## Appendix D: Special-Status Species

		<b>Status</b> <sup>b</sup>			
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
	FEDERALLY L	ISTED TH	IREATEN	ED OR E	NDANGERED SPECIES
Invertebrates					
Valley elderberry longhorn beetle Desmocerus californicus dimorphus	MG	FT			Found in deciduous riparian habitat with elderberry species (Sambucus spp.) below 2,000 feet. Elderberry occur at scattered locations within the lower planning corridor. Suitable habitat for this species occurs within the planning corridor. Valley elderberry longhorn beetles are reported from El Portal within the planning corridor.
Fish					
Delta smelt Hypomesus transpacificus	OC	FT	СТ		Not native to planning corridor. This species does not occur within the planning corridor.
Lahontan cutthroat trout Oncorhynchus clarki henshawi	oc	FT			Historically occurred in all accessible cold waters of the Lahonton Basin in a wide variety of water temperatures and conditions. Cannot tolerate the presence of other salmonids. Requires gravel riffles in streams for spawning. Recorded within the west fork of Portuguese Creek – outside the Merced River watershed (CDFG 2004a). This species cannot be considered present within the Merced River watershed except as artificially introduced.
Central Valley steelhead trout Oncorhynchus mykiss	OC	FT			Not native to planning corridor. This species does not occur within the planning corridor.
Paiute cutthroat trout Oncorhynchus clarki seleniris	OC	FT			Native to the east slope of the Sierra Nevada (NPS 1997w). Not native to Merced River watershed. This species cannot be considered present within the Merced River watershed.
Reptiles and Amphibians					
California red-legged frog Rana aurora draytonii	YV, MG	FT	CSC		Found in quiet pools in permanent streams in mixed conifer zones and foothills. Prefers riparian deciduous habitat. Suitable habitat for this species occurs within the planning corridor.
Birds					
Bald eagle Haliaeetus leucocephalus	YV, MG	FT	CE		Forages over rivers, streams, and lakes. Primarily eats fish, also carrion, waterbirds, and small mammals. Transient through Yosemite Valley and El Portal. No nesting in the park (NPS 1997w). The species was proposed for delisting 7/6/99. Suitable habitat for this species occurs within the planning corridor.
Mammals					
Sierra Nevada bighorn sheep Ovis canadensis sierrae	OC	FE	CE		Occurs primarily along the Sierra Crest in the northeast portion of the park. Most of the herd inhabits Forest Service land adjacent to the park. This species does not occur within the planning corridor.
		FEDER.A	L SPECIE	S OF CO	NCERN
Invertebrates					
Wawona riffle beetle Atractelmis wawona	YV, MG, SF	FC			This aquatic species is a listed species due to its limited distribution in the North and South Forks of the Merced River. Historic occurrences of this species are located within the planning corridor. Suitable habitat for this species occurs within the planning corridor.
Merced Canyon shoulderband snail Helminthoglypta allynsmithi	MG	FC			Found in rockslide habitat with shade and moisture. This species is associated with rocky areas that are resistant to effects reasonably associated with this plan.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Keeled sideband snail Monadenia circumcarinata	YV, MG, SF	FC			Presence in project area unknown (NPS 1997w). This species is associated with rocky areas that are resistant to effects reasonably associated with this plan.
Yosemite Mariposa sideband snail Monadenia hillebrandi	YV, MG, SF	FC			Rockslides may be necessary for shelter. This species is associated with rocky areas that are resistant to effects reasonably associated with this plan.
yosemitensis Sierra pygmy grasshopper Tetrix sierrana	MG	FC			One record for El Portal (1953). Occurs in upland and riparian habitats. Suitable habitat for this species occurs within the planning corridor.
Bohart's blue butterfly Philotiella speciosa bohartorum	MG, SF	FC			An annual in the buckwheat family, Chorizanthe membrancea, is the suspected host. It is found in association with serpentine soils. Suitable habitat for this species occurs within the planning corridor.
Fish					
Longfin smelt Spirinchus thaleichthys	ОС	FC	CSC		Not native to planning corridor. This species does not occur within the planning corridor.
Red hills roach Lavinia symmetricus	OC	FC	CSC		Not native to planning corridor. This species does not occur within the planning corridor.
Sacramento splittail Pogonichthys mecrolepidotus	OC	FC	CSC		Not native to planning corridor. This species does not occur within the planning corridor.
Reptiles and Amphibians					
Limestone salamander Hydromantes brunus	MG	FC	СТ		Very limited distribution along Merced River and its tributaries between elevations of 800 and 2,500 feet, usually in association with limestone outcrops. This species has limited distribution along the Merced River, and its habitat – limestone outcrops – and is not vulnerable to effects reasonably associated with this plan.
Mount Lyell salamander Hydromantes platycephalus	UM, YV,	FC	CSC		Occurs in massive rock areas between 4,000 and 11,500 feet in elevation, in rock fissures, seeps, shade, and low-growing plants. Suitable habitat for this species occurs within the planning corridor.
Yosemite toad Bufo canorus	UM	FCL	CSC		Restricted to areas of wet meadows in central high Sierra Nevada, between 6,400 and 11,300 feet. Suitable habitat for this species occurs within the planning corridor.
Foothill yellow-legged frog <i>Rana boylei</i>	YV, MG, SF	FC	CSC		Formerly abundant, and found up to 6,000 feet in elevation, this species has virtually disappeared from its range in the Sierra Nevada from unknown causes. Preferred habitat was rocky streams and wet meadows. Suitable habitat for this species occurs within the planning corridor.
Mountain yellow-legged frog Rana muscosa	UM	FCL	CSC		A species of mountain habitats, occurring at elevations from 6,000 to over 12,000 feet, found in streams, lakes, and ponds in a variety of vegetation types. Recent surveys in Yosemite have found that this species is much-reduced in distribution and numbers, probably due primarily to the introduction of non-native fish into its habitats. Suitable habitat for this species occurs within the planning corridor.
Northwestern pond turtle Clemmys marmorata marmorata	YV, MG	FC	CSC		Found in the Sierra Nevada up to 6,000 feet in elevation, this species has decreased by up to 80% in numbers, probably due to habitat fragmentation and non-native predators. Habitat is permanent water in a variety of habitat types. Suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Southwestern pond turtle Clemmys marmorata pallida	YV, MG	FC	CSC		Found in the Sierra Nevada up to 6,000 feet in elevation, this species has decreased by up to 80% in numbers, probably due to habitat fragmentation and non-native predators. Habitat is permanent water in a variety of habitat types. Suitable habitat for this species occurs within the planning corridor.
Northern sagebrush lizard Sceloporus graciosus graciosus	UM	FC			Inhabits mountain slopes, forested slopes, and open areas. Occurs in sandy areas near water. Suitable habitat for this species occurs within the planning corridor.
Birds					
Harlequin duck Histrionicus histrionicus	YV, MG, SF	FC	CSC		Breeds along large, swift-moving mountain rivers. Was formerly found in every major watershed in the Sierra, but has disappeared. Formerly nested in Yosemite Valley (NPS 1997w). This species was observed breeding in Yosemite Valley in 2002, and observed within Yosemite Valley without evidence of breeding in 2003 and 2004 (NPS 2004m).
Northern goshawk Accipiter gentilis	UM, YV, SF	FC	CSC		Favors moderately dense coniferous forests broken by meadows, and other openings, between 5,000 and 9,000 feet in elevation. Typically nests in mature conifer stands near streams. Habitat destruction in its range has caused declines in population. Records exist for Yosemite Valley, primarily between November and February. Suitable habitat for this species occurs within the planning corridor.
American Peregrine falcon Falco peregrinus anatum	YV, MG	FD	CE		Usually nest on high cliffs near water to search for prey. The species was formally delisted 8/25/99. Suitable habitat for this species occurs within the planning corridor.
Long-billed curlew Numenius americanus	OC	FC			Breeds in wet meadow habitat in northeastern California. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. Suitable habitat for this species does not occur within the planning corridor.
Burrowing owl Athene cunicularia	OC	FC	CSC		Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation; subterranean nester in small mammal burrows. Suitable habitat for this species does not occur within the planning corridor.
Flammulated owl Otus flammeolus	YV, MG, SF	FC			Various coniferous habitats from ponderosa pine to red fir forests. Breeds in the North Coast and Klamath Ranges, Sierra Nevada, and in suitable habitats in mountains in southern California. Suitable habitat for this species occurs within the planning corridor.
California spotted owl Strix occidentalis occidentalis	YV, MG, SF	FC	CSC		Breeds from oak and ponderosa pine forests upslope to lower-elevation red fir forests up to 7,600 feet, with mixed conifer the optimum type. Presence of black oak in the forest canopy also enhances habitat suitability. Suitable habitat for this species occurs within the planning corridor.
Vaux's swift Chaetura vauxi	YV	FC	CSC		Inhabits redwood and Douglas-fir habitats. Utilizes large hollow trees and snags, especially tall, burned-out stubs for nest sites. This species is mostly transient through the planning corridor. Breeding occurs in Yosemite Valley, usually in forested habitat near meadows (NPS 2004m).

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Black swift Cypseloides niger	YV	FC	CSC		Occurs in mountainous regions of the western United States and Canada. Currently, black swifts occur in three widely separated areas: central Colorado through central Utah; central and southwestern coastal California; and southern Alaska to northern Washington and inland to southwestern Alberta, northern Idaho, and northwestern Montana. This species has been observed within Yosemite Valley, specifically at Vernal Fall in 1990 (NPS 2004m).
Rufous hummingbird Selasphorus rufus	YV	FC			Found in a wide variety of habitats that provide nectar- producing flowers. Uses valley foothill hardwood, valley foothill hardwood-conifer, riparian, and various chaparral habitats in both northward and southward migration; montane riparian, aspen, and high mountain meadows (to treeline and above) used in southward migration. Suitable habitat for this species occurs within the planning corridor.
Lewis' woodpecker Melanerpes lewis	OC	FC			Occurs in open oak savannahs, broken deciduous, and coniferous habitats. Breeds locally along eastern slopes of the Coast Ranges, and in the Sierra Nevada, Warner Mountains, Klamath Range, and the Cascade Range. Suitable habitat for this species does not occur in the planning corridor.
White-headed woodpecker Picoides albolarvatus	YV	FC			Occurs in montane coniferous forests up to lodgepole pine and red fir habitats in the Sierra Nevada, Cascade, Klamath, Transverse, and Peninsular Ranges, and Warner Mountains. Suitable habitat for this species occurs in the planning corridor.
Nuttall's woodpecker Picoides nuttallii	YV, MG	FLC			Occurs in the Central Valley, Coast Ranges, and in lower portions of the Cascade Range and Sierra Nevada. Forages mostly in oak and riparian deciduous habitats. This species occurs commonly in El Portal and less commonly in Yosemite Valley (NPS 2004m).
Loggerhead shrike Lanius ludovicianus	OC	FC	CSC		Nests in shrublands and forages in open grasslands. Suitable habitat for this species does not occur in the planning corridor.
Oak titmouse Baeolophus inornatus	MG	FLC			Live oaks and deciduous woodlands. Suitable habitat for this species occurs within the planning corridor.
American dipper Cinclus mexicanus	YV	FLC			Permanent resident throughout most of western United States, along mountain streams. This species often nests under bridges in Yosemite Valley (NPS 2004m).
California thrasher Toxostoma redivivum	OC	FC			Occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open valley foothill riparian habitat in foothill and lowland areas. Suitable habitat for this species does not occur within the planning corridor.
Tricolored Blackbird Agelais tricolor	OC	FC	CSC		Colonial nesting species in emergent wetlands. This species has not been reported from the planning corridor.
Bell's sage sparrow Amphispiza belli belli	OC	FC	CSC		This species has not been reported from the planning corridor.
Lawrence's goldfinch Carduelis lawrencei	OC	FC			Breeds in oak or other open woodlands near water. This species has not been reported from the planning corridor.
Mammals					
Mount Lyell shrew Sorex lyelli	UM	FC	CSC		Favors riparian zones and other wet sites (USFS 1980). Known only from the vicinity of Mount Lyell (outside the planning corridor) within the park. Suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Spotted bat Euderma maculatum	YV, MG, SF, UM	FC	CSC		Rare throughout range. Uses crevices in rock faces for roosting and reproduction. Forages in a wide variety of habitats, primarily for moths. Suitable habitat for this species occurs within the planning corridor.
Small-footed myotis bat Myotis ciliolabrum	MG, UM, YV, SF	FC			Usually found above 6,000 feet and in wooded and brushy habitats near water. Forages among trees and over water. Breeds in colonies in buildings, caves, and mines (NPS 1997w). Suitable habitat for this species occurs within the planning corridor.
Long-eared myotis bat Myotis evotis	YV, MG, UM, SF	FC			Wide range from coast to high Sierra Nevada; montane oak woodlands. Roosts primarily in hollow trees, especially large snags or lightning-scarred live trees. Suitable habitat for this species occurs within the planning corridor.
Fringed myotis bat Myotis thysanodes	YV, MG, SF, UM	FC			Found to at least 6,400 feet in the Sierra Nevada, in deciduous/mixed conifer forests. Feeds over water, in open habitats, and by gleaning from foliage. Roosts in caves, mines, buildings, and trees, especially large conifer snags. Suitable habitat for this species occurs within the planning corridor.
Long-legged myotis bat Myotis volans	YV, MG, UM, SF	FC			Found up to high elevations in the Sierra Nevada, in montane coniferous forest habitats. Forages over water, close to trees and cliffs, and in openings in forests. Roosts primarily in large-diameter snags. Forms nursery colonies numbering hundreds of individuals, usually under bark or in hollow trees. Suitable habitat for this species occurs within the planning corridor.
Yuma myotis bat Myotis yumanensis	YV, MG, SF, UM	FC	CSC		Usually occurs below elevations of 8,000 feet. Forages over open, still, or slow-moving water and above low vegetation in meadows. Roosts in buildings, caves, or crevices. Nursery colonies of several thousand individuals may be in buildings, caves, or mines. Suitable habitat for this species occurs within the planning corridor.
Greater western mastiff bat Eumops perotis californicus	YV, MG, SF, UM	FC	CSC		Found in a variety of habitats to elevations over 8,000 feet. Roosts primarily in crevices in cliff faces, and occasionally trees. Detected most often over meadows and other open areas, but will also feed above forest canopy; sometimes to high altitudes (1,000 feet). Suitable habitat for this species occurs within the planning corridor.
Pygmy rabbit Brachylagus idahoensis	OC	FC	CSC		This species has not been reported from the planning corridor.
Sierra Nevada snowshoe hare Lepus americanus tahoensis	OC	FC	CSC		This species has not been reported from the planning corridor.
Mono Basin mountain beaver Aplodontia rufa californica	SF, UM	FC	CSC		Prefers willow-lined perennial streams through montane meadows, where it establishes a system of burrows, often with the stream running through them. Suitable habitat for this species occurs within the planning corridor.
Marten Martes americanus	UM, SF, YV	FC			Found in dense, complex coniferous forests with large trees and snags. Structural complexity near the ground is important for foraging and protection from predators. Suitable habitat for this species occurs within the planning corridor.
Fisher Martes pennanti	UM, SF	FCL	CSC		Occurs in coniferous forests and deciduous-riparian habitats with a high percentage of canopy closure, mostly above elevations of approximately 6,000 feet. Carnivorous, but may also eat fruit and fungi. Densities of fisher in the central Sierra Nevada appear to be very low, for unknown reasons. Higher densities exist in both the northern and southern Sierra Nevada. Suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

		Status <sup>b</sup>			
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Vegetation					
Three-bracted onion Allium tribracteatum	MG, SF	FC		PS	Found in chaparral and Sierran coniferous forest on volcanic slopes and ridges between 3,400 and 9,750 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Big-scale balsamroot Balsamorhiza macrolepis var macrolepis	MG	FLC		PW	Valley and foothill grassland and woodland communities. Often associated with serpentine soils. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Mono hot springs evening primrose Camissonia sierrae ssp. alticola	UM	FC		PS	Known from few occurrences in Fresno and Mariposa Counties. In sand or gravel over granite in mixed conifer forests. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Small's southern clarkia Clarkia australis	UM	FC		PS	Confined to open ponderosa pine forests. Recorded at Tioga Road and at the Toll House (CDFG 2004a). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Mariposa clarkia Clarkia biloba ssp. australis	MG, SF	FC		PS	Chaparral and cismontane woodlands. Endemic to Mariposa and Tuolumne Counties outside the park. Recorded along the South Fork Merced River, Mouth of Ned's Gulch, Sweetwater Creek, and along Highway 140 (CDFG 2004a). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Merced clarkia Clarkia lingulata	MG, SF	FC	CE	PS	Endemic to Mariposa County west of Yosemite National Park and the El Portal Administrative Site. Associated with metamorphic gravels and talus in red clay on north-facing slopes and canyon bottoms within chaparral, coniferous forest, and cismontane woodland communities. Recorded along Highway 140 near the South Fork Merced River outside the planning corridor (CDFG 2004a). Suitable habitat for this species occurs within the planning corridor.
Congdon's woolly sunflower Eriophyllum congdonii	MG, SF	FC	R	PS	Restricted to dry, mostly south-facing metamorphic and metasedimentary outcrops. Occurs on dry ridges on metamorphic rocks, scree, and talus. One plant has been located at the Sand Pit in El Portal. Known population of this species occurs within the planning corridor (NPS 2004k, USGS 2004b).
Yosemite woolly sunflower Eriophyllum nubigenum	UM	FC		PS	South-facing granitic slabs, domes, and gravels. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Short-leaved hulsea Hulsea brevifolia	UM	FLC		PS	Inhabits granitic or volcanic montane coniferous forests between 4,950 and 10,560 feet in elevation with gravelly or sandy soils. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Red-rayed hulsea Hulsea heterochroma	UM	FLC		PS	Known from sandy open coniferous forests and recent burns. Known population of this species occurs within the planning corridor (NPS 2004k, NPS 1985c).
Yosemite lewisia Lewisia disepala	UM, YV, MG	FC		PS	Occurs on fine gravel on rock outcrops, domes, or ridges. Known population of this species occurs within the planning corridor (NPS 2004k, NPS 1985c).
Congdon's lomatium Lomatium congdonii	MG	FC		PS	Restricted to serpentine and metamorphic soils in canyon live oak woodlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

	Status				
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Slender-stemmed monkeyflower Mimulus filicaulis	MG	FC		PS	Located in moist granitic soils and meadow edges – vernally mesic sites. Recorded near Snow Creek, Merced Grove, Moss Creek, Bull Creek, and Big-Grizzly Mountain (CDFG 2004a). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Pansy monkeyflower Mimulus pulchellus	YV	FLC		PS	Found in vernally moist, open gravelly places such as vernal pools. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Yosemite popcorn-flower Plagiobothrys torreyi var. torreyi	YV	FLC		PS	Located in moist granitic soils and meadow edges/disturbed sites often in partial shade between about 3,900 to 5,700 feet. Known historic occurrences of this species are located between Happy Isles and Mirror Lake, and at Sentinel Bridge and Bridalveil Meadow (CDFG 2004a). Known population of this species occurs within the planning corridor (USGS 2004b)
[No common name] Schizymenium shevockii	MG, SF	FLC			Found in cismontane woodland in areas with metamorphic rock, on rock ledges and overhangs. Known populations of this species occur within the planning corridor at Cold Creek near the Redbud Picnic Area (Shevock 2004).
Bolander's clover Trifolium bolanderi	YV	FC		PS	Confined to wet montane meadows. This species occurs along Glacier Point Road (outside the planning corridor). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
STATE LISTED RARE	, THREATENE	D, OR EN	VDANGE	RED SPE	CIES AND SPECIES OF SPECIAL CONCERN
Birds					
Cooper's hawk Accipiter cooperi	YV, UM, MG, SF		CSC		A hawk of wooded areas, found up to 9,000 feet in the Sierra Nevada. Numerous recent records for Yosemite, especially in Yosemite Valley. Habitat destruction in its range has led to population declines. Frequently hunts along wooded edges (NPS 1997w). This species is relatively tolerant of high levels of disturbance.
Sharp-shinned hawk Accipiter striatus	YV, UM, MG, SF		CSC		Hunts in open coniferous forest and edges of meadows and clearings between elevations of 4,000 and 7,000 feet in the Sierra Nevada. Nests in forests. One old (1930) nesting record for Yosemite Valley (NPS 1997w). This species is relatively tolerant of high levels of disturbance.
Merlin Falco columbarius	OC		CSC		Occurs mostly below elevations of 4,000 feet, ranging from annual grasslands to ponderosa pine and California black oak woodland, but prefers open country. Feeds primarily on birds. Reduction in numbers over recent decades may be due to pesticides. This species has not been reported from the planning corridor.
Prairie falcon Falco mexicanus	UM, YV		CSC		Primarily associated with open areas such as grasslands and meadows, where it feeds on small mammals and birds. Nests on cliffs. Numbers have declined in California due to several probable factors, including nest robbing by humans, control of prey species, and pesticides. Many records of this species in alpine areas of Yosemite National Park and occasionally seen in Yosemite Valley. Suitable habitat for this species occurs within the planning corridor.
Long-eared owl Asio otus	YV, MG, SF		CSC		Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Proximity of this habitat to meadow edges for hunting also enhances quality. One nesting record in Yosemite Valley in 1915 (NPS 1997w). Suitable habitat for this species occurs within the planning corridor.

Statusb

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Great gray owl Strix nebulosa	UM, YV, SF		CE		Entire California population of this species is restricted to the Yosemite region, where it reaches southernmost extent of its North American range. Breeds in mixed conifer/red fir forests bordering meadows. Winters in mixed conifer down to blue oak woodlands. Research suggests that human disturbance could affect foraging success of this species, which may explain its absence from Yosemite Valley, and raises concern about actions that may increase human disturbance on great gray owl habitat. Suitable habitat for this species occurs within the planning corridor.
Little willow flycatcher Empidonax traillii brewsteri	YV, SF		CE		Breeds in mountain meadows and riparian areas from elevations of 2,000 to 8,000 feet in the Sierra Nevada, with lush growth of shrubby willows. Has disappeared from much of its range, due to habitat destruction and parasitism from brown-headed cowbirds. Suitable habitat for this species occurs within the planning corridor.
Yellow warbler Dendroica petechia	YV, MG, SF		CSC		Prefers riparian woodlands, but also breeds in chaparral, ponderosa pine, and mixed conifer habitats with substantial amounts of brush. In recent decades, numbers of breeding pairs have declined dramatically in many lowland areas of California. A major cause of this decline has apparently been brown-headed cowbird parasitism (NPS 1997w). Suitable habitat for this species occurs within the planning corridor.
Mammals					
Pallid bat Antrozous pallidus	YV, SF, MG		CSC		Primarily found below 6,000 feet in elevation, in a variety of habitats, especially oak, ponderosa pine, and giant sequoia habitats. Roosts in rock outcrops, caves, and especially hollow trees. Suitable habitat for this species occurs within the planning corridor.
Pale big-eared bat Corynorhinus townsendii pallescens	YV		CSC		Found in all habitats up to alpine zone. Requires caves, mines, or buildings for roosting. Prefers mesic habitats where it gleans from brush or trees along habitat edges. Recorded at Wildcat Creek bridge and Mirror Lake (CDFG 2004a). Suitable habitat for this species occurs within the planning corridor.
Townsend's big-eared bat Corynorhinus townsendii townsendii	YV, MG, SF, UM		CSC		Found in all habitats up to alpine zone. Requires caves, mines, or buildings for roosting. Prefers mesic habitats where it gleans from brush or trees along habitat edges. Suitable habitat for this species occurs within the planning corridor.
Sierra Nevada red fox Vulpes vulpes necator	UM		СТ		Primarily found in red fir, lodgepole pine, subalpine forests, and alpine fell-fields. Found mostly above 7,000 feet and rarely below elevations of 5,000 feet. Five unconfirmed reports for Yosemite Valley, but these sightings could have been of eastern red fox, a nonnative species that is present on the west slope of the Sierra Nevada. Suitable habitat for this species occurs within the planning corridor.
California wolverine Gulo gulo luteus	UM		СТ		Found in a wide variety of mountain habitats. Needs water, caves, logs, or other cover for denning. No wolverine occurrences have been recorded within California since the 1970s (CDFG 2004a). This species is presumed extirpated from California.

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Vegetation					
Yosemite onion Allium yosemitense	SF		R	PS	Confined to open metamorphic slabs, talus slopes, and scree. Known population of this species occurs within the planning corridor (NPS 1985c, USGS 2004b).
Tompkin's sedge Carex tompkinsii	MG		R	PS	Limited to foothill oak woodland and chaparral areas and along lower talus slopes. Found sporadically from Arch Rock to El Portal in the Merced River gorge. Known populations of this species occur within the planning corridor (USGS 2004).
Congdon's lewisia Lewisia congdonii	MG		R	PS	Grows on moist exposed metamorphic rock faces and slopes. Occurs in chaparral and mixed conifer forest on north-facing slopes in shade. Known population of this species occurs within the planning corridor (NPS 1985c, USGS 2004b).
		PAR	K SENSIT	IVE SPE	CIES
Vegetation					
Mountain bent grass Agrostis humilis	UM			PS	Grows in subalpine coniferous forest, alpine boulder and rock field, and meadows and seeps from 8,800 to 10,500 feet in elevation. An historic occurrence of this species was recorded west of Tenaya Lake (CDFG 2004a). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sugar stick Allotropa virgata	YV			PS	Confined to black oak and mixed conifer forest areas. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Broad-podded phoenicaulis Anelsonia eurycarpa	UM			PS	Found on broken rock, talus, slopes, ridges. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Pasque flower Anemone occidentalis	UM			PS	Occurs on open, rocky slopes and montane coniferous forest between 3,900 and 10,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Slender silver-moss Anomobryum julaceum	YV			PS	Found in exposed seasonally wet soils, such as along south facing walls. Historic occurrence of this species is located near Yosemite Falls (CDFG 2004a). No recent reported occurrences, but suitable habitat for this species occurs within the planning corridor (Shevock 2004).
Snapdragon Antirrhinum leptaleum	SF			PS	Restricted to small washes and shallow ditches in disturbed areas. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Weeping-fruited Holboell's rock cress Arabis holboellii var. pendulocarpa	UM			PS	Occurs on rocky slopes in yellow pine forest to subalpine forest between 5,000 and 10,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Inyo rock cress Arabis inyoensis	UM			PS	Found on rocky ridges and slopes in pinyon-juniper woodland to subalpine forest between 5,000 and 11,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Lyall's rock cress Arabis Iyallii var. Iyallii	UM			PS	Found on rock crevices, talus, meadows, alpine fell fields between 7,800 and 12,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Greene's rock cress Arabis repanda var. greenei	UM			PS	Occurs between approximately 8,860 and 11,810 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

			Statusb		
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Repand rock cress Arabis repanda var. repanda	UM, YV, MG, SF			PS	Found on gravel, rocks, talus, dry slopes, often under pines, in yellow pine forest, red fir forest, lodgepole forest between 4,600 and 9,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Lemmon's wild ginger Asarum lemmonii	UM, YV, MG, SF			PS	Occurs in shady wet sites in yellow pine and red fir forest between 3,600 and 6,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Alpine spiny rattleweed Astragalus kentrophyta var. danus	MG, SF			PS	Grows on alpine summits with metamorphic bedrock. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sierra bolandra Bolandra californica	YV			PS	Found in lower and upper montane coniferous, rocky and mesic habitats. Known population of this species occurs within the planning corridor (NPS 1985c).
Hair-leaf sedge Bulbostylis capillaris	YV, MG, SF			PS	Occurs in yellow pine forest, in meadows and seeps and meadow habitats between 4,000 and 6,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Yosemite evening-primrose Camissonia sierrae ssp. sierrae	YV			PS	Located on granite outcrops in ponderosa pine or foothill pine/blue oak forests. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sedge Carex albonigra	MG			PS	Locally rare in the Sierra Nevada in alpine marshy areas and springs. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Buxbaum's sedge Carex buxbaumii	UM			PS	Occurs in montane and subalpine fens; yellow pine, red fir, lodgepole, and subalpine forests, meadows, seeps. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sedge Carex capitata	MG			PS	Restricted in the Sierra Nevada; strictly alpine. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Congdon's sedge Carex congdonii	MG			PS	Talus slopes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Cleft sedge Carex fissuricola	UM			PS	Located in meadow slopes and flats, among rocks, in red fir and subalpine forests, between 5,000 and 11,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Cloud sedge Carex haydeniana	UM			PS	Occurs in rocky slopes and flats in snow-melt areas, subalpine forest, alpine fell-fields between 7,800 and 13,800 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Dana's sedge Carex incurviformis var. danaensis	UM			PS	Occurs in alpine fell-fields in open, gravelly or rocky slopes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Shore sedge Carex limosa	UM, YV, MG, SF			PS	Found in bogs and fens in montane coniferous forest, meadows, and marshes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Meadow sedge Carex praticola	MG			PS	Found in meadows and open woods below 2,000 feet. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Single-spiked sedge Carex scirpoidea var. pseudoscirpoidea	UM, YV, MG, SF			PS	Occurs in rocky places that are at least seasonally wet. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

		Status <sup>b</sup>			
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Tahoe sedge Carex tahoensis	UM			PS	Found in open dry rocky slopes in subalpine forest, alpine fell-fields between 9,500 and 12,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Whitney's sedge Carex whitneyi	YV			PS	Found in sandy and gravelly meadows. Known population of this species occurs within the planning corridor (NPS 1985c).
Indian paintbrush Castilleja foliolosa	MG			PS	Found on dry, open, rocky slopes on the edge of chaparral areas. No recorded occurrences, but suitable habitat for this species occurs within the planning corridor.
Fresno ceanothus Ceanothus fresnensis	YV, MG. SF				Occurs in cismontane woodland and lower montane coniferous forest habitats. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Alpine cerastrum Cerastrum beeringianum	MG			PS	Grows near snowbanks in alpine areas. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Bolander's woodreed Cinna bolanderi	MG,SF			PS	Found in meadows and seeps, streamside and other mesic areas in subalpine coniferous forest between 5,511 and 8,052 feet in elevation. Recorded occurrences of this species are located near Mariposa Grove (CDFG 2004a) and Tamarack Flat (NPS 2004l). No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Fell-fields claytonia Claytonia megahiza	UM			PS	Occurs on gravelly soils or crevices between rocks within alpine fell fields and subalpine coniferous forests. No recorded occurrences, but suitable habitat for this species occurs within the planning corridor.
Sierra spring beauty Claytonia nevadensis	UM			PS	Occurs in alpine fell-fields. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Bride's bonnet Clintonia uniflora	YV, MG, SF			PS	Found in yellow pine forest and red fir forest between 3,500 and 6,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Child's blue-eyed Mary Collinsia childii	MG, SF			PS	Endemic to central and southern Sierra Nevada, reaching the northern extent of its range in Mariposa County. Occurs on shaded slopes and in open oak and mixed coniferous woodlands. Known population of this species occurs within the planning corridor (NPS 2004l, NPS 1985c).
Collinsia Collinsia linearis	MG, SF			PS	Restricted to dry, metamorphic rock outcrops along the metamorphic-granitic contact zone. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Short-bracted bird's-beak Cordylanthus rigidus ssp. brevibracteatus	YV, MG, SF			PS	Found between approximately 3,280 and 8,200 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Truckee cryptantha Cryptantha glomeriflora	UM			PS	Occurs in yellow pine, red fir, lodgepole, and subalpine forests, meadows, seeps, slope habitats. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Mountain lady's slipper Cypripedium montanum	YV, MG			PS	Found in broad-leaved upland forest, lower montane conferous forest. Known occurrence of this species occurs within the planning corridor (NPS 1985c, USGS 2004b).
Red larkspur Delphinium nudicaule	MG, SF			PS	Found in chaparral, foothill woodland, mixed evergreen forest, and yellow pine forest in dry conditions in slope habitats up to 6,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

		Status <sup>b</sup>			
Species	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Few-flowered bleeding heart Dicentra pauciflora	UM			PS	Located in gravelly sites in subalpine forest and alpine fell-fields between 4,000 and 10,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Subalpine draba Draba praealta	UM			PS	Occurs in montane or subalpine moist meadows, streambanks, above 10,000 feet. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sundew Drosera rotundifolia	UM			PS	Confined to sphagnum bogs. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Broad-leaved willow herb Epilobium latifolium	UM			PS	Found in lodgepole pine forest and subalpine forest in wet stony places. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Stream orchid Epipactis gigantea	YV			PS	Restricted to moist granitic ledges, and planted in landscaped areas. Known populations of this species occur within the planning corridor (NPS 2004l, NPS 1985c, USGS 2004b).
Shining fleabane Erigeron barbellulatus	UM			PS	Occurs on gravelly or rocky slopes in red fir forest to subalpine forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Rayless fleabane Erigeron inornatus var. inornatus	MG, SF			PS	Located in forest openings, dry rocky places, in foothill woodland, mixed evergreen forest, yellow pine forest, and red fir forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Wild daisy Erigeron linearis	MG			PS	Known from the metamorphic contact zone. No reported occurrences, but suitable habitat for this species may occur within the planning corridor.
Wild daisy Erigeron vagus	OC			PS	Rare on crest and eastern slopes of the Sierra Nevada. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Buckwheat Eriogonum prattenianum	OC			PS	Found on rock outcrops within river corridors. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Naked wild buckwheat Eriogonum nudum var. scapigerum	OC			PS	Found on alpine slopes. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Slender cotton-grass Eriophorum gracile	YV, MG, SF			PS	Found in yellow pine forest, red fir forest, and mixed evergreen forest in meadows and bogs. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Fawn-lily Erythronium purpurascens	YV			PS	Endemic to the Sierra Nevada, growing along shaded stream and river corridors. Known population of this species occurs within the planning corridor (NPS 2004l, NPS 1985c).
Small-flowered fescue Festuca minutiflora	UM, YV, MG, SF			PS	Occurs on moist, shady banks. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Pine-woods fritillary Fritillaria pinetorum	UM			PS	Found in yellow pine, red fir, lodgepole, and subalpine forest, on granitic substrate in slope habitats between 6,000 and 10,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Explorer's gentian Gentiana calycosa	UM			PS	Occurs in red fir forest, lodgepole forest, and subalpine forest in moist conditions between 4,000 and 10,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

Species	Area <sup>a</sup>	Status <sup>b</sup>			
		USFWS	State	Park	Habitat Type/Occurrence
Boreal bedstraw Galium boreale ssp. septentrionale	YV			PS	Found in wet lower montane meadows. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Dane's gentian Gentianella tenella	MG			PS	Occurs in high meadows. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
California sunflower Helianthus californicus	MG			PS	Found in foothill woodland, valley grassland, freshwater wetlands, meadows, and seeps, in wet conditions up to 6,000 feet in elevation. Known population of this species is located north of the planning corridor (NPS 1985c).
Goldenaster Heterotheca sessiliflora ssp. echioides	YV, MG			PS	Limited to grasslands and open oak woodlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Hairy goldenaster Heterotheca villosa var. hispida	OC			PS	Found in rocky places in red fir forest and Joshua tree woodland. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Oceanspray Holodiscus discolor	MG			PS	Found in lower to middle montane forests in rocky, dry areas. Known population of this species is located near the planning corridor (NPS 1985c).
Western quillwort Isoetes occidentalis	OC			PS	Found in mountain lakes in red fir forest to subalpine forest. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Yosemite ivesia Ivesia unguiculata	YV			PS	Endemic to montane meadows and forest edges. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Common juniper Juniperous communis var. montana	MG			PS	Rocky or wooded slopes in high elevation forests. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Pitcher sage Lepechinia calycina	MG			PS	Found on rocky slopes within chaparral and canyon live oak woodlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sierra laurel Leucothoe davisiae	YV			PS	Grows in wet areas and bogs in acid soil. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
False pimpernel Lindernia dubia var. anagallidea	YV			PS	Lives in wet meadows. Known occurrence of this species occurs within the planning corridor (NPS 1985c).
Tanoak Lithocarpus densiflorus var. echinoides	YV, MG, SF			PS	Occurs in dry conditions in slope habitats between approximately 1,970 and 6,560 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Slender lupine Lupinus gracilentus	UM			PS	Found in subalpine coniferous forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Inyo meadow lupine Lupinus pratensis var. pratensis	YV, MG, SF			PS	Occurs in meadows and stream banks between 3,300 and 11,550 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Northern bugleweed Lycopus uniflorus	YV, MG, SF			PS	Found in moist areas, marshes, and near springs between 5,280 and 6,600 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Yosemite tarplant Madia yosemitana	YV, MG,SF			PS	Occurs in lower montane coniferous forests, grassy slopes, and meadows between 3,960 and 7,590 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

Species	<b>Area</b> <sup>a</sup>	Status <sup>b</sup>			
		USFWS	State	Park	Habitat Type/Occurrence
Elongate copper-moss Mielichhoferia elongate	MG, SF			PS	Found in cismontane woodland in areas with metamorphic rock, on rock ledges and overhangs. Known populations of this species occur within the planning corridor at Cold Creek near the Redbud Picnic Area (Shevock 2004).
Bicolored monkeyflower Mimulus bicolor	MG, SF			PS	Found in foothill woodland, yellow pine forest, and chaparral in moist conditions; usually occurs in nonwetlands, but occasionally found in wetlands up to 6,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Congdon's monkeyflower Mimulus congdonii	MG			PS	Found in granitic soils in disturbed areas, seeps, runoff areas on slopes. Known population of this species occurs within the planning corridor (NPS 1985c).
Purple mouse-ears Mimulus douglasii	MG, SF			PS	Occurs in chaparral and foothill woodland on gravelly serpentine soils under moist conditions, equally likely in wetlands or nonwetlands up to 4000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Inconspicuous monkeyflower Mimulus inconspicuous	MG			PS	Found near hillside streams or seeps in partial shade. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Cut-leaved monkeyflower Mimulus laciniatus	MG, SF			PS	Occurs in chaparral, lower and upper montane conifer forest, and mesic areas of granitic substrate. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Palmer's monkeyflower <i>Mimulus palmeri</i>	MG			PS	Restricted to damp, shaded slopes under canyon live oaks. Known population of this species occurs near planning corridor (NPS 2004l). Suitable habitat for this species occurs within the planning corridor.
Alpine sandwort Minuartia obtusiloba	UM			PS	Occurs in subalpine coniferous forest, dwarf scrub, alpine boulder and rock field on metamorphic rock. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Dwarf sandwort Minuartia pusilla	MG			PS	Confined to open pine forests and chaparral slopes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Bishop's cap Mitella pentandra	YV			PS	Known from red fir forest, lodgepole forest in rocky soil, occurs almost always under natural conditions in wetlands. Known population of this species occurs within the planning corridor (NPS 1985c).
Sierra sweet-bay Myrica hartwegii	SF			PS	Endemic to the northern and central Sierra Nevada. Restricted to streambanks, forming small thickets along the river. Known population of this species occurs within the planning corridor (NPS 2004l, NPS 1985c, USGS 2004b).
Bog asphodel Narthecium californicum	MG, SF			PS	Found in yellow pine, red fir, and Douglas-fir forests, meadows, seeps and wet conditions almost always in wetlands up to 8,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Azure penstemon Penstemon azureus ssp. angustissimus	YV			PS	Generally found in moist woodlands and open forests. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Foothill penstemon Penstemon heterophyllus var. purdyi	MG, SF			PS	Located in chaparral, foothill woodland, and yellow pine forest in dry conditions on slope habitats; up to approximately 5,250 feet in elevation.
Phacelia Phacelia platyloba	MG			PS	Found in gravelly or rocky soils in chaparral and canyon live oak woodland. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

	Area <sup>a</sup>	Status <sup>b</sup>			
Species		USFWS	State	Park	Habitat Type/Occurrence
Phacelia Phacelia tanacetifolia	YV			PS	Grows in moist sandy and gravelly open areas. Known population of this species occurs within the planning corridor (NPS 1985c).
Condensed phlox Phlox condensata	OC			PS	Found on dry slopes and benches, especially on travertine or limestone, in pinyon-juniper woodland, yellow pine forest. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Coleman's piperia Piperia colemanii	MG, SF			PS	Occurs in chaparral and lower montane coniferous forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Bog bluegrass Poa leptocoma ssp. leptocoma	UM			PS	Occurs on wet stream banks and boggy meadows in lodgepole forest and subalpine forest habitats. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Sierra podistera Podistera nevadensis	UM			PS	Occurs in alpine boulder and rock field habitats. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Great polemonium Polemonium occidentale	UM			PS	Found in yellow pine, red fir, lodgepole, and subalpine forests in wet conditions almost always in wetlands up to 11,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Showy polemonium Polemonium pulcherrimum	UM			PS	Found in subalpine forest and alpine fell-fields, on rocky soil and volcanic substrate under dry conditions in slope habitat between approximately 7,875 and 12,140 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Kruckeberg's sword fern Polystichum kruckebergii	UM			PS	Found in shaded rock crevices and rocky soils in subalpine forest and red fir forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Nuttall's pondweed Potamogeton epihydrus ssp. nuttallii	UM, YV, MG, SF			PS	Occurs in freshwater marsh habitats. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Robbins' pondweed Potamogeton robbinsii	OC			PS	Found in lakes and other deep water emergent wetlands. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
Silver-weed cinquefoil Potentilla anserina ssp. anserina	MG, SF			PS	Occurs in wet, often alkali areas, in montane coniferous forest between 3,960 and 8,250 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Nuttall's alkali grass Puccinellia nuttalliana	OC			PS	Occurs in alkaline places, in mixed evergreen forest, sagebrush scrub, yellow pine forest. No reported occurrences, and suitable habitat for this species does not occur within the planning corridor.
White beaked rush Rhynchospora alba	UM, YV, MG, SF			PS	Found in fens and bogs and freshwater wetlands almost always in wetlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Snow willow Salix reticulata	MG			PS	Restricted to the Sierra Nevada crest in Yosemite National Park and adjacent alpine slopes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Weak saxifrage Saxifraga debilis	UM			PS	Found in upper montane forests with rocky moist soils. Known population of this species occurs within the planning corridor (NPS 1985c).
Wood saxifrage Saxifraga mertensiana	YV			PS	Endemic to northern and central Sierra Nevada. Grows on mossy rocks and moist cliffs. Known population of this species occurs within the planning corridor (NPS 1985c).

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

Species	Area <sup>a</sup>	Status <sup>b</sup>			
		USFWS	State	Park	Habitat Type/Occurrence
Bog saxifrage Saxifraga oregana	UM			PS	Occurs in yellow pine, red fir, lodgepole, and subalpine forest, in meadows, seeps and under wet conditions, almost always in wetlands between 3,500 and 11,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Yosemite bulrush Scirpus clementis	UM			PS	Occurs in subalpine forest, alpine fell-fields, lodgepole forest, meadows, and seeps between 8,000 and 12,000 feet in elevation.
Bolander's skullcap Scutellaria bolanderi	SF			PS	Occurs in gravelly soils along stream banks and in oak and pine woodlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Clark's ragwort Senecio clarkianus	YV, MG, SF			PS	Found in damp meadows between 4,620 and 8,910 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Streambank butterweed Senecio pseudaureus var. pseudaureus	UM, YV, MG, SF			PS	Found on stream banks and meadows between 7,920 and 10,890 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Groundsel Senecio serra var. serra	MG			PS	Found in streambanks and meadows between 7,920 and 10,890 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Giant sequoia Sequoiadendron giganteum	YV, SF			PS	Grows in three discrete groves in the park, has also been planted in historic and recent landscaped areas. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Small bur-reed Sparganium natans	UM, YV, MG, SF			PS	Occurs in freshwater wetlands, in lake-margin and edge habitats, almost always in wetlands under natural conditions. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Ladies' tresses Spiranthes porrifolia	YV			PS	Found in wet meadows. Known population of this species occurs within the planning corridor (NPS 2004).
Bladdernut Staphylea bolanderi	MG			PS	Found in chaparral, foothill woodland, and yellow pine forest in canyon habitats up to 4,500 feet in elevation. Known population of this species occurs adjacent to the planning corridor (NPS 1985c).
Obtuse stellaria Stellaria obtusa	UM			PS	Found in red fir forest under moist conditions between 6,000 and 7,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Western tofieldia Tofieldia occidentalis ssp. occidentalis	MG, SF			PS	Occurs in wet meadows and bogs in montane coniferous forest below 10,230 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Pacific starflower Trientalis latifolia	YV, MG, SF			PS	Found in mixed evergreen forest, redwood forest, and yellow pine forest, equally likely to occur in wetlands or nonwetlands up to 4,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Bowl clover Trifolium cyathiferum	YV, MG, SF			PS	Occurs in red fir, yellow pine, and mixed evergreen forest in moist conditions, usually in wetlands, but also in nonwetlands up to 8,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Trillium Trillium angustipetalum	SF			PS	Found in meadows and moist grasslands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

Table D-1 Rare, Threatened, and Endangered Species Considered in this Analysis

Species		Status <sup>b</sup>			
	Area <sup>a</sup>	USFWS	State	Park	Habitat Type/Occurrence
Giant trillium Trillium chloropetalum	SF			PS	Found in moist woodlands. Known population of this species occurs within the planning corridor (NPS 1985c).
Coast Range triplet-lily Triteleia lugens	MG, SF			PS	Found in chaparral and mixed forest edges. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Lesser bladderwort Utricularia minor	UM, YV, MG, SF			PS	Occurs in shallow water; almost always in wetlands. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Red huckleberry Vaccinium parvifolium	MG, SF			PS	Found in redwood forest, red fir forest, mixed evergreen forest in moist conditions in canyon habitats up to 7,000 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Cusick's speedwell Veronica cusickii	UM			PS	Occurs in alpine boulder and rock field, meadows, subalpine coniferous forest, and upper montane coniferous forest. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Common viburnum Viburnum ellipticum	MG, SF			PS	Found in yellow pine forest and chaparral up to 4,500 feet in elevation. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.
Hall's wyethia Wyethia elata	SF, YV, MG			PS	Endemic to the central and southern Sierra Nevada. Occurs in open deciduous woodlands and coniferous forests. Known population of this species occurs within the planning corridor (NPS 2004l, NPS 1985c).
Whitneya Whitneya dealbata	MG			PS	Located in open montane forests and dry meadows and slopes. No reported occurrences, but suitable habitat for this species occurs within the planning corridor.

## NOTES:

a Area of Potential Occurrence: UM = Upper Merced River Corridor (main stem and South Fork), YV = Yosemite Valley, MG = Merced River Gorge (includes El Portal Road into Yosemite Valley), SF = South Fork Merced River (Wawona and below Wawona), OC = Outside planning corridor

b Status:

USFWS

FE = federally endangered

FT = federally threatened

FD = federally delisted (status to be monitored for at least five years)

FCL = federal candidate for listing

FC = federal species of concern

FLC = federal species of local concern

State

CE = California endangered

CT = California threatened

CSC = California species of special concern

R = California rare

Park

PS = Yosemite Park sensitive

PW = Yosemite Park watch list

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