floodway. The FEMA base flood elevations in the Upper Truckee River marsh range from approximately 6,243 feet NGVD (6,247 feet NAVD [North American Vertical Datum], used by FEMA) at the U.S. 50 crossing, to approximately 6,230 feet NGVD (6,234 feet NAVD) near the mouth of the river.

Some residential areas adjacent to the study area (a couple of streets in Tahoe Island and some lots in Sky Meadows) are within the floodplain fringe west of the Upper Truckee River. A few lots in Al Tahoe (along El Dorado Avenue, Edgewood Circle, and Lilly Avenue) are along the edge of the regulatory floodplain east of Trout Creek (Exhibit 3.8-14). Some residential areas adjacent to the study area, including portions of Tahoe Island (from the northern intersection of Tahoe Keys Boulevard and Michael Drive east along Colorado Court to the southeast end of Colorado Avenue and including the corner of Michael Drive east of Oregon Avenue) and several lots in Sky Meadows are within the floodplain fringe west of the Upper Truckee River. A few lots in Al Tahoe (along El Dorado Avenue, Edgewood Circle, and the west end of Lilly Avenue) are in the edge of the regulatory floodplain east of Trout Creek (Exhibits 3.8-14a and 3.8-14b).

The 100-year flood WSELs in the Upper Truckee River marsh as modeled by FEMA (2012) range from approximately 6,247 feet NAVD upstream of the U.S. 50 crossing to approximately 6,232 feet NAVD along the beach ridge (Exhibits 3.8-14a and 3.8-14b).

Flood Profiles for the Upper Truckee River One-Dimensional HEC-RAS Modeling

In 2005, hydraulic modeling has been was performed for the study area to estimate flood boundaries and elevations, using the USACE Hydraulic Engineering Center's River Analysis System (HEC-RAS) model (Version 3.1.2) in combination with geographic information system (GIS) applications (ArcView and HEC-GeoRAS) (Conservancy 2003, Conservancy and DGS 2005). This one-dimensional (1D) modeling routed the large and assumed concurrent



Source: Conservancy and DGS 2003

Exhibit 3.8-14 FEMA Floodplain Overlain on Aerial Map

peak-flow hydrographs for both the Upper Truckee River and Trout Creek through the study area, and included the effects of changing floodplain storage on resulting water surface elevations. The worst-case analysis assumed a high <u>initial</u> lake level (6,229 feet). The modeled flood hydrographs spanned the 5-year to 100-year events, and thus covered the range of flows that are likely to be associated with flood hazards. The 100-year event peak flows for the Upper Truckee River and Trout Creek were estimated to be 7,650 cfs and 900 cfs, respectively. Historic streamflow data and statistical analysis were used to estimate these flows. The peak flow was then applied to the rainfall hydrograph to produce a total storm hydrograph to input into the model.

The <u>1D</u> flood model was calibrated using field markings in Sky Meadows and Colorado Court from the January 1997 event (Conservancy and DGS 2005:6-10, 6-11). <u>In 2000, p</u>Photographs, homeowners' recollections, and remaining flood debris/damage marks were used to field-survey water levels from the 1997 event. (<u>The survey occurred in 2000.</u>) Simulated water surface elevations were generated by model runs that used the range of estimated peak flow for the 1997 event. Comparison of the field-surveyed water surface data to the simulated elevations supported calibration of the <u>1D</u> model (Table 3.8-4).

Table 3.8-4 Surveyed and Simulated Water Surface Elevations for the January 1997 Flood					
Location	Surveyed Floration Dange (feet)	Simulated Elevation Range (f			
Location	Surveyed Elevation Range (feet) —	At 5,560 cfs	At 6,560 cfs	At 7,500 cfs	
Sky Meadows	6,236.80 to 6,237.02	6,236.44	6,236.78	6,237.08	
Colorado Court	6,232.00 to 6,232.04	6,231.95	6,232.16	6,232.35	

Notes: cfs = cubic feet per second

The calibrated results of the <u>1D</u> hydraulic modeling include profiles of the existing channel bed, banks, and floodwater surfaces of the Upper Truckee River. As discussed above, showing that the channel's capacity is large enough to contain the 5-year event in the upstream portion of the study area between U.S. 50 and the "big bend" (Exhibit 3.8-15). The 5-year floodwater surface is about equal to the bank heights from the "big bend" to just upstream of the Colorado Avenue outfall. Downstream of this area, the 5-year water surface is higher than the east bank and higher than the west bank in some short reaches, including the restored LWS wetland. As expected, the 100-year water surface elevation exceeds the bank heights throughout the project reach, with the exception of the reserved fill "islands" along the restored LWS wetlands. The results of the previous 1D modeling were used to describe the existing conditions and evaluate and compare the action alternatives in the Draft EIR/EIS/EIS.

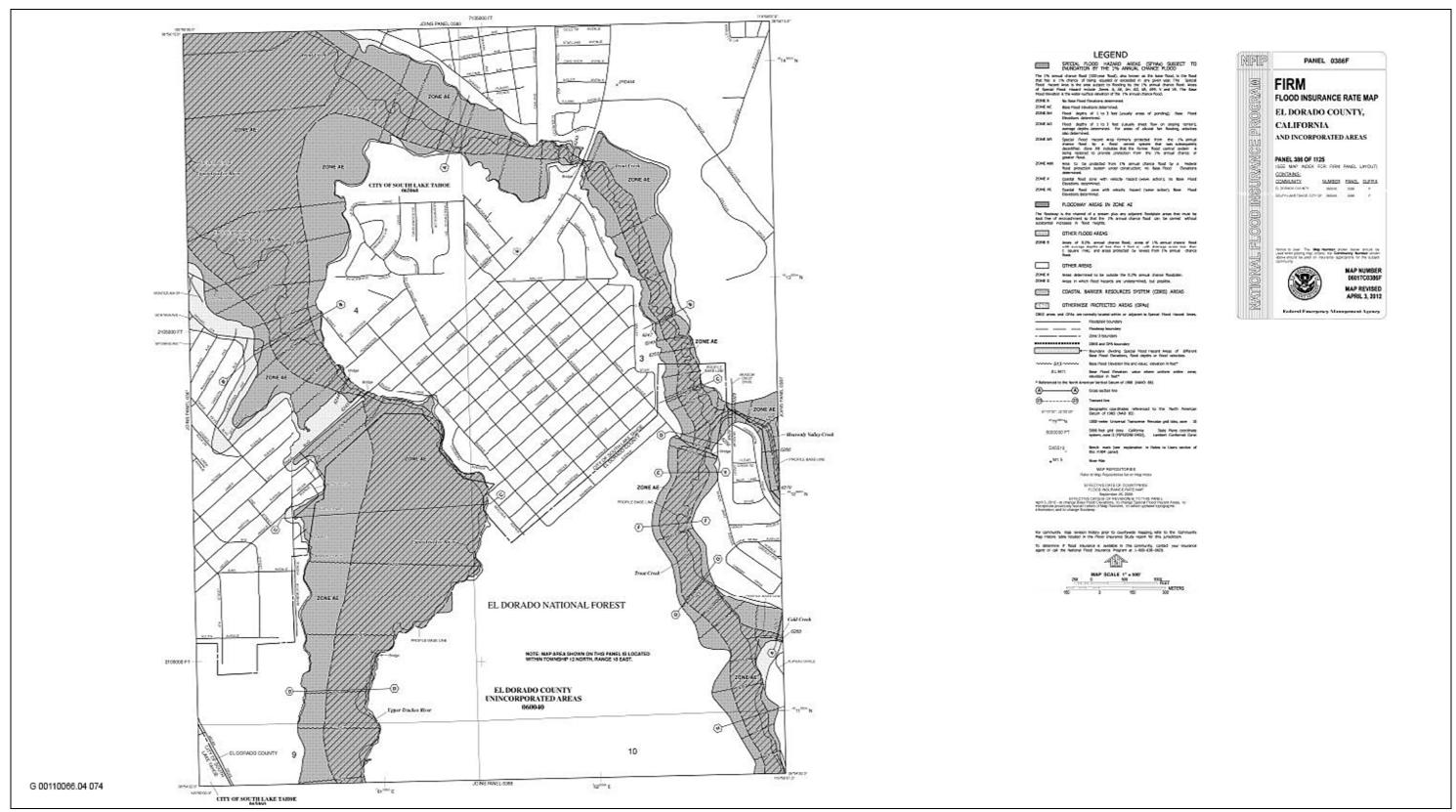
5.6 REVISIONS TO SECTION 3.9, "GEOMORPHOLOGY AND WATER QUALITY"

The text of Mitigation Measure 3.9-7 (Alt. 3) on page 3.9-67 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Mitigation Measure 3.9-7 (Alt. 3): Monitor and Adaptively Manage Delivery of Coarse Sediment to Cove East and Barton Beaches.

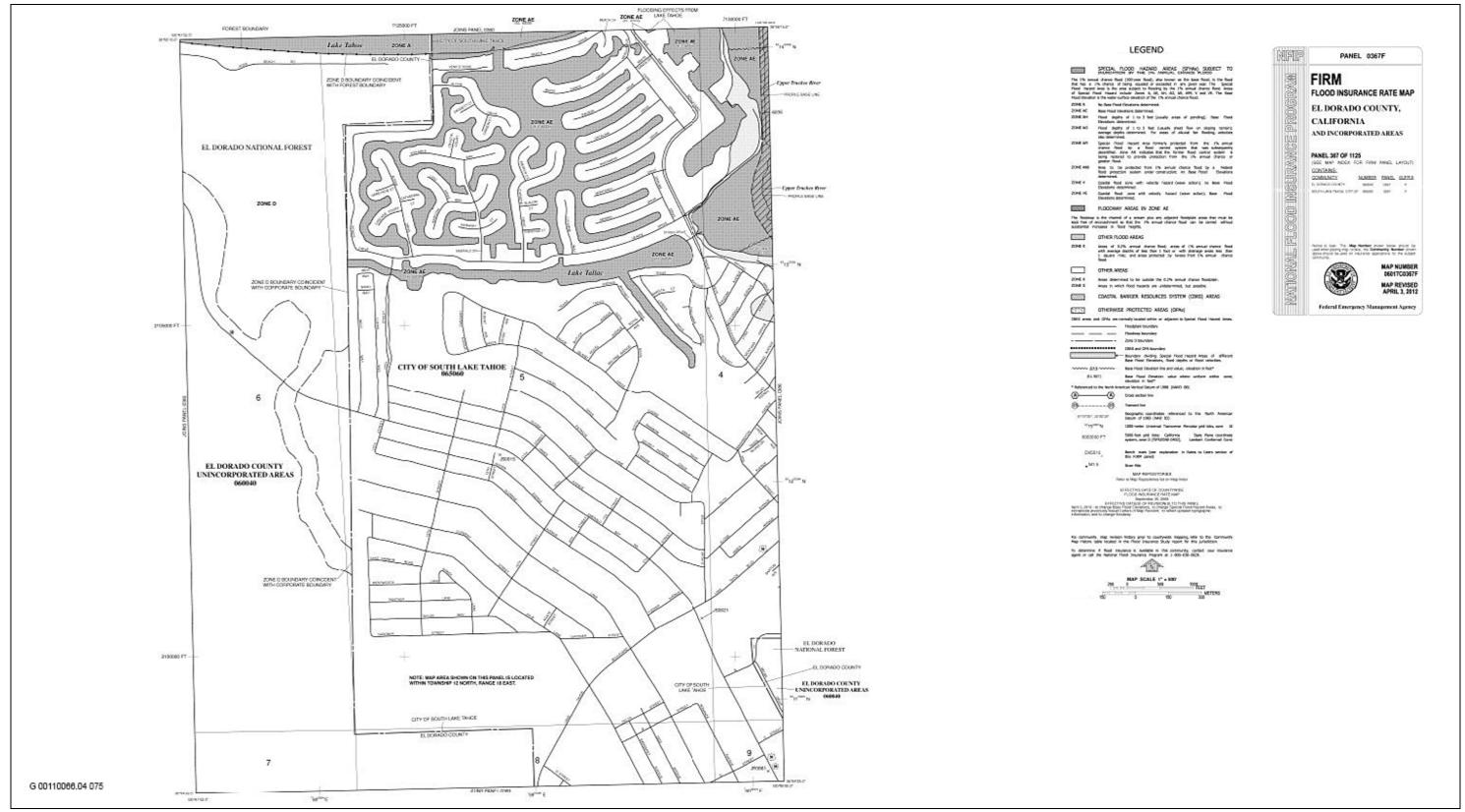
During the period of channel adjustments following construction, and until the streambed profile attains a relatively continuous slope within the study area, the Conservancy will monitor the supply of coarse sediment entering the study area, deposition within the treated reaches, and beach-face erosion at least once a year. Specifically, the Conservancy will make observations of net deposition or scour during low-water conditions. If substantial coarse-sediment deposition is occurring within large portions of the study area or beach-face erosion

^{*} Modeled three different peak flows for the range of estimated 1997 peak flows downstream of the U.S. Highway 50 bridge. Source: Conservancy and DGS 2005



Source: Data compiled by Cardno in 2015 based on FEMA 2012 data

Exhibit 3.8-14a FEMA Effective FIRM Panel 386F



Source: Data compiled by Cardno in 2015 based on FEMA 2012 data

Exhibit 3.8-14b

FEMA Effective FIRM Panel 387F

has worsened, and coarse-sediment input from upstream has not decreased, the Conservancy will respond with site-specific adaptive management. The Conservancy will develop and implement an adaptive management plan that will review and evaluate monitoring data and project conditions and recommend follow-up actions. Such actions could include continued or revised monitoring, corrective actions or interventions, and documentation. If coarse-sediment supplementation to site beaches or the nearshore is pursued as a corrective action, the coarse sediment shall be similar in lithology (rock type) and morphology (size and shape) to the native sands; washed free of fine sediments or contaminants; and obtained from a permitted borrow/quarry location.

5.7 REVISIONS TO SECTION 3.12, "PUBLIC SERVICES"

The text discussing the environmental setting related to law enforcement on pages 3.12-4 and 3.18-5 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

ENVIRONMENTAL SETTING

Law Enforcement

South Lake Tahoe Police Department

Police service in the study area is provided by the South Lake Tahoe Police Department (SLTPD). SLTPD is located within the government complex at the intersection of Al Tahoe and Johnson Boulevards. This complex also houses the El Dorado County Superior Court, Sheriff Coroner, and Sheriff's Department, among others.

SLTPD is allocated 41 sworn officers for an estimated 1.7 officers per 1,000 residents (based on the current population of approximately 24,000 residents). These staffing numbers may vary slightly, based on availability of grant funded positions and increases from seasonal work force employment. The population of South Lake Tahoe can reach 75,000 during the summer months. Because of this fluctuation, SLTPD does not use staffing ratios to determine human resource needs. SLTPD's response time goal is to arrive in less than 3 minutes for priority one calls (rape, robbery, or crimes in progress), none of which has generally been an issue in the study area. Only priority one calls are tracked; thus, response time goals are not set for other calls (Daniels, pers. comm., 2007).

SLTPD has informal mutual aid agreements with the El Dorado County Sheriff's Department and the Douglas County Sheriff's Department for response during critical incidents. While the study area is state land, it is within a local response area, not a state response area (PRC Section 4125-4128).

El Dorado County Sheriff's Department

The Conservancy contracts with the El Dorado County Sheriff's Department to provide patrols of the project area. Although the study area is not the primary jurisdiction of the Sheriff's Department, the Conservancy utilizes its services to supplement management of the property.

The El Dorado County Sheriff's Department has an informal mutual aid agreement with the South Lake Tahoe Police Department for response during critical incidents.

5.8 REVISIONS TO SECTION 3.18, "CUMULATIVE IMPACTS"

The text discussing related projects considered in the cumulative impact analysis on pages 3.18-4 through 3.18-12 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

RELATED PROJECTS CONSIDERED IN THE CUMULATIVE IMPACT ANALYSIS

Past Projects

The Upper Truckee River, its watershed, and surrounding areas have been substantially altered by land use practices during the past 150 years. The opening of the Comstock silver mining boom in Nevada in mid-1859 prompted a surge in timber harvesting, and agricultural and developed land uses also increased. From the 1900s to the present, developed land uses have continued to increase, particularly since 1960. For example, the population of the city of South Lake Tahoe has increased five-fold since 1960 (CSLT 2003).

As a result of these changes in land use, the Upper Truckee River watershed has experienced ecosystem degradation that is typical of what has occurred elsewhere in the Tahoe Basin (Murphy and Knopp 2000). The river has been modified from its original conditions by human activities such as logging, livestock grazing, and road construction, and by residential, commercial, and industrial developments (including the Lake Tahoe Airport and U.S. 50 bridge). Many of these past actions continue to affect resources in the project vicinity and Upper Truckee River watershed, and along the south shore of Lake Tahoe. These major past actions include the following:

- ► Historic Timber Harvests. Most forests within the watershed of the Upper Truckee River have been grazed and logged during the past 150 years, and an associated network of skid trails, flumes, logging roads, and railroads has been constructed during that time (Murphy and Knopp 2000). This extensive grazing, logging, and road construction altered biologic, hydrologic, geomorphic, and other resources in the Upper Truckee River watershed, including the project vicinity. Some logging occurred in the study area, and the study area was grazed for more than 100 years beginning in the 1860s (Lindström 1995, 1996). Both this grazing and the network of water impounding and diverting dams, gates, and miscellaneous earthen works affected resources in the study area and adjacent areas.
- ► Fire Suppression. Before the late 1800s, fires were frequent in the Tahoe Basin, and were mostly of low to moderate intensity. Since that time, changes in land use and fire management have altered the frequency and intensity of fires. In particular, since about the 1920s, fire suppression has resulted in a several-fold increase in tree density and fuel loads in most forests in the Tahoe Basin (Barbour et al. 2002:461–462). These changes in forest structure have altered biological habitats and increased the frequency of high-intensity fires and the vulnerability of trees to insect outbreaks.
- ► Species Introductions. Nonnative species have been accidentally or deliberately introduced into the aquatic and terrestrial ecosystems of the Tahoe Basin. Species that have become particularly abundant and are present in the project vicinity include cowbird (Molothrus ater), beaver (Castor canadensis), brown trout (Salmo trutta), brown bullhead catfish (Ictalurus nebulosus), cheatgrass (Bromus tectorum), and Eurasian milfoil (Myriophyllum spicatum) (Conservancy and DGS 2003). These species have been altering the resources of the project vicinity, the Upper Truckee River watershed, and the south shore of Lake Tahoe.
- ▶ Urban Development. During the past 150 years, a portion of the watershed of the Upper Truckee River has been converted to developed land uses. Based on a review of land cover within the watershed (using geographic information system [GIS] data layers from CAL FIRE 2002 and California Interagency Watershed Mapping Committee 2004), this portion is about 9 percent, concentrated in the lower elevation areas of the watershed, and includes much of the project vicinity. Urban development has been altering hydrologic, geomorphic, and other resources within the Upper Truckee River watershed, including the project vicinity. Several development projects along the Upper Truckee River have adversely affected geomorphic processes, water quality, and habitats: the golf course at the Lake Valley State Recreation Area (SRA), the South Lake Tahoe Airport, U.S. 50, and the Tahoe Keys Marina and residential area. (In particular, construction of the Tahoe Keys Marina and Tahoe Keys residential area has substantially affected resources in the project vicinity, as described separately below.)

- Newlands Project—Tahoe City Dam. Since 1870, a dam has been operated at Tahoe City to regulate the flow of water from Lake Tahoe into the Lower Truckee River. After enactment of the Reclamation Act of 1902, the Secretary of the Interior authorized construction of the Newlands Project, and during 1909–1913, the dam at Tahoe City was reconstructed to its present configuration. This dam controls the top 6.1 feet of storage at Lake Tahoe as a federal reservoir. The Truckee River Operating Agreement governs the operation of this dam, and consequently the surface elevation of Lake Tahoe (Reclamation 2008), which has a substantial effect on the resources of the study area.
- Tahoe Keys Marina and Tahoe Keys Residential Area. From the late 1950s into the 1970s, construction of the Tahoe Keys Marina and the Tahoe Keys residential area substantially altered the Upper Truckee Marsh and the downstream reach of the Upper Truckee River. During this time, approximately 500 acres in the center of the marsh was excavated to create canals and the Tahoe Keys Marina, and fill was placed to create the housing pads of the Tahoe Keys residential area. This project fragmented the marsh into what is now known as Pope Marsh on the west and the Upper Truckee Marsh on the east. In addition, by 1965, the adjacent portion of the Upper Truckee River was channelized, which effectively disconnected it from its former floodplain (Conservancy and DGS 2003).
- ▶ Heavenly Mountain Resort Master Plan This plan by Vail Resorts, Inc. guided improvement, expansion, and management of facilities and uses at Heavenly Mountain Resort, including areas within the Cold Creek watershed (which is within the Trout Creek watershed) (Vail Resorts 2007). Phase I projects included replacing ski lifts and regrading ski trails; constructing a 1,000-seat restaurant, a bridge for skiers, and new ski trails; and constructing other facilities. The project involved construction activities (e.g., installing trail, road, and pipeline crossings) in the channel of perennial waterways.
- Lower West Side Wetland Restoration Project. During the summers of 2001 and 2002, approximately 12 acres of former wetland that was filled during Tahoe Keys construction was excavated three to five feet, and subsequently restored as wetland and reconnected to the Upper Truckee River as part of the active floodplain. The Lower West Side Wetland Restoration Project area is located next to Tahoe Keys Marina behind Cove East Beach, west of the river.
- ▶ Angora Creek Restoration Projects. Two restoration projects were completed by the California Department of Parks and Recreation (DPR) on Angora Creek, in 1997 and 2002:
 - A reach of Angora Creek that flows through the study area was restored in 1997. That reach was channelized and diverted to dry the meadow for grazing. The Lake Tahoe Golf Course was later built over part of this meadow and abandoned channel. Both reaches were restored, building a new, more sinuous channel reconnected to the meadow floodplain. The objective of both projects was to decrease erosion, enhance wetland and riparian habitat, and improve water quality by restoring the stream channel to a geomorphically functioning condition. Restoring the bed elevation and sinuosity of the stream restored access to the meadow floodplain, raised groundwater elevations, increased sediment deposition and nutrient removal, and improved meadow health.
 - In 2002, DPR restored a second reach of Angora Creek, as well as the adjacent meadow. A section of Angora Creek once meandered through a wet meadow, but the stream was captured by the South Tahoe Public Utility District's sewer alignment in the 1960s. The stream deviated from its original winding path over the sewer, giving the stream more power and causing an increase in erosive forces. The channel had down-cut, scouring the bed of the stream to two feet below its original elevation. This in turn caused the meadow to dry out and degraded critical habitat.
- Angora Fisheries and Water Quality Project. This project, completed in 2010 by the Conservancy, El Dorado County, and Reclamation, is located in the watershed of the Upper Truckee River at the Angora Creek crossing of Lake Tahoe Boulevard (El Dorado County DOT 2006). The project involved modifying Angora

Creek near the culverts under Lake Tahoe Boulevard to improve fish passage. As part of these modifications, fill was removed in the Stream Environment Zone (SEZ) and the existing culverts were replaced. Angora Creek was dewatered and isolated while the culverts were replaced.

- Upper Truckee Middle Reaches 3 and 4 Restoration Project. This project was implemented by the CSLT with funding from the Conservancy and Reclamation and completed in 2011. The project is located along the Upper Truckee River from roughly 0.5 mile northeast of the northern runway limit of the Lake Tahoe Airport to approximately the midpoint of the runway (Reclamation, CSLT, and TRPA 2008). The objectives were to restore natural river and floodplain processes by increasing overbank flow and depositing sediment onto the floodplain, and to improve habitat for terrestrial and aquatic wildlife. To accomplish these objectives, a new channel (approximately 4,000 feet long) was constructed and revegetated and the abandoned channel was backfilled and revegetated. A new floodplain was constructed by removing existing fill. Construction of this new channel and floodplain entailed constructing a temporary river crossing, removing and stockpiling approximately 52,000 cubic yards of soil, and removing and stockpiling a large amount of plant materials. Additionally, three fish barriers were removed and three in-channel habitat structures were constructed. The total area of disturbance associated with this project was approximately 28 acres.
- Trout Creek Restoration Project. Trout Creek is a tributary to the Upper Truckee River, reaching the confluence within the study area. Geomorphic problems with Trout Creek stem from channelization of the lower portions of this stream during construction of a 19th-century railroad route. The straightened channel produced an incised and eroded bed, sand and sediment deposition, and degraded aquatic and riparian habitat conditions. As a part of efforts to control sediment delivery into Lake Tahoe and stabilize stream channels in the watershed, a restoration project began on Trout Creek to reconstruct natural channel sinuosity, pool-riffle sequences, substrate composition, bank stability, and hydrologic function. The project site was located on lower Trout Creek meadows, above and below the confluence with Cold Creek. Restoration of the upper channelized section of stream (above Cold Creek) to control erosion and stabilize the channel involved completely replacing this upstream reach with an adjacent reconstructed sinuous channel. The channel and bank of the downstream reach (below Cold Creek) was only partly reconfigured, interspersed with existing channel forms where natural sinuosity occurred. The reconstruction project was completed during 2000–2001, with flow of the creek redirected into the new channels in summer 2001 (Herbst 2009:2–3).
- Lake Tahoe Airport Runway Restoration Project. This project by the CSLT was located at the South Lake Tahoe Airport adjacent to the Upper Truckee River. Along the existing runway, the CSLT removed a 25-footwide by 1,300-foot-long area of impervious surface and replaced a portion of this area with pervious concrete. Fill within the SEZ of the Upper Truckee River was removed and the area revegetated. The project did not involve activities within the channel of the Upper Truckee River or any perennial tributaries of the river. The project was completed in 2010.
- hulti-Agency Erosion Control Projects. Multiple agencies have completed erosion control projects throughout the Upper Truckee River watershed and elsewhere in the Tahoe Basin to restore the clarity of Lake Tahoe. Most projects addressed erosion control and source runoff improvements, as well as the implementation of best management practices (BMPs) to capture fine sediment and other pollutants before they reach the lake. Erosion control projects and advance treatment methods are implemented to reduce both the volume of water running off roadways and the amount of fine sediment, nitrogen, and phosphorus discharging into Lake Tahoe. El Dorado County, the Conservancy, TRPA, Caltrans, CSLT, and the U.S. Forest Service (USFS) have implemented erosion control measures along Angora Creek, U.S. 50, North Upper Truckee Road, Al Tahoe neighborhood, and other roadways, including forest roads and trails. Measures include redesign and replacement of inadequately sized culverts, inlets, and outfalls; revegetation and other source control measures on eroding slopes; and installation of curbs and gutters, rock bowls at culvert outlets, vegetated swales, and sediment traps and other BMPs. Specific project examples in the Upper Truckee River watershed include El Dorado SR 89, Segment 1–Luther Pass to Meyers Water Quality

Improvement Project, Apalachee 3B–Water Quality Project, <u>Christmas Valley Phase 2 Water Quality and Recreation Access</u>, and U.S. 50 Caltrans Water Quality Projects.

- ► Sawmill 1B Bike Trail Project—Air Quality and Recreation Access. This project by El Dorado County, with funding from the Conservancy and TRPA, is located along U.S. 50 from the entrance to the Lake Tahoe Golf Course to Sawmill Road (Ferry, pers. comm., 2007). It provides a bike trail across the project area. This project involved some construction activities in the channel of waterways (e.g., footings and abutments of crossings). Construction was completed in 2010.
- ► Sawmill 2 Bike Path and Erosion Control Project. This project by El Dorado County, with funding from the Conservancy and USFS, is located in the watershed of the Upper Truckee River along Sawmill Road from Lake Tahoe Boulevard to U.S. 50. It provides a bike trail and BMPs to reduce erosion and nutrient loading and increase treatment of stormwater runoff from impervious surfaces in the project area. Construction was completed in 2014.
- ▶ Riparian Hardwoods Restoration and Enhancement Description. This project by DPR was completed in 2011 in selected areas of DPR properties, including Washoe Meadows State Park and Lake Valley State Recreation Area. It involved removing lodgepole pines from areas of aspen, willow, and alder along the maintenance road adjacent to the Upper Truckee River upstream of the golf course (DPR and Reclamation 2007). The project did not involve construction activities in the channel of a perennial waterway.
- High Meadows Forest Plan Designation; Ecosystem Restoration; and Access and Travel Management
 Project. This USFS project was located on 1,790 acres in the upper Cold Creek watershed, part of the Trout
 Creek watershed (USFS 2008a). Its purpose included guiding management of the property and restoring the
 channel of Cold Creek through the High Meadow Complex to increase water and sediment storage, to allow it
 to function as a wet meadow ecosystem, and to provide for current and future recreation needs and reduce the
 impacts associated with recreation. The project was completed in 2012.

Present and Reasonably Foreseeable Projects

Present and reasonably foreseeable, probable future projects are those projects that are currently under construction, approved for construction, or in various stages of formal planning. Some of these projects are planned to be under construction during the period when this project is expected to be constructed (2015–2018).

The present or reasonably foreseeable, probable future projects considered in this cumulative analysis are those projects that are located within the Upper Truckee River watershed and the south shore area of the Tahoe Basin and that have been identified as potentially affecting resources that also may be affected by the Upper Truckee River and Marsh Restoration Project. Table 3.18-2 lists these related projects. A preliminary list of projects was compiled by reviewing available information regarding planned projects (including agency Web sites), and by contacting staff members from the CSLT, the Conservancy, El Dorado County, Lake Valley Fire Protection District, DPR, TRPA, and USFS. Projects were then reviewed for inclusion in the cumulative impact analysis based on three criteria:

- (1) The project is reasonably foreseeable because it has an identified sponsor and has initiated CEQA, TRPA, and/or NEPA environmental review or other regulatory procedures.
- (2) Available information defines the project in sufficient detail to allow meaningful analysis.
- (3) The project could affect resources potentially affected by the Upper Truckee River and Marsh Restoration Project.

Identified projects that satisfied these three criteria have been organized into the following three categories:

- (1) river and stream restoration,
- (2) water quality and erosion control, and
- (3) other projects.

The projects within each of these categories are listed in Table 3.18-2.

List of Re	Table 3.18-2 List of Related Projects in the Upper Truckee River Watershed and the South Shore Area				
Name	Description and Status				
	River-and, Stream, and Meadow Restoration Projects				
Sunset Stables Restoration Project	Description: This project proposed by the Conservancy and the USFS would be located in a 739-acre Management Planning Area in the vicinity of the South Lake Tahoe Airport, and adjacent to and directly south of the Upper Truckee Middle Reaches 3 and 4 Restoration Project (Conservancy and DGS 2008a). Its goals include restoring a more naturally functioning river and floodplain, improving water quality by restoring floodplain processes, and reducing erosion from bank failure. The project would restore, enhance, and protect aquatic and terrestrial habitat diversity and quality and provide for appropriate and compatible public access. To accomplish these goals, it would restore a portion of the 2.6-mile-long reach of the Upper Truckee River that is in the Management Planning Area. This new channel would start east of the U.S. 50 bridge and would be designed around existing sewer and water pipelines to the extent possible. Lateral grade controls would be installed where the new channel crosses the old channel, and vertical grade controls would be installed where the new channel transitions to existing channel. Implementation would entail excavating new channels, and after the new channels have been revegetated, diverting the river's flow into the new channel(s) and filling and revegetating the abandoned channel. Status: Environmental review (IS/MND and EA/FONSI) is complete and construction of the first phase (Reach 5) began in 2012 and will be complete in 2016. Construction of the second phase (Reach 6) has not secured construction funding and would begin construction in 2015-2016 at the earliest and last for four years.				
Upper Truckee River Middle Reaches 1 and 2 Stream Restoration Project	Description: This project led by the Conservancy and the USFS would be located from U.S. 50 upstream to the vicinity of the South Lake Tahoe Airport, and just downstream of the Upper Truckee Middle Reaches 3 and 4 Restoration Project. The objectives of the Upper Truckee Middle Reaches 1 and 2 Stream Restoration Project are to (1) eliminate a gully that is eroding along the river at this site, and (2) enhance aquatic and adjacent terrestrial habitat along the Upper Truckee River. To accomplish these objectives, the gully channel would be filled and revegetated, and portions of the channel banks of the Upper Truckee River would be recontoured and revegetated. Some riparian enhancements, bank stabilization, and aquatic habitat structures are also being considered (Carroll, pers. comm., 2008). Status: Currently the project is on hold while the USFS proceeds through the federal land acquisition process with the intention of acquiring the property by 2013. The environmental document (IS/MND and EA/FONSI) is being developed. Construction could begin in 2014-2016 and would last for 1 season, with only irrigation anticipated in subsequent seasons.				

List of Re	Table 3.18-2 Plated Projects in the Upper Truckee River Watershed and the South Shore Area
Name	Description and Status
Upper Truckee River Restoration and Golf Course Reconfiguration Project	Description: This DPR, TRPA, and Reclamation project would occur in the Upper Truckee River watershed at Washoe Meadows SP and Lake Valley SRA. The purpose of the project is to improve geomorphic processes, ecological functions, and habitat values of a 1.5-mile reach of the Upper Truckee River, helping to reduce the river's discharge of nutrients and sediment that diminish Lake Tahoe's clarity while providing access to public recreation opportunities in Washoe Meadows SP and Lake Valley SRA. Four alternative approaches to implementing the proposed project are being considered, along with the No-Project/No-Action Alternative. Depending on which alternative is selected, the proposed restoration project may include continuing existing golf course use, removing the entire Lake Tahoe Golf Course, or reconfiguring the golf course to allow for restoration of the river, reduce the area of SEZ occupied by the golf course, and allow for establishment of a buffer area between the golf course and the river. The four action alternatives (Alternatives 2–5) and the No-Project/No-Action Alternative (Alternative 1) are-were analyzed in the Draft EIR/EIS/EIS. Under the No-Project/No-Action Alternative, Alternative 1, the river restoration and changes to the golf course would not be implemented. This alternative represents a projection of reasonably foreseeable future conditions that could occur if no project actions were implemented. Alternative 2 would involve restoring the Upper Truckee River and providing a reconfigured 18-hole regulation golf course. Alternative 3 would involve restoring the river and providing a reduced-play golf course. Alternative 4 would use a combination of hard and soft stabilization to keep the river in its present configuration and would involve only minor changes to the existing golf course. Alternative 5 would involve decommissioning and removing the 18-hole regulation golf course to restore all or a portion of the golf course landscape to meadow and riparian habitat. Status: An EIR/EIS/EIS is cu
High Meadows Forest Plan Designation; Ecosystem Restoration; and Access Travel Management Project	Description: This project by USFS would be located on 1,790 acres in the upper Cold Creek watershed, which is part of the Trout Creek watershed (USFS 2008a). Its purpose includes guiding management of the property, restoring the channel of Cold Creek through the High Meadow Complex to increase water and sediment storage and to allow it to function as a wet meadow ecosystem, and to provide for current and future recreation needs and reduce the impacts associated with recreation. The project could include creation of approximately 8,700 feet of new channels and associated floodplain on the mainstem, East Fork, and North Fork of Cold Creek; removal and fill of diversion ditches; removal of lodgepole pines; rerouting and decommissioning of roads and trails; and redesign of stream crossings by roads and trails to reduce effects on aquatic ecosystems. Status: The project is to be completed in 2012.
Restoration of Fire Adapted Ecosystems	Description: This project, proposed by USFS, is located at multiple locations throughout El Dorado and Placer counties, California; and Carson City and Douglas counties, Nevada. The project intends to use hand thinning and prescribed fire to restore priority meadows to reduce conifer encroachment, improve native riparian/wetland plant abundance and vigor, and improve habitat for native riparian dependent species. Status: Environmental review is in progress; scoping was initiated in 2012 and a decision is expected in May 2015. Implementation is expected to begin in Summer 2016.

List of Re	Table 3.18-2 lated Projects in the Upper Truckee River Watershed and the South Shore Area
Name	Description and Status
	Erosion Control and Water Quality Projects
Sierra Tract Erosion Control Project	Description: This project, proposed by the CSLT with funding from the Conservancy and USFS, is located in the Sierra Tract subdivision in the Trout Creek watershed in South Lake Tahoe. It entails constructing a stormwater conveyance and treatment system and stabilizing roadsides with vegetation. This project has been structured into five phases. The project does not include activities in the channel of a perennial waterway. Status: Phases 1 and 2 have been completed, except for a small Phase 1c that is on hold. (USFS 2007). Phases 3 and 4 is being planned and designed and will be constructed in 20122015 and 2016. Phases 4 and 5 are future projects whose schedule is dependent on the availability of funding is scheduled for 2015.
Montgomery Estates Phases 1, 2, and 3 Water Quality Project	Description: This project proposed by El Dorado County, with funding from the Conservancy and USFS, would be located in the watershed of Trout Creek in the El Dorado County. It would implement various slope stabilization, infiltration, sediment trapping, and channel or road source treatment BMPs to reduce the amount of sediment discharging into Cold Creek and Trout Creek. Status: Environmental review is complete, Phase 1 is scheduled to be completed in 2012. Phase 2 is scheduled for 2013 Phases 1 - 3 are constructed.
Christmas Valley Phase 2 Water Quality and Recreation Access	Description: This project by El Dorado County, with funding from the Conservancy and USFS, would be located in the watershed of the Upper Truckee River along SR 89 from the intersection with U.S. 50 to Portal Drive (Ferry, pers. comm., 2007). It would reduce both peak discharge of stormwater during large storm events and the quantity of fine and coarse sediment entering the Upper Truckee River from the project area. The project would not involve activities in the channel of a perennial waterway. Status: Construction is scheduled to be completed in 2012
Sawmill 2 Bike Path and Erosion Control Project	Description: This project by El Dorado County, with funding from the Conservancy and USFS, would be located in the watershed of the Upper Truckee River along Sawmill Road from Lake Tahoe Boulevard to U.S. 50 (Ferry, pers. comm., 2007). It would provide a bike trail through the project area, and it would install appropriate BMPs to reduce erosion and nutrient loading and increase treatment of stormwater runoff from existing impervious surfaces in the project area. This project would include construction activities in the channel of perennial waterways, which would be dewatered during construction. Status: Environmental review is complete and Phase 1 was completed in 2012 and Phase 2 is scheduled to be completed in 2013.
U.S. 50 from "Y" Intersection with State Highway 89 to Trout Creek Bridge	Description: This project by Caltrans is located within the CSLT on U.S. 50 from the "Y" intersection with State Route 89 to the Trout Creek Bridge. It is being completed in partnership with the Lahontan RWQCB, TRPA, and CSLT. The project will collect and treat stormwater runoff as part of the Lake Tahoe EIP. It will also widen the roadway to provide 6-foot shoulders for bike lanes; replace traffic signals; replace curbs, gutters, and sidewalks; and improve pavement cross slope. Caltrans is working with CSLT to incorporate improvements at Sierra Boulevard (signal and left-turn lane). Status: Environmental review is complete. Construction scheduled to begin in spring 2017 (utilities relocation expected to start in May 2015) and is expected to require 3 years for completion.
Upper Truckee Marsh Sewer Facilities Protection Project	Description: South Tahoe Public Utility District is implementing an adaptive management plan to protect the sewer infrastructure from flooding and reduce the risk of a sewer spill. Implementation of the adaptive management plan consists of measures designed to both prevent permanent establishment of Trout Creek over the sewer lines and to encourage flows to establish new flow paths to the south, away from the district's facilities. In Year 1 (2014) vegetative roughness elements were placed in the vicinity of the easement to prevent new channel establishment, along with reestablishing flow paths to the south. Some flow paths out of the existing channel leading northward to the easement were blocked to further direct flows southward. The Year 1 Plan also included removal of a portion of an

List of Ro	Table 3.18-2 elated Projects in the Upper Truckee River Watershed and the South Shore Area
Name	Description and Status
	abandoned historical roadway that crossed the marsh. The roadway fill constricted flood flows and prevented the creek from freely migrating across the marsh. The easement is expected to continue to become inundated during flood flows, but they are intended to reduce inundation to the seasonal or episodic character of pre-2011 conditions and to provide long-term protection of the sewer facilities by encouraging channel formation and future channel migration in areas away from the easement, along with sediment deposition over the easement. Status: Environmental review and Year 2 construction are complete. Construction will continue to for up to 3 more years as needed to adaptively manage flooding.
	Other Projects
US50/Stateline Corridor Project	The Tahoe Transportation District is partnering with the Federal Highway Administration, USFS, CSLT, TRPA, Nevada Department of Transportation, and California Department of Transportation are evaluating alternatives for the US50/Stateline Corridor Project. As identified in TRPA Environmental Improvement Program (EIP), recommended alternatives include water quality, intersection, roadway, pedestrian, bicycle, air, and scenic improvements. Several other projects identified in the EIP will be implemented as a packaged project. US-50 is the principal highway into South Lake Tahoe. Entering the Basin west of Echo Summit, it continues through the South Shore, crosses Stateline, continues to the East Shore, and exits the Basin at Spooner Summit. A major portion of traffic enters the Lake Tahoe Basin through this route, and traffic volumes are predicted to increase 27% over the next 20 years. Traffic delay has a major effect on the Lake environment including impacts to air quality, and pedestrian, bicycle, transit, and vehicle travel. Status: The Draft EIR/EIS is currently being prepared.
Edgewood Lodge and Golf Course Improvement Project	Description: The approximately 231-acre project site is located within the Edgewood Tahoe Golf Course and includes a small area to the east across U.S. 50. The Edgewood Lodge and Golf Course Improvement Project would include construction of a new lodge complex with associated parking, and other improvements. The project would include construction of a 194-unit lodge complex, including accessory uses; expansion of the South Room at the Edgewood clubhouse; relocation of two existing lakefront residential lots; construction of a new public beach, lakefront recreation facilities, and pedestrian path; pier removal, relocation, and reconstruction; golf course and cart path modifications; and implementation of five threshold improvement projects. Status: The Final EIR was completed and the project approved. Construction could begin began in 2014.
Greenway Bike Trail Project	Description: This project by the Conservancy would be located between the intersection of Pioneer Trail and U.S. 50 in Meyers, California, and Van Sickle Bi-State Park at Stateline, Nevada. A portion of this project site is in the watershed of the Upper Truckee River and a portion is in the Trout Creek watershed. The project would also include restoration actions and fuel reduction actions along the trail route. The project would cross waterways on bridges or raised platforms, and the construction of these crossings would require some in-channel construction activities. Status: Phase 1 (Sierra Blvd to Van Sickle Bi-State Park) has completed environmental review and permitting (IS/MND and FONSI/EA) and construction. pending funding and easement acquisition. Phase 1a is scheduled to be constructed in 2014 at the earliest 2015. Future phases of the trail would need to complete environmental review and obtain construction funding. The schedule is unknown.
Lake Tahoe Boulevard Enhancement Project	Description: This project by the Conservancy, El Dorado County, and USFS would be located in the watershed of the Upper Truckee River in a corridor along Lake Tahoe Boulevard from Tahoe Mountain Road to the CSLT. It would involve constructing a 2-mile-long bike trail along the road and implementing erosion control measures. The project would not involve construction activities in the channel of a perennial waterway. Status: Construction-is complete.

Table 3.18-2 List of Related Projects in the Upper Truckee River Watershed and the South Shore Area				
Name	Description and Status			
Multi-Agency Fuel Reduction Plan	Description: This plan is a multiagency strategy for coordinating implementation of fuel reduction treatments in the Tahoe Basin (USFS et al. 2007). Treatment types (i.e., general prescriptions) include community defensible space—wildland urban interface, urban core, defense zone, and general forest prescriptions. All of these prescriptions reduce surface and ladder fuels, and tree density, to reduce flame lengths and the likelihood of crown fire. Treatment methodologies include thinning, pruning, prescribed burning, and masticating and chipping. The strategy identifies a substantial portion of the Upper Truckee River watershed as priority areas for treatment. These treatments would not involve construction activities in the channel of perennial waterways. Status: Fuel reduction treatments are ongoing and the plan identifies priority areas for treatment during the next five and ten years.			
Angora Fire Restoration and Redevelopment	Description: Much of the Tahoe Mountain/North Upper Truckee neighborhood is being redeveloped after the Angora Fire in the summer of 2007 destroyed 254 structures. Current rules allow for property owners to pursue the replacement of previously existing development. Provisions allow for an expedited permitting process for landowners and for granting of fee waivers and allocation requirements. Coverage that was preexisting, including coverage located within SEZs and on steep slopes, may be redeveloped. Various agencies including the Conservancy, El Dorado County, and USFS have implemented erosion control techniques and provided assistance with removal of hazardous trees in the area. These agencies are proposing additional restoration activities including channel reconstruction and meadow and wetland complex restoration in the burn area. Status: Angora Fire restoration and redevelopment is ongoing. It is expected that additional restoration and redevelopment will continue for the next five to ten years.			
Additional Urban Development	Description: This urban development would consist of numerous small residential, commercial, industrial, and infrastructure projects in the project vicinity and elsewhere in the watershed of the Upper Truckee River and south shore of Lake Tahoe. These projects might include some construction activities in the channel of perennial or intermittent waterways (e.g., at road and utility crossings). Based on current land use planning and projected changes in population, additional urban development in the project vicinity, the Upper Truckee River watershed, and the south shore of Lake Tahoe is likely. Based on a review of land cover and general plan land use designations within the watershed (using the GIS data layers from CAL FIRE 2002, and California Interagency Watershed Mapping Committee 2004), approximately 8 percent of the watershed is in natural vegetation within areas zoned for developed land uses, and thus a portion of this natural vegetation could be converted to developed land uses in the foreseeable future. However, zoning does not necessarily guarantee development as most of the Basin is fully developed and most improvements are within existing developed land uses. Most development in the area consists of numerous small residential, commercial, industrial, and infrastructure projects. These projects might include some construction activities in the channel of perennial or intermittent waterways (e.g., at road and utility crossings). Status: Additional urban development is ongoing, and anticipated to be ongoing throughout implementation of the Upper Truckee River and Marsh Project.			
Echo Summit Sidehill Viaduct	Description: This project by Caltrans will replace or rehabilitate the Echo Summit Bridge (Br#25-0044), which is located in El Dorado County 7 miles west of the city of South Lake Tahoe along U.S. 50, a major access route to the CSLT, near Echo Summit. At the project location, the road's width is very narrow and confined by a vertical rock cut slope on the mountain side and a nearly vertical downward slope on the Basin side. This project will address deficient structural components in a bridge that is in poor condition. The project may require the full closure of U.S. 50 for a period of time, or at minimum, one-lane closure for a portion of up to two seasons. Status: Environmental review is in process. Construction is expected to begin in spring 2019 and could continue for 2 years.			

Table 3.18-2 List of Related Projects in the Upper Truckee River Watershed and the South Shore Area				
Name	Description and Status			
South Shore Fuel Reduction and Healthy Forest Restoration	Description: This USFS project is located throughout the entire South Shore area of Lake Tahoe and extends from Cascade Lake on the northwest to the Heavenly Mountain Resort special use permit boundary and the Nevada state line on the northeast, and from Lake Tahoe on the north to the LTBMU boundary on the south. The USFS intends to reduce the risk of high-intensity wildfire on National Forest System lands in the wildland urban interface in order to provide a defense zone between the National Forest and urban and/or suburban development. Status: Environmental review was completed in 2012. Project implementation was initiated in 2012 and is anticipated to take at least 8 years to complete.			
Upper Echo Lakes Fuel Reduction	Description: This USFS project is located within the South Shore of Lake Tahoe adjacent to Upper Echo Lakes Recreation Residence Tract. The project involves fuels reduction treatments using hand thinning and pile burning around the Upper Echo Lake Recreation Residence Tract. Fuels reduction treatments would occur on a total of approximately 100 acres and within 300 feet of cabins. Status: Environmental review was completed in 2012. Project implementation began in 2013 and is expected to take up to 6 years to complete.			
Tahoe Valley Area Plan	Description: The CSLT is preparing the Tahoe Valley Area Plan in collaboration with TRPA. This plan is being developed consistent with the coordinated planning and permitting process developed as part of the 2012 TRPA Regional Plan Update and consistent with requirements of a specific plan under California state law. The 335-acre planning area is centered on the intersection of U.S. 50 and State Route 89. The plan will serve as a long-term comprehensive land use and zoning plan for the Tahoe Valley community and reflects the CSLT's effort to rekindle the economic vitality and recognize the unique characteristics of the Tahoe Valley Community. Status: Environmental review on the draft plan was initiated in June 2014.			
South Tahoe Middle School Area Connectivity Plan	Description: The Lake Tahoe Unified School District was awarded funding by the Tahoe Metropolitan Planning Organization for the South Tahoe Middle School Area Connectivity Plan as part of its "On Our Way" community grant program. Goals of the plan are to provide safer, more walkable and bikeable off-highway routes around South Tahoe Middle School, Bijou Park, and Lake Tahoe Community College for students, the community, and visitors. Status: A draft plan is currently under development. The goal is to develop a preferred alternative alignment with appropriate environmental review and schematic level design as the basis of an Active Transportation Program and/or Safe Routes to School construction grant application in May 2015.			
Lake Tahoe Community College Facilities Master Plan	Description: Lake Tahoe Community College developed a Facilities Master Plan in 2014 as part of its ultimate goal of becoming California's premier destination community college. The plan includes conceptual-level planning for 10 capital facilities projects, five of which are expected to qualify for state capital outlay funding. Potential projects include remodeling for efficiency, modernization, and enhancement; expansion of the early learning center; and development of a regional public safety training center, environmental studies and sustainability center, a university center, residential student living, and a solar-generating storage facility. Status: The master plan was developed in 2014 and includes a vision of implementation over the next 5–15 years. Project programs will be developed in detail as funding becomes available and through the planning process set in place by Lake Tahoe Community College.			
South Lake Tahoe Parks, Trails and Recreation Master Plan	Description: The CSLT and El Dorado County developed a Parks, Trails and Recreation Master Plan for the South Shore. The plan represents a coordinated effort to align recreation resources and obtain community support to enhance recreation facilities and services for the Eastern Slope of El Dorado County. It provides direction for enhancing recreation opportunities for residents and visitors, including recommendations for regional coordination and collaboration; park and facility maintenance, renovations and improvements; new park, facility and trail development; recreation activities; programs and events; and operations and maintenance. Status: The master plan was drafted in August and finalized in November 2014. A CEQA analysis of the master plan in currently under way.			

Table 3.18-2 List of Related Projects in the Upper Truckee River Watershed and the South Shore Area

Name Description and Status

Notes: BMP = best management practice; CAL FIRE = California Department of Forestry and Fire Protection; Caltrans = California Department of Transportation; Conservancy = California Tahoe Conservancy; CSLT = City of South Lake Tahoe; EA = environmental assessment; EIP = Environmental Improvement Program; EIR = environmental impact report; EIS = environmental impact statement; FHWA = Federal Highway Administration; FONSI = finding of no significant impact; GIS = geographic information system; IS = initial study; LTBMU = Lake Tahoe Basin Management Unit; ND = negative declaration; Reclamation = U.S. Department of the Interior, Bureau of Reclamation; RWQCB = Regional Water Quality Control Board; SEZ = Stream Environment Zone; SP = (California) State Park; SR = State Route; SRA = State Recreation Area; DPR = California Department of Parks and Recreation; TRPA = Tahoe Regional Planning Agency; U.S. 50 = U.S. Highway 50; USFS = U.S. Forest Service.

Source: Data compiled by EDAW (now AECOM) in 2010 and by AECOM in 2015.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.18.3, "Cumulative Impact Analysis," on page 3.18-22 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

As a result of reasonably foreseeable projects, conditions for special-status plants, except for Tahoe yellow cress, would be improved or remain similar to existing conditions. In the Upper Truckee River—Trout Creek watershed, the combined long-term effect of reasonably foreseeable projects on some special-status plants could be beneficial because restoration projects would be implemented and other projects would avoid or minimize their effects on special-status plants; for other special-status plants and sensitive habitats, conditions would remain similar to existing conditions. Reasonably foreseeable projects are not expected to affect American mannagrass.

Tahoe yellow cress could be adversely affected by construction and recreation activities resulting from reasonably foreseeable projects (e.g., Edgewood Lodge and Golf Course Improvement Project). Also, as discussed in Impact 3.18-C30 (Alts. 1–5), "Cumulative Geomorphology and Water Quality—Long-Term Modifications in Upper Truckee River Coarse Sediment Transport and Delivery Downstream," depending on the alternatives implemented by upstream restoration projects and depending on the effects of climate change, the delivery of sands and gravel to Tahoe yellow cress habitat at the study area's beaches could be affected. Potential effects of the action alternatives (particularly Alternatives 1-3) could combine with effects of other actions on transport and delivery of coarse sediment; however, the incremental or combined effects on beach erosion are not predictable because climate change influences are highly uncertain. Conditions could range from worse than the existing degraded condition to a possible improvement regardless of changes in coarse sediment delivery. After thorough investigation, the cumulative effect on delivery of coarse sediment to the study area's beaches remains speculative.

The action alternatives differ in their effects on special-status plants. Under Alternative 2, lagoon restoration would increase the extent of potential habitat for American mannagrass, and the restoration and increased inundation of willow scrub wet meadow under this alternative could also increase the extent of habitat. However, both of these effects are uncertain and may not alter the extent of suitable habitat for American mannagrass.

As a result of the corrected identification of American mannagrass to fowl mannagrass, the text of Section 3.18.3, "Cumulative Impact Analysis," on page 3.18-23 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Although it includes lagoon restoration that could benefit American mannagrass, Alternative 1 could potentially negatively affect Tahoe yellow cress by creating additional recreation features (the bridge and boardwalk) in the vicinity of occupied habitat that would create the opportunity for damage by recreationists. This contribution to the overall cumulative effect on Tahoe yellow cress of habitat loss and damage from human activities would be

significant. Additional feasible mitigation is not available to reduce this impact to less than significant, so the residual impact would be **significant and unavoidable**.

5.9 REVISIONS TO CHAPTER 4.0, "OTHER REQUIRED SECTIONS"

The text of Section 4.5, "Environmentally Superior Alternative/Environmentally Preferred Alternative," on page 4-6 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Based on the analysis of impacts on resources in Chapter 3 of the Draft EIR/EIS/EIS, the action alternatives present trade-offs related to overall environmental advantages. Implementing Alternative 1, 2, 3, or 4 would involve restoring the river and its floodplain, which would improve long-term water quality, increase the amount and improve the quality of aquatic and floodplain habitats, and restore the stream environment zone. These alternatives would have short-term and interim impacts on water quality that could not be avoided because of the strict turbidity criteria used to determine a significant and unavoidable impact (Section 3.8) and to sensitive habitats and wildlife (Section 3.4). Implementing Alternative 1 would also create long-term significant and unavoidable scenic impacts and Tahoe yellow cress impacts related to bridge construction (Sections 3.4 and 3.14). Implementing Alternative 3 could have a long-term significant unavoidable impact to fish passage through the study area during low flow periods if channel disconnectivity occurs (Section 3.5). Implementing Alternative 5 (the No-Project/No-Action Alternative) would avoid the adverse impacts generated by construction of additional recreational facilities; however, the long-term water quality and habitat benefits would not occur. Consequently, Alternative 5 (the No-Project/No-Action Alternative) is not the environmentally superior or environmentally preferred alternative.

Of the action alternatives <u>evaluated in the Draft EIR/EIS/EIS</u>, Alternative 2, New Channel—West Meadow (Minimum Recreation Infrastructure), is <u>was considered</u> the environmentally superior alternative because it involves a relatively minimal level of impacts associated with public access and recreational infrastructure while including river, lagoon, floodplain, and beach and dune restoration benefits comparable to or greater than those under Alternative 1, 3, or 4. However, unlike under the other action alternatives, implementing Alternative 2 would not provide recreation infrastructure to redirect public access from sensitive areas. Compared with the other action alternatives <u>evaluated in the Draft EIR/EIS/EIS</u>, this alternative minimizes construction activities and costs, maintenance and staffing responsibilities and costs, disturbances associated with infrastructure construction, and formal public access to locations throughout the study area.

Although Alternative 2 would be environmentally superior, it includes non-environmental trade-offs. Implementing Alternative 2 would provide the least benefit for public access and recreation opportunities and experiences.

The Preferred Alternative, recommended here in the Final EIR/EIS/EIS, includes the most beneficial and cost-effective elements of the five alternatives evaluated in the Draft EIR/EIS/EIS. This combined approach is also considered the environmentally superior alternative concept given it proposes the most geomorphically appropriate channel configuration allowing the pilot channel to strategically connect the current river alignment to historic channels and lagoons in a manner considered the most resilient to the potential impacts of climate change when compared to other action alternatives. The river would form its own pattern and spread over the expanse of the marsh, resulting in substantial benefits to habitats, wildlife, and long-term water quality; however, as with Alternative 3, the Preferred Alternative could have a long-term significant unavoidable impact to fish passage through the study area during low flow periods if channel disconnectivity occurs. It would also have short-term and interim impacts on water quality that could not be avoided because of the strict turbidity criteria used to determine a significant and unavoidable impact and to sensitive habitats and wildlife. Compared with the action alternatives evaluated in the Draft EIR, this alternative minimizes construction activities and costs, maintenance and staffing responsibilities and costs, disturbances associated with infrastructure construction, and still provides formal public access to locations throughout the study area consistent with public expectations.

5.10 REVISIONS TO CHAPTER 5.0, "COMPLIANCE, CONSULTATION, AND COORDINATION"

The text of Section 5.1.7, "Section 106 of the National Historic Preservation Act of 1966, as Amended (Public Law 89-665, 80 Stat. 915, 16 USC Section 470 et Seq. and 36 CFR 18, 60, 61, 63, 68, 79, 800)," on pages 5-5 and 5-6 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

5.10.1 Section 106 of the National Historic Preservation Act of 1966, as Amended (Public Law 89-665, 80 Stat. 915, 16 USC Section 470 ET Seq. and 36 CFR 18, 60, 61, 63, 68, 79, 800)

The National Historic Preservation Act requires agencies to take into account the effects of their actions on properties listed in or eligible for listing in the National Register of Historical Places (NRHP). The Advisory Council on Historic Preservation has developed an implementing regulation (36 CFR 800) that allows agencies to develop agreements for consideration of these historic properties. Section 106 review includes the scoping, identification, assessment, and consultation called for in its implementing regulation (36 CFR 800) to determine impacts on properties listed in or eligible for listing in the NRHP. Consultation under Section 106 takes place during preparation of an EIS to determine whether historic resources would be adversely affected and, if so, whether measures could be implemented to reduce adverse effects to a less-than-significant level. Section 106 does not address impacts on all types of cultural resources or all cultural aspects of the environment; it deals only with impacts on properties listed in or eligible for listing in the NRHP.

Section 106 requires federal agencies to consider the effects of their actions, including those they fund or permit, on properties that may be eligible for listing or are listed in the NRHP. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (archaeological, historic, and architectural properties) must be inventoried and evaluated for listing in the NRHP. Although compliance with Section 106 is the responsibility of the lead Federal agency, a qualified representative of the lead agency can conduct the necessary steps. The Section 106 review process involves a four-step procedure:

- ► Establish the undertaking, develop a plan for public involvement, and identify other consulting parties.
- ▶ Identify historic properties by determining the scope of efforts, identifying cultural resources, and evaluating their eligibility for inclusion in the NRHP.
- Assess adverse effects by applying the criteria of adverse effect on historic properties (resources that are eligible for inclusion in the NRHP).
- ► Resolve adverse effects by consulting with the State Historic Preservation Officer (SHPO) and other consulting agencies, including the Advisory Council on Historic Preservation if necessary, to develop an agreement that addresses the treatment of historic properties.

In accordance with Section 106 requirements, the Washoe Tribe of Nevada and California was contacted regarding the proposed project, and surveys were conducted to identify cultural resources and evaluate their eligibility for inclusion in the NRHP.

Studies of the area of potential effect and consultation with the Washoe Tribe and the California SHPO determined that prehistoric and historic-era sites have been documented in the study area that could be affected by the proposed alternatives. The prehistoric resources, particularly CA-ELD-26, represent the intensive use of the lakeshore and the adjacent Upper Truckee River Marsh by the Washoe for fishing, the acquisition of numerous other lake and marsh resources, and general habitation. Although no subsurface investigations were conducted at CA ELD 26, surface indications and detailed ethnographic and historic era accounts of Washoe occupation at this

location suggest that the site may retain important scientific information. Consequently, CA-ELD-26 appears to be eligible for listing in the NRHP. Subsurface testing in 2012 by AECOM archaeologists at CA-ELD-26/H has identified buried prehistoric cultural deposits that appear relatively substantial and intact, suggesting that the site has good physical integrity. Although a portion of the site has been affected by development, the portion in the project area appears to possess good to excellent integrity, indicating that the site retains important scientific information. Therefore, the prehistoric component of CA-ELD-26/H is recommended eligible for listing in the NRHP Criteria d. No other sites appear to be eligible. A representative of the Washoe Tribe (Daryl Cruz) has been involved in reviewing previous study findings, the results of archival and field research, and environmental commitments designed to reduce potential impacts on cultural resources to less-than-significant levels. Construction of some of the proposed recreational facilities, access/haul roads, and staging areas has the potential to affect portions of site CA-ELD-26 and/or artifacts and features possibly associated with this site that have not yet been documented on the landform (bluff) located above the marsh. As described in EC 2, the Conservancy would prepare and implement a cultural resources protection plan. As part of the plan, construction barriers would be installed around site CA-ELD-26, construction workers would be educated about site protection requirements, and a qualified cultural resource specialist would oversee initial grading activities in the vicinity of the bluff (Table 2-7). Furthermore, as part of the final design the bike path will completely avoid the bluff area and ELD-26/H. These measures have been proposed to address all potential adverse effects on the eligible resource.

In addition, Reclamation has initiated the Section 106 process for the proposed project and will complete consultation with the SHPO before the record of decision is issued. For these reasons, the project would comply with Section 106 of the National Historic Preservation Act. In February 2013, following the cultural resources identification efforts conducted by EDAW (now AECOM), consultation with the Washoe Tribe, and commitments for project redesign to avoid a significant cultural resource, pursuant to 36 CFR § 800.5(b) Reclamation consulted with the SHPO on a finding of no adverse effect on historic properties for the Upper Truckee River and Marsh Restoration Project. This consultation covered all proposed action alternatives within the project area of potential effects. After addressing SHPO comments and concerns related to the results of the identification efforts, the SHPO concurred with Reclamation's finding of no adverse effect through correspondence dated December 19, 2014. The receipt of SHPO concurrence completed the NHPA Section 106 process and compliance requirement for the proposed federal undertaking. Further, concurrence with the finding of no adverse effect on historic properties under NHPA Section 106 affirms a NEPA finding of no significant impact to cultural resources for the Preferred Alternative.

The text of Section 5.2.3, "California Fish and Game Code Section 1602—Streambed Alterations," on page 5-11 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

5.10.2 CALIFORNIA FISH AND WILDLIFE CODE SECTION 1602—LAKE AND STREAMBED ALTERATIONS

Section 1602 of the California Fish and <u>Wildlife</u> Code requires that a <u>lake and</u> streambed alteration agreement (<u>LSAA</u>) be granted before any action is conducted that may divert or obstruct natural channel flow; substantially change the bed, channel, or bank of any river, stream, or lake designated by CDF<u>W</u>; or use any material from the streambed of a CDF<u>W</u>-designated waterway; or result in the disposal or deposition of debris, waste, or other material where is may pass into any river, stream, or lake. Implementing the proposed project would require a streambed alteration agreement from CDF<u>W</u> for work on the bed and banks of the Upper Truckee River and Trout Creek. The Conservancy would obtain the streambed alteration agreement from CDFG and implement all terms required for permit compliance. Therefore, the project would be in compliance with California Fish and Wildlife Code Section 1602.

The text of Section 5.2.6, "California State Lands Commission," on page 5-12 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

The California State Lands Commission (CSLC) was given authority and responsibility to manage and protect the important natural and cultural resources on certain public lands in the state and the public's rights to access these lands. The public lands under the CSLC's jurisdiction are of two distinct types: sovereign lands and school lands. Sovereign lands, which encompass approximately four million acres, include the beds of California's naturally navigable rivers, lakes (including Lake Tahoe), streams, and the underlying beds, as well as the state's tidal and submerged lands along the coastline, extending from the shoreline to three miles offshore. These lands are owned by the State and held in trust for the benefit of all people. The rights protected include navigation, commerce, and fisheries uses, as well as the right to fish, hunt, bathe, swim, boat, and engage in general recreation. The trust also encompasses the right to preserve lands in their natural state for ecological study, as open space, and as bird and marine habitat. These public rights are inalienable and cannot be extinguished, except to further public trust purposes generally. In making these choices, the government has the power to make equitable adjustments among conflicting trust uses.

A project cannot use these state lands unless an easement is first obtained from CSLC. The public trust easement in navigable waterways allows lateral access between the high-water line and the low-water line; at Lake Tahoe, this is the area between the adjudicated ordinary low-water mark, at elevation 6,223 feet Lake Tahoe Datum, and the ordinary high-water mark, at elevation 6,228.75 feet Lake Tahoe Datum.

Because the bed of Lake Tahoe in the study area is within CSLC jurisdiction, use of the bed of Lake Tahoe would require an easement from the CSLC. The Conservancy has been coordinating with CSLC as a responsible agency under CEQA during preparation of this DEIR/DEIS/DEIS.

A project cannot use these State lands unless a lease or authorization is first obtained from CSLC. Because the bed of Lake Tahoe in the study area is within CSLC jurisdiction, use of the bed of Lake Tahoe below the low-water mark for the project would require a lease from the CSLC.

The public-trust easement in navigable waterways allows lateral access between the high-water line and the low-water line. At Lake Tahoe, this is the area between the adjudicated ordinary low-water mark, at elevation 6,223 feet Lake Tahoe Datum, and the ordinary high-water mark, at elevation 6,228.75 feet Lake Tahoe Datum. The CSLC has oversight authority over activities occurring in the public-trust easement to ensure that such activities and uses are consistent with the public trust. The Conservancy has been coordinating with CSLC as a responsible agency under CEQA during preparation of this EIR/EIS/EIS.

The text of Section 5.2.8, "Porter-Cologne Water Quality Control Act," on page 5-13 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

The proposed project is under the jurisdiction of the Lahontan RWQCB. The *Water Quality Control Plan for the Lahontan Region* (Basin Plan), adopted on March 31, 1995, and as amended, identifies the beneficial uses, water quality objectives, numerical standards, and waste discharge prohibitions for surface water and groundwater on the California side of the Lake Tahoe Basin (Lahontan RWQCB 1995:1-1). The Basin Plan incorporates water quality thresholds, programs, and regulations as developed and implemented by TRPA, along with state and federal regulations. It states specific water quality objectives for certain water bodies in the Lake Tahoe Hydrologic Unit. The objectives pertaining to water bodies in the study area are summarized in Table 3.9-2 of Section 3.9, "Geomorphology and Water Quality." To achieve those objectives, the Basin Plan identifies prohibitions against discharges and threatened discharges in 100-year floodplains or below the high-water rim of Lake Tahoe that apply to portions of the TRPA-defined shorezone. The Lahontan RWQCB has granted an "exemption to a waste discharge prohibition contained in the Water Quality Plan for the Lahontan Region" to specifically allow for potential turbidity elevation during the construction of stream restoration projects in the Lake Tahoe Basin. If necessary, the Conservancy would apply for this exemption. For this project, the Lahontan

RWQCB would be required to take a separate discretionary action to grant a prohibit exemption. The Conservancy would apply for exemptions as part of the Lahontan RWQCB's permitting process.

5.11 REVISIONS TO CHAPTER 7, "REFERENCES CITED"

The following references are hereby added to the references for Section 3.4, "Biological Resources: Vegetation and Wildlife," as presented in Chapter 7, "References," on page 7-18 of the 2013 Draft EIR/EIS/EIS:

AECOM. 2014 (August 21). 2011 American Manna Grass Survey Results. Memorandum submitted to Ivo Bergsohn, South Tahoe Public Utility District.

Ascent. See Ascent Environmental.

- <u>Ascent Environmental. 2015 (October 20). Sierra Nevada Yellow-legged Frog Survey Results for the Upper Truckee Marsh.</u> Memorandum submitted to Stuart Roll, California Tahoe Conservancy.
- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken (eds.). 2012. *The Jepson Manual: Vascular Plants of California*, 2nd Edition. Berkeley, CA: University of California Press.
- <u>California Department of Fish and Wildlife. 2015 (October). Special Animals List. California Natural Diversity Database. Sacramento, CA. Available: https://www.dfg.ca.gov/wildlife/nongame/list.html. Accessed October 27, 2015.</u>

The following reference is hereby added to the references for Section 3.8, "Hydrology and Flooding," as presented in Chapter 7, "References," on page 7-18 of the 2013 Draft EIR/EIS/EIS:

<u>Federal Emergency Management Agency. 2012. Flood Insurance Study, El Dorado County, California and Incorporated Areas. Study No. 06017CV000B.</u>

5.12 REVISIONS TO APPENDIX H, "WILDLIFE SPECIES AND ASSOCIATED PLANT COMMUNITIES AND AQUATIC ECOSYSTEMS AT THE UPPER TRUCKEE MARSH"

The text in the table in Appendix H, "Wildlife Species and Associated Plant Communities and Aquatic Ecosystems at the Upper Truckee Marsh," on page H-1 of the 2013 Draft EIR/EIS/EIS is hereby revised as follows:

Appendix H: Wildlife species and associated plant communities and aquatic ecosystems at the Upper Truckee Marsh. Species in bold have been observed at the site during recent surveys. Other species may potentially occur. List compiled from TRPA surveys from 1999-2002 (TRPA 2001, TRPA 2002), CTC surveys from 2002 (CTC 2002), and S. Fox surveys from 1994-1996 (Global 1997).

Scientific Name	Common Name	Community Associations ₁	Breeder?2
AMPHIBIANS			
Rana muscosa sierrae	MountainSierra Nevada Yellow-legged Frog	WS, MM, ST, LG	

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