

APPENDIX 5.2C

Biology Tables

Table 5.2C-1a Sensitive plant species with potential to occur within 10 miles of the CCGS site

	Scientific Name	Common Name	Federal	State	CNPS	ECC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
Bryophytes									
	Pottiaceae								
	<i>Didymodon norrisii</i>	Norris' beard moss			List 2.2		Occurs in Cismontane woodland, Lower montane coniferous forest/intermittently mesic, rock. Elevation 600 to 1973 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Triquetrella californica</i>	coastal triquetrella			List 1B.2		Occurs in Coastal bluff scrub, Coastal scrub/soil. Elevation 10 to 100 meters. (CNPS 2009)	None	No appropriate habitat present.
Monocots									
	Alismataceae								
	<i>Sagittaria sanfordii</i>	Sanford's arrowhead			List 1B.2		Occurs in marshes and swamps(assorted shallow freshwater). Blooms May-October. Elevation 0 to 650 meters. (CNPS 2009)	Low	No known local occurrences, salt influence in ditches may preclude establishment.
	Cyperaceae								
	<i>Carex comosa</i>	bristly sedge			List 2.1		Occurs in Coastal prairie, marshes and swamps(lake margins), Valley and foothill grassland. Blooms May-September. Elevation 0 to 625 meters. (CNPS 2009)	Low	No known local occurrences. Marsh habitat is recent or altered.
	<i>Carex vulpinoidea</i>	brown fox sedge			List 2.2		Occurs in marshes and swamps(freshwater), Riparian woodland. Blooms May-June. Elevation 30 to 1200 meters. (CNPS 2009)	None	No appropriate habitat present.
	Liliaceae								
	<i>Calochortus pulchellus</i>	Mt. Diablo fairy-lantern			List 1B.2	Yes	Occurs in Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland. Blooms April-June. Elevation 30 to 840 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Fritillaria liliacea</i>	fragrant fritillary			List 1B.2		Occurs in Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland/often serpentinite. Blooms February-April. Elevation 3 to 410 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Hesperolinon breweri</i>	Brewer's western flax			List 1B.2	Yes	Occurs in Chaparral, Cismontane woodland, Valley and foothill grassland/usually serpentinite. Blooms May-July. Elevation 30 to 900 meters. (CNPS 2009)	None	No appropriate habitat present.
Dicots									
	Poaceae								
	<i>Neostapfia colusana</i>	Colusa grass	Threatened	Endangered	List 1B.1		Occurs in Vernal pools (adobe, large). Blooms May-August. Elevation 5 to 200 meters. (CNPS 2009)	None	No appropriate habitat present.
	Apiaceae								
	<i>Cicuta maculata var. bolanderi</i>	Bolander's water-hemlock			List 2.1		Occurs in marshes and swamps in coastal, fresh or brackish water. Blooms July-September. Elevation 0 to 200 meters. (CNPS 2009)	Low	Habitat is present, but no known local occurrences.
	<i>Eryngium racemosum</i>	Delta button-celery		Endangered	List 1B.1		Occurs in Riparian scrub(vernally mesic clay depressions). Blooms June-September. Elevation 3 to 30 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Lilaeopsis masonii</i>	Mason's lilaeopsis		Rare	List 1B.1		Occurs in marshes and swamps(brackish or freshwater), Riparian scrub. Blooms April-November. Elevation 0 to 10 meters. (CNPS 2009)	Present	Populations are known from the Antioch area.
	<i>Sanicula saxatilis</i>	rock sanicle		Rare	List 1B.2		Occurs in Broadleafed upland forest, Chaparral, Valley and foothill grassland/rocky. Blooms April-May. Elevation 620 to 1175 meters. (CNPS 2009)	None	No appropriate habitat present.
	Asteraceae								
	<i>Blepharizonia plumosa</i>	big tarplant			List 1B.1	Yes	Occurs in Valley and foothill grassland. Blooms July-October. Elevation 30 to 505 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Centromadia parryi ssp. congdonii</i>	Congdon's tarplant			List 1B.2		Occurs in Valley and foothill grassland(alkaline). Blooms May-October(Nov). Elevation 1 to 230 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Centromadia parryi ssp. parryi</i>	pappose tarplant			List 1B.2		Occurs in Chaparral, Coastal prairie, Meadows and seeps, marshes and swamps(coastal salt), Valley and foothill grassland(vernally mesic)/often alkaline. Blooms May-November. Elevation 2 to 420 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Helianthella castanea</i>	Diablo helianthella			List 1B.2	Yes	Occurs in Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland. Blooms March-June. Elevation 60 to 1300 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Isocoma arguta</i>	Carquinez goldenbush			List 1B.1		Occurs in Valley and foothill grassland(alkaline). Blooms August-December. Elevation 1 to 20 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Lasthenia conjugens</i>	Contra Costa goldfields	Endangered		List 1B.1		Occurs in Cismontane woodland, Playas(alkaline), Valley and foothill grassland, Vernal pools/mesic. Blooms March June. Elevation 0 to 470 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Madia radiata</i>	showy golden madia			List 1B.1	Yes	Occurs in Cismontane woodland, Valley and foothill grassland. Blooms March-May. Elevation 25 to 900 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Senecio aphanactis</i>	chaparral ragwort			List 2.2		Occurs in Chaparral, Cismontane woodland, Coastal scrub/sometimes alkaline. Blooms January-April. Elevation 15 to 800 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Symphyotrichum lentum</i>	Suisun Marsh aster			List 1B.2		Occurs in Marshes and swamps(brackish and freshwater). Blooms May-November. Elevation 0 to 3 meters. (CNPS 2009)	Present	Known occurrences in the Antioch area.
	Boraginaceae								
	<i>Amsinckia grandiflora</i>	large-flowered fiddleneck	Endangered	Endangered	List 1B.1		Occurs in Cismontane woodland, Valley and foothill grassland. Blooms April-May. Elevation 275 to 550 meters. (CNPS 2009)	None	No appropriate habitat present.
	<i>Cryptantha hooveri</i>	Hoover's cryptantha			List 1A		Occurs in Inland dunes, Valley and foothill grassland(sandy). Blooms April-May. Elevation 9 to 150 meters. (CNPS 2009)	Low	Potential habitat may exist on interior stabilized dunes. Plant is considered extinct.
	<i>Plagiobothrys hystriculus</i>	bearded popcorn-flower			List 1B.1		Occurs in Valley and foothill grassland(mesic), Vernal poolsmargins/often vernal swales. Blooms April-May. Elevation 0 to 274 meters. (CNPS 2009)	None	No appropriate habitat present.
	Brassicaceae								
	<i>Erysimum capitatum var. angustatum</i>	Contra Costa wallflower	Endangered	Endangered	List 1B.1		Occurs in Inland dunes. Blooms March-July. Elevation 3 to 20 meters. (CNPS 2009)	Present	Known occurrences in protected sites on interior stabilized dunes.
	<i>Streptanthus albidus ssp. peramoenus</i>	most beautiful jewel-flower			List 1B.2		Occurs in Chaparral, Cismontane woodland, Valley and foothill grassland/serpentinite. Blooms (March)April-September(Oct). Elevation 94 to 1000 meters. (CNPS 2009)	None	No appropriate habitat present.

Table 5.2C-1a Sensitive plant species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CNPS	ECC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Streptanthus hispidus</i>	Mt. Diablo jewel-flower			List 1B.3		Occurs in Chaparral, Valley and foothill grassland/rocky. Blooms March-June. Elevation 365 to 1200 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Tropidocarpum capparideum</i>	caper-fruited tropidocarpum			List 1B.1		Occurs in Valley and foothill grassland(alkaline hills). Blooms March-April. Elevation 1 to 455 meters. (CNPS 2009)	None	No appropriate habitat present.
Bryaceae								
<i>Anomobryum julaceum</i>	slender silver moss			List 2.2		Occurs in Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest/damp rock and soil on outcrops, usually on roadcuts. Blooms . Elevation 100 to 1000 meters. (CNPS 2009)	None	No appropriate habitat present.
Campanulaceae								
<i>Campanula exigua</i>	chaparral harebell			List 1B.2		Occurs in Chaparral(rocky, usually serpentinite). Blooms May-June. Elevation 275 to 1250 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Downingia pusilla</i>	dwarf downingia			List 2.2		Occurs in Valley and foothill grassland(mesic), Vernal pools. Blooms March-May. Elevation 1 to 445 meters. (CNPS 2009)	None	No appropriate habitat present.
Caprifoliaceae								
<i>Viburnum ellipticum</i>	oval-leaved viburnum			List 2.3		Occurs in Chaparral, Cismontane woodland, Lower montane coniferous forest. Blooms May-June. Elevation 215 to 1400 meters. (CNPS 2009)	None	No appropriate habitat present.
Chenopodiaceae								
<i>Atriplex cordulata</i>	heartscale			List 1B.2		Occurs in Chenopod scrub, Meadows and seeps, Valley and foothill grassland(sandy)/saline or alkaline. Blooms April-October. Elevation 1 to 375 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Atriplex depressa</i>	brittlescale			List 1B.2	Yes	Occurs in Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools/alkaline, clay. Blooms April-October. Elevation 1 to 320 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Atriplex joaquiniana</i>	San Joaquin spearscale			List 1B.2	Yes	Occurs in Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland/alkaline. Blooms April-October. Elevation 1 to 835 meters. (CNPS 2009)	None	No appropriate habitat present.
Convolvulaceae								
<i>Calystegia atriplicifolia ssp. buttensis</i>	Butte County morning-glory			List 1B.2		Occurs in Chaparral, Lower montane coniferous forest/rocky, sometimes roadside. Blooms May-July. Elevation 600 to 1524 meters. (CNPS 2009)	None	No appropriate habitat present.
Ericaceae								
<i>Arctostaphylos auriculata</i>	Mt. Diablo manzanita			List 1B.3	Yes	Occurs in Chaparral(sandstone), Cismontane woodland. Blooms January-March. Elevation 135 to 650 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Arctostaphylos manzanita ssp. laevigata</i>	Contra Costa manzanita			List 1B.2		Occurs in Chaparral(rocky). Blooms January-March(April). Elevation 500 to 1100 meters. (CNPS 2009)	None	No appropriate habitat present.
Fabaceae								
<i>Astragalus tener var. tener</i>	alkali milk-vetch			List 1B.2		Occurs in Playas, Valley and foothill grassland(adobe clay), Vernal pools/alkaline. Blooms March-June. Elevation 1 to 60 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Lathyrus jepsonii var. jepsonii</i>	Delta tule pea			List 1B.2		Occurs in marshes and swamps(freshwater and brackish). Blooms May-July(September). Elevation 0 to 4 meters. (CNPS 2009)	Moderate	Moderate. Habitat may be present, but no known local occurrences.
Geraniaceae								
<i>California macrophylla</i>	round-leaved filaree			List 1B.1		Occurs in Cismontane woodland, Valley and foothill grassland/clay. Blooms March-May. Elevation 15 to 1200 meters. (CNPS 2009)	None	No appropriate habitat present.
Hydrophyllaceae								
<i>Phacelia phacelioides</i>	Mt. Diablo phacelia			List 1B.2		Occurs in Chaparral, Cismontane woodland/rocky. Blooms April-May. Elevation 500 to 1370 meters. (CNPS 2009)	None	No appropriate habitat present.
Juglandaceae								
<i>Juglans hindsii</i>	Northern California black walnut			List 1B.1		Occurs in Riparian forest, Riparian woodland. Blooms April-May. Elevation 0 to 440 meters. (CNPS 2009)	None	No appropriate habitat present.
Lamiaceae								
<i>Monardella antonina ssp. antonina</i>	San Antonio Hills monardella			List 3		Occurs in Chaparral, Cismontane woodland. Blooms June-August. Elevation 500 to 1000 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Scutellaria galericulata</i>	marsh skullcap			List 2.2		Occurs in Lower montane coniferous forest, Meadows and seeps(mesic), marshes and swamps. Blooms June-September. Elevation 0 to 2100 meters. (CNPS 2009)	Low	Habitat may be present but no known local occurrences.
<i>Scutellaria lateriflora</i>	side-flowering skullcap			List 2.2		Occurs in Meadows and seeps(mesic), marshes and swamps. Blooms July-September. Elevation 0 to 500 meters. (CNPS 2009)	Low	Habitat may be present but no known local occurrences.
Malvaceae								
<i>Hibiscus lasiocarpus</i>	woolly rose-mallow			List 2.2		Occurs in marshes and swamps(freshwater). Blooms June-September. Elevation 0 to 120 meters. (CNPS 2009)	Moderate	Habitat is present but no known local occurrences.
<i>Malacothamnus hallii</i>	Hall's bush-mallow			List 1B.2		Occurs in Chaparral, Coastal scrub. Blooms May-September(Oct). Elevation 10 to 760 meters. (CNPS 2009)	None	No appropriate habitat present.
Onagraceae								
<i>Oenothera deltooides ssp. howellii</i>	Antioch Dunes evening-primrose	Endangered	Endangered	List 1B.1		Occurs in Inland dunes. Blooms March-September. Elevation 0 to 30 meters. (CNPS 2009)	Present	Known occurrences in protected sites on interior stabilized dunes.
Papaveraceae								
<i>Eschscholzia rhombipetala</i>	diamond-petaled California poppy			List 1B.1		Occurs in Valley and foothill grassland(alkaline, clay). Blooms March-April. Elevation 0 to 975 meters. (CNPS 2009)	None	No appropriate habitat present.
Polemoniaceae								
<i>Eriastrum brandegeeeae</i>	Brandegee's eriastrum			List 1B.2		Occurs in Chaparral, Cismontane woodland/volcanic, sandy. Blooms April-August. Elevation 305 to 1030 meters. (CNPS 2009)	None	No appropriate habitat present.
Polygonaceae								
<i>Eriogonum truncatum</i>	Mt. Diablo buckwheat			List 1B.1		Occurs in Chaparral, Coastal scrub, Valley and foothill grassland/sandy. Blooms April-September(Nov-December). Elevation 3 to 350 meters. (CNPS 2009)	None	No appropriate habitat present.

Table 5.2C-1a Sensitive plant species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CNPS	ECC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
Potamogetonaceae								
<i>Potamogeton zosteriformis</i>	eel-grass pondweed			List 2.2		Occurs in marshes and swamps(assorted freshwater). Blooms June-July. Elevation 0 to 1860 meters. (CNPS 2009)	Low	No local occurrences. Freshwater wetland habitats limited.
Ranunculaceae								
<i>Delphinium californicum ssp. interius</i>	Hospital Canyon larkspur			List 1B.2		Occurs in Chaparral(openings), Cismontane woodland(mesic). Blooms April-June. Elevation 230 to 1095 meters. (CNPS 2009)	None	No appropriate habitat present.
<i>Delphinium recurvatum</i>	recurved larkspur			List 1B.2	Yes	Occurs in Chenopod scrub, Cismontane woodland, Valley and foothill grassland/alkaline. Blooms March-June. Elevation 3 to 750 meters. (CNPS 2009)	None	No appropriate habitat present.
Scrophulariaceae								
<i>Cordylanthus mollis ssp. mollis</i>	soft bird's-beak	Endangered	Rare	List 1B.2		Occurs in marshes and swamps(coastal salt). Blooms July-November. Elevation 0 to 3 meters. (CNPS 2009)	Present	Known occurrence in the north bank of the San Joaquin River
<i>Cordylanthus nidularius</i>	Mt. Diablo bird's-beak		Rare	List 1B.1		Occurs in Chaparral(serpentinite). Blooms July-August. Elevation 600 to 800 meters. (CNPS 2009)		
<i>Limosella subulata</i>	Delta mudwort			List 2.1		Occurs in marshes and swamps. Blooms May-August. Elevation 0 to 3 meters. (CNPS 2009)	High	Local occurrences in the San Joaquin river upstream of Antioch.

Notes:

Federal Status

FE = federally listed as endangered

FT = federally listed as threatened

State Status

SE = state listed as endangered

ST = state listed as threatened

California Native Plant Society (CNPS) Status

1A = plants presumed extinct in California

1B = plants rare, threatened, or endangered in California, but more common elsewhere

2 = plants rare, threatened, or endangered in California, but more common elsewhere

East Contra Costa HCP/NCCP (ECC HCP/NCCP)

Yes = covered species

No = not a covered species

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
Arthropoda								
Insecta								
Coleoptera								
<i>Hygrotus curvipes</i>	curved-foot hygrotus diving beetle			SSA		An aquatic beetle known only from Alameda and Contra Costa counties (CNDDDB, 2009).	Moderate	Habitat is unknown, potential habitat may occur within inaccessible portions of the CCGS 1 mile survey area
Diptera								
<i>Efferia antiochi</i>	Antioch efferian robberfly			SSA		Known only from Contra Costa and Fresno counties (CNDDDB, 2009).	Moderate	Habitat is unknown, potential habitat may occur within inaccessible portions of the CCGS 1 mile survey area
Hymenoptera								
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee			SSA		This bee is oligolectic (collects pollen only from plants within a single genus) on vernal pool blennosperma (CNDDDB, 2009)	Low	Vernal pool habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Myrmosula pacifica</i>	Antioch multilid wasp			SSA				
Crustacea								
Anostraca								
<i>Branchinecta conservatio</i>	conservancy fairy shrimp	Endangered				Endemic to the grasslands of the northern two-thirds of the central valley; found in large, turbid pools (CNDDDB 2008)	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Branchinecta longiantenna</i>	longhorn fairy shrimp	Endangered			Yes	Inhabits small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales. Endemic to the eastern margin of the central coast mountains in seasonally astatic grassland vernal pools (CNDDDB, 2009).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	Threatened			Yes	Inhabits small, clear-water sandstone depression pool and grassland swale, earth slump, or basalt-flow depression pools (CNDDDB, 2009).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Branchinecta mesovallensis</i>	midvalley fairy shrimp			SSA	Yes	Vernal pools in the central valley (CNDDDB, 2009).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Linderiella occidentalis</i>	California linderiella					Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions (CNDDDB, 2009).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
Notostraca								
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	Endangered			Yes	Inhabits vernal pools and swales in the sacramento valley containing clear to highly turbid water (CNDDDB, 2009).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
Chordata								
Actinopterygii								
Perciformes								
<i>Archoplites interruptus</i>	Sacramento perch			SC		Historically found in the sloughs, slow-moving rivers, and lakes of the central valley. Prefers warm water but tolerates wide range of physio-chemical water conditions. Aquatic vegetation is essential for young (CNDDDB, 2009)	High	The CNDDDB (2009) reports an occurrence of Sacramento perch within the CCGS 1 mile survey area
<i>Acipenser medirostis</i>	green sturgeon	Threatened (NMFS)				Spawns in the Sacramento River and the Klamath River (CNDDDB 2009).	Low	The CCGS survey area includes portions of the San Joaquin River upstream of the confluence with the Sacramento River.
<i>Oncorhynchus mykiss</i>	Central California Coastal steelhead	Threatened (NMFS)				The DPS includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (CNDDDB 2009).	Low	The CCGS survey area includes portions of the San Joaquin River upstream of the confluence with the Sacramento River.
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	Threatened (NMFS)				DPS includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries (CNDDDB 2009).	Moderate	The CCGS survey area includes portions of the San Joaquin River upstream of the confluence with the Sacramento River.
<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	Threatened (NMFS)				The ESU includes all naturally spawned populations of low spring-run Chinook salmon in the Sacramento River and its tributaries in California (CNDDDB 2009).	Low	The CCGS survey area includes portions of the San Joaquin River upstream of the confluence with the Sacramento River.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Oncorhynchus tshawytscha</i>	winter-run chinook salmon, Sacramento river	Endangered (NMFS)				The ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (CNDDDB 2009).	Low	The CCGS survey area includes portions of the San Joaquin River upstream of the confluence with the Sacramento River.
Osmeriformes <i>Hypomesus transpacificus</i>	Delta smelt	Threatened	Threatened			Occurs in the Sacramento-San Joaquin delta and seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay (CNDDDB, 2009).	Moderate	Suitable habitat is present within the CCGS 1 mile survey area
Amphibia Anura <i>Rana draytonii</i>	California red-legged frog	Threatened		SC	Yes	Adults need dense, shrubby or emergent riparian vegetation closely associated with greater than 2.3 feet deep still or slow moving water. Largest population densities are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails. Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. Estivates in small mammal burrows and moist leaf litter. Has been found up to 100 feet from water in adjacent dense riparian vegetation.	Low	Suitable habitat may occur in East Antioch Creek and in other inaccessible portions of the CCGS 1 mile survey area
Caudata <i>Ambystoma californiense</i>	California tiger salamander	Threatened	unknown	SC	Yes	The species is restricted to grasslands and low (typically below 2000 feet/610 meters) foothill regions where lowland aquatic sites are available for breeding. They prefer natural ephemeral pools or ponds that mimic them (stock ponds that are allowed to go dry).	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area; however, the survey area is beyond the upland dispersal range from any known occurrences.
Reptilia Testudines <i>Actinemys marmorata</i>	western pond turtle			SC	Yes	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation (CNDDDB, 2009)	Low	Suitable habitat may occur in East Antioch Creek and in other inaccessible portions of the CCGS 1 mile survey area
<i>Actinemys marmorata marmorata</i>	northwestern pond turtle			SC		Associated with permanent or nearly permanent water in a wide variety of habitats (CNDDDB, 2009).	Low	Suitable habitat may occur in East Antioch Creek and in other inaccessible portions of the CCGS 1 mile survey area
Squamata <i>Anniella pulchra pulchra</i>	silvery legless lizard			SC	Yes	Occurs in sandy or loose loamy soils under sparse vegetation. High soil moisture is essential (CNDDDB, 2009). Rocky soils or areas disturbed by agriculture, sand mining, or other human uses are not suitable for legless lizards (Miller 1944, Bury 1972, Hunt 1983, Stebbins 1985).	High	The CNDDDB (2009) reports an occurrence of Silvery legless lizard within the CCGS 1 mile survey area.
<i>Phrynosoma coronatum (frontale population)</i>	coast (California) horned lizard			SC		Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate	Suitable habitat occurs within the CCGS 1-mile survey area
<i>Masticophis lateralis euryxanthus</i>	Alameda whipsnake	Threatened	Threatened		Yes	The Alameda whipsnake currently inhabits the inner coast range mostly in Contra Costa and Alameda counties, with additional occurrence records in San Joaquin and Santa Clara counties. Alameda whipsnakes are typically found in chaparral—northern coastal sage scrub and coastal sage. (USFWS 2005)	Low	Suitable habitat may occur within inaccessible portions of the CCGS 1 mile survey area
<i>Thamnophis gigas</i>	giant garter snake	Threatened	Threatened		Yes	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches (CNDDDB, 2009).	Moderate	The CNDDDB (2009) reports a giant garter snake occurrence across the San Joaquin River, just beyond the CCGS 1 mile survey area.
Birds Anseriformes <i>Anser albifrons</i>	greater white-fronted goose	MBTA				Moist grasslands, pastures, croplands, and emergent wetlands (McCimmon, Emergent wetlands, and less commonly moist grasslands, pastures and croplands. Butte Sink in the Sacramento Valley, Grizzly Island Wildlife Area and adjacent duck clubs in Suisun Marsh, and, marginally, the Napa Marshes.	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Anser albifrons elgasi</i>	"tule" greater white-fronted goose	MBTA		SC			Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Chen caerulescens</i>	snow goose	MBTA				Lakes, emergent wetlands, and nearby fields	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Chen rossii</i>	Ross's goose	MBTA				Lakes, emergent wetlands, and nearby fields	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Branta hutchinsii</i>	cackling goose	MBTA				Lakes, emergent wetlands, and nearby fields	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Branta canadensis</i>	Canada goose	MBTA				Lakes, ponds, fields, and parks	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Cygnus columbianus</i>	tundra swan	MBTA				Lakes, wet croplands, pastures, grasslands, and emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aix sponsa</i>	wood duck	MBTA				Wooded aquatic areas with emergent vegetation	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas americana</i>	American wigeon	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas penelope</i>	Eurasian wigeon	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas strepera</i>	gadwall	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands, herbaceous croplands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas platyrhynchos</i>	mallard	MBTA				Fresh emergent wetlands, ponds, rivers, estuaries, pastures, croplands, and urban parks	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas clypeata</i>	northern shoveler	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas acuta</i>	northern pintail	MBTA				Fresh and saline emergent wetlands, croplands, pastures, grasslands, and meadows	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas crecca</i>	green-winged teal	MBTA				Lakes, slow-moving rivers, fresh, brackish, and less commonly saline emergent wetlands, croplands, pastures, grasslands, and meadows	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas discors</i>	blue-winged teal	MBTA				Lakes, estuaries, fresh and saline emergent wetlands, herbaceous and agricultural fields	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Anas cyanoptera</i>	cinnamon teal	MBTA				Lakes, slow-moving rivers, fresh, brackish, and less commonly saline emergent wetlands, herbaceous and agricultural fields	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya valisineria</i>	canvasback	MBTA				Estuaries, bays, and lakes	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya americana</i>	redhead	MBTA		SC		Lakes, estuaries, fresh and saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya collaris</i>	ring-necked duck	MBTA				Lakes, ponds, slow-moving rivers, fresh, and less commonly brackish or saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya fuligula</i>	tufted duck	MBTA				Lakes, ponds, fresh, brackish, and saline emergent wetlands (Very rare visitor to North America from Asia or Europe)	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya marila</i>	greater scaup	MBTA				Large bays, estuaries, saline, brackish, and less commonly fresh emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Aythya affinis</i>	lesser scaup	MBTA				Estuaries, lakes, fresh, brackish, and saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Bucephala albeola</i>	bufflehead	MBTA				Estuaries, lagoons, bays, lakes, ponds, fresh, brackish, and saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Bucephala clangula</i>	common goldeneye	MBTA				Rivers, lakes, ponds, estuaries, bays, lagoons, and less commonly emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Bucephala islandica</i>	Barrow's goldeneye	MBTA				Rivers, lakes, ponds, estuaries, bays, lagoons, and less commonly emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Lophodytes cucullatus</i>	hooded merganser	MBTA				Ponds, small reservoirs, rivers, and lagoons	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Mergus merganser</i>	common merganser	MBTA				Rivers, lakes, ponds, and less commonly emergent wetlands (much rarer in saline habitats)	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Mergus serrator</i>	red-breasted merganser	MBTA				Bays, estuaries, inshore waters, and less commonly on large inland lakes and rivers (much rarer in fresh water habitats)	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
<i>Oxyura jamaicensis</i>	ruddy duck	MBTA				Estuaries, bays, lakes, fresh, brackish, and less commonly saline emergent wetlands	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
Gaviiformes								
<i>Gavia immer</i>	common loon	MBTA				Estuaries, bays, subtidal zones, and less commonly on I	Moderate	Suitable foraging habitat is present within the CCGS 1-mile survey area.
Pocipediformes								
<i>Podilymbus podiceps</i>	pied-billed grebe	MBTA				Lakes, ponds, slow-moving rivers, fresh, brackish, and saline emergent wetlands	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Podiceps auritus</i>	horned grebe	MBTA				Estuaries, bays, subtidal zones, and less commonly on large inland lakes and rivers	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.
<i>Podiceps nigricollis</i>	eared grebe	MBTA				Estuaries, bays, subtidal zones, lakes, slow-moving rivers, fresh, brackish, and saline emergent wetlands	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.
<i>Aechmophorus clarkii</i>	Clark's grebe	MBTA				Subtidal zones, estuaries, bays, large lakes, open marshes, and less commonly on wide rivers	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.
<i>Aechmophorus occidentalis</i>	western grebe	MBTA				Subtidal zones, estuaries, bays, large lakes, open marshes, and less commonly on wide rivers	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.
Pelicaniformes								
<i>Pelecanus erythrorhynchos</i>	American white pelican	MBTA				Large lakes, estuaries, fresh and brackish emergent wetlands (much less common in saline habitats)	Moderate	Emergent wetlands are present within the CCGS 1-mile survey area.
<i>Pelecanus occidentalis</i>	brown pelican	Endangered, MBTA	Endangered	FP		Estuaries, subtidal zones, and pelagic waters (very rare visitor to fresh water habitats)	Moderate	Estuaries are present within the CCGS 1-mile survey area.
<i>Phalacrocorax auritus</i>	double-crested cormorant	MBTA				Lakes, reservoirs, rivers, estuaries, subtidal zones, fresh, brackish, and saline wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
Ciconiiformes								
<i>Botaurus lentiginosus</i>	American bittern	MBTA				Fresh emergent wetlands (much rarer in saline habitats)	Moderate	Fresh emergent wetlands are present within the CCGS 1-mile survey area.
<i>Ardea alba</i>	great egret	MBTA				Estuaries, lakes, slow-moving rivers, mudflats, croplands, pastures, fresh, brackish, and saline emergent wetlands	Moderate	Estuaries and emergent wetlands are present within the CCGS 1-mile survey area.
<i>Ardea herodias</i>	great blue heron	MBTA				Estuaries, lakes, slow-moving rivers, mudflats, croplands, pastures, fresh, brackish, and saline emergent wetlands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Butorides virescens</i>	green heron	MBTA				Lake margins, slow-moving rivers, creeks, fresh and brackish emergent wetlands (much less common in saline habitats)	Moderate	Estuaries and emergent wetlands are present within the CCGS 1-mile survey area.
<i>Egretta thula</i>	snowy egret	MBTA				Estuaries, ponds, slow-moving rivers, mudflats, irrigation ditches, wet fields, fresh, brackish, and saline emergent wetlands	Moderate	Estuaries and emergent wetlands are present within the CCGS 1-mile survey area.
<i>Bubulcus ibis</i>	cattle egret	MBTA				Pastures, irrigated croplands, herbaceous fields, and less commonly the margins of lakes or slow-moving rivers	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Nycticorax nycticorax</i>	black-crowned night-heron	MBTA				Lake margins, large rivers, fresh, brackish and saline emergent wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Plegadis chihi</i>	white-faced ibis	MBTA				Shallow lakes, muddy meadows, irrigated pastures, flooded fields, fresh emergent wetlands (much rarer in saline habitats)	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Cathartes aura</i>	turkey vulture	MBTA				Extensive open areas with nearby protected cliffs, ledges or large tree cavities for nesting and roosting	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
Falconiformes								
<i>Pandion haliaetus</i>	osprey	MBTA				Lakes, reservoirs, rivers, bays, and estuaries	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Elanus leucurus</i>	white-tailed kite	MBTA		FP	Yes	Open agricultural areas, herbaceous fields with scattered trees	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Aquila chrysaetos</i>	golden eagle	MBTA, BGEPA	Endangered	FP		Rolling foothills, rugged mountains with canyons, and oak savannah	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Haliaeetus leucocephalus</i>	bald eagle	MBTA, BGEPA		FP		Lakes, reservoirs, rivers, and less frequently coastal marine habitats	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Accipiter striatus</i>	sharp-shinned hawk	MBTA				Riparian deciduous, and mixed coniferous woodlands for breeding, but much more general at other seasons	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Accipiter cooperii</i>	Cooper's hawk	MBTA				Riparian deciduous, and mixed coniferous woodlands for breeding, but much more general at other seasons	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Circus cyaneus</i>	northern harrier	MBTA		SC		Meadows, grasslands, rangelands, fresh, brackish, and saline emergent wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Buteo lineatus</i>	red-shouldered hawk	MBTA				Lowland riparian woodlands (up to 5000'), especially where adjacent to emergent wetlands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Buteo jamaicensis</i>	red-tailed hawk	MBTA				Very general; nearly all types of open habitats including grasslands, open woodlands, foothills, mountains with canyons, urban areas, etc.	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Buteo swainsoni</i>	Swainson's hawk	MBTA	Threatened		Yes	Oak savannah, grasslands, grain or alfalfa fields, and livestock pastures	Present	This species was observed during wildlife surveys on April 13, 2009.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Buteo lagopus</i>	rough-legged hawk	MBTA				Wet meadows, open marshes, valley and foothill oak savannah and grasslands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Buteo regalis</i>	ferruginous hawk	MBTA				Open grasslands, agricultural areas, valley and foothill oak savannah	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Flaco sparverius</i>	american kestrel	MBTA				Very general; nearly all types of open habitats including grasslands, open woodlands, foothills, coastal areas, urban areas, etc.	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Falco columbarius</i>	merlin	MBTA				Open grasslands, coastlines, valley and foothill oak savannah, open woodlands, and wetland margins	Moderate	Wetland margins are present within the CCGS 1-mile surveys area.
<i>Falco mexicanus</i>	prairie falcon	MBTA				Open grasslands, valley and foothill oak savannah, rangelands, and less frequently along the coastline	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Falco peregrinus</i>	peregrine falcon	MBTA	Endangered	FP		Various riparian areas and wetlands, especially those with protected cliffs or ledges for nesting and roosting (some use buildings)	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
Gruiformes								
<i>Laterallus jamaicensis coturniculus</i>	California black rail	MBTA	Threatened	FP		Saline and brackish emergent wetlands (especially those with <i>Salicornia</i>), and much less frequently in fresh emergent wetland	High	The CNDDDB (2009) reports an occurrence of California black rail within the CCGS 1-mile survey area.
<i>Rallus longirostris obsoletus</i>	California clapper rail	Endangered, MBTA	Endangered	FP		Saline and brackish emergent wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Rallus limicola</i>	Virginia rail	MBTA				Fresh emergent wetlands, wet meadows, and saline emergent wetlands in non-breeding seasons	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Porzana carolina</i>	sora	MBTA				Fresh emergent wetlands, wet meadows, and saline emergent wetlands in non-breeding seasons	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Gallinula chloropus</i>	common moorhen	MBTA				Fresh emergent wetlands, ponds, slow streams, and irrigation ditches	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Fulica americana</i>	American coot	MBTA				Wet grasslands, lakes, estuaries, croplands, park ponds, fresh, brackish, and saline emergent wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Grus canadensis</i>	sandhill crane	MBTA	Threatened	FP		Open shortgrass plains, grain fields, and open wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
Charadriiformes								
<i>Pluvialis squatarola</i>	black-bellied plover	MBTA				Intertidal mudflats, estuaries, pastures, and wet meadows	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Charadrius vociferus</i>	killdeer	MBTA				Shores of lakes, rivers, and estuaries, as well as mudflats, croplands, lawns, and a wide variety of gravelly urban surfaces	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Charadrius montanus</i>	mountain plover	MBTA		SC		Short grasslands, and plowed fields	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Recurvirostra americana</i>	American avocet	MBTA				Mudflats, estuaries, fresh, brackish, and saline emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Himantopus mexicanus</i>	black-necked stilt	MBTA				Mudflats, estuaries, fresh, brackish, and saline emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Actitis macularius</i>	spotted sandpiper	MBTA				Gravelly shores of rivers and lakes	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Tringa melanoleuca</i>	greater yellowlegs	MBTA				Lakes, estuaries, wet meadows, flooded fields, streams, irrigation ditches, mudflats, and emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Numenius americanus</i>	long-billed curlew					Estuaries, herbaceous croplands, and open grasslands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Calidris mauri</i>	western sandpiper	MBTA				Estuaries, mudflats, and wet fields, as well as emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Calidris minutilla</i>	least sandpiper	MBTA				Estuaries, mudflats, wet fields, shores of lakes and rivers, as well as emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Calidris alpina</i>	dunlin	MBTA				Intertidal mudflats, estuaries, pastures, and wet meadows	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Gallinago delicata</i>	wilson's snipe	MBTA				Wet meadows, pastures, rice fields, sloughs, canals, irrigation ditches, fresh, brackish, and less commonly saline emergent wetlands	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Limnodromus scolopaceus</i>	long-billed dowitcher	MBTA				Intertidal mudflats, estuaries, wet meadows, shallow lakes, and pastures	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Phalaropus lobatus</i>	red-necked Phalarope	MBTA				Estuaries, salt ponds, surf zones, and pelagic waters	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.
<i>Chroicocephalus philadelphia</i>	Bonaparte's gull	MBTA				Seashores, bays, salt ponds, offshore waters, lakes, and less frequently inland rivers	Moderate	Suitable nesting and foraging habitat is present within the CCGS 1-mile survey area.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Contopus sordidulus</i>	western wood-pewee	MBTA				Hardwood-conifer, and mixed coniferous woodlands, as well as valley riparian habitats during migration	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Sayornis nigricans</i>	black phoebe	MBTA				Streams, rivers, ponds, lakes, agricultural ditches, bayshores, and even frequently sprinkled lawns	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Sayornis saya</i>	Say's phoebe	MBTA				Grasslands, open chaparral, coastal scrub, rural and open suburban neighborhoods	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	MBTA				Chaparral, hardwood-conifer riparian, and open oak woodlands	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Tyrannus verticalis</i>	western kingbird	MBTA					Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Lanius ludovicianus</i>	loggerhead shrike	MBTA		SC		Grasslands, croplands, and open shrublands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Vireo huttoni</i>	Hutton's vireo	MBTA				Oak savannah, grasslands, croplands, and livestock pastures (especially those with barbed wire)	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Cyanocitta stelleri</i>	Steller's jay	MBTA				Live oak woodlands, hardwood-conifer woodlands, mixed riparian woodlands, and chaparral	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Aphelocoma californica</i>	western scrub-jay	MBTA				Moist coniferous woodlands above 2500', and less frequently hardwood areas at lower elevations	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Pica nuttalli</i>	yellow-billed magpie	MBTA				Oak woodlands, chaparral, coastal scrub, riparian hardwoods, rural, urban, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Corvus brachyrhynchos</i>	American crow	MBTA				Oak savannah, oak riparian woodlands, orchards, rural, urban, and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Corvus corax</i>	common raven	MBTA				Grasslands, croplands, pastures, oak riparian woodlands, orchards, shorelines, rural, urban, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Eremophila alpestris</i>	horned lark	MBTA				Open areas of all sorts, especially those with cliff faces, tall buildings, or other human-made structures for nesting and roosting	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Tachycineta thalassina</i>	violet-green swallow	MBTA				Grasslands, croplands, and livestock pastures	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Tachycineta bicolor</i>	tree swallow	MBTA				All manner of woodlands near water, especially those near cliffs or rock crevices for nesting	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Riparia riparia</i>	bank swallow	MBTA	Threatened			Riparian woodlands, estuaries, rivers, lakes, and emergent wetlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	MBTA				Rivers, streams, and creeks (especially those with suitable banks for nesting)	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Petrochelidon pyrrhonota</i>	cliff swallow	MBTA				Rivers, streams, and creeks (especially those with suitable banks for nesting), canals, grasslands, and pastures	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Hirundo rustica</i>	barn swallow	MBTA				Cliffs, canyons, grasslands, pastures, and canals (bridges, buildings, and freeway overpasses serve as chief nesting habitat)	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Baeolophus inornatus</i>	oak titmouse	MBTA				Grasslands, pastures, open chaparral, lakes, ponds, harbors, and urban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Poecile rufescens</i>	chestnut-backed chickadee	MBTA				Oak woodlands, chaparral, riparian hardwoods, urban, and suburban areas	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Psaltriparus minimus</i>	bushtit	MBTA				Hardwood-conifer, and mixed coniferous woodlands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Sitta carolinensis</i>	white-breasted nuthatch	MBTA				All manner of brushy habitats in all stages of growth, including urban and suburban areas	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Troglodytes aedon</i>	house wren	MBTA				Oak woodlands, and hardwood-conifer woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Thryomanes bewickii</i>	Bewick's wren	MBTA				Brushy understories of especially oak woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Salpinctes obsoletus</i>	Rock wren	MBTA				Dense shrubby undergrowth of especially oak woodlands, and chaparral	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Catherpes mexicanus</i>	canyon wren	MBTA				All manner of habitats bestrewn with rocks including lakeshores, chaparral, canyons, riverbanks, seacliffs, etc.	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Cistothorus palustris</i>	marsh wren	MBTA				Moist, steep, shaded canyons, talus slopes, and dams	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
<i>Regulus satrapa</i>	golden-crowned kinglet	MBTA				Dense, well shaded coniferous woodlands, and hardwood-conifer mixed woodlands	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Regulus calendula</i>	ruby-crowned kinglet	MBTA				All manner of woodlands and shrublands including urban and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Poliophtila caerulea</i>	blue-gray gnatcatcher	MBTA				Open oak woodlands, chaparral, coastal scrub, and brushy field margins	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Sialia mexicana</i>	western bluebird	MBTA				Open woodlands (especially oak-pine mixes), oak savannah, and open park land	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Sialia currucoides</i>	mountain bluebird	MBTA				Agricultural fields, pastures, and orchards	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Catharus guttatus</i>	hermit thrush	MBTA				Hardwood-conifer woodlands with dense understory, orchards, well wooded rural, urban, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Turdus migratorius</i>	american robin	MBTA				Open woodlands, orchards, rural, urban, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Ixoreus naevius</i>	varied thrush	MBTA				Dense, moist, and mature coniferous forests	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Mimus polyglottos</i>	northern mockingbird	MBTA				Shrublands, scrub, brushy open riparian woodlands, rural, urban, and suburban areas	Present	This species was observed during habitat surveys conducted on March 4, 2009.
<i>Toxostoma redivivum</i>	California thrasher	MBTA				Chaparral, coastal scrub, and shrubby understory of coniferous woodlands	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Anthus rubescens</i>	American pipit	MBTA				Grasslands, meadows, pastures, and shorelines	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Bombycilla cedrorum</i>	cedar waxwing	MBTA				Anywhere berries are growing, especially parks, gardens and riparian woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Phainopepla nitens</i>	phainopepla	MBTA				Anywhere mistletoe is growing, especially chaparral, oak riparian woodlands, and some suburban neighborhoods	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Vermivora celata</i>	orange-crowned warbler	MBTA				Open woodlands with brushy understory, chaparral, coastal scrub, and riparian woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Dendroica petechia</i>	yellow warbler	MBTA		SC		Open woodlands with brushy understory, and riparian woodlands (especially those with willow thickets)	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Dendroica coronata</i>	yellow-rumped warbler	MBTA				All manner of woodlands and shrublands including urban and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Dendroica nigrescens</i>	black-throated gray warbler	MBTA				Open oak woodlands, and hardwood-conifer woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Dendroica tonsendi</i>	Townsend's warbler	MBTA				Mature oak woodlands, and mixed coniferous woodlands	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Setophaga ruticilla</i>	American redstart	MBTA				Open woodlands with brushy understory, and riparian woodlands (Rare visitor to California from eastern North America)	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.
<i>Geothlypis trichas</i>	common yellowthroat	MBTA				Dense thickets in riparian habitat, emergent wetlands, and wet meadows	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Icteria virens</i>	yellow-breasted chat	MBTA		SC		Dense thickets in riparian habitat	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Pipilo crissalis</i>	California towhee	MBTA				Open chaparral, coastal scrub, open brushlands, oak woodlands with brushy understory, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Pipilo maculatus</i>	spotted towhee	MBTA				Oak and hardwood-conifer woodlands with substantial litter layer and thick understory, suburban parks and gardens	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Aimophila ruficeps</i>	rufous-crowned sparrow	MBTA				Chaparral, coastal scrub, and shrubby understory of hillslope coniferous woodlands	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Spizella passerina</i>	chipping sparrow	MBTA				Open woodlands, orchards, rural, urban, and suburban areas	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Poocetes gramineus</i>	vesper sparrow	MBTA				Grasslands, croplands, and pastures	Moderate	Suitable habitat is present within the CCGS 1-mile survey area.
<i>Chondestes grammacus</i>	lark sparrow	MBTA				Oak savannah, chaparral, and hardwood-conifer woodlands	Low	No suitable habitat is present within the CCGS 1-mile survey area; however, this species may migrate through the 1-mile survey area.

Table 5.2C-1b Sensitive wildlife species with potential to occur within 10 miles of the CCGS site

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	1-Mile Potential	1-mile Rationale
Carnivora								
<i>Taxidea taxus</i>	American badger			SC		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	Endangered	Threatened		Yes	Occurs in annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing, and suitable prey base (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area
Chiroptera								
<i>Antrozous pallidus</i>	pallid bat			SC		Occurs in deserts, grasslands, shrublands, woodlands and forests. Is most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area
<i>Lasiurus blossevillii</i>	western red bat			SC		Roost only in tree foliage, including orchards. Closely associated with cottonwoods in riparian areas at elevations below 6,500 feet. Typically feed along forest edges, in small clearings, or around street-lights where they prefer moths. May burrow into leaf litter or dense grass for hibernation.	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area
<i>Lasiurus cinereus</i>	hoary bat			SSA		May be found at any location in California. Generally roosts in dense foliage of medium to large trees (CWHR 2008)	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area
Rodentia								
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse			SSA		Typically found in grasslands and blue oak savannas with friable soils (CNDDDB 2009).	Moderate	Suitable habitat occurs within the CCGS 1 mile survey area

Notes:

Federal Status

FE = federally listed as endangered

FT = federally listed as threatened

MBTA = Migratory Bird Treaty Act

BGEPA = Bald and Golden Eagle Protection Act

State Status

SE = State listed as endangered

ST = State listed as threatened

SC = State species of concern

FP = State fully protected species

SSA = State Special Animal

East Contra Costa HCP/NCCP (ECC HCP/NCCP)

Yes = covered species

No = not a covered species

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CNPS	ECC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
Monocots								
Alismataceae								
<i>Sagittaria sanfordii</i>	Sanford's arrowhead			List 1B.2		Occurs in marshes and swamps(assorted shallow freshwater). Blooms May-October. Elevation 0 to 650 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Cyperaceae								
<i>Carex comosa</i>	bristly sedge			List 2.1		Occurs in Coastal prairie, marshes and swamps(lake margins), Valley and foothill grassland. Blooms May-September. Elevation 0 to 625 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Dicots								
Apiaceae								
<i>Cicuta maculata var. bolanderi</i>	Bolander's water-hemlock			List 2.1		Occurs in marshes and swamps in coastal, fresh or brackish water. Blooms July-September. Elevation 0 to 200 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis		Rare	List 1B.1		Occurs in marshes and swamps(brackish or freshwater), Riparian scrub. Blooms April-November. Elevation 0 to 10 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Asteraceae								
<i>Symphotrichum lentum</i>	Suisun Marsh aster			List 1B.2		Occurs in Marshes and swamps(brackish and freshwater). Blooms May-November. Elevation 0 to 3 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Boraginaceae								
<i>Cryptantha hooveri</i>	Hoover's cryptantha			List 1A		Occurs in Inland dunes, Valley and foothill grassland(sandy). Blooms April-May. Elevation 9 to 150 meters. (CNPS 2009)	None.	Potential habitat surveyed in late March. No plants attributed to genus <i>Cryptantha</i> or <i>Plagiobothrys</i> found.
Brassicaceae								
<i>Erysimum capitatum var. angustatum</i>	Contra Costa wallflower	Endangered	Endangered	List 1B.1		Occurs in Inland dunes. Blooms March-July. Elevation 3 to 20 meters. (CNPS 2009)	Not Present	No plants found during surveys of disturbed sandy soils in March.
Fabaceae								
<i>Lathyrus jepsonii var. jepsonii</i>	Delta tule pea			List 1B.2		Occurs in marshes and swamps(freshwater and brackish). Blooms May-July(September). Elevation 0 to 4 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Lamiaceae								
<i>Scutellaria galericulata</i>	marsh skullcap			List 2.2		Occurs in Lower montane coniferous forest, Meadows and seeps(mesic), marshes and swamps. Blooms June-September. Elevation 0 to 2100 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
<i>Scutellaria lateriflora</i>	side-flowering skullcap			List 2.2		Occurs in Meadows and seeps(mesic), marshes and swamps. Blooms July-September. Elevation 0 to 500 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Malvaceae								
<i>Hibiscus lasiocarpus</i>	woolly rose-mallow			List 2.2		Occurs in marshes and swamps(freshwater). Blooms June-September. Elevation 0 to 120 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Onagraceae								
<i>Oenothera deltoides ssp. howellii</i>	Antioch Dunes evening-primrose	Endangered	Endangered	List 1B.1		Occurs in Inland dunes. Blooms March-September. Elevation 0 to 30 meters. (CNPS 2009)	Not present.	No plants found during surveys of disturbed sandy soils in March
Potamogetonaceae								
<i>Potamogeton zosteriformis</i>	eel-grass pondweed			List 2.2		Occurs in marshes and swamps(assorted freshwater). Blooms June-July. Elevation 0 to 1860 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
Scrophulariaceae								
<i>Cordylanthus mollis ssp. mollis</i>	soft bird's-beak	Endangered	Rare	List 1B.2		Occurs in marshes and swamps(coastal salt). Blooms July-November. Elevation 0 to 3 meters. (CNPS 2009)	None	No marsh or swamp habitat present.
<i>Limosella subulata</i>	Delta mudwort			List 2.1		Occurs in marshes and swamps. Blooms May-August. Elevation 0 to 3 meters. (CNPS 2009)	None	No marsh or swamp habitat present.

Notes:

Federal Status

FE = federally listed as endangered

FT = federally listed as threatened

State Status

SE = state listed as endangered

ST = state listed as threatened

California Native Plant Society (CNPS) Status

1A = plants presumed extinct in California

1B = plants rare, threatened, or endangered in California, but more common elsewhere

2 = plants rare, threatened, or endangered in California, but more common elsewhere

East Contra Costa HCP/NCCP (ECC HCP/NCCP)

Yes = covered species

No = not a covered species

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
Arthropoda								
Insecta								
Coleoptera								
<i>Hygrotus curvipes</i>	curved-foot hygrotus diving beetle			SSA		An aquatic beetle known only from Alameda and Contra Costa counties (CNDDDB, 2009).	None	No aquatic habitat occurs within the CCGS site and electrical transmission towers
Diptera								
<i>Efferia antiochi</i>	Antioch efferian robberfly			SSA		Known only from Contra Costa and Fresno counties (CNDDDB, 2009).	Moderate	Habitat is unknown, potential habitat may occur within the CCGS site and electrical transmission towers
Hymenoptera								
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee			SSA		This bee is oligolectic (collects pollen only from plants within a single genus) on vernal pool blennosperma (CNDDDB, 2009)	None	No vernal pools are present within the CCGS site or electrical transmission tower locations
<i>Myrmosula pacifica</i>	Antioch multilid wasp			SSA				
Crustacea								
Anostraca								
<i>Branchinecta conservatio</i>	conservancy fairy shrimp	Endangered				Endemic to the grasslands of the northern two-thirds of the central valley; found in large, turbid pools (CNDDDB 2008)	None	No vernal pools are present within the CCGS site or electrical transmission tower locations
<i>Branchinecta longiantenna</i>	longhorn fairy shrimp	Endangered			Yes	Inhabits small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales. Endemic to the eastern margin of the central coast mountains in seasonally astatic grassland vernal pools (CNDDDB, 2009).	None	No clear-water depressions or pools are present within the CCGS site or electrical transmission tower locations
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	Threatened			Yes	Inhabits small, clear-water sandstone depression pool and grassland swale, earth slump, or basalt-flow depression pools (CNDDDB, 2009).	None	No clear-water depressions or pools are present within the CCGS site or electrical transmission tower locations
<i>Branchinecta mesovallensis</i>	midvalley fairy shrimp			SSA	Yes	Vernal pools in the central valley (CNDDDB, 2009).	None	No vernal pools are present within the CCGS site or electrical transmission tower locations
<i>Linderiella occidentalis</i>	California linderiella					Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions (CNDDDB, 2009).	None	No seasonal pools are present within the CCGS site or electrical transmission tower locations
Notostraca								
<i>Lepidurus packardi</i>	vernal pool tadpole shrimp	Endangered			Yes	Inhabits vernal pools and swales in the sacramento valley containing clear to highly turbid water (CNDDDB, 2009).	None	No vernal pools are present within the CCGS site or electrical transmission tower locations
Chordata								
Actinopterygii								
Perciformes								
<i>Archoplites interruptus</i>	Sacramento perch			SC		Historically found in the sloughs, slow-moving rivers, and lakes of the central valley. Prefers warm water but tolerates wide range of physio-chemical water conditions. Aquatic vegetation is essential for young (CNDDDB, 2009)	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
<i>Acipenser medirostis</i>	green sturgeon	Threatened (NMFS)				Spawns in the Sacramento River and the Klamath River (CNDDDB 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
<i>Oncorhynchus mykiss</i>	Central California Coastal steelhead	Threatened (NMFS)				The DPS includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (CNDDDB 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	Threatened (NMFS)				DPS includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries (CNDDDB 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	Threatened (NMFS)				The ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California (CNDDDB 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
<i>Oncorhynchus tshawytscha</i>	winter-run chinook salmon, Sacramento river	Endangered (NMFS)				The ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (CNDDDB 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
Osmeriformes								
<i>Hypomesus transpacificus</i>	Delta smelt	Threatened	Threatened			Occurs in the Sacramento-San Joaquin delta and seasonally in suisun bay, carquinez strait and san pablo bay (CNDDDB, 2009).	None	No suitable habitat is present within the CCGS site or electrical transmission tower locations
Amphibia								
Anura								
<i>Rana draytonii</i>	California red-legged frog	Threatened		SC	Yes	Adults need dense, shrubby or emergent riparian vegetation closely associated with greater than 2.3 feet deep still or slow moving water. Largest population densities are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails. Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. Estivates in small mammal burrows and moist leaf litter. Has been found up to 100 feet from water in adjacent dense riparian vegetation.	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
Caudata								
<i>Ambystoma californiense</i>	California tiger salamander	Threatened	unknown	SC	Yes	The species is restricted to grasslands and low (typically below 2000 feet/610 meters) foothill regions where lowland aquatic sites are available for breeding. They prefer natural ephemeral pools or ponds that mimic them (stock ponds that are allowed to go dry).	None	No suitable breeding or upland habitat occurs at the site; Although an unreported breeding site may be located within 1.3 miles, the site does not contain small mammal burrows.
Reptilia								
Testudines								
<i>Actinemys marmorata</i>	western pond turtle			SC	Yes	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation (CNDDDB, 2009)	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Actinemys marmorata marmorata</i>	northwestern pond turtle			SC		Associated with permanent or nearly permanent water in a wide variety of habitats (CNDDDB, 2009).	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
Squamata								
<i>Anniella pulchra pulchra</i>	silvery legless lizard			SC	Yes	Occurs in sandy or loose loamy soils under sparse vegetation. High soil moisture is essential (CNDDDB, 2009). Rocky soils or areas disturbed by agriculture, sand mining, or other human uses are not suitable for legless lizards (Miller 1944, Bury 1972, Hunt 1983, Stebbins 1985).	Low	Except for the far west end of the electrical transmission line, the CCGS site is disturbed by agriculture and other human uses and is not likely to provide suitable habitat.
<i>Phrynosoma coronatum (frontale population)</i>	coast (California) horned lizard			SC		Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate	Suitable habitat is present at the CCGS site and near the electrical transmission towers.
<i>Masticophis lateralis euryxanthus</i>	Alameda whipsnake	Threatened	Threatened		Yes	The Alameda whipsnake currently inhabits the inner coast range mostly in Contra Costa and Alameda counties, with additional occurrence records in San Joaquin and Santa Clara counties. Alameda whipsnakes are typically found in chaparral—northern coastal sage scrub and coastal sage. (USFWS 2005)	None	The CCGS site and electrical transmission towers are not located within the inner coast range and do not possess coastal sage scrub or chaparral habitat.
<i>Thamnophis gigas</i>	giant garter snake	Threatened	Threatened		Yes	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches (CNDDDB, 2009).	None	The CCGS site does not include suitable habitat for giant garter snake.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
Birds								
Anseriformes								
<i>Anser albifrons</i>	greater white-fronted goose	MBTA				Moist grasslands, pastures, croplands, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anser albifrons elgasi</i>	"tule" greater white-fronted goose	MBTA		SC		Emergent wetlands, and less commonly moist grasslands, pastures and croplands. Butte Sink in the Sacramento Valley, Grizzly Island Wildlife Area and adjacent duck clubs in Suisun Marsh, and, marginally, the Napa Marshes.	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Chen caerulescens</i>	snow goose	MBTA				Lakes, emergent wetlands, and nearby fields	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Chen rossii</i>	Ross's goose	MBTA				Lakes, emergent wetlands, and nearby fields	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Branta hutchinsii</i>	cackling goose	MBTA				Lakes, emergent wetlands, and nearby fields	Moderate	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Branta canadensis</i>	Canada goose	MBTA				Lakes, ponds, fields, and parks	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Cygnus columbianus</i>	tundra swan	MBTA				Lakes, wet croplands, pastures, grasslands, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aix sponsa</i>	wood duck	MBTA				Wooded aquatic areas with emergent vegetation	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas americana</i>	American wigeon	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas penelope</i>	Eurasian wigeon	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas strepera</i>	gadwall	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands, herbaceous croplands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas platyrhynchos</i>	mallard	MBTA				Fresh emergent wetlands, ponds, rivers, estuaries, pastures, croplands, and urban parks	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas clypeata</i>	northern shoveler	MBTA				Lakes, fresh, brackish, and less commonly saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas acuta</i>	northern pintail	MBTA				Fresh and saline emergent wetlands, croplands, pastures, grasslands, and meadows	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Anas crecca</i>	green-winged teal	MBTA				Lakes, slow-moving rivers, fresh, brackish, and less commonly saline emergent wetlands, croplands, pastures, grasslands, and meadows	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas discors</i>	blue-winged teal	MBTA				Lakes, estuaries, fresh and saline emergent wetlands, herbaceous and agricultural fields	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anas cyanoptera</i>	cinnamon teal	MBTA				Lakes, slow-moving rivers, fresh, brackish, and less commonly saline emergent wetlands, herbaceous and agricultural fields	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya valisineria</i>	canvasback	MBTA				Estuaries, bays, and lakes	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya americana</i>	redhead	MBTA		SC		Lakes, estuaries, fresh and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya collaris</i>	ring-necked duck	MBTA				Lakes, ponds, slow-moving rivers, fresh, and less commonly brackish or saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya fuligula</i>	tufted duck	MBTA				Lakes, ponds, fresh, brackish, and saline emergent wetlands (Very rare visitor to North America from Asia or Europe)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya marila</i>	greater scaup	MBTA				Large bays, estuaries, saline, brackish, and less commonly fresh emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aythya affinis</i>	lesser scaup	MBTA				Estuaries, lakes, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Bucephala albeola</i>	bufflehead	MBTA				Estuaries, lagoons, bays, lakes, ponds, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Bucephala clangula</i>	common goldeneye	MBTA				Rivers, lakes, ponds, estuaries, bays, lagoons, and less commonly emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Bucephala islandica</i>	Barrow's goldeneye	MBTA				Ponds, small reservoirs, rivers, and lagoons	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Lophodytes cucullatus</i>	hooded merganser	MBTA				Rivers, lakes, ponds, and less commonly emergent wetlands (much rarer in saline habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Mergus merganser</i>	common merganser	MBTA						

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Mergus serrator</i>	red-breasted merganser	MBTA				Bays, estuaries, inshore waters, and less commonly on large inland lakes and rivers (much rarer in fresh water habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
						Estuaries, bays, lakes, fresh, brackish, and less commonly saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Oxyura jamaicensis</i>	ruddy duck	MBTA				Estuaries, bays, subtidal zones, and less commonly on l	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Gaviiformes								
<i>Gavia immer</i>	common loon	MBTA						
Pocipediiformes								
<i>Podilymbus podiceps</i>	pieb-billed grebe	MBTA				Lakes, ponds, slow-moving rivers, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Podiceps auritus</i>	horned grebe	MBTA				Estuaries, bays, subtidal zones, and less commonly on large inland lakes and rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Podiceps nigricollis</i>	eared grebe	MBTA				Estuaries, bays, subtidal zones, lakes, slow-moving rivers, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aechmophorus clarkii</i>	Clark's grebe	MBTA				Subtidal zones, estuaries, bays, large lakes, open marshes, and less commonly on wide rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aechmophorus occidentalis</i>	western grebe	MBTA				Subtidal zones, estuaries, bays, large lakes, open marshes, and less commonly on wide rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Pelicaniformes								
<i>Pelecanus erythrorhynchos</i>	American white pelican	MBTA				Large lakes, estuaries, fresh and brackish emergent wetlands (much less common in saline habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Pelecanus occidentalis</i>	brown pelican	Endangered, N	Endangered	FP		Estuaries, subtidal zones, and pelagic waters (very rare visitor to fresh water habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Phalacrocorax auritus</i>	double-crested cormorant	MBTA				Lakes, reservoirs, rivers, estuaries, subtidal zones, fresh, brackish, and saline wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Ciconiiformes								
<i>Botaurus lentiginosus</i>	American bittern	MBTA				Fresh emergent wetlands (much rarer in saline habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Ardea alba</i>	great egret	MBTA				Estuaries, lakes, slow-moving rivers, mudflats, croplands, pastures, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Ardea herodias</i>	great blue heron	MBTA				Estuaries, lakes, slow-moving rivers, mudflats, croplands, pastures, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Butorides virescens</i>	green heron	MBTA				Lake margins, slow-moving rivers, creeks, fresh and brackish emergent wetlands (much less common in saline habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Egretta thula</i>	snowy egret	MBTA				Estuaries, ponds, slow-moving rivers, mudflats, irrigation ditches, wet fields, fresh, brackish, and saline emergent wetlands	Moderate	Drainage ditches are present within the CCGS site and electrical transmission towers.
<i>Bubulcus ibis</i>	cattle egret	MBTA				Pastures, irrigated croplands, herbaceous fields, and less commonly the margins of lakes or slow-moving rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Nycticorax nycticorax</i>	black-crowned night-heron	MBTA				Lake margins, large rivers, fresh, brackish and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Plegadis chihi</i>	white-faced ibis	MBTA				Shallow lakes, muddy meadows, irrigated pastures, flooded fields, fresh emergent wetlands (much rarer in saline habitats)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Cathartes aura</i>	turkey vulture	MBTA				Extensive open areas with nearby protected cliffs, ledges or large tree cavities for nesting and roosting	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Falconiformes								
<i>Pandion haliaetus</i>	osprey	MBTA				Lakes, reservoirs, rivers, bays, and estuaries	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Elanus leucurus</i>	white-tailed kite	MBTA		FP	Yes	Open agricultural areas, herbaceous fields with scattered trees	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Aquila chrysaetos</i>	golden eagle	MBTA, BGEPA	Endangered	FP		Rolling foothills, rugged mountains with canyons, and oak savannah	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Haliaeetus leucocephalus</i>	bald eagle	MBTA, BGEPA		FP		Lakes, reservoirs, rivers, and less frequently coastal marine habitats	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Accipiter striatus</i>	sharp-shinned hawk	MBTA				Riparian deciduous, and mixed coniferous woodlands for breeding, but much more general at other seasons	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Accipiter cooperii</i>	Cooper's hawk	MBTA				Riparian deciduous, and mixed coniferous woodlands for breeding, but much more general at other seasons	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Circus cyaneus</i>	northern harrier	MBTA		SC		Meadows, grasslands, rangelands, fresh, brackish, and saline emergent wetlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Buteo lineatus</i>	red-shouldered hawk	MBTA				Lowland riparian woodlands (up to 5000'), especially where adjacent to emergent wetlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Buteo jamaicensis</i>	red-tailed hawk	MBTA				Very general; nearly all types of open habitats including grasslands, open woodlands, foothills, mountains with canyons, urban areas, etc.	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Buteo swainsoni</i>	Swainson's hawk	MBTA	Threatened		Yes	Oak savannah, grasslands, grain or alfalfa fields, and livestock pastures	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Buteo lagopus</i>	rough-legged hawk	MBTA				Wet meadows, open marshes, valley and foothill oak savannah and grasslands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Buteo regalis</i>	ferruginous hawk	MBTA				Open grasslands, agricultural areas, valley and foothill oak savannah	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Flaco sparverius</i>	american kestrel	MBTA				Very general; nearly all types of open habitats including grasslands, open woodlands, foothills, coastal areas, urban areas, etc.	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Falco columbarius</i>	merlin	MBTA				Open grasslands, coastlines, valley and foothill oak savannah, open woodlands, and wetland margins	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Falco mexicanus</i>	prairie falcon	MBTA				Open grasslands, valley and foothill oak savannah, rangelands, and less frequently along the coastline	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Falco peregrinus</i>	peregrine falcon	MBTA	Endangered	FP		Various riparian areas and wetlands, especially those with protected cliffs or ledges for nesting and roosting (some use buildings)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Gruiformes								
<i>Laterallus jamaicensis coturniculus</i>	California black rail	MBTA	Threatened	FP		Saline and brackish emergent wetlands (especially those with <i>Salicornia</i>), and much less frequently in fresh emergent wetland	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Rallus longirostris obsoletus</i>	California clapper rail	MBTA	Endangered	FP		Saline and brackish emergent wetlands	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Rallus limicola</i>	Virginia rail	MBTA				Fresh emergent wetlands, wet meadows, and saline emergent wetlands in non-breeding seasons	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Porzana carolina</i>	sora	MBTA				Fresh emergent wetlands, wet meadows, and saline emergent wetlands in non-breeding seasons	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Gallinula chloropus</i>	common moorhen	MBTA				Fresh emergent wetlands, ponds, slow streams, and irrigation ditches	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Fulica americana</i>	American coot	MBTA				Wet grasslands, lakes, estuaries, croplands, park ponds, fresh, brackish, and saline emergent wetlands	None	The CCGS site and electrical transmission towers do not possess suitable habitat.
<i>Grus canadensis</i>	sandhill crane	MBTA	Threatened	FP		Open shortgrass plains, grain fields, and open wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Charadriiformes								
<i>Pluvialis squatarola</i>	black-bellied plover	MBTA				Intertidal mudflats, estuaries, pastures, and wet meadows	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Charadrius vociferus</i>	killdeer	MBTA				Shores of lakes, rivers, and estuaries, as well as mudflats, croplands, lawns, and a wide variety of gravelly urban surfaces	Moderate	Suitable nesting and forage habitat is present within the CCGS site and electrical transmission towers.
<i>Charadrius montanus</i>	mountain plover	MBTA		SC		Short grasslands, and plowed fields	Moderate	Suitable nesting and forage habitat is present within the CCGS site and electrical transmission towers.
<i>Recurvirostra americana</i>	American avocet	MBTA				Mudflats, estuaries, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Himantopus mexicanus</i>	black-necked stilt	MBTA				Mudflats, estuaries, fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Actitis macularius</i>	spotted sandpiper	MBTA				Gravelly shores of rivers and lakes		The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Tringa melanoleuca</i>	greater yellowlegs					Lakes, estuaries, wet meadows, flooded fields, streams, irrigation ditches, mudflats, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Numenius americanus</i>	long-billed curlew					Estuaries, herbaceous croplands, and open grasslands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Calidris mauri</i>	western sandpiper					Estuaries, mudflats, and wet fields, as well as emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Calidris minutilla</i>	least sandpiper					Estuaries, mudflats, wet fields, shores of lakes and rivers, as well as emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Calidris alpina</i>	dunlin					Intertidal mudflats, estuaries, pastures, and wet meadows	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Gallinago delicata</i>	wilson's snipe					Wet meadows, pastures, rice fields, sloughs, canals, irrigation ditches, fresh, brackish, and less commonly saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Limnodromus scolopaceus</i>	long-billed dowitcher					Intertidal mudflats, estuaries, wet meadows, shallow lakes, and pastures	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Phalaropus lobatus</i>	red-necked Phalarope					Estuaries, salt ponds, surf zones, and pelagic waters	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Chroicocephalus philadelphia</i>	Bonaparte's gull					Seashores, bays, salt ponds, offshore waters, lakes, and less frequently inland rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus canus</i>	mew gull					Rivermouths, harbors, surfines, offshore waters, bays, and less frequently inland rivers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus delawarensis</i>	ring-billed gull					Dumps, wet croplands, pastures, lakes, rivers, emergent wetlands, and parking lots	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus californicus</i>	California gull					Lakes, estuaries, beaches, mudflats, intertidal zones, pelagic waters, dumps, rivers, emergent wetlands, croplands, and parking lots	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus argentatus</i>	herring gull					Bays, harbors, rivers, lakes, dumps, wet fields, grasslands, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus occidentalis</i>	western gull					Harbors, beaches, bays, rivermouths, dumps, intertidal zones, and pelagic waters	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Larus glaucescens</i>	glaucous-winged gull					Harbors, beaches, bays, rivermouths, dumps, intertidal zones, pelagic waters, rivers, and wet fields	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

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Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Hydroprogne caspia</i>	Caspian tern	MBTA				Estuaries, salt ponds, lakes, rivers, surf zones, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Sternula antillarum browni</i>	California least tern	Endangered, MBTA	Endangered	FP		Estuaries, salt ponds, and coastal lagoons	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Sterna forsteri</i>	Forster's tern	MBTA				Subtidal zones, estuaries, bays, large lakes, open marshes, and less commonly on wide rivers		
Columbiformes								
<i>Zenaidura macroura</i>	mourning dove	MBTA				Croplands, pastures, grasslands, open chaparral, mixed riparian woodlands, urban and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
Strigiformes								
<i>Tyto alba</i>	barn owl	MBTA				Croplands, pastures, grasslands, open chaparral, urban and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Asio flammeus</i>	short-eared owl	MBTA		SC		Grasslands, prairies, dunes, meadows, irrigated croplands, and emergent wetlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Bubo virginianus</i>	great horned owl	MBTA				Forests with meadows or other openings, open chaparral, riparian hardwood, and mixed coniferous woodlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Megascops kenicottii</i>	western screech-owl	MBTA				Riparian oak woodlands, mixed coniferous woodlands, wooded portions of rural and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Athene cunicularia hypugaea</i>	western burrowing owl	MBTA		SC	Yes	Dry open grasslands, and open shrublands with burrowing mammals present	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
Apodiformes								
<i>Aeronautes saxatalis</i>	white-throated swift	MBTA				Rocky cliffs, dams, freeway overpasses, and skyscrapers	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Archilochus alexandri</i>	black-chinned hummingbird	MBTA				Open riparian woodlands, broken chaparral, and wooded neighborhoods	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Calypte anna</i>	Anna's hummingbird	MBTA				Open riparian woodlands, coastal scrub, chaparral, rural, urban, and suburban gardens	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Coraciiformes								
<i>Ceryle alcyon</i>	belted kingfisher	MBTA				Rivers, streams, and creeks (especially those with suitable banks for nesting), estuaries, lakes, and harbors	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
Piciformes								
<i>Melanerpes formicivorus</i>	acorn woodpecker	MBTA				Mature oak woodlands, and mixed coniferous woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Melanerpes lewis</i>	Lewis's woodpecker	MBTA				Open oak savannah, and (less frequently during the winter) mixed coniferous woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Sphyrapicus ruber</i>	red-breasted sapsucker	MBTA				Deciduous woodlands, orchards, and wooded neighborhoods	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Picoides nuttallii</i>	Nuttall's woodpecker	MBTA				Riparian deciduous, and oak woodlands		The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

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Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Picoides pubescens</i>	downy woodpecker	MBTA				Riparian deciduous, and mixed coniferous woodlands (prefers to forage in regeneration)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Picoides villosus</i>	hairy woodpecker	MBTA				Riparian deciduous, and mixed coniferous woodlands (prefers to forage in more mature stands)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Colaptes auratus</i>	northern flicker	MBTA				All manner of woodland and shrub habitats (including rural, suburban, and urban areas)	Present	This species was observed during wildlife surveys on April 13, 2009.
Passeriformes								
<i>Contopus sordidulus</i>	western wood-pewee	MBTA				Hardwood-conifer, and mixed coniferous woodlands, as well as valley riparian habitats during migration	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Sayornis nigricans</i>	black phoebe	MBTA				Streams, rivers, ponds, lakes, agricultural ditches, bayshores, and even frequently sprinkled lawns	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Sayornis saya</i>	Say's phoebe	MBTA				Grasslands, open chaparral, coastal scrub, rural and open suburban neighborhoods	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	MBTA				Chaparral, hardwood-conifer riparian, and open oak woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Tyrannus verticalis</i>	western kingbird	MBTA				Grasslands, croplands, and open shrublands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Lanius ludovicianus</i>	loggerhead shrike	MBTA		SC		Oak savannah, grasslands, croplands, and livestock pastures (especially those with barbed wire)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Vireo huttoni</i>	Hutton's vireo	MBTA				Live oak woodlands, hardwood-conifer woodlands, mixed riparian woodlands, and chaparral	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Cyanocitta stelleri</i>	Steller's jay	MBTA				Moist coniferous woodlands above 2500', and less frequently hardwood areas at lower elevations	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Aphelocoma californica</i>	western scrub-jay	MBTA				Oak woodlands, chaparral, coastal scrub, riparian hardwoods, rural, urban, and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Pica nuttalli</i>	yellow-billed magpie	MBTA				Oak savannah, oak riparian woodlands, orchards, rural, urban, and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Corvus brachyrhynchos</i>	American crow	MBTA				Grasslands, croplands, pastures, oak riparian woodlands, orchards, shorelines, rural, urban, and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Corvus corax</i>	common raven	MBTA				Open areas of all sorts, especially those with cliff faces, tall buildings, or other human-made structures for nesting and roosting	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Eremophila alpestris</i>	horned lark	MBTA				Grasslands, croplands, and livestock pastures	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Tachycineta thalassina</i>	violet-green swallow	MBTA				All manner of woodlands near water, especially those near cliffs or rock crevices for nesting	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Tachycineta bicolor</i>	tree swallow	MBTA				Riparian woodlands, estuaries, rivers, lakes, and emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Riparia riparia</i>	bank swallow	MBTA	Threatened			Rivers, streams, and creeks (especially those with suitable banks for nesting)		The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	MBTA				Rivers, streams, and creeks (especially those with suitable banks for nesting), canals, grasslands, and pastures	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Petrochelidon pyrrhonota</i>	cliff swallow	MBTA				Cliffs, canyons, grasslands, pastures, and canals (bridges, buildings, and freeway overpasses serve as chief nesting habitat)	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Hirundo rustica</i>	barn swallow	MBTA				Grasslands, pastures, open chaparral, lakes, ponds, harbors, and urban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Baeolophus inornatus</i>	oak titmouse	MBTA				Oak woodlands, chaparral, riparian hardwoods, urban, and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Poecile rufescens</i>	chestnut-backed chickadee	MBTA				Hardwood-conifer, and mixed coniferous woodlands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Psaltriparus minimus</i>	bushtit	MBTA				All manner of brushy habitats in all stages of growth, including urban and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Sitta carolinensis</i>	white-breasted nuthatch	MBTA				Oak woodlands, and hardwood-conifer woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Troglodytes aedon</i>	house wren	MBTA				Brushy understories of especially oak woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Thryomanes bewickii</i>	Bewick's wren	MBTA				Dense shrubby undergrowth of especially oak woodlands, and chaparral	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Salpinctes obsoletus</i>	Rock wren	MBTA				All manner of habitats bestrewn with rocks including lakeshores, chaparral, canyons, riverbanks, seacliffs, etc.	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Catherpes mexicanus</i>	canyon wren	MBTA				Moist, steep, shaded canyons, talus slopes, and dams	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Cistothorus palustris</i>	marsh wren	MBTA				Fresh, brackish, and saline emergent wetlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Regulus satrapa</i>	golden-crowned kinglet	MBTA				Dense, well shaded coniferous woodlands, and hardwood-conifer mixed woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Regulus calendula</i>	ruby-crowned kinglet	MBTA				All manner of woodlands and shrublands including urban and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Poliophtila caerulea</i>	blue-gray gnatcatcher	MBTA				Open oak woodlands, chaparral, coastal scrub, and brushy field margins	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Sialia mexicana</i>	western bluebird	MBTA				Open woodlands (especially oak-pine mixes), oak savannah, and open park land	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Sialia currucoides</i>	mountain bluebird	MBTA				Agricultural fields, pastures, and orchards	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Catharus guttatus</i>	hermit thrush	MBTA				Hardwood-conifer woodlands with dense understory, orchards, well wooded rural, urban, and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Turdus migratorius</i>	american robin	MBTA				Open woodlands, orchards, rural, urban, and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Ixoreus naevius</i>	varied thrush	MBTA				Dense, moist, and mature coniferous forests	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Mimus polyglottos</i>	northern mockingbird	MBTA				Shrublands, scrub, brushy open riparian woodlands, rural, urban, and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Toxostoma redivivum</i>	California thrasher	MBTA				Chaparral, coastal scrub, and shrubby understory of coniferous woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Anthus rubescens</i>	American pipit	MBTA				Grasslands, meadows, pastures, and shorelines	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Bombycilla cedrorum</i>	cedar waxwing	MBTA				Anywhere berries are growing, especially parks, gardens and riparian woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Phainopepla nitens</i>	phainopepla	MBTA				Anywhere mistletoe is growing, especially chaparral, oak riparian woodlands, and some suburban neighborhoods	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Vermivora celata</i>	orange-crowned warbler	MBTA				Open woodlands with brushy understory, chaparral, coastal scrub, and riparian woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Dendroica petechia</i>	yellow warbler	MBTA		SC		Open woodlands with brushy understory, and riparian woodlands (especially those with willow thickets)	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Dendroica coronata</i>	yellow-rumped warbler	MBTA				All manner of woodlands and shrublands including urban and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Dendroica nigrescens</i>	black-throated gray warbler	MBTA				Open oak woodlands, and hardwood-conifer woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Dendroica tonsendi</i>	Townsend's warbler	MBTA				Mature oak woodlands, and mixed coniferous woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Setophaga ruticilla</i>	American redstart	MBTA				Open woodlands with brushy understory, and riparian woodlands (Rare visitor to California from eastern North America)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Geothlypis trichas</i>	common yellowthroat	MBTA				Dense thickets in riparian habitat, emergent wetlands, and wet meadows	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Icteria virens</i>	yellow-breasted chat	MBTA		SC		Dense thickets in riparian habitat	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Pipilo crissalis</i>	California towhee	MBTA				Open chaparral, coastal scrub, open brushlands, oak woodlands with brushy understory, and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Pipilo maculatus</i>	spotted towhee	MBTA				Oak and hardwood-conifer woodlands with substantial litter layer and thick understory, suburban parks and gardens	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Aimophila ruficeps</i>	rufous-crowned sparrow	MBTA				Chaparral, coastal scrub, and shrubby understory of hillslope coniferous woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Spizella passerina</i>	chipping sparrow	MBTA				Open woodlands, orchards, rural, urban, and suburban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Pooecetes gramineus</i>	vesper sparrow	MBTA				Grasslands, croplands, and pastures	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Chondestes grammacus</i>	lark sparrow	MBTA				Oak savannah, chaparral, and hardwood-conifer woodlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Passerculus sandwichensis</i>	savannah sparrow	MBTA				Grasslands, croplands, pastures, shorelines, wet meadows, brackish and saline emergent wetlands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Ammodramus savannarum</i>	grasshopper sparrow	MBTA		SC		Dry open grasslands, and open shrublands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Melospiza lincolnii</i>	Lincoln's sparrow	MBTA				Thickets, shrublands, and wet grassy areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Melospiza melodia</i>	song sparrow	MBTA				Dense riparian thickets, emergent wetlands, and wet grassy areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Melospiza melodia</i>	song sparrow, "Modesto" population	MBTA		SC		Fresh emergent wetlands, and riparian willow thickets in the Sacramento Valley, Sacramento-San Joaquin River Delta, and northern San Joaquin Valley	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Melospiza melodia maxillaris</i>	Suisun song sparrow	MBTA		SC		Tidal marshes with dense emergent vegetation. Restricted to Suisun Marsh from the Carquinez Strait east to the confluence of the Sacramento and San Joaquin Rivers near Antioch.	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Passerella iliaca</i>	fox sparrow	MBTA				Dense riparian thickets, chaparral, and shrublands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Zonotrichia atricapilla</i>	golden-crowned sparrow	MBTA				Shrublands with herbaceous openings, and dense riparian thickets, rural, urban, and suburban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Zonotrichia albicollis</i>	white-throated sparrow	MBTA				Shrublands with herbaceous openings, and dense riparian thickets (Rare visitor to California from Canada or eastern North America)	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	MBTA				Open areas with scattered shrubs, coastal scrub, chaparral, and riparian woodland undergrowth, rural, urban, and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Junco hyemalis</i>	dark-eyed junco	MBTA				Open areas with scattered shrubs, coastal scrub, chaparral, and riparian woodland undergrowth, rural, urban, and suburban areas	Present	This species was observed during wildlife surveys on April 13, 2009.

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Pheucticus melanocephalus</i>	black-headed grosbeak	MBTA				Open oak or hardwood-conifer woodlands near edges of denser stands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Passerina caerulea</i>	blue grosbeak	MBTA				Grasslands, dense riparian edges, shrublands, and croplands	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Passerina amoena</i>	lazuli bunting	MBTA				Open brushlands, willow thickets, chaparral, hillside riparian woodlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Agelaius phoeniceus</i>	red-winged blackbird	MBTA			Yes	Emergent wetlands, croplands, and other open fields	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Agelaius tricolor</i>	tricolored blackbird	MBTA		SC		Fresh emergent wetlands, berry thickets surrounded by open country, croplands, and other open fields	Moderate	Suitable nesting and forage habitat is present within the CCGS site and electrical transmission tower alignments.
<i>Sturnella neglecta</i>	western meadowlark	MBTA				Dense grasslands, oak savannah, croplands, and other open fields	Present	This species was observed during habitat surveys conducted on March 4, 2009.
<i>Xanthocephalus xanthocephalus</i>	yellow-headed blackbird	MBTA		SC		Fresh emergent wetlands, wet meadows, pastures, and other open fields in non-breeding seasons	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	MBTA				Herbaceous croplands, pastures, lakeshores, open riparian woodlands, and urban areas	Moderate	Suitable forage habitat is present within the CCGS site and electrical transmission towers.
<i>Quiscalus mexicanus</i>	great-tailed grackle	MBTA				Open areas, shrubs, thickets, and emergent vegetation near water, as well as urban areas	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Molothrus ater</i>	brown-headed cowbird	MBTA				Pastures, irrigated croplands, herbaceous fields, and riparian woodlands with frequent openings	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Icterus cucullatus</i>	hooded oriole	MBTA				Riparian woodlands, urban and suburban areas with exotic plantations (especially fan palms)	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Icterus bullockii</i>	Bullock's oriole	MBTA				Open deciduous woodlands, urban and suburban areas with exotic plantations (especially eucalyptus)	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Carpodacus purpureus</i>	purple finch	MBTA				Moist coniferous woodlands, and riparian oak woodlands	Present	This species was observed during wildlife surveys on April 13, 2009.
<i>Carpodacus mexicanus</i>	house finch	MBTA				All manner of open habitats, especially urban and suburban areas with elevated perches and access to water	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Carduelis tristis</i>	American goldfinch	MBTA				Riparian deciduous woodlands, especially near weedy brushlands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Carduelis psaltria</i>	lesser goldfinch	MBTA				Open oak woodlands, and hardwood-conifer woodlands bordered by dense shrublands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.
<i>Carduelis lawrencei</i>	Lawrence's goldfinch	MBTA				Open oak woodlands, and hardwood-conifer woodlands bordered by weedy shrublands	Low	The CCGS site and electrical transmission towers do not possess suitable nesting or forage habitat; however, this species may occasionally pass through the site.

**Mammalia
Carnivora**

Table 5.2C-2b Sensitive wildlife species with potential to occur within 1the CCGS survey area

Scientific Name	Common Name	Federal	State	CDFG	ECCC HCP/NCCP	Habitat Description	Site Potential	Site Rationale
<i>Taxidea taxus</i>	American badger			SC		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	Endangered	Threatened		Yes	Occurs in annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing, and suitable prey base (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.
Chiroptera								
<i>Antrozous pallidus</i>	pallid bat			SC		Occurs in deserts, grasslands, shrublands, woodlands and forests. Is most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures (CNDDDB, 2009).	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.
<i>Lasiurus blossevillii</i>	western red bat			SC		Roost only in tree foliage, including orchards. Closely associated with cottonwoods in riparian areas at elevations below 6,500 feet. Typically feed along forest edges, in small clearings, or around street-lights where they prefer moths. May burrow into leaf litter or dense grass for hibernation.	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.
<i>Lasiurus cinereus</i>	hoary bat			SSA		May be found at any location in California. Generally roosts in dense foliage of medium to large trees (CWHR 2008)	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.
Rodentia								
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse			SSA		Typically found in grasslands and blue oak savannas with friable soils (CNDDDB 2009).	Moderate	Suitable habitat occurs within the CCGS site and electrical transmission towers.

Notes:

Federal Status

FE = federally listed as endangered

FT = federally listed as threatened

MBTA = Migratory Bird Treaty Act

BGEPA = Bald and Golden Eagle Protection Act

State Status

SE = State listed as endangered

ST = State listed as threatened

SC = State species of concern

FP = State fully protected species

SSA = State Special Animal

East Contra Costa HCP/NCCP (ECC HCP/NCCP)

Yes = covered species

No = not a covered species