

Appendix M

Special Status Species Tables

Table M-1 Special-Status Plant Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat and Flowering Period	Potential to Occur on the Project Site ²
	TRPA/ Federal	State		
Washoe tall rockcress <i>Arabis rectissima</i> var. <i>simulans</i>	-	NNHP-AR	Dry, sandy, granitic or andesitic soil on gently slopes. Excluded from areas of bare ground, deep litter, dense tree or shrub cover, or intense disturbance; 6,000 – 7,340 ft. elev. Blooms June–August.	None. No suitable habitat present on project site.
Galena Creek (Carson Range) rockcress <i>Arabis rigidissima</i> var. <i>demota</i>	TRPA	CRPR-1B	Rocky areas along edges of conifer and/or aspen stands. Usually found on moderate to steep northerly aspects in moisture accumulating microsites; 7,400–8,400 ft. elev. Blooms August.	None. The project site is located below the elevation range of this species. No moderate to steep slopes present on site.
Threetip sagebrush <i>Artemisia tripartita</i> ssp. <i>tripartita</i>	-	CRPR-2	Openings in upper montane coniferous forest, on rocky/volcanic soils; 7,200–8,530 ft. elev. Blooms August.	None. The project site is located below the elevation range of this species.
Margaret’s rushy milkvetch <i>Astragalus convallarius</i> var. <i>margaretiae</i>	-	NNHP-AR	Rocky slopes and flats among sagebrush in pinyon pine, Utah juniper and big sagebrush; 4,700–6,300 ft. elev. Blooms May–June.	None. No suitable habitat present on project site.
Lavin eggvetch <i>Astragalus oophorus</i> var. <i>lavinii</i>	-	NNHP-AR	Open, dry, relatively barren gravelly clay slopes and outcrops within the pinyon pine, Utah juniper and big sagebrush; 4,700 – 6,400 ft. elev. Blooms May–June.	None. No suitable habitat present on project site.
Tiehm’s rock cress <i>Boechera tiehmii</i>	-	CRPR-1B	Granitic alpine boulder and rock fields; 9,700 to 12,000 ft. elev. Blooms July-August.	None. The project site is located below the elevation range of this species; no alpine rocky habitats present.
Upswept moonwort <i>Botrychium ascendens</i>	-	-	Wet or moist soils, mostly of meadows and riparian areas in lower montane coniferous forest; 5,000–10,200 ft. elev. Fertile in August.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site.
Scalloped (dainty) moonwort <i>Botrychium crenulatum</i>	-	CRPR-2	Bogs, fens, meadows, and seeps, in upper montane coniferous forest, primarily moist meadows near creeks; 4,000–11,000 ft. elev. Fertile July–August.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site.
Common moonwort <i>Botrychium lunaria</i>	-	CRPR-2	Wet or moist soils, mostly of meadows, seeps, and springs in subalpine and upper montane coniferous forest; 6,400–11,200 ft. elev. Fertile in August.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site.
Mingan moonwort <i>Botrychium minganense</i>	-	CRPR-2	Wet or moist soils, mostly of riparian areas, small streams, or fens in upper and lower montane coniferous forest; 5,000–10,000 ft. elev. Fertile July–Sept.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site.

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	TRPA/ Federal	State		
Western goblin <i>Botrychium montanum</i>	-	CRPR-2	Wet or moist soils, mostly of meadows and seeps in upper and lower montane coniferous forest; 5,000–7,000 ft. elev. Fertile July-Sept.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site.
Bolander's candle moss <i>Bruchia bolanderi</i>	-	CRPR-2	Wet or moist soils of meadows, seeps, and stream banks in upper and lower montane coniferous forest; 5,300–11,000 ft. elev. Fertile period not specified.	Low. The riparian/mesic habitat present on site is highly disturbed and generally exposed. No known documented occurrences are near the project site. Known occurrences are generally higher elevation than the project site.
Davy's sedge <i>Carex davyi</i>	-	CRPR-1B	Subalpine and upper montane coniferous forests; 4,800-10,600 ft. elev. Blooms May–August.	Low. Type locality is from along the Truckee River but nearest known occurrence is east of Martis Peak at 8,230 ft on volcanic soil; and species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Woolly-fruited sedge <i>Carex lasiocarpa</i>	-	CRPR-2	Bogs and fens, and lake margin marshes and swamps at elevations; of 1,980-6,850 ft. elev. Blooms June–July.	None. No suitable habitat present on project site.
Mud sedge <i>Carex limosa</i>	-	CRPR-2	Upper montane coniferous forest, lower montane coniferous forest, bogs and fens, meadows and seeps, marshes and swamps (in floating bogs and soggy meadows, often at edges of lakes); 4,000–9,000 ft. elev. Blooms June–August.	Low. Boggy habitats that typically support this species are not present. The riparian/mesic habitat present on site is highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Northern meadow sedge <i>Carex praticola</i>	-	CRPR-2	Wet meadows and seeps; 0-10,500 ft. elev. Blooms May–July.	Low. The mesic habitats present on site is highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015). Nearest known occurrence is from near Barker Pass at 7,800 ft.
Bodie Hills draba <i>Cusickiella quadricostata</i>	-	NNHP-AR	Rocky flats, sagebrush, slopes and pinyon/juniper woodland; 7,500–9,000 ft. elev. Blooms May–June.	None. No suitable habitat present on project site. Project site is below the elevation range of this species.
Tahoe draba <i>Draba asterophora var. asterophora</i>	TRPA	CRPR-1B, NNHP-AR	Alpine boulder and rock fell field in rock crevices and open granite talus slopes, subalpine coniferous forest, usually on northeast-facing slopes; 8,200–10,500 ft. elev. Blooms July–September.	None. Species occurs at much higher elevations than occur on the project site. No suitable habitat present on project site
Cup Lake draba <i>Draba asterophora var. macrocarpa</i>	TRPA,	CRPR-1B	Subalpine coniferous forest on steep, gravelly or rocky slopes; 8,200–9,200 ft. elev. Blooms July–August.	None. Species occurs at much greater elevations than occur on the project site. No suitable habitat present on project site
Steamboat monkeyflower	-	NNHP-AR		

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<i>Diplacus ovatus</i>			Rocky clay in sagebrush flats; 4,000–5,900 ft. elev. Blooms April–July.	None. No suitable habitat present on project site. Project site is above the elevation range of this species.
Oregon fireweed <i>Epilobium oregonum</i>	-	CRPR-1B	Upper montane coniferous forest, lower montane coniferous forest, in or near streams, bogs, or fens; often in serpentine soils (broad endemic); 1,600–7,300 ft. elev. Blooms June–September.	Low. Mesic habitat on project site is highly disturbed, and elevations of known occurrences generally lower than that of project site. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Marsh willowherb <i>Epilobium palustre</i>	-	CRPR-2	Bogs and fens, meadows, and seeps; 7,218 ft. elev. Blooms July–August.	Low. Known in California only from Grass Lake in El Dorado County and Willow Lake in Plumas County. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Nevada daisy <i>Erigeron eatonii</i> var. <i>nevadincola</i>	-	CRPR-2	Rocky flats, generally in sagebrush scrub or pinyon and juniper woodland; 4,500–9,500 ft. elev. Blooms May–July.	None. No suitable open rocky habitat present on project site. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Starved daisy <i>Erigeron miser</i>	-	CRPR-1B	Cracks or clefts in granite outcrops; 6,000–8,500 ft. elev. Blooms June–October.	None. No suitable open rocky habitat present on project site and elevations of known occurrences generally much higher than that of project site. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Slide Mountain buckwheat <i>Eriogonum ovalifolium</i> var. <i>eximium</i>	-	NNHP-AR	Granite sandy or gravelly to rocky slopes, sagebrush communities and montane woodlands; 5,500–8,200 ft. elev. Blooms June–September.	None. No suitable habitat present on project site.
Torrey (Donner Pass) buckwheat <i>Eriogonum umbellatum</i> var. <i>torreyanum</i>	-	CRPR-1B	Highly erosive, shallow, rocky volcanic soils with sparse vegetation; 6,000–8,600 ft. elev. Blooms July–September.	None. No suitable volcanic soils or habitat present in project site and known occurrences generally from higher elevation than that of project site.
American manna grass <i>Glyceria grandis</i>	-	CRPR-2	Bog, fens, meadows, seeps, marshes, and swamps; streambanks and lake margins; 50–6,500 ft. elev. Blooms June–August.	Low. Known occurrences from along Truckee River are from lower elevations than occur on the project site. Mesic habitats on the project site are highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Sand cholla <i>Grusonia pulchella</i>	-	NNHP-AR	Dry, open, loose and sandy soils, sometimes gravelly or rock of valley floors in lower pinyon-juniper woodlands; 3,900–5,000 ft. elev. Blooms May–June.	None. No suitable habitat present on project site. Project site is located above the elevation range of this species.
Blandow's bog-moss <i>Helodium blandowii</i>	-	CRPR-2	Bogs and fens with calcareous groundwater in subalpine coniferous forest; 5,000–9,500 ft. elev. Fertile period unknown.	None. No suitable fen habitat present on project site.

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	TRPA/ Federal	State		
Short-leaved hulsea <i>Hulsea brevifolia</i>	-	CRPR-1B	Upper and lower montane coniferous forest, primarily red fir forests, on volcanic or granitic gravel or sand, or on slate; 4,200-10,500 ft. elev. Blooms May–August.	None. No suitable habitat present on project site and known occurrences are generally from higher elevations than occur on the project site.
Pine Nut Mountains mousetails <i>Ivesia pityocharis</i>	-	NNHP-AR	Seasonally or periodically wet, otherwise moist granite soils or sod of meadow margins; associated with springs and drainages; 6,900 – 8,500 ft. elev. Blooms July–September.	None. No suitable habitat present on project site. Project site is located below the elevation range of this species.
Plumas ivesia <i>Ivesia sericoleuca</i>	-	CRPR-1B	Vernally wet portions of meadows and alkali flats, and in vernal pools within sagebrush scrub or lower montane coniferous forest, often on volcanic soils; 4,300-7,200 ft. elev. Blooms May–October.	None. No suitable volcanic soils or habitat present on project site.
Webber's ivesia <i>Ivesia webberi</i>	FC	CRPR-1B, NCE, NNHP-AR	Shallow, clayey soils derived from andesitic rock. Typically found on sparsely to moderately densely vegetated sites in low sage scrub in association with dwarfed or cushion-like perennial herbs; 3,000-7,000 ft. elev. Blooms May-July.	None. No suitable habitat present on project site and species known in California only from Sierra and Dog Valleys.
Santa Lucia dwarf rush <i>Juncus luciensis</i>	-	CRPR-1B	Wet, sandy soils in riparian habitats, meadows and seeps, and vernal pools within chaparral, sagebrush scrub, and lower montane coniferous forest; 1,000-6,700 ft. elev. Blooms April–July.	Low. Mesic habitats on project site are highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Sierra Valley lewisia <i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i>	-	CRPR-3	Ridge tops or flat open spaces with widely spaced trees and sandy granite, slate or volcanic rubble in upper montane coniferous forest; 5,000 to 7,000 ft. elev. Blooms May-August.	None. No suitable volcanic soils or habitat present on project site.
Kellogg's lewisia <i>Lewisia kelloggii</i> ssp. <i>kelloggii</i>	-	-	Ridge tops in decomposed granite, volcanic ash, or rubble in upper montane coniferous forest; 4,500- 8,000 ft. elev. Blooms June-August.	None. No suitable volcanic soils or habitat present on project site.
Long-petaled lewisia <i>Lewisia longipetala</i>	TRPA	CRPR-1B	Northerly exposures on slopes and ridge tops in alpine boulder and rock field, subalpine coniferous forest; often found near the margins of persistent snow banks in wet soils 8,200–9,400 ft. elev. Blooms July–August.	None. The project site is located below the elevation range of this species. No suitable fell field habitat present on project site.
Broad-nerved hump moss <i>Meesia uliginosa</i>	-	CRPR-2	Bogs and fens, and permanently wet meadows, typically spring fed, in subalpine and upper montane coniferous forest; 4,200–8,200 ft. elev. Fertile period not specified.	None. No suitable fen habitat present on project site.

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	TRPA/ Federal	State		
Wassuk beardtongue <i>Penstemon rubicundus</i>	-	NNHP-AR	Open, rocky to gravelly soils on limestone shores, decomposed granite slopes and rocky drainage bottoms; 4,200–6,800 ft. elev. Blooms June–August.	None. No suitable habitat present on project site.
Whitebark pine <i>Pinus albicaulis</i>	FC	-	Thin, rocky, cold soils at or near timberline in subalpine forests; 7,000-12,000 ft. elev.	None. Known occurrences in the Lake Tahoe basin are from much higher elevations than occur on the project site.
Williams combleaf <i>Polyctenium williamsiae</i>	-	NCE, NNHP-AR	Relatively barren sandy to sandy clay, even mud bottoms of seasonal lakes in sagebrush and pinyon-juniper woodlands; 5,600–8,900 ft. elev. Blooms March–July.	None. No suitable habitat present on project site.
Alder buckthorn <i>Rhamnus alnifolia</i>	-	CRPR-2	Meadows, seeps, and riparian scrub within lower and upper montane coniferous forests; 4,500-7,000 ft. elev. Blooms May–July.	Low. Mesic habitats on the project site are highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015), and known occurrences are generally from lower elevations than occur on the project site.
Tahoe yellow cress <i>Rorippa subumbellata</i>	TRPA, FC	CE, CRPR-1B, NNHP-AR	Decomposed granitic beaches on Lake Tahoe; species is endemic to Lake Tahoe Basin beaches; 6,217–6,234 ft. elev. Blooms May–Sept.	None. Only occurs on beaches of Lake Tahoe.
Water bulrush <i>Schoenoplectus subterminalis</i>	-	CRPR-2	Bogs and fens, marshes and swamps (montane lake margins in shallow water); 2,461–7,661 ft. elev. Blooms July–August.	Low. No suitable habitat present; mesic habitats on the project site are highly disturbed.
Marsh skullcap <i>Scutellaria galericulata</i>	-	CRPR-2	Meadows, seeps, marshes, and swamps in sunny openings in lower montane coniferous forest; 0–7,000 ft. elev. Blooms June–September.	Low. No marsh habitat is present on site and although the wet meadow habitat could potentially provide habitat, it is highly disturbed. Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Munro's desert mallow <i>Sphaeralcea munroana</i>	-	CRPR-2	Sagebrush scrub; 6,560 ft. elev. Blooms May–June.	Low. Known in CA from a single herbarium specimen from 1922 “near Squaw Creek in Placer County at about 6,500 ft.” Species not observed during focused botanical surveys conducted in 2009–2010 (TTD 2015).
Tiehm peppergrass <i>Stroganowia tiehmii</i>	-	NNHP-AR	Dry, open, very rocky clay soils, bare boulders derived from basalt or other volcanic rock. Generally on gentle to steep slopes in sagebrush and lower juniper woodland; 4,800–6,100 ft. elev. Blooms May–June.	None. No suitable habitat present on the project site.

Table M-1 Special-Status Plant Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat and Flowering Period	Potential to Occur on the Project Site ²
	TRPA/ Federal	State		
Slender-leaved pondweed <i>Stuckenia filiformis</i>	-	CRPR-2	Shallow, clear water of lakes and rivers; 900–8,000 ft. elev. Blooms May–July.	None. No suitable habitat present on the project site.
Crème-flowered bladderwort <i>Utricularia ochroleuca</i>				

¹Regulatory Status Codes:

TRPA/Federal:

TRPA = TRPA sensitive/threshold species

FC = Federal candidate for listing

FT = Federal Threatened

State:

CA (California Department of Fish and Wildlife)

CE = California Endangered

CRPR = California Rare Plant Rank

1A = Plants presumed extinct in California

1B = Plants considered rare or endangered in California and elsewhere

2 = Plants considered rare or endangered in California, but more common elsewhere.

NV (Nevada Natural Heritage Program)

NCE = Nevada Critically Endangered (and Fully Protected under N.A.C 527.010)

NNHP-AR = Nevada Natural Heritage Program At-Risk Species

²Potential for Occurrence Definitions

Present – Species was observed during site visits conducted for this analysis or was documented on the site by another reputable source.

High – All of the species' specific life history requirements can be met by habitat present on the site, and populations are known to occur in the immediate vicinity.

Moderate – Some or all of the species life history requirements are provided by habitat on the site; populations may not be known to occur in the immediate vicinity, but are known to occur in the region (Tahoe Basin).

Low – Species not likely or expected to occur due to marginal habitat quality or distance from known occurrences.

None – None of the species' life history requirements are provided by habitat on the site and/or the site is outside of the known distribution for the species.

Table M-2 Special-Status Animal Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat Associations	Potential to Occur or Be Affected on the Project Site ²
	TRPA/ Federal	State/ Other		
Invertebrates				
Northern Sierra endemic ant <i>Formica microphthalma</i>	–	NNHP-AR	Montane ant found in coniferous forest of the northern Sierra.	Low. Not expected to occur on the project site. While little is known about this species, most <i>Formica</i> ants require coarse woody debris, rocks, or other material for nesting; these features are in low abundance on the project site.
Fish				
Lahontan lake tui chub <i>Gila bicolor pectinifer</i>	–	C-SSC	Pelagic fish that feed on zooplankton in the open water of Lake Tahoe.	None. Not known nor expected to occur outside of Lake Tahoe.
Lahontan cutthroat trout <i>Oncorhynchus clarki henshawi</i>	TRPA, FT	NNHP-AR	Only trout species native to lakes and streams in the Tahoe Basin. Found in both lake and stream habitats, but spawn in stream environments. Lahontan cutthroat trout (LCT) requires gravels and riffles for spawning and generally does not persist or occur with nonnative salmonids.	None. No suitable aquatic habitat present on the project site.
Reptiles				
Sierra alligator lizard <i>Elgaria coerulea palmeri</i>	–	NNHP-AR	Generally found in cool and damp woodlands, forests, and grasslands. Also found in overgrown grassy areas near streams, rock outcrops and talus. This species tends to hide in brush or under rocks.	Low. Suitable habitat is not present on the project site.
Amphibians				
Yosemite toad <i>Bufo canarus</i>	FT	C-SSC	Endemic California toad found in wet meadows between 4,000 and 12,000 feet in the Sierra Nevada from Alpine County south to Fresno County.	None. Suitable habitat is not present on the project site; also, the project site is outside the known range of this species.
Mount Lyell salamander <i>Hydromantes platycephalus</i>	–	C-SSC	Isolated populations occur in the Sierra Nevada, from Sierra County south to Tulare County, at approximately 4,000–12,000 feet elevation. Associated with large rock outcrops in mixed conifer, red fir, lodgepole pine, and subalpine habitats. Individuals usually found on the ground surface, in areas of open water in the form of seeps, drips, or spray.	Low. Suitable habitat is not present on the project site.
Sierra Nevada yellow-legged frog <i>Rana sierrae</i>	FE	C-ST, NNHP-AR	Occurs in upper elevation lakes, ponds, bogs, and slow-moving alpine streams. Most Sierra Nevada populations are found between 6,000–12,000 feet elevation. Almost always found	Low. The only known population in the Tahoe Basin occurs at Hell Hole bog, in the southern end of the Lake Tahoe Basin. Several occurrence records are located just outside the Tahoe Basin in Desolation

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	TRPA/ Federal	State/ Other		
			within 3.280853 feet 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. Low-gradient streams are preferred because breeding and tadpole development cannot occur in streams with fast-moving water. Small streams are generally unoccupied and have no potential breeding locations because of the lack of depth for overwintering and refuge. Although Sierra Nevada yellow-legged frogs have been observed successfully breeding in shallow locations less than 7 feet deep, typically depth is an important factor for breeding locations since adults and larvae require overwintering habitat. For up to nine months, adults and larvae will live/hibernate below ice, or in nonfrozen portions of ponds or lakes, so adequate depth (greater than 2 m) is necessary to avoid having the pond or lake freeze through.	Wilderness. Limited occurrence records are also present on the Tahoe National Forest, with the largest known population in the Soda Springs area. However, no known occurrences are near the project site. Additionally, suitable habitat is not present on the project site because of hydrologic conditions, presence of predators (e.g., nonnative trout), and disturbed aquatic habitat.
Birds				
Waterfowl species (collectively)	TRPA	–	Nest and roost in wetlands and around waters such as lakes, creeks, drainages, marshes, and wet meadows.	Low - nesting habitat. Marginal nesting habitat is present on the project site, primarily due to the level of recreational and other disturbances. However, waterfowl species may occasionally use the area for resting and foraging.
Northern goshawk <i>Accipiter gentilis</i>	TRPA	C-SSC, NNHP-AR	In the Sierra Nevada, this species generally requires mature conifer forests with large trees, snags, downed logs, dense canopy cover, and open understories for nesting; aspen stands also are 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.	Low. Potential foraging habitat is present on the project site, however it is highly disturbed.

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	TRPA/ Federal	State/ Other		
Northern harrier <i>Circus cyaneus</i>	–	C-SSC	Found in a variety of open grassland, wetland, and agricultural habitats. Open wetland habitats used for breeding include marshy meadows, wet and lightly grazed pastures, and freshwater and brackish marshes. Breeding habitat also includes dry upland habitats, such as grassland, cropland, drained marshland, and shrub-steppe in cold deserts. Winters throughout California where suitable habitat occurs. Wintering habitat includes open areas dominated by herbaceous vegetation, such as grassland, pastures, cropland, coastal sand dunes, brackish and freshwater marshes, and estuaries (Grinnell and Miller 1944, MacWhirter and Bildstein 1996).	Low. Suitable habitat is not present on the project site.
Bald eagle <i>Haliaeetus leucocephalus</i>	TRPA	C-SE, C-FP, NNHP-AR	Use ocean shorelines, lake margins, and river courses for both nesting and wintering. Most nests are within 1 mile of water, in large trees with open branches. Roost communally in winter.	Low. In the Tahoe Basin, bald eagle is known to nest only in two locations (Emerald Bay and Marlette Lake). Potential perch sites may be located on the project site, due to the close proximity to Lake Tahoe, and the project site could be used during winter. However, use of the project site would be limited due to the level of disturbance and the presence of more suitable habitat located nearby.
Golden eagle <i>Aquila chrysaetos</i>	TRPA, BGEPA	C-FP	Mountains and foothills throughout California. Nest on cliffs and escarpments or in tall trees.	Low. Suitable nesting habitat is not present on the project site, and golden eagle is rare in the Tahoe area. Due to disturbance levels and habitat quality on the project site, and higher quality habitat outside the project site, golden eagle is not expected to nest or forage on the project site.
Osprey <i>Pandion haliaetus</i>	TRPA	–	Associated with large fish-bearing waters. Nest usually within 0.25 mile of fish-producing water, but may nest up to 1.5 miles 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 Tahoe Basin occur along the shorelines of smaller lakes (e.g., Fallen Leaf Lake) and in forest uplands up to 1.5 miles from lakes.	Low. Osprey nests and forages in suitable habitat throughout the Tahoe Region; however, osprey does not nest on the project site. Potential perch sites and are present on the project site. However, use of the project site by osprey would likely be limited due to high levels of disturbance the presence of more suitable habitat located nearby on Lake Tahoe.
Peregrine falcon <i>Falco peregrinus</i>	TRPA	C-FP, NNHP-AR	Nest and roost on protected ledges of high cliffs, usually adjacent to water bodies and wetlands that support abundant avian prey.	Low. Suitable nesting habitat not present on the project site.

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	TRPA/ Federal	State/ Other		
California spotted owl <i>Strix occidentalis occidentalis</i>	–	C-SSC, NNHP-AR	Occur in several forest vegetation types including mixed conifer, ponderosa pine, red fir, and montane hardwood. Nesting habitat is generally characterized by dense canopy closure (i.e., greater than 70 percent) with medium to large trees and multistoried stands (i.e., at least two canopy layers). Foraging habitat can include intermediate to late-successional forest with greater than 40 percent canopy cover.	Low. Potential foraging habitat is present on the project site, but the area is highly disturbed. More suitable habitat exists nearby.
Long-eared owl <i>Asio otus</i>	–	C-SSC	Found in a variety of habitat types throughout its range. Nest in woodland, forest, and open settings (e.g., grassland, shrub-steppe, and desert). Occupy wooded and nonwooded areas that support relatively dense vegetation (e.g., trees, shrubs) adjacent to or within larger open areas such as grasslands or meadows (i.e., habitat edges) (Bloom 1994; Marks, Evans, and Holt 1994). This species also has been documented breeding in contiguous conifer forest habitat with heavy mistletoe infestation (Bull, Wright, and Henjum 1989). Trees and shrubs used for nesting and roosting include oaks, willows, cottonwoods, conifers, and junipers (Marks, Evans, and Holt 1994).	Low. Potential habitat is present on the project site, but it is highly disturbed.
Great gray owl <i>Strix nebulosa</i>	–	C-SE	Found in Central Sierra mature mixed conifer forests near meadows. Scattered along the west slope of the Sierra, between 4,500 and 7,500 feet elevation, from Plumas County to Yosemite National Park.	None. Suitable habitat is not present on the project site, and the species has not been documented in the area.
Willow flycatcher <i>Empidonax traillii</i>	–	C-SE	In the Sierra Nevada, suitable habitat typically consists of montane meadows that support riparian deciduous shrubs (particularly willows) and remain wet through the nesting season (i.e., midsummer). Important characteristics of suitable meadows include a high water table that results in standing or slow-moving water, or saturated soils (e.g., “swampy” conditions) during the breeding season; abundant riparian deciduous shrub cover (particularly willow); and riparian shrub structure with moderate to high foliar density that is uniform from the ground to the shrub canopy. Most breeding occurrences are in meadows larger than 19 acres, but the average size of occupied meadows is approximately 80 acres. Although less common in the Sierra	Low. Riparian/meadow habitat with suitable vegetation structure and hydrology is not present on the project site.

Table M-2 Special-Status Animal Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat Associations	Potential to Occur or Be Affected on the Project Site ²
	TRPA/ Federal	State/ Other		
			Nevada, riparian habitat along streams also can function as suitable habitat for willow flycatcher. However, those areas must support the hydrologic and vegetation characteristics described for suitable meadows (e.g., standing or slow-moving water, and abundant and dense riparian vegetation).	
Olive-sided flycatcher <i>Contopus cooperi</i>	–	C-SSC	Summer resident and migrant that breeds primarily in late-succession conifer forest with open canopy. Species prefers to forage near forest openings or edges.	Low. Forest habitat conditions on the project site are marginal for this species.
Bank swallow <i>Riparia riparia</i>	–	C-ST	Nests in fine-textured or sandy banks or cliffs along rivers, streams, ponds, or lakes. Typically nests in colonies.	None. No suitable habitat present on the project site. Additionally, the Tahoe Basin is not within the current breeding range of bank swallow (see Garrison 1998). The only documented records are from the Tahoe Keys area in 1962 (10 birds) and 1976 (one bird).
Black swift <i>Cypseloides niger</i>	–	C-SSC	Nests on canyon walls near water and sheltered by overhanging rock or moss, preferably near waterfalls or on sea cliffs. It breeds in California from May to September.	None. No suitable habitat present on the project site.
Yellow warbler <i>Dendroica petechia</i>	–	C-SSC	In the Sierra Nevada, yellow warbler typically breed in wet areas with dense riparian vegetation. Breeding habitats primarily include willow patches in montane meadows, and riparian scrub and woodland dominated by willow, cottonwood, aspen, or alder with dense understory cover. Localized breeding has been documented in more xeric sites including chaparral, wild rose (<i>Rosa</i> spp.) thickets, and young conifer stands (Siegel and DeSante 1999, RHJV 2004).	Low. Potential riparian habitat with dense vegetation on the project site is limited and highly disturbed.
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	–	C-SSC	Typically breeds in marshes that have tall emergent vegetation such as cattails or tules, in open areas near and over relatively deep water.	Low. No suitable marsh habitat present on the project site.
Mammals				
Pallid bat <i>Antrozous pallidus</i>	–	C-SSC, WBWG-H	Locally common at lower elevations in California and occurs in grassland, shrubland, woodland, and mixed conifer forests. Absent from highest elevation locations in the Sierra Nevada. Rocky outcrops, caves, crevices, and occasional tree cavities or buildings provide roosts.	Low. Potential habitat is limited on the project site and this species is more commonly found at lower elevations.

Table M-2 Special-Status Animal Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat Associations	Potential to Occur or Be Affected on the Project Site ²
	TRPA/ Federal	State/ Other		
Sierra Nevada mountain beaver <i>Aplodontia rufa californica</i>	–	C-SSC, NNHP-AR	Use riparian habitats with soft, deep soils for burrowing, lush growth of preferred food sources such as willow and alder, and a variety of herbaceous species for bedding material. Vegetation types preferred include wet meadows and willow-alder-dominated riparian corridors typically near water sources. Suitable riparian habitats are characterized by dense growth of small deciduous trees and shrubs near permanent water. Mountain beaver is generally solitary, except during its short breeding season; beavers spend a high proportion of their time in extensive underground burrow systems with multiple openings, tunnels, and food caches.	Low. Potential habitat is very limited on the project site, and the area is heavily disturbed by recreation activities.
Pale Townsend's big-eared bat <i>Corynorhinus townsendii pallescens</i>	–	C-SSC, WBWG-H	Range throughout California, mostly in mesic habitats. Limited by available roost sites (i.e., caves, tunnels, mines, and buildings).	Low. Suitable habitat not present on the project site. Until 2007, no occurrences reported within the Tahoe Basin. However, this species was detected several miles from the project site in Blackwood Canyon and Cookhouse Meadow in 2007.
California wolverine <i>Gulo gulo luteus</i>	FPT	C-ST, C-FP	Inhabit upper montane and alpine habitats of Sierra Nevada, Cascades, Klamath, and north Coast Ranges. Need water source and denning sites. Rarely seen. Sensitive to human disturbance.	None. Suitable habitat not present on the project site. Very few documented occurrences in or near the Tahoe Basin.
Western red bat <i>Lasiurus blossevillii</i>	–	C-SSC, WBWG-H, NNHP-AR	Day roosting common in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. An association with intact riparian habitat may exist (particularly willows, cottonwoods, and sycamores).	Low. Potential habitat on the project site is limited.
Spotted bat <i>Lasiurus blossevillii</i>	–	NNHP-AR	Dependent on rock-faced cliffs for roosting habitat. Forages in forest openings, pinyon juniper woodlands, and a variety of meadow and river habitats.	Low. Suitable roosting habitat not present on the project site.
Fringed myotis <i>Myotis thysanodes</i>	–	NNHP-AR	Associated with a variety of habitats; optimal habitat includes pinyon-juniper, valley foothill hardwood, and hardwood-conifer. Uses open habitats, streams, lakes, and ponds as foraging areas. Roosts in caves, mines, buildings, and crevices.	Low. Species has been detected in the Tahoe Basin; however, no known occurrences on or near the project site, and optimal habitat is not present.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	–	C-SSC	In the Sierra Nevada, found in boreal zones, typically inhabiting riparian communities with thickets of deciduous trees and shrubs such as willows and alders.	Low. The project site is at the lower elevational limits of this species range. Habitat present on the project site is limited, of marginal quality, and is highly disturbed.

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Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat Associations	Potential to Occur or Be Affected on the Project Site ²
	TRPA/ Federal	State/ Other		
Western white-tailed jackrabbit <i>Lepus townsendii</i>	–	C-SSC	Year-round resident in sagebrush, subalpine conifer, juniper, and other habitats along the crest and the eastern slope of the Sierra Nevada. Uncommon to rare.	Low. Suitable habitat is not present on the project site.
Sierra marten <i>Martes caurina sierrae</i>	–	NNHP-AR	Inhabits dense canopy conifer forests with large snags and downed logs. Prefers old growth stands with multiple age classes in vicinity.	Low. Suitable habitat is not present on the project site.
Pacific fisher <i>Martes pennanti pacifica</i>	FC	C-SSC	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, Kucera, and Barrett 1995). No longer considered present in the Tahoe Basin; no current records.	None. Considered extirpated from the Tahoe Region.
Mule deer <i>Odocoileus hemionus</i>	TRPA	–	Year-long resident or elevational migrant that prefer a wide distribution of various-aged vegetation for cover, meadow, and forest openings, and free water. In the Sierra Nevada, early to mid-successional forests, woodlands, and riparian and brush habitats are preferred because of the greater diversity of shrubby vegetation and woody cover. In addition to forage, vegetative cover is critical for thermoregulation. Suitable habitats include a mosaic of vegetation such as forest or meadow openings, dense woody thickets and brush, edge habitat, and riparian areas. Fawning habitat, used by does during birth and by newborn fawns, is of critical importance for reproductive success. A diversity of thermal cover, hiding cover, succulent forage, and water are needed during fawning. Optimal deer fawning habitat has been described as having moderate to dense shrub cover near forest cover and water, such as riparian zones. A source of surface water (e.g., creek or river) is especially important to mule deer. Typical fawning habitat varies in size, but an area of 5–26 acres is adequate, with optimal fawn-rearing habitat of around 400 acres.	Low. Potential habitat in the project site is marginal and highly disturbed. There is no suitable fawning habitat present on the project site.
American water shrew <i>Sorex palustris</i>	–	NNHP-AR	This species prefers small, cold mountain streams or other bodies of water; utilizing heavy vegetation, logs and rocks for cover. Water shrews are rarely found far from water, and often associated with habitats with over 75% cover. They generally	Low. Potential riparian habitat with dense vegetation on the project site is limited and highly disturbed.

Table M-2 Special-Status Animal Species Evaluated for the US 50/South Shore Community Revitalization Project

Common Name and <i>Scientific Name</i>	Regulatory Status ¹		Habitat Associations	Potential to Occur or Be Affected on the Project Site ²
	TRPA/ Federal	State/ Other		
			forage on invertebrates in the water but may also be seen eating foraging on fungi and green vegetation.	
American badger <i>Taxidea taxus</i>	–	C-SSC	Primarily occupy open habitats, such as grasslands, but can also be found in mountain meadows, marshes, brushy areas, open forests and deserts at elevations up to 12,000 feet. Habitats contain friable soils and ample rodent prey.	Low. Suitable habitat is not present on the project site.
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	–	C-ST	Inhabits upper montane and alpine habitats of Sierra Nevada, Cascades, Klamath, and north Coast Ranges. Need water source and denning sites. Rarely seen. Sensitive to human disturbance. No longer considered present in the Tahoe Basin; no current records.	None. Considered extirpated from the Tahoe Region.
Western jumping mouse <i>Zapus princeps</i>	–	NNHP-AR	Primarily found in moist fields, thickets and woodlands where cover is dense with grasses and sedges. May also be found in grassy edges of streams and ponds, usually within 50 feet of water.	Low. Suitable habitat is not present on the project site.

¹ Regulatory Status Definitions:

TRPA/Federal:

TRPA = TRPA sensitive/special interest (threshold) species
 FT = Threatened species under the Federal Endangered Species Act
 FE = Endangered species under the Federal Endangered Species Act
 FPT = Proposed for listing as Threatened under the Federal Endangered Species Act
 FC = Candidate for listing under the Federal Endangered Species Act
 BGEPA = Protected under the Bald and Golden Eagle Protection Act

State/Other:

C-FP = Fully Protected

CA—California Department of Fish and Game:

C-C = Candidate for listing
 C-SE = Endangered
 C-SSC = Species of special concern
 C-ST = Threatened

NV—Nevada Natural Heritage Program

NNHP-AR = Nevada Natural Heritage Program At-Risk Species

Western Bat Working Group

WBWG-H = Designated as High Priority by the Western Bat Working Group

² Potential for Occurrence Definitions:

Present—Species was observed in the study area during site visits conducted for this analysis or was documented there by another reputable source.

High—All of the species' specific life history requirements can be met by habitat present in the study area, and populations are known to occur in the immediate vicinity.

Moderate—Some or all of the species life history requirements are provided by habitat in the study area; populations may not be known to occur in the immediate vicinity, but are known to occur in the Region.

Low—Species not likely to occur because of marginal habitat quality or distance from known occurrences.

None—None of the species' life history requirements are provided by habitat in the study area and/or the study area is outside of the known distribution for the species. Any occurrence would be a very unlikely anomaly.

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