

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Abronia umbellata</i> ssp. <i>brevifolia</i>	pink sand-verbena	1B.1	Disturbed sandy areas; coastal dunes and scrub ; <100 m.	Yes	No	Present in Seashore (PORE).
<i>Agrostis blasdalei</i>	Blasdale's bent grass	FSacS C; 1B.2	Coastal dunes, prairie, bluffs, and scrub .	Yes	Yes* quarry	Known from fewer than 15 occurrences (CNPS 2007). Present in Seashore (PORE). Located adjacent to the McClure Ranch quarry area.
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	FE; 1B.1	Freshwater marshes and swamps; riparian scrub; wet meadows.	Yes	No	Known from fewer than ten occurrences (CNPS 2007). Mapped in marshy area of creek near Inverness Park in 1898, but not observed in that area since (NDDDB 2007). Present in coastal areas of Seashore. Jepson does not differentiate var. <i>sonomensis</i> (Hickman 1993).
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	FSacSL C; 1B.2	Openings in broadleaf upland forest, chaparral, and cismontane woodland.	No		Found on Mt. Tam, Bolinas and San Geronimo Valley (NDDDB 2007).
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	FSacSL C; 1B.2	Coastal bluff scrub; Cismontane woodland; Valley and foothill grassland	Yes	No	Occurs in several locations around the county including some near the mouth of Tomales Bay (NDDDB 2007).
<i>Arabis blepharophylla</i>	coast rock cress	FSacSL C; 4.3	Coastal prairie, bluffs, and scrub ; broadleaved upland forest.	Yes	No	Present in Seashore (PORE).
<i>Arctostaphylos hookeri</i> ssp. <i>montana</i>	Tamalpais manzanita	FSacS C; 1B.2	Serpentine areas in chaparral and valley and foothill grassland	No		Known from fewer than 20 occurrences in the Mt. Tamalpais area (CNPS 2007).
<i>Arctostaphylos virgata</i>	Marin manzanita	FSacSL C; 1B.2	Broadleaved upland forest; closed-cone coniferous forest; chaparral; North Coast coniferous forest; on sandstone or granitic soil.	No		Known from fewer than 20 occurrences (CNPS 2007). Mapped in Bishop pine forest in several locations on Inverness Ridge (NDDDB 2007).
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>		FSacSL C; 1B.2	Coastal marshes or seeps ; <30 m.	Yes	No	Present in Seashore (PORE).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Blennosperma nanum</i> var. <i>robustum</i>	Point Reyes blennosperma	FSacS C; SR; 1B.2	Coastal prairie and scrub.	Yes	No	Known from fewer than 15 occurrences; some Pt. Reyes populations intermediate to <i>B. var. nanum</i> (CNPS 2007). Species occurs in the vicinity of the McClure Quarry, but not within the proposed hauling route.
<i>Boschniackia hookeri</i>	small groundcone	2.3	North Coast coniferous forest, usually parasitic on <i>Gaultheria salon.</i>	No		Mapped on several places on Mt. Tamalpais (NDDDB 2007).
<i>Calamagrostis crassiglumis</i>	Thurber's reed grass	FSacS C; 2.1	Mesic areas in coastal scrub and freshwater marshes.	Yes	No	Known in California from fewer than 10 occurrences (CNPS 2007). Present in Seashore (PORE). Jepson does not differentiate from <i>C. stricta</i> ssp. <i>inexpansa</i> (Hickman 1993).
<i>Calochortus tiburonensis</i>	Tiburon mariposa lily	FT, ST; 1B.1	Serpentine areas in valley and foothill grassland.	No		Known from only one occurrence at Ring Mountain (CNPS 2007).
<i>Calystegia purpurata</i> ssp. <i>saxicola</i>	morning-glory	FSacSL C; 1B.2	Rocky coastal scrub; <100 m.	No		Present in the Seashore (PORE). All known locations are west on Inverness Ridge. None occur in Tomales Bay.
<i>Campanula californica</i>	swamp harebell	FSacS C; 1B.2	Bogs and fens; closed-cone and North Coast coniferous forest; coastal prairie; meadows; freshwater marsh.	Yes	No	Mapped in several locations along the western side of Tomales Bay and Inverness Ridge (NDDDB 2007).
<i>Carex buxbaumii</i>	sedge	4.2	Wet places; < 3300 m.	Yes	No	Not known from Seashore (PORE) or Tomales Bay area (NDDDB 2007). J.T. Howell (1970) records it historically occurred on Point Reyes Peninsula in <i>Marin Flora</i> .
<i>Carex leptalea</i>	flaccid sedge	2.2	Bogs and fens; meadows; marshes and swamps.	Yes	No	Historically known only from Ledum Swamp in the Seashore (NDDDB 2007). Apparently extirpated from Marin by wetland loss (CNPS 2007).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Carex lyngbyei</i>	Lyngbye's sedge	2.2	Marshes and swamps (brackish or freshwater).	Yes	Yes	Found in Inverness, south of Inverness, and Stinson's Beach (NDDDB 2007). Occurs in brackish marsh along Lagunitas Creek in Project Area and just north of the Giacomini Ranch North Levee on the west near Sir Francis Drake.
<i>Castilleja affinis</i> ssp. <i>neglecta</i>	Tiburon Indian paintbrush	FE; ST; 1B.2	Serpentine areas in valley and foothill grassland.	No		Known from six occurrences (CNPS 2007). Not known from Seashore (PORE) or Tomales Bay area (NDDDB 2007).
<i>Castilleja ambigua</i> ssp. <i>ambigua</i>	salt marsh owl's-clover	FSacSL C	High marsh/upland ecotone of salt marshes.	Yes	Yes	Potentially a species of regional significance (USFWS <i>in prep.</i>). Marsh ecotype populations have declined significantly. Occurs at Tomales Bay Trail and Limantour Marshes.
<i>Castilleja ambigua</i> ssp. <i>humboldtensis</i>	Humboldt Bay owl's-clover	FSacS C; 1B.2	Coastal salt marsh. Mid-marsh.	Yes	Yes	Known only from Humboldt and Marin counties (NDDDB 2007). Reported previously as present in a few locations on western and eastern sides of Tomales Bay, including along Tomales Bay Trail. Observed outboard of Giacomini Ranch levee and in undiked marsh north of Ranch, as well.
<i>Ceanothus gloriosus</i> var. <i>exaltatus</i>	glory brush	4.3	Shrubby slopes; ridges; chaparral; coniferous forest; <500 m.	No		Present in GGNRA (PORE).
<i>Ceanothus gloriosus</i> var. <i>gloriosus</i>	Point Reyes ceanothus	4.3	Sandy areas in coastal bluff scrub, closed-cone coniferous forest, coastal dunes, and coastal scrub.	Yes	No	Present in Seashore (PORE). Species occurs in the vicinity of the McClure Quarry, but not within the proposed hauling route.
<i>Ceanothus gloriosus</i> var. <i>porrectus</i>	Mount Vision ceanothus	FSacS C; 1B.3	Closed-cone coniferous forest; coastal prairie; coastal scrub; valley and foothill grassland.	Yes	No	Mapped in Bishop pine forest and in coastal prairie in several locations around Point Reyes (NDDDB 2007) Known from fewer than 15 occurrences (CNPS 2007).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Ceanothus masonii</i>	Mason's ceanothus	FSacS C; SR; 1B.2	Serpentine areas in chaparral.	No		Known from approximately five occurrences; may be a variety of <i>C. gloriosus</i> (CNPS 2007). Present in GGNRA (PORE).
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	spineflower	FSacS C; 1B.2	Sandy areas in coastal dunes, coastal prairie, and coastal scrub .	Yes	No	Present in the Seashore (PORE) north of Abbot's Lagoon (NDDDB 2007). "Some plants from Point Reyes probably intermediate to var. <i>villosa</i> " (CNPS 2007). Jepson does not differentiate species into varieties (Hickman 1993).
<i>Chorizanthe cuspidata</i> var. <i>villosa</i>	spineflower	FSacS C; 1B.2	Sandy areas in coastal dunes, coastal prairie, and coastal scrub .	Yes	No	Known from fewer than 10 occurrences (CNPS 2007). Present in the Seashore (PORE) in sandy soils along the Great Beach and historically present at Dillon Beach (NDDDB 2007). Jepson does not differentiate species into varieties (Hickman 1993).
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower	FE; 1B.1	Cismontane woodland (openings); Coastal dunes; Coastal scrub ; sandy or gravelly substrate.	Yes	Yes* quarry	Presence in the Seashore (PORE) is currently in dispute. Genetic testing found at least one population in the Seashore was actually <i>C. cuspidata villosa</i> . Status of the other populations is undetermined (<i>pers. comm.</i> , Rodgers 2007). Known from several locations from of Abbot's Lagoon to L Ranch and McClure's Ranch, one of which is along the proposed route to the McClure Ranch Quarry (NDDDB 2007).
<i>Chorizanthe valida</i>	Sonoma spineflower	FE; SE; 1B.1	Sandy areas in coastal prairie.	No		Thought extinct at one time; only known extant occurrence in Seashore (CNPS 2007; PORE).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Cirsium andrewsii</i>	Franciscan thistle	1B.2	Sometimes serpentine areas in broadleaved upland forest and coastal bluff scrub.	No		Present in Seashore (PORE).
<i>Cirsium hydrophilum</i> var. <i>vaseyi</i>	Mount Tamalpais thistle	FSacS C; 1B.2	Serpentine seeps in broadleaved upland forest and chaparral.	No		Known from fewer than 10 occurrences on Mt. Tamalpais (CNPS 2007).
<i>Clarkia concinna</i> ssp. <i>raichei</i>	Raiche's red ribbons	FSacS C; 1B.1	Coastal bluff scrub.	Yes	No	Species known from only one occurrence in Marin County which is near Tomales (CNPS 2007).
<i>Collinsia corymbosa</i>	round-headed chinese houses	1B.2	Coastal dunes.	No		Not known from Seashore (PORE) or Tomales Bay area (NDDDB 2007). May not be any occurrences currently in Marin County (CNPS 2007). Howell (1970) cites its possible presence in Marin county at Bolinas Lagoon).
<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	Point Reyes bird's-beak	FSacS C; 1B.2	Coastal salt marsh. Higher portions of mid marsh or high marsh.	Yes	Yes	Present in several areas on the western and eastern sides of Tomales Bay. Observed in undiked marsh at end of Tomales Bay Trail and north of Giacomini Ranch.
<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	soft bird's beak	FE; FX; SR; 1B.2	Coastal salt marsh.	Yes	No	Known from fewer than 15 occurrences. Not listed as currently occurring in Marin (CNPS 2007) and has never been observed in marshes on west coast of Marin and Sonoma counties. Currently located exclusively in San Francisco Bay and Sacramento-San Joaquin Delta.
<i>Delphinium bakeri</i>	Baker's larkspur	FE; FX; SR; 1B.1	Coastal scrub.	Yes	No	Known from only one occurrence east of Marshall (CNPS 2007).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Delphinium luteum</i>	Yellow larkspur	FE; FX; SR; 1B.1	Chaparral; Coastal prairie; Coastal scrub/rocky	Yes	No	Known from only four occurrences. Hybridizes with <i>D. nudicaule</i> (CNPS 2007). Only known populations near Valley Ford, Walker Creek, and south of town of Tomales (NDDDB 2007).
<i>Dirca occidentalis</i>	western leatherwood	FSacSL C; 1B.2	Broadleaved upland forest; chaparral; closed-cone and North coast coniferous forest; cismontane woodland; riparian scrub; riparian woodland; on brushy, mesic slopes ; mostly in mixed evergreen and foothill woodland communities.	Yes	No	Mapped along Nicasio Creek, Devils Gulch and Inverness Ridge (NDDDB 2007).
<i>Elymus californicus</i>	California bottle-brush grass	4.3	North coast coniferous forest.	No		Present in Seashore (PORE).
<i>Erigeron supplex</i>	supple daisy	FSacS C; 1B.2	Coastal bluff scrub ; coastal prairie.	Yes	No	Last known occurrence in the Seashore from 1900 near Drakes Bay. Site searched in 1983 without success. Probably extirpated (NDDDB 2007).
<i>Eriogonum luteolum var caninum</i>	Tiburon buckwheat	FSacSL C; 3.2	Chaparral; Coastal prairie; Valley and foothill grassland/serpentinite	Yes	No	Not known from Seashore. Mapped at Carson Ridge and Tiburon (NDDDB 2007).
<i>Erysimum franciscanum</i>	San Francisco wallflower	FSacS C; 4.2	Coastal dunes; coastal scrub ; often serpentinite or granitic areas in valley and foothill grassland.	Yes	No	Not known from Seashore (PORE) or Tomales Bay area (NDDDB 2007).
<i>Fritillaria affinis var. tristulis</i>	fritillary	FSacS C; 1B.1	Coastal bluff scrub; coastal scrub ; coastal prairie; in canyon, riparian, and rock outcrop areas; often on serpentine.	Yes	No	Endemic to Marin County. Mapped in several locations in Seashore (PORE) west of Inverness Ridge and near Bolinas (NDDDB 2007). Known from fewer than 15 extant occurrences (CNPS 2007). This variety currently not recognized by Jepson Manual (June 2004).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Fritillaria liliacea</i>	fragrant fritillary	FSacS C; 1B.2	Often on serpentinite soils in coastal scrub, coastal prairie, and valley and foothill grassland.	Yes	Yes Adjacent to Study Area	Previously mapped near Nicasio Reservoir, Limantour, and east side of Tomales Bay at the eastern end of Tomales Bay Trail (NDDDB 2007).
<i>Gilia capitata</i> ssp. <i>chamissonis</i>	dune gilia	FSacS C; 1B.1	Coastal sandhills; <60 m.	No		Present in Seashore (PORE).
<i>Gilia capitata</i> ssp. <i>tomentosa</i>	woolly-headed gilia	FSacS C; 1B.1	Rocky outcrops on coastal bluff scrub.	Yes	No	Known from only three occurrences near Tomales and Salt Point SP. Last known occurrence in Seashore in 1934. Known from several locations along the east side of Tomales Bay along Highway 1. Intergrades with <i>G. capitata</i> ssp. <i>capitata</i> (NDDDB 2007).
<i>Gilia millefoliata</i>		FSacSL C; 1B.1	Stabilized coastal dunes; <10 m.	No		Found in several locations in the Seashore (PORE) between Drakes Bay and the Great Beach.
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	FSacS C; 1B.2	Sandy, serpentinite soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland.	Yes	No	Present in Seashore (PORE).
<i>Hemizonia congesia</i> ssp. <i>leucocephala</i>	hayfield tarplant	3	Coastal scrub; valley and foothill grassland.	Yes	No	Present in Seashore (PORE). Intergrades with <i>H. congesia</i> ssp. <i>congesia</i> (CNPS 2007) and listed by Jepson Manual as synonym for that species.
<i>Hespererax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	FSacS C; 2.2	Coastal bluff scrub; coastal dunes.	Yes	No	Present in Seashore (PORE).
<i>Hesperolinon congestum</i>	Marin dwarf flax	FT; ST; 1B.1	Serpentinite areas in chaparral and valley and foothill grassland.	No		Present in GGNRA (PORE). Known from fewer than 20 occurrences (CNPS 2007).
<i>Holocarpha macradenia</i>	Santa Cruz tarplant	FT; SE; 1B.1	Often clay soils in coastal prairie and valley and foothill grassland.	Yes	No	Last remaining population in San Francisco Bay extirpated in 1993 (CNPS 2007).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Horkelia cuneata</i> ssp. <i>sericea</i>	Kellogg's horkelia	FSacS C; 1B.1	Old dunes; coastal sandhills; gen < 200 m.	No		Historically present at Abbots Lagoon, but not seen since 1935 (NDDDB 2007). Occurrence from Mt. Bruno area probably last remaining one in San Francisco Bay (CNPS 2007).
<i>Horkelia marinensis</i>	Point Reyes horkelia	FSacS C; 1B.2	Coastal dunes, prairie, and scrub.	Yes	No	Present in Seashore (PORE). Known from fewer than 20 occurrences (CNPS 2007).
<i>Horkelia tenuiloba</i>	thin-lobed horkelia	FSacSL C; 1B.2	Broadleaved upland forest; chaparral; valley and foothill grassland /mesic openings, sandy	Yes	No	Species located on the east side of Bolinas Ridge and on Mt. Tamalpais (CNDB 2005).
<i>Lasthenia macrantha</i> ssp. <i>bakeri</i>	Baker's goldfields	1B.2	Closed-cone coniferous forest, coastal scrub, meadows and seeps, marshes and swamp.	Yes	No	Plants from the Seashore may be this subspecies, but need verification (CNPS 2007)
<i>Lasthenia macrantha</i> ssp. <i>macrantha</i>	goldfields	FSacSL C; 1B.2	Grasslands and dunes along immediate coast; <500 m.	No		Present in Seashore (PORE).
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tulle pea	FSacS C; 1B.2	Freshwater and brackish marsh.	Yes	No	Species located exclusively in San Francisco Bay and Sacramento-San Joaquin Delta. Has never been observed in marshes on west coast of Marin and Sonoma counties. Not listed as occurring in Marin County (CNPS 2007). Specimen from 1892 collected in "Tamalpais Region" in the University Herbarium at UC Berkeley.
<i>Layia carnosa</i>	beach layia	FE; SE; 1B.1	Coastal dunes.	No		Present in Seashore (PORE).
<i>Leptosiphon grandiflorus</i> (= <i>Linanthus grandiflorus</i>)	large-flower linanthus	FSacSL C; 4.2	Coastal bluff scrub; closed-cone coniferous forest; cismontane woodland; coastal dunes; coastal prairie; coastal scrub ; and valley and foothill grassland.	Yes	No	Present in Seashore (PORE). Species occurs in the vicinity of the McClure Quarry, but not within the proposed hauling route.

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Leptosiphon rosaceus</i> (= <i>Linanthus rosaceus</i>)	rosy linanthus	FSacS C; 1B.1	Coastal bluff scrub	Yes	No	Present in Seashore (PORE). Occurs along ocean facing coastal bluffs in the Seashore along the Great Beach, Tomales Point, and Chimney Rock.
<i>Lessingia hololeuca</i>	woolly-headed lessingia	3	Broadleaved upland forest; coastal scrub; lower montane coniferous forest; valley and foothill grassland /clay , serpentinite	Yes	No	Mapped in east and northern Marin at Tiburon, Ignacio, and Chileno Valley areas (CNPS 2007).
<i>Lessingia micradenia</i> var. <i>micradenia</i>	Tamalpais lessingia	FSacS C; 1B.2	Usually serpentinite areas in chaparral and valley and foothill grassland; often along roadsides.	No		Known only from Mt. Tamalpais (CNPS 2007),
<i>Lilaeopsis masonii</i>	Mason's lileopsis	FSacS C; SR; 1B.1	Freshwater and brackish marshes; riparian scrub ; in muddy or silty soil formed through river deposition.	Yes	No	Questionable identification of species in 1939. May have been <i>L. occidentalis</i> . Hydrology of site since altered. Presumed extirpated (NDDDB 2007).
<i>Lilium maritimum</i>	coast lily	FSacS C; 1B.1	Broadleaved upland forest; closed-cone coniferous forest; coastal prairie; coastal scrub ; and North coast coniferous forest.	Yes	No	Present in only one location in Marin County within the Seashore near Bull Point (PORE).
<i>Limnanthes douglasii</i> ssp. <i>sulphurea</i>	Point Reyes meadowfoam	SE; 1B.2	Coastal prairie; mesic areas in meadows; freshwater marsh ; and vernal pools.	Yes	No	Known from fewer than 15 occurrences (CNPS 2007). Present in Seashore (PORE).
<i>Limosella subulata</i>	Delta mudwort	2.1	Marshes and swamps .	Yes	No	Known in California from occurrences in the Sacramento-San Joaquin Delta; occurrence from PORE needs verification (CNPS 2007). Jepson classifies as native of eastern coast of North America and Europe (Hickman 1993).
<i>Lupinus tidestromii</i>	Tidestrom's lupine	FE; SE; 1B.1	Coastal dunes.	No	No	Present in Seashore (PORE).
<i>Micropus amphibolus</i>	Mt. Diablo cottonweed	3.2	Broadleaved upland forest; chaparral; cismontane woodland; valley and foothill grassland/ rocky	Yes	No	Known from several sites in east Marin. Not known from the Seashore (PORE).

APPENDIX A -1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Microseris paludosa</i>		FSacSL C; 1B.2	Moist grassland or open woods; < 300 m.	Yes	No	Present in Seashore (PORE).
<i>Monardella undulata</i>	curly-leaved monardella	FSacS C; 4.2	Chaparral; coastal dunes; coastal scrub ; ponderosa pine sandhills in lower montane coniferous forest.	Yes	No	Present in Seashore (PORE).
<i>Navarretia rosulata</i>	Marin County navarretia	FSacSL C; 1B.2	Closed-cone coniferous forest; chaparral / serpentine, rocky	No		Known from fewer than 20 occurrences. Found on Mt. Tamalpais and in Marin Municipal Water District lands (NDDDB 2007). Not known from Seashore.
<i>Pentachaeta belliflora</i>	white-rayed pentachaeta	FE; SE; 1B.1	Often serpentine areas in valley and foothill grassland.	No		Known from only one extended occurrence near Highway 280 on San Francisco Peninsula and one occurrence in Santa Lucia Mountains (CNPS 2007). Historically found in Marin, but not known from the Seashore (PORE) or Tomales Bay area (NDDDB 2007).
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	FSacS C; 4.2	Mesic areas in broadleaved upland forest, chaparral, valley and foothill grassland , and vernal pools.	Yes	No	Present in Seashore (PORE).
<i>Phacelia insularis</i> var. <i>continentis</i>	northcoast phacelia	FSacS C; 1B.2	Coastal bluff scrub ; coastal dunes.	Yes	No	Known from fewer than 10 occurrences (CNPS 2007). Present in Seashore (PORE).
<i>Piperia elegans</i> ssp. <i>decurtata</i>	Point Reyes rein orchid	1B.1	Generally dry, open sites; shrubland; coniferous forest; < 500 m.	No		Present in Seashore (PORE). Jepson does not recognize subspecies (Hickman 1993).
<i>Piperia michaelii</i>	Michael's rein orchid	FSacS C; 4.2	Coastal scrub and bluff scrub, closedcone and lower montane coniferous forests, chaparral, and cismontane woodland	Yes	No	Present in Seashore (PORE). Species occurs in the vicinity of the McClure Quarry, but not within the proposed hauling route.
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	FSacS C; ST; 1B.1	Mesic areas in broadleaved upland forest, meadows , North Coast coniferous forest, and vernal pools.	Yes	No	Known from fewer than 10 occurrences (CNPS 2007). Not known from Seashore (PORE) or Tomales Bay area (NDDDB 2007).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Pleuropogon refractus</i>	nodding semaphore grass	4.2	Mesic areas in lower montane coniferous forest, meadows , North Coast coniferous forest, and riparian forest .	Yes	No	Present in Seashore (PORE).
<i>Polygonum marinense</i>	Marin knotweed	FSacS C; 3.1	Coastal salt marshes and brackish marshes.	Yes	Yes	Known from fewer than 20 occurrences. Taxonomic status uncertain, related to <i>P. aviculare</i> ; possibly synonym of <i>P. robertii</i> , a non-native plant (CNPS 2007). Present in several locations in the Seashore. Mapped previously on western side of Tomales Bay north of Inverness (NDDDB 2007). In 2003 one individual observed in undiked marsh 2,000 feet north of Giacomini Ranch.
<i>Quercus parvula</i> var. <i>tamalpaisensis</i>	Tamalpais oak	1B.3	Lower montane coniferous forest.	No		Not known from Seashore (PORE). Known only from Mt. Tamalpais. May hybridize with <i>Q. wislizenii</i> var. <i>frutescens</i> . Not recognized by the <i>Jepson Manual</i> as a separate species (CNPS 2007.)
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	4.4	Mesic areas in cismontane woodland, North Coast coniferous forest, valley and foothill grassland , and vernal pools.	Yes	No	Present in Seashore (PORE). Found south of Olema Marsh in sag pond in Bear Valley (A. Ryan, NPS, pers. obs.).
<i>Ribes victoris</i>	Victor's gooseberry	4.3	Broadleaf upland forest, chaparral	No	No	One report from Tomales Bay State Park in 2001 (NDDDB 2007).
<i>Rhynchospora californica</i>	California beaked-rush	FSacS C; 1B.1	Bogs and fens; lower montane coniferous forest; seeps in meadows; freshwater marshes.	Yes	No	Known from fewer than 10 occurrences (CNPS 2007). Mapped on western side of Inverness Ridge. Last seen in 1945 (NDDDB 2007).
<i>Sidaicea calycosa</i> ssp. <i>rhizomata</i>	checkerbloom	1B.2	Marshes and swamps near coast.	Yes	No	Present in Seashore (PORE).

APPENDIX A-1. LIST OF SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT STUDY AREA AND VICINITY AND QUARRY HAULING ROUTES

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Marin County); California Natural Diversity Database (NDDB; 2007; Inverness, Tomales, and Point Reyes NE quadrangles), Point Reyes National Seashore rare plant database (PORE), and CNPS (2007; Inventory of rare and endangered vascular plants of California). Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

Scientific name	Common name	Status	Habitat	Habitat Present	Species Present	Comments
<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>	Marin checkerbloom	FSacS C; 1B.3	Serpentinite areas in chaparral.	No		One specimen identified by Howell near Drakes Bay in 1941; another collected in 1964 (NDDB 2007).
<i>Spartina foliosa</i>	Cordgrass	FSacSL C	Low intertidal salt marsh and mud flats	Yes	Yes	Fringes undiked tidal channels north of Giacomini Ranch and the northernmost portion of Lagunitas creek (L. Parsons and A. Ryan, NPS, pers. obs.).
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	FSacS C; 1B.2	Open areas, sometimes serpentinite, in broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, and coastal scrub .	Yes	No	Known from fewer than 20 occurrences (CNPS 2007). Not known from Seashore (PORE) or Tomales Bay area (NDDB 2007).
<i>Stellaria littoralis</i>	starwort	4.2	Marshy fields; marshes ; coastal bluffs; < 40 m.	Yes	No	Common in coastal portions of Park (PORE). Not common in Tomales Bay area (NDDB 2007).
<i>Streptanthus batrachopus</i>	Tamalpais jewelflower	FSacS C; 1B.3	Serpentinite areas in closed-cone coniferous forest and chaparral.	No		Known from fewer than 10 occurrences in the Mt. Tamalpais area (CNPS 2007). Intergrades with <i>S. barbiger</i> .
<i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i>	Mount Tamalpais jewelflower	1B.2	Serpentinite areas in chaparral and valley and foothill grassland.	No		Endemic to the Mt. Tamalpais area. Present in GGNRA (PORE).
<i>Streptanthus niger</i>	Tiburon jewelflower	FE; SE; 1B.1	Serpentinite areas in valley and foothill grassland.	No		Known from only three occurrences on the Tiburon Peninsula (CNPS 2007).
<i>Trifolium amoenum</i>	showy Indian clover	FE; 1B	Valley and foothill grassland; coastal bluff scrub ; sometimes on serpentine soil; open, sunny areas; swales	Yes	No	Last recorded in Olema area in 1886. One plant rediscovered in Bodega area in 1993 and another in 1996 (CNPS 2007).
<i>Triphysaria floribunda</i>	San Francisco owl's- clover	FSacS C; 1B.2	Serpentinite areas in coastal prairie and valley and foothill grassland.	No		Present in Seashore (PORE).

FEDERAL, STATE, AND CNPS STATUS CODES

FEDERAL LISTING

- FE = Listed as endangered under federal Endangered Species Act.
- FT = Listed as threatened under federal Endangered Species Act.
- FPE = Proposed for listing as endangered under the federal Endangered Species Act.
- FPT = Proposed for listing as threatened under the federal Endangered Species Act.
- FSacSC = Former U.S. Fish and Wildlife Service, Sacramento Office, Species of Concern (formerly a category 2 candidate for listing).
- FSacSLC = Former U.S. Fish and Wildlife Service, Sacramento Office, Species of Local Concern (formerly a category 2 candidate for listing).

STATE LISTING

- SE = Listed as endangered under the California Endangered Species Act.
- ST = Listed as threatened under the California Endangered Species Act.
- SR = Listed as rare under the California Endangered Species Act.

CALIFORNIA NATIVE PLANT SOCIETY (CNPS) LISTING

- 1A = Plants presumed extinct in California.
- 1B = Plants rare, threatened, or endangered in California.
- 2 = Plants rare, threatened, or endangered in California, but more common elsewhere.
- 3 = Plants about which we need more information – a review list.
- 4 = Plants of limited distribution – a watch list.

CNPS THREAT RANKS

- 0.1 = Seriously threatened in California (high degree/immediacy of threat)
- 0.2 = Fairly threatened in California (moderate degree/immediacy of threat)
- 0.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

References

California Natural Diversity Database (NDDDB). 2007. Search of Inverness, Tomales, and Point Reyes NE 7.5 minute U.S. Geological Survey quadrangles. California Department of Fish and Game, Sacramento, CA.

California Native Plant Society. 2007. Inventory of rare and endangered vascular plants of California. Sixth Edition. California Native Plant Society, Sacramento, CA.

Hickman, J.C., ed. 1993. The Jepson Manual: higher plants of California. University of California Press, Berkeley and Los Angeles, CA.

Howell, J.T., ed. 1970. Marin Flora: Manual of the Flowering Plants and Ferns of Marin County, California. University of California Press, Berkeley and Los Angeles, CA.

Parsons, Lorraine. Wetland Ecologist, Point Reyes National Seashore. Personal observation.

Point Reyes National Seashore (PORE). Database on rare plant occurrences within PORE and north district of Golden Gate National Recreation Area (GGNRA).

Rodgers, Jane. 2007. Personal Communication

Ryan, Amelia. Point Reyes National Seashore. Personal observation

U.S. Fish and Wildlife Service. May 7, 2005. Official List of Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in Marin County and Inverness, Tomales, and Point Reyes NE quadrangles. Document Number: 070507061229. Sacramento, CA.

USFWS (U.S. Fish and Wildlife Service). In preparation. *Coastal salt marsh recovery plan*. Prepared by U.S. Fish and Wildlife Service.

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (MMPA). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
Mammals						
<i>Antrozous pallidus</i>	pallid bat	CSC	Found in any areas that have structures or tree hollows (G. Fellers, USGS, 2001).	No	No	Occurrences near Tocaloma/Olema (NDDDB 2007).
<i>Aplodontia rufa phaea</i>	Point Reyes mountain beaver	FSacSC	Coastal areas; North facing slopes of hills and gullies with sword ferns and thimbleberries	No	No	Historic occurrences near Mt. Wittenberg, Bear Valley Ranch, and Inverness; 1981 survey did not locate extant populations at first two locations (NDDDB 2007).
<i>Arctocephalus townsendi</i>	Guadalupe fur seal	FT	Open ocean, haul out on islands	No	No	No records within Tomales Bay.
<i>Balaenoptera borealis</i>	sei whale	FE	Offshore occurrence	No	No	No records within Tomales Bay.
<i>Balaenoptera musculus</i>	blue whale	FE	Offshore occurrence	No	No	No records within Tomales Bay.
<i>Balaenoptera physalus</i>	finback whale	FE	Offshore occurrence	No	No	No records within Tomales Bay.
<i>Corynorhinus townsendii townsendii</i>	Townsend's western big-eared bat	FSacSC	Roosts in limestone caves, lava tubes; roosts only in the open, hanging from walls and ceilings.	No	No	Roost found near Tocaloma (NDDDB 2007). There are known colonies near Inverness park, and 5 mi S of Olema (G. Fellers, USGS, 2005).
<i>Enhydra lutris</i>	Southern sea otter	FT	Occurs in bays and coastal waters	No	No	Listed as threatened only south of Point Conception, California (USFWS 2007). Occurs rarely in Tomales Bay; live foraging sea otter documented in 2004 (S. Allen 2005), but is
<i>Eschrichtius robustus</i>	gray whale	FD	Occurs as migrant in nearctic waters along outercoast..	No	No	Annually seen in Tomales Bay and feeding noted; carcass found in 1976 (S. Allen, Seashore, 2005, D. Adams, Seashore, 2001)

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (MMPA). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Eubalaena glacialis</i> (= <i>Balaena glacialis</i>)	right whale	FE	Offshore occurrence	No	No	No records within Tomales Bay.
<i>Eumetopias jubatus</i>	Steller sea lion	FT, FX	Nearshore and rocky intertidal area and Tomales Bay	No	No	Historically bred at Point Reyes Headlands (S. Allen, Seashore, 2001)
<i>Eumops perotis californicus</i>	greater western mastiff-bat	FSacSC	Rocky cliffs	No	No	Not known to occur locally.
<i>Lontra canadensis sonorae</i> (= <i>Lutra canadensis sonorae</i>)	Southwestern river otter	CSC	Estuaries, rivers, marshes, and riparian areas.	Yes	Yes	First observed near Giacomini Ranch in 1992 (PWA et al. 1993). Since 2001, common sightings in Lagunitas Creek and portions of Giacomini Ranch drainage ditches. Burrow observed adjacent to northwestern corner of West Pasture in 2002 (ARA et al. 2002).
<i>Megaptera novaeangliae</i>	humpback whale	FE	Open ocean and nearshore	No	No	Occurs around Point Reyes Headlands (S. Allen, Seashore, 2001).
<i>Myotis evotis</i>	long-eared myotis bat	FSacSC	Douglas-fir forest	No	No	Occurrences near Five Brooks (G. Fellers, USGS, 2001).
<i>Myotis thysanodes</i>	fringed myotis bat	FSacSC	Roosts in barns and other buildings; forages over wetlands, fields, and forest.	Yes	Unknown	
<i>Myotis volans</i>	long-legged myotis bat	FSacSC	Roosts in barns and other buildings; forages over wetlands, fields, and forest.	Yes	Unknown	Less common; occurs in Park (G. Fellers, USGS, 2001).
<i>Myotis yumanensis</i>	yuma myotis bat	FSacSC	Roosts in barns and other buildings; forages over wetlands, fields, and forest.	Yes	Unknown	Observed in Bear Valley near Park headquarters (G. Fellers, USGS, 2001).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Phoca vitulina richardii</i>	Pacific harbor seal	MMPA	Open waters in coastal and bay waters and Intertidal	Yes	Yes - Rare	Wanders with the tide up the estuarine reaches of Lagunitas Creek on occasion (ARA et al. 2002).
<i>Physeter catodon</i>	sperm whale	FE	Offshore occurrence, but carcasses wash ashore in bays and estuaries.	No	No	No records in Tomales Bay; carcass washed ashore in Drakes Estero 2004. (S. Allen, Seashore, 2005)
<i>Zalophus californianus</i>	California sea lion	None (MMPA)	Bays and estuaries	Yes	No	Occurs in Tomales Bay coincident with herring runs, including up to the town of Point Reyes Station (ARA et al. 2002, S. Allen, Seashore, 2005).
<i>Zapus trinotatus orarius</i>	Point Reyes jumping mouse	FSacSC	Riparian and grassland	Yes	No	No individuals caught during trapping surveys conducted in 2002 (ARA et al. 2002). It does occur on the Point Reyes Peninsula (G. Fellers, USGS, 2005)
Birds						
<i>Accipiter cooperi</i>	Cooper's hawk	CSC	Riparian shrubs and trees	Yes	Yes	Common migrant and fairly common winter resident at southern end of Tomales Bay and Olema Marsh. Breeds irregularly on east slope of Inverness Ridge (ARA et al. 2002).
<i>Accipiter striatus</i>	sharp-shinned hawk	CSC	Riparian shrub, and trees	Yes	Yes	Common migrant and fairly common winter resident at southern end of Tomales Bay and Olema Marsh. Breeds irregularly on east slope of Inverness Ridge (ARA et al. 2002).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Agelaius tricolor</i>	tricolored blackbird	FSacSC	Open country, protected nesting substrate. Nests colonially in freshwater marsh habitat.	Yes	Yes	Breeds infrequently in southern Tomales Bay, but not on Giacomini Ranch. Large flocks occur around feed lot on Ranch and on pastures in fall-winter months (ARA et al. 2002).
<i>Ammodramus savannarum</i>	grasshopper sparrow	BSSC2; S2	Short to mid-height grassland.	Yes	Yes	Fairly common breeder (Apr-Aug) on east shore of Tomales Bay. Present in East Pasture of Giacomini Ranch in summer 2002 (ARA et al. 2002).
<i>Amphispiza belli belli</i>	bell's sage sparrow	FSacSC; CSC	Breeds in chaparral and arid shrub habitat.	No	No	Distribution confined to Carson Ridge, Mt. Tamalpais. Very rare vagrant to Park (ARA et al. 2002).
<i>Aquila chrysaetos</i>	golden eagle	CSC; S3	Nests in rolling foothill mountain areas, in cliffs or large trees	No	Yes	Usually nests in northern Marin county, but has nested in Point Reyes. Occasional flyover sighting in Project Area (ARA et al. 2003). Seen 12/15/05 flying over Giacomini fields (J. Evens, ARA, 2005)
<i>Anser albifrons elgasi</i>	tule greater white-fronted goose	BSSC2			Yes	Rare winter visitor to moist pastures and ponds in Project Area (ARA et al. 2002)
<i>Ardea alba</i>	great egret	S4	Nests in large trees near marshes, tide flats, irrigated pastures.	Yes	Yes	Common in all wetlands around Tomales Bay; nests in Inverness Park and forages locally in shallow estuarine waters and tidal, freshwater and brackish marshes and moist pastureland.

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Ardea herodias</i>	great blue heron	S4	Nests in tall trees, cliffsides, and marshes near foraging areas.	Yes	Yes	Rookery in Inverness Park (NDDDB 2007) and Bear Valley. Forages regularly on Giacomini Ranch (ARA et al. 2002).
<i>Arenaria melanocephalus</i>	black turnstone	FSacSC	Rocky shores	No	No	Occurs along Tomales Bay. Moderately common. (G. Fellers, USGS, 2005).
<i>Asio flammeus</i>	short-eared owl	CSC; BSSC2	Tidal marshes, lowland meadows, and swales.	Yes	Yes	Breeds at Pt Reyes, and there is a chance it breeds within the Tomales Bay watershed (G. Fellers, USGS, 2005). Forages sporadically during fall and winter in tidal marsh north of Millerton Point. Sporadically roosts in <i>Grindelia</i> high marsh in undiked marsh north of Giacomini Ranch. (ARA et al. 2002).
<i>Asio otus</i>	long-eared owl	BSSC2	Nests in riparian bottomlands and hunts in adjacent open fields.	Yes	No	Was not found in Project Area during field surveys. Irregular visitor to riparian areas in Point Reyes region and has occasionally bred locally (ARA et al. 2002).
<i>Athene cunicularia</i> var. <i>hypugaea</i>	burrowing owl	FSacSC, CSC; BSSC1	Nests in burrows in open fields; winters in same area.	No	Yes - Rare	Reported as occurring on Giacomini Ranch in 1992 (PWA et al. 1993). Occurs very rarely in coastal Marin. Not detected in 2001-2002 (ARA et al. 2002). Regularly occurs (but is not common) at Point Reyes (G Fellers, USGS, 2005)

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Aythya americana</i>	redhead	BSSC2	Marshy lakes and ponds		Yes	Occasional in outer Tomales Bay. Irregular visitor to ponds in Project Area (ARA et al. 2002).
<i>Botaurus lentiginosus</i>	American bittern	FSacSC; BSSC3	Freshwater, brackish and coastal marshes		Yes	Sporadic occurrences at Olema Marsh (ARA et al. 2002).
<i>Brachyramphus marmoratus</i>	marbled murrelet	FT, FX	Nests in old growth conifer forest near open ocean and bays for foraging.	No	No	Not known to breed in Marin County, but occurs in nearitic waters most months. No records in Tomales Bay (ARA et al. 2003).
<i>Branta bernicla nigricans</i>	black brant	BSSC3	Shallow bays and coastal marshes	Yes	Yes	Abundant seasonal migrant through outer Tomales Bay. Occasional in ponds in Project Area (ARA et al. 2002).
<i>Branta canadensis leucopareia</i>	Aleutian Canada goose	FD	Wet pastures, shallowly flooded fields, and marshes along coastal Marin County, especially during fall and winter.	Yes	Yes	Sporadically roosts in diked marsh and pasture areas south of north levee in West Pasture of Giacomini Ranch (ARA et al. 2003). Two present in mixed flock 12/19/05 (J. Evens, ARA, 2005).
<i>Branta canadensis minima</i>	cackling Canada goose	BSSC2			Yes?	Very rare transient through Project Area. (ARA et al. 2002). Recorded in project area 12/05 in mixed flock with Canada geese and Aleutians (J. Evens, ARA, 2005).
<i>Bucephala albeola</i>	bufflehead	BSSC3			Yes	Common in open water habitat in Tomales Bay during winter. Found in Project Area (ARA et al. 2002).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Buteo regalis</i>	ferruginous hawk	FSacSC; CSC	Breeds in open country, including prairie grassland and shrubland.	Yes	Yes	Casual visitor to the Giacomini Ranch with several sightings, mostly during fall and winter, to pastures and wetlands (ARA et al. 2002).
<i>Calidris canutus</i>	red knot	FSacSC	Beaches and mudflats	Yes	No	Occurs irregularly and in low numbers on Tomales Bay mudflats (G. Fellers, USGS, 2005). Formerly regular, in low numbers, at mouth of Lagunitas Creek; not recorded in recent years (J. Evens, ARA, 2005).
<i>Catharus ustulatus</i>	Swainson's thrush	BSSC2	Breeds in riparian and coastal scrub habitats	Yes	Yes	Locally common breeder. Occurs in Project Area (ARA et al. 2002). Dependant on riparian understory cover (J. Evens, ARA, 2005).
<i>Ceryle alcyon</i>	belted kingfisher	BSSC3			Yes	Nests along Lagunitas Creek and Sir Francis Drake Blvd adjacent to Project Area. Common year-round resident (ARA et al. 2002).
<i>Chaetura vauxi</i>	Vaux's swift	FSacSC	Nests in coniferous forests. Often forages over rivers and lakes.		Yes	Locally uncommon. Suspected of breeding in mature and decadent conifer forests of Bolinas and Inverness Ridges. Uncommon transient flying over Giacomini Ranch (ARA et al. 2002).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT, FX	Sandy beaches, salt pond levees; needs sandy, gravelly, or friable soil for nesting.	No	No	Nests on outer coastal beaches at Park. May have bred formerly and/or occasionally at Dillon Beach, but does not breed along the shoreline of Tomales Bay. Occasional migrant/winter records for tidal flats at south end of Tomales Bay (Stenzel et al. 1981).
<i>Chidonias niger</i>	black tern	FSacSC; CSC; BSSC3		No	No	Rare vagrant over tidal shallows (ARA et al. 2002).
<i>Chondestes grammacus</i>	lark sparrow	FSacSC		No	Yes - Rare	Breeds in Chileno Valley and eastern shore of Tomales Bay. Rare spring and fall transient to grassland at south end of Tomales Bay. Sighted once in Project Area in spring 2002 (ARA et al. 2003).
<i>Circus cyaneus</i>	northern harrier	CSC; BSSC2	Open fields, savannas, meadows and marshes; in mating season found in marsh-like areas.	Yes	Yes	Observed in Giacomini Ranch and vicinity since 1961. Common forager over Giacomini Ranch. Breeds in northwestern corner near Project Area (ARA et al. 2002).
<i>Coccyzus americanus occidentalis</i>	yellow-billed cuckoo	FC; SE		No	No	One was sighted in the Point Reyes Peninsula in August 2003 and fall 2005. Does not breed in the Park. Has never nested locally; no habitat.(J. Evens, ARA, 2005).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Contopus cooperi</i>	olive-sided flycatcher	FSacSC; BSSC2	Nests in Douglas Fir and Bishop Pine association.	No	Yes	Nests on Inverness Ridge (Shuford 1993). Does not breed at Giacomini Ranch, but was observed near Project Area, probably as post-breeding dispersant (ARA et al. 2002).
<i>Coturnicops noveboracensis</i>	yellow rail	CSC; BSSC2	Freshwater marshlands	Yes	Yes	Very rare visitor to southern Tomales Bay. Sighted several times since 1996, including in tidal marsh and riparian areas of Project Area in winter 2001-2002 (ARA et al. 2002). Sighted each subsequent winter 2002-2005; records increasing in greater Bay Area (J. Evens, ARA, 2005).
<i>Cypseloides niger</i>	black swift	FSacSC; CSC	Breeds on cliffs adjacent or behind waterfalls in canyons and sea-bluffs above surf.	No	No	Very rare fall migrant through southern Tomales Bay. Observed at Dillon Beach and Point Reyes headlands in migration. Not known to breed in Marin County (ARA et al. 2002).
<i>Dendroica occidentalis</i>	hermit warbler	S3	Breeds in Douglas fir forest.	No	Yes	Uncommon breeder on Inverness Ridge. Occasionally uses riparian scrub area on Point Reyes Mesa adjacent to Giacomini Ranch (ARA et al. 2002).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Dendroica petechia brewsteri</i>	yellow warbler	CSC	Nests and forages in riparian vegetation – California bay and willow.	Yes	Yes	Breeds regularly near confluence of Olema and Lagunitas Creeks and historically near Inverness Park. Also appear to breed in riparian scrub area on Point Reyes Mesa adjacent to Giacomini Ranch. Common fall migrant through riparian corridor (ARA et al. 2002).
<i>Diomedea albatrus</i> (=Phoebastria albatrus)	short-tailed albatross	FE	north Pacific Ocean, most frequently the productive edge of the outer Continental Shelf	No	No	Closest breeding colony is in Izu, Japan. Extremely rare wanderer offshore, but becoming more frequent (ARA et al. 2002). Some individuals seen most years off the Marin/Sonoma coast. Not within Tomales Bay (G. Fellers, USGS, 2005).
<i>Elanus leucurus</i>	white-tailed kite	FSacSC	Coniferous forest; open grasslands.	Yes	Yes	Common breeder on Inverness Ridge. Common during all seasons in pasture and marsh areas in northwestern corner of Giacomini Ranch (ARA et al. 2002).
<i>Empidonax difficilis</i>	Pacific-slope flycatcher	FSacSC	Riparian habitat	Yes	Yes	One of the most common breeding passerines in the riparian forests, thickets, and scrub on the perimeter of the Giacomini Ranch (ARA et al. 2002).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Empidonax traillii brewsteri</i> (= <i>Coleoptes chrysoides</i>)	willow flycatcher	SE (nest.)	Riparian habitat	Yes	Yes - Rare	Does not breed in Park or in Marin County. Uncommon migrant through southern Tomales Bay in spring and fall. Observed on Giacomini Ranch in Aug.-Sept. 2001 (ARA 2002).
<i>Eremophila alpestris actia</i>	California horned lark	BSSC3	Coastal areas from Sonoma to San Diego counties.	Yes	Unknown	Uncommon visitor to outer Point Reyes. Probably occurs in the Project Area (ARA et al. 2002). Occurs along the east side of Tomales Bay. Has been recorded on a number of Christmas bird counts (G. Fellers, USGS, 2005).
<i>Falco columbarius</i>	merlin	CSC	Estuaries and coastal embayments	Yes	Yes	Regular winter visitor to southern end of Tomales Bay. Present in very low numbers in late autumn through winter, hunting over undiked marsh north of Giacomini Ranch and pastures (ARA et al. 2002).
<i>Falco mexicanus</i>	prairie falcon	BSSC3	Nests in dry, open areas		No	Rare transient, but have been documented wintering in southern Tomales Bay in 2002 (ARA et al. 2002). Seen occasionally as a fly by over south end of Tomales Bay, but fairly regular in fall and winter at Abbott's Lagoon (J. Evens, ARA, 2005).
<i>Falco peregrinus anatum</i>	American peregrine falcon	FD	High cliffs, ledges for nesting		Yes	May breed at Park. Regularly observed foraging over Giacomini Ranch and undiked marsh north of Ranch (ARA et al. 2003).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Fratercula cirrhata</i>	tufted puffin	CSC; BSSC1; S2	Open ocean. Nest on islands and rarely on ocean cliffs.	No	No	Occasional in the vicinity of Drakes Bay. Not known to occur in Tomales Bay (NDDDB 2007).
<i>Gavia immer</i>	common loon	CSC		Yes	Yes	Occurs in open water in Tomales Bay. Occasionally wanders up Lagunitas Creek on high winter tides (ARA et al. 2002).
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellowthroat	FSacSC; CSC; BSSC2	Freshwater, saltwater marshes with thick, continuous cover	Yes	Yes	Point Reyes may support one-third of total population of this taxon. Breeds commonly in coastal marshes throughout Point Reyes, Olema, and Bear Valley marshes. Observed in riparian corridor along western and eastern edges of Giacomini Ranch and Olema Marsh (ARA et al. 2002).
<i>Grus canadensis tabida</i>	sandhill crane	ST			Yes – Rare	Very rare visitor to wet pastures on Giacomini Ranch (ARA et al. 2002).
<i>Haliaeetus leucocephalus</i>	bald eagle	FT, SE	Forages in large water body.	No	No	Does not breed at Park. Very rare fall/winter visitor to Tomales Bay. May forage occasionally on Giacomini Ranch, but not observed during 2001-2002 surveys (ARA et al. 2002).
<i>Haematopus bachmani</i>	black oystercatcher	FSacSC	Rocky shorelines on the coast.	No	No	Occurs on rocky shoreline at the mouth of Tomales Bay; not likely to occur at South end due to lack of habitat. Breeds on outer Point Reyes and Tomales Point in very limited habitat.(J. Evens, ARA, 2005).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Histrionicus histrionicus</i>	harlequin duck	FSacSC, CSC; BSSC1	Breeds on swift flowing northern rivers, nesting on rocky islands in rivers or in sheltered sites on banks.	No	No	Rare winter visitor to rocky Tomales Bay shoreline (ARA et al. 2002).
<i>Icteria virens</i>	yellow-breasted chat	BSSC3; S3	Dense riparian thickets.		Yes	Sometimes breeds in riparian thickets in the Project Area. Last seen in July 2001 (ARA et al. 2002). Observed in willows along lower Lagunitas Creek (near old dam site), August 2005 (J. Evens, ARA, 2005).
<i>Ixobrychus exilis hesperis</i>	Western least bittern	S1; BSSC3	Nests in marshes and pond/reservoir fringes	Yes	Yes	Rare in the area. Bred in Olema Marsh in 1998. Seen in June 2002 (ARA 2002).
<i>Lanius ludovicianus</i>	loggerhead shrike	FSacSC, CSC; S4			Yes	Uncommon visitor to Marin County coast during fall-spring. Breeds in interior areas of watershed such as Chileno Valley. Occasionally observed during fall/winter in undiked marsh north of Giacomini Ranch (ARA et al. 2002).
<i>Larus californicus</i>	California gull	CSC; S2			Yes	Fairly common non-breeding visitor to Tomales Bay and vicinity. Occasional, incidental visitor to dairy, open water, and irrigated fields (ARA et al. 2002).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Lateralus jamaicensis coturniculus</i>	California black rail	ST	Freshwater, saltwater or brackish marshes bordering large bays	Yes	Yes	Once very common in Tomales Bay marshes. Occasional breeder in Olema and Bear Valley marshes. Potential breeding birds consistently present in undiked marsh north of Giacomini Ranch and, during surveys, in freshwater marsh in West Pasture (ARA et al. 2002).
<i>Limosa fedoa</i>	marbled godwit	FSacSC	Nest in grassy marshes and feed in beaches and mudflats	Yes	No	A common visitor to Tomales Bay in fall, winter, spring. Large numbers may congregate in flooded pastures on high tides, but usually forages on tidal flats and adjacent tidal marsh (J. Evens, ARA, 2005).
<i>Melospiza melodia samuells</i>	San Pablo song sparrow	FSacSC; CSC			No	Does not occur in Tomales Bay watershed (ARA et al. 2002).
<i>Numenius americanus</i>	long-billed curlew	FSacSC		Yes	Yes	Occurs regularly on tidal flats north of the Giacomini Ranch and on flooded pastures during fall and winter (J. Kelly, 2001).
<i>Numenius phaeops</i>	whimbrel	FSacSC	Coastal marshes, beaches, and rocky shore	Yes	No	Occurs in Tomales Bay.(G. Fellers, USGS, 2005).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Nycticorax nycticorax</i>	black-crowned night heron	S3		Yes	Yes	Small numbers roost regularly in northwestern corner of Giacomini Ranch and occasionally in willows along Lagunitas Creek. Also roosts irregularly in willows along Tomasini Creek at base of Point Reyes Mesa (ARA et al. 2002).
<i>Oceanodroma homochroa</i>	ashy storm-petrel	FSacSC; CSC; BSSC2	Nests on rocky cliff areas and off-shore islands.	No	No	Observed in northern portion of Tomales Bay and Point Reyes Headlands. Extremely unlikely in southern Tomales Bay (ARA et al. 2002).
<i>Pandion haliaetus</i>	osprey	CSC	Large nests in tree tops within 15 miles of waterbodies with fish	Yes	Yes	Breeds on Inverness Ridge. Approximately 20 nests per year distributed along Inverness Ridge from Five Brooks to Tomales Bay State Park. Observed regularly foraging over Giacomini Ranch (ARA et al. 2002).
<i>Pelecanus erythrorhynchos</i>	American white pelican	CSC; BSSC1	Nests on large interior lakes.		Yes	Observed occasionally on Lagunitas Creek near Project Area (ARA et al. 2002).
<i>Pelecanus occidentalis californicus</i>	California brown pelican	FE, SE	Open water and roosts on mudflats; breed in Channel Islands.	Yes	Yes	Does not breed at the Park, but fairly common non-breeding visitor to Tomales Bay. Irregular visitor to Giacomini Ranch in small numbers. Most commonly observed in fall foraging in open water or roosting along shoreline of Lagunitas Creek (ARA et al. 2003).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Phalacrocorax auritus</i>	double-crested cormorant	CSC	Open water and nearshore feeding; nests in trees and structures.	Yes	Yes	Common year-round resident in southern Tomales Bay and along Lagunitas Creek. Roosting flocks of up to several hundred birds observed on tidal flats at mouth of Lagunitas Creek. Believed to breed on outer coast (ARA et al. 2002).
<i>Plegadis chihii</i>	white-faced ibis	CSC; S1	Shallow freshwater marshes	Yes	Yes – Rare	Rare transient. Large flocks visited Project Area in late spring 2000/2002 (ARA et al. 2002).
<i>Porzana carolina</i>	sora	BSSC3	Vegetated brackish and freshwater marshes	Yes	Yes	Uncommon breeder in the Project Area. Present in 2002 breeding season (ARA 2002).
<i>Progne subis arboricola</i>	purple martin	BSSC1; S3	Woodlands and low-elevation coniferous forest.	No	Yes	Regular breeder on Inverness Ridge. Forages in Olema Marsh (ARA et al. 2002).
<i>Ptychotamphus aleuticus</i>	Cassin's auklet	BSSC2			No	Breeds on the Farallon Islands and has been rarely seen at the mouth of Tomales Bay (ARA et al. 2002).
<i>Rallus longirostris obsoletus</i>	California clapper rail	FE, SE	Salt marsh, estuarine	Yes	Yes	Occurs sporadically in undiked marsh north of Giacomini Ranch. Observed for four to five years during 1990s in undiked marsh. However, none detected in this area since 2001 (ARA et al. 2002 and J. Evens, ARA, 2005).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Rhynchops niger</i>	black skimmer	FSacSC; BSSC3	Nests on sandy beaches, and gravel bars.	Yes	No	Nests in Salton Sea and San Diego Bay.(NDDDB 2007) Has been spotted as transient in Bodega Bay (McCaskie et al. 1979). Being seen with increasing regularity in San Francisco Bay (G. Fellers, USGS, 2005). Occasional transient at Tomales Bay (J. Evens, ARA, 2005).
<i>Riparia riparia</i>	bank swallow	ST; FSacSC			Yes - Rare	Rare transient over Giacomini Ranch, especially in fall (ARA et al. 2002).
<i>Selasphorus rufus</i>	rufous hummingbird	FSacSC			Unknown	Migrates through Coast Range, but does not breed. Uncommon transient in southern Tomales Bay in spring and fall (ARA et al. 2002) Very closely resembles Allen's hummingbird, so presence in Project Area is possible, but not confirmed (ARA et al. 2002).
<i>Selasphorus sasin</i>	Allen's hummingbird	FSacSC	Riparian, mixed evergreen, Douglas fir, redwood, Bishop pine forests, and coastal scrub.	Yes	Yes	Common breeder in southern Tomales Bay and Marin County. Breeds in the Project Area in riparian thickets and blackberry bushes (ARA et al. 2002).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Sphyrapicus ruber</i>	red-breasted sapsucker	FSacSC	Nests in mixed evergreen or riparian forests adjacent to Douglas fir forests.	Yes	Yes	Rather uncommon in coastal Marin County. Observed in alder-dominated riparian habitat on western edge of Giacomini Ranch during fall and winter (ARA et al. 2002) Occasionally seen in the Bear Valley area. One bird was resident here for several months in the fall of 2005 (G. Fellers, USGS, 2005).
<i>Sterna elegans</i>	elegant tern	FSacSC, CSC; BSSC3		Yes	Yes	Fairly common to abundant fall transient to shallow estuarine waters at southern end of Tomales Bay. Occurs in Project Area (ARA et al. 2002).
<i>Sternula antillarum brownii</i> (=Sterna, =albifrons)	California least tern	FE; SE	Nests along the coast in sparsely vegetated flats.	No	No	Very rare transient; no recent records (J. Evens, ARA, 2005).
<i>Strix occidentalis caurina</i>	northern spotted owl	FT	Old growth forests or mixed old growth and mature trees	No	No	Nests in east slope canyons on Inverness Ridge at least 1 mile from Giacomini Ranch (D. Adams, Seashore, 2001). Dead bird found along Sir Francis Drake Highway in 1995 (ARA et al. 2002).
<i>Synthliboramphus hypoleucus</i>	Xantus' murrelet	FSacSC; ST; BSSC2	Oceanic habitats.	No	No	No records of this marine species in Tomales Bay (Stallcup et al., 2000')

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Thryomanes bewickii</i>	Bewick's wren	FSacSC	Riparian habitat. Most common in coastal scrub and drier habitats.	Yes	Yes	Very common and widespread throughout Marin County and Point Reyes Peninsula. Fairly common resident on Point Reyes Mesa bluff and in blackberry patches in riparian forests along perimeter of Giacomini Ranch (ARA et al. 2002).
<i>Toxostoma redivivum</i>	California thrasher	FSacSC			No	Closest breeding population on Carson Ridge. Does not occur on Giacomini Ranch or southern Tomales Bay (ARA et al. 2002).
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE, FX, SE	Riparian habitat	Yes	Yes - Rare	Occurs as extremely rare vagrant in riparian corridor along southern end of Lagunitas Creek. Sighted in Project Area near Lagunitas Creek in 1985 (ARA et al. 2003).
Reptiles						
<i>Caretta caretta</i>	loggerhead turtle	FT	Continental shelves, bays, estuaries, and lagoons in temperate, subtropical, and tropical waters; nest on ocean beaches.	No	No	Observed in the outer coast; vagrant only in Tomales Bay.
<i>Chelonia mydas</i>	green turtle	FT	Open ocean; nest on ocean beaches.	No	No	Observed in the outer coast; vagrant only in Tomales Bay.

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Clemmys marmorata marmorata</i> (= <i>Emmys marmorata marmorata</i>)	northwestern pond turtle	FSacSC	Near-permanent water with basking sites	Yes	Yes	Observed in Lagunitas Creek and both the West and East Pastures of the Giacomini Ranch, although only one occurrence in West Pasture (Fong 2002, Fellers and Guscio 2002).
<i>Dermodochelys coriacea</i>	leatherback turtle	FE	Open ocean; nest on ocean beaches.	No	No	Observed in the outer coast; vagrant only in Tomales Bay.
<i>Lepidochelys olivacea</i>	olive ridley sea turtle	FT	Open ocean	No	No	Observed in the outer coast; vagrant only in Tomales Bay.
<i>Phrynosoma coronatum frontale</i>	California horned lizard	FSacSC	Arid areas with ants	No	No	No records in Tomales Bay (ARA et al. 2003).
Amphibians						
<i>Ambystoma californiense</i>	California tiger salamander	FT	Ponds and streams near ground squirrel burrows	Yes	No	Not known from Marin County. Nearest populations are just S of Santa Rosa. (G. Fellers, USGS, 2005).
<i>Rana aurora aurora</i>	northern red-legged frog	FSacSC	Ponds, streams, wet woodlands	Yes	No	Nearest records are from north of Pt Arena (G. Fellers, USGS, 2005).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Rana aurora draytonii</i>	California red-legged frog	FT, FX	Deep pools with dense, shrubby, or emergent vegetation. Oversummer in riparian habitat.	Yes	Yes	Present in numerous areas in Tomales Bay and the Seashore, some of which is Critical Habitat. Occurs in East and West Pastures on Giacomini Ranch. However, breeding adults occur only in West Pasture, specifically central portion of Fish Hatchery Creek and freshwater marsh (Fellers and Guscio 2002). Numbers have fluctuated since 2001 due possibly to salinity intrusion events in winter. Also occurs in Olema Marsh, although conditions make estimating population size difficult (G. Fellers, USGS, 2004).
<i>Rana boylei</i>	foothill yellow-legged frog	FSacSC	Shallow streams with riffles and rocky substrate	Yes	No	Observed near Salmon Creek and Walker Creek (NDDDB 2007). Nearest occurrence reported 2 miles from Giacomini Ranch in a hillside drainage near Inverness (G. Fellers, USGS, 2001).
Fish						
<i>Acipenser medirostris</i>	green sturgeon	FT	Feeds in estuaries and bays, but breeds in the freshwater of large rivers.	Yes	Yes	Last official sighting in Tomales Bay in 1995 (ARA et al. 2003). Listing applies only to the Sacramento River population(s).

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Eucyclogobius newberryi</i>	tidewater goby	FE	Brackish water in shallow lagoons and lower stream reaches	Yes	Yes	Last observed in Tomales Bay watershed in 1953 until 2002, when small population discovered in the portion of Tomasini Creek within the Giacomini Ranch (ARA et al. 2002). As of 2006, also found in Fish Hatchery Creek in West Pasture and East Pasture drainage ditch system.
<i>Hypomesus transpacificus</i>	delta smelt	FT		No	No	Occur only in Sacramento and San Joaquin River watersheds.
LAMPETRA TRIDENTATA	Pacific lamprey	FSacSC	Anadromous in high flow systems.	Yes	Yes - Rare	Listed as common in Lagunitas Creek (Tomales Bay Association 1995) and present in Olema Creek (Ketcham et al. 2005) . Migrates through Project Area.
<i>Lavinia symmetricus ssp 2</i>	Tomales roach	CSC	Freshwater portions of small creeks and streams and isolated pools.	Yes	No	Reported in Walker Creek and upstream portions of Lagunitas Creeks (NDDB 2007) . Not observed in downstream portion of Lagunitas Creek or Giacomini Ranch streams and drainages during 2002 (ARA 2002) or 2005 (M. Reichmuth, Seashore, 2005).
<i>Oncorhynchus kisutch</i>	coho salmon – central coast	FE, FX	Typically spawn in upper portions of watershed. Smolts use estuary for feeding and refugia; adults use estuary as holding area prior to migrating upstream.	Yes	Yes	Currently spawn in upstream portions of Olema Creek, Lagunitas Creek, Devil's Gulch, and San Geronimo Creek (NDDB 2007). Smolts found in downstream portion of Lagunitas Creek and Tomasini Creek in June 2005 (Ketcham et al. 2005).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Oncorhynchus mykiss</i>	central CA coastal steelhead	FT, FX	Typically spawn in upper portions of watershed. Smolts use estuary for feeding and refugia; adults use estuary as holding area prior to migrating upstream.	Yes	Yes	Historically abundant in Lagunitas Creek and tributaries. Historical status in Tomasini and Fish Hatchery Creeks unknown. Smolts found in downstream portions of Lagunitas, Bear Valley, and Tomasini Creeks in 2004 and/or 2005. Juveniles also observed in Fish Hatchery Creek in 2002 and 2005 (ARA et al. 2002; Ketcham et al. 2005).
<i>Oncorhynchus tshawytscha</i>	Southern Oregon/California coastal chinook salmon	FT, FX	Typically spawn in middle to upper portions of watershed. Smolts use estuary for feeding and refugia; adults use estuary as holding area prior to migrating upstream.	Yes	Yes	Typically found in all estuaries north of San Francisco Bay, except Tomales Bay. However, small numbers observed in Lagunitas Creek annually since 1998; Not likely a sustained population (B. Ketcham, Seashore, 2001). One stray found in Olema Creek in 2004 (M. Reichmuth, Seashore, 2005).
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	FSacSC			No	Endemic to Central Valley; largely confined to Delta, Suisun Bay, Suisun Marsh, and Napa Marsh.
<i>Spirinchus thaleichthys</i>	longfin smelt	FSacSC			No	Occurs at Estero de San Antonio (ARA et al. 2002).
Invertebrates						

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Adela oplerella</i>	Opler's longhorn moth	FSacSC	Confined to serpentine soil-based grassland.	No	No	Recorded occurrences are 18 sites extending from 5 miles southeast of Nicasio in Marin County to Gilroy area in Santa Clara County and Oakland on the inner Coast Ranges (USFWS).
<i>Caecidotaea tomalensis</i>	Tomales isopod	FSacSC; S2	Stagnant freshwater ponds	Yes	Unknown	
<i>Carterocephalus palaemon</i>	Sonoma arctic skipper	FSacSC	Adults use glades and openings in heavily forested woods, moist meadows, stream-sides. Host plants include purple needlegrass and iris.	No	No	Nearest recorded occurrence is Ft. Bragg (S. Allen, Seashore, 2001).
<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	FSacSC; S1	Inhabits clean, dry, light-colored sand in upper zone of beach dunes.	No	No	Could occur near Lawson's Landing, but not on the Giacomini property, (G. Fellers, USGS, 2005).
<i>Coelus globosus</i>	globose dune beetle	FSacSC; S1	Inhabits coastal sand dune habitats commonly burrowing below the sand surface and dune vegetation of the foredunes and sand hummocks.	No	No	Moderately common in suitable dune habitat such as near North Beach. Could occur at Lawsons Landing. Needs sand dunes, so is unlikely to occur on Project Area (G. Fellers, USGS, 2005).
<i>Danaus plexippus</i>	monarch butterfly	S3	Roosts in wind-protected tree groves with nectar and water sources nearby.	No	No	Common migrant through west Marin County area, with winter roost in Bolinas and Stinson Beach (NDDDB 2007).
<i>Haliotes chracheronii</i>	black abalone	FC; S3	Found in intertidal and shallow subtidal zones down to a depth of about 20 feet.	Yes	No	Range from Mendocino to southern California.

APPENDIX A-2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Haliotes sorenseni</i>	white abalone	FE	Found in the subtidal zone down to at least 200 feet in open, exposed areas in Southern California.	No	No	Not found in Marin County (S. Allen, Seashore, 2001).
<i>Helminthoglypta arrosa williamsi</i>	William's bronze shoulderband snail	FSacSC	Found under brush and weeds.		No	Only known from Hog Island on lower slopes of island (NDDDB 2007).
<i>Helminthoglypta nickliniana awania</i>	Nicklin's Peninsula Coast Range snail	FSacSC; S1			No	Only known population in the Point Reyes Lighthouse vicinity (NDDDB 2007).
<i>Hydrochara rickseckeri</i>	Ricksecker's water scavenger beetle	FSacSC, S1/S2	Ponds	Yes	No	Found in pond habitat in several northern California counties. Specimen from Bolinas collected in 1940 (NDDDB 2007).
<i>Icaricia icarioides</i> ssp. (=Plebejus icarioides parapheres)	Point Reyes blue butterfly	FSacSC, S1	Lupine is host plant for larvae.	No	No	Distribution and abundance unknown, but 1992 surveys located this butterfly at Tomales Point and North Beach dunes (D. Adams, Seashore, 2001).
<i>Incisalia mossii bayensis</i> (=Callophrys mossii bayensis)	San Bruno elfin butterfly	FE; S1	Coastal mountains with grassy cover; sedum hostplant.	No	No	One occurrence reported at Dillon Beach, date unknown. Also known from Alpine Lake (NDDDB 2007).
<i>Incisalia mossii marinensis</i> (=Callophrys mossii marinensis)	Marin elfin butterfly	FSacSC; S1	Douglas-fir forest; sedum is host plant for larvae.	No	No	May occur in Douglas fir forest on Inverness Ridge (ARA et al. 2002).
<i>Ischnura gemina</i>	San Francisco forktail damselfly	FSacSC; S2	Frequents wetlands with emergent vegetation and ponds or slow-moving creeks.	Yes	Yes	Nearest recorded occurrence to Giacomini Ranch is directly north of Tomasini Creek confluence with Tomales Bay at Railroad Point and terminus of Tomales Bay Trail (Hafernik and Mead 1992).

APPENDIX A -2. LIST OF SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE GIACOMINI WETLAND RESTORATION PROJECT AND VICINITY

Information on species occurrences compiled from U.S. Fish and Wildlife Service Endangered and Threatened Species List (May 2007; Bolinas, Double Point, San Geronimo, Point Reyes NE, Tomales, Drakes Bay and Inverness quadrangles; Marin County bird species list); California Natural Diversity Database (NDDDB 2007; Inverness, Tomales, and Point Reyes NE quadrangles), and Point Reyes National Seashore list of species protected under the Marine Mammal Protection Act (PORE). Status refers to listing either by federal government or state of California: Federal Species of Concern (FSC) listings have been eliminated, but regional USFWS office formerly established its own listing of Species of Concern, designated as FSacSC. Though this list is discontinued, the species from the former list are retained for consideration. Species presence in Project Area was determined from historical and recent sightings, as well as surveys conducted in 1993 and 2001-2002, and 2005 (PWA et al. 1993, ARA et al. 2002, Ketcham et al. 2005, NPS, unpub. data).

SCIENTIFIC NAME	COMMON NAME	Status	Habitat	Habitat Present ?	Species Present?	Comments
<i>Lichnanthe ursina</i>	bumblebee scarab beetle	FSACSC ; S2	Coastal sand dunes	No	No	Ranges from Sonoma to San Mateo Counties. Observed at MCI/RCA property in Park in summer 2000-2001. Total distribution and abundance within Park unknown (D. Adams, Seashore, 2001).
<i>Speyeria zerene myrtilae</i>	Myrtle's silverspot butterfly	FE; S1	Dunes, scrub, and grasslands immediately adjacent to the coast.	No	No	Occurs in the coastal dunes of the Point Reyes Peninsula and observed near Dillon's Beach in 2003-2004 (NDDDB 2007).
<i>Syncaris pacifica</i>	California freshwater shrimp	FE; SE	Lowland coastal perennial streams	Yes	Probably not present	Found primarily in Sonoma, Marin, and Napa counties. Observed in Walker, Keys, Lagunitas, and Olema Creeks. Location of most sightings on Lagunitas and Olema Creeks were upstream of Giacomini Ranch (Fong 2003), although reported as occurring in lower Lagunitas Creek adjacent to Ranch in 2000 (Pearson 2000). Surveys found no individuals in creek near Ranch (2002) or in Olema Marsh (2005), although were present upstream on Lagunitas and Olema Creeks (Fong 2003).

FEDERAL, STATE, AND CNPS STATUS CODES

FEDERAL LISTING

- FE = Listed as endangered under federal Endangered Species Act.
- FT = Listed as threatened under federal Endangered Species Act.
- FPE = Proposed for listing as endangered under the federal Endangered Species Act.
- FPT = Proposed for listing as threatened under the federal Endangered Species Act.
- FC = Proposed as candidate for listing under the federal Endangered Species Act.
- FD = Proposed for delisting under the federal Endangered Species Act. Undergoing 5-year monitoring program.
- FX = Critical Habitat designated for this species
- FSacSC = A Sacramento Fish and Wildlife Office Species of Concern (formerly a category 2 candidate for listing).
- MMPA = Protected under the Marine Mammal Protection Act

STATE LISTING

- SE = Listed as endangered under the California Endangered Species Act.
- ST = Listed as threatened under the California Endangered Species Act.
- SSC = Listed as a Species of Special Concern by the California Department of Fish and Game.

NATURAL DIVERSITY DATABASE LISTING

- S1 = Seriously endangered in California
- S2 = Endangered in California
- S3 = Restricted range or rare in California
- S4 = Statewide population apparently secure, some factors exist to cause some concern.

BIRD SPECIES OF SPECIAL CONCERN

- BSSC1 = First Priority
- BSSC2 = Second Priority
- BSSC3 = Third Priority

SPECIES WITH POTENTIAL TO BE AFFECTED CODES

- NLAA = Not Likely to be Adversely Affected
- NE = No Effect

References

- Adams, Dawn. 2001. Ecologist. Point Reyes National Seashore. Personal communication with Kristin Byrd, Point Reyes National Seashore. June.
- Allen, Sarah. 2001. Science Advisor. Point Reyes National Seashore. Personal communication with Kristin Byrd, Point Reyes National Seashore. June.
- Allen, Sarah. 2005. Science Advisor. Point Reyes National Seashore. Personal communication with Amelia Ryan, Point Reyes National Seashore. December.
- Avocet Research Associates 2002. Giacomini Marsh Restoration Site Special Status Animal Species: Reconnaissance & Compliance. Final Report to the National Park Service, Point Reyes National Seashore.
- California Department of Fish and Game. 2005. Natural Diversity Database (NDDB).
- California Department of Fish and Game. 2005. Habitat Conservation Planning Branch. California's plants and animal Species Account <http://www.dfg.ca.gov/hcpb/species>.
- Evens, Jules. 2005. Avocet Research Associates. Personal communication with Amelia Ryan, Point Reyes National Seashore. December.
- Fellers, Gary. 2001. Research Scientist, Point Reyes National Seashore. Personal communication with Kristin Byrd, Point Reyes National Seashore.
- Fellers, Gary. 2005. Research Scientist, Point Reyes National Seashore. Personal communication with Amelia Ryan, Point Reyes National Seashore. December.
- Fellers, Gary and Greg Guscio. 2002. Red-legged frog surveys at the Giacomini Wetlands, Point Reyes National Seashore. U.S. Geological Survey, Western Ecological Research Center, Point Reyes National Seashore. Prepared for the National Park Service, Point Reyes National Seashore.
- Fong, Darren. 2002. California freshwater shrimp (*Syncaris pacifica*) and tidewater goby (*Euicyclogobius newberryi*) surveys, Giacomini Ranch, Marin Co. Prepared for the Division of Resource Management, Point Reyes National Seashore, National Park Service.
- Hafernik, J.E. and D.L. Mead. 1992. Golden Gate National Recreation Area rare insect inventory project. Report prepared for the Golden Gate National Park Association and Division of Planning. Golden Gate National Recreation Area. San Francisco State University, Department of Biology.
- Kelly, J. 2001. Distribution and abundance of wintering shorebirds on Tomales Bay, California: implications for conservation. Western Birds 32:145-166.¹
- Ketcham, Brannon. 2001. Hydrologist, Point Reyes National Seashore. Personal communication with Kristin Byrd, Point Reyes National Seashore.
- Ketcham, Brannon. 2005. Hydrologist, Point Reyes National Seashore. Personal communication with Amelia Ryan, Point Reyes National Seashore. December.
- Ketcham, B. J., D. Fong, and Reichmuth M. 2005. Working Draft. Adult Escapement Monitoring Program Summary 2004-2005.. Point Reyes National Seashore, National Park Service.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley.²
- Pearson, Jennifer M. 2000. Fish and mysids in two creeks/estuary systems in Marin County, California. Master's Thesis, San Francisco State University, San Francisco, Calif.

Philip Williams and Associates, Ltd., Wetlands Research Associates, Strong Associates, and L.J. Butler. 1993. An evaluation of the feasibility of wetland restoration on the Giacomini Ranch, Marin County (Feasibility Study). Prepared for the National Park Service.

Reichmuth, Micheal. 2005. Fisheries Biologist, Point Reyes National Seashore. Fish Personal communication to Amelia Ryan, Point Reyes National Seashore. December.

Shuford, W.D. 1993. The Marin County Breeding Bird Atlas: a distributional and natural history of coastal California bird Bushtit Pres Bolinas.

Shuford, W.D., and Ryan, T.P. 2000. Nesting populations of California and Ring-billed gulls in California: Recent Surveys and historical status. *Western Birds* 31: 133-164.¹

Stenzel, L., S.C. Peaslee, and G. Page. 1981. The breeding status of the snowy plover in California. *Western Birds* 12:1-40.

Tomales Bay Association. 1995. Fish species of the Tomales Bay watershed. Tomales Bay Watershed. Fall 1995.

USFWS (U.Fish and Wildlife Service). Federal Register 50 CFR 17: November 22, 1994.

U.S. Fish and Wildlife Service. November 18, 2005. Official List of Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in Marin County and Inverness, Tomales, and Point Reyes NE quadrangles. Document Number: 051117042938. Sacramento, CA.

U.S. Fish and Wildlife Service. May 7, 2005. Official List of Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in Marin County and Inverness, Tomales, and Point Reyes NE quadrangles. Document Number: 070507061229. Sacramento, CA.

White, Sean. 2002. Fisheries biologist, William Carmen Wildlife Consulting, Mill Valley, Calif. Personal communication with Lorraine Parsons, Point Reyes National Seashore.

Footnotes

1. Kelly, J. 2001, and Shuford W.D. and Ryan, 2000, references are from within ARA et al. 2002. These works were not independently consulted.
2. McCaskie et al., 1979, reference are from within CDFG: California's plants and animal Species Account . This work was not independently consulted.