Draft Integrated Feasibility Report and Environmental Impact Statement/Environmental Impact Report

Appendix H

Contract No. W912P7-11-D-0004 Task Order No. 0013

# Special-status Species



**Prepared for:** U.S. Army Corps of Engineers, San Francisco District

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## H. Special-status Flora and Fauna with Potential to Occur in the Project Area

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	Federal/State				
Common Name	<sup>1</sup> / CNPS				
(Scientific Name)	Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
FISH	1		1	1	
Chinook salmon -	NMFS-	Spawns in fresh water; juveniles rear	Potential to occur.	Potential to occur.	Low potential to
Central Valley fall	SC/SSC	in fresh and estuarine water before	Suitable spawning	Suitable foraging	occur.
/ late fall-run ESU		migrating to the ocean. Require	habitat is not	habitat for the	
(Oncorhynchus		clean, cold water and gravel beds for	present, however	species may be	
tshawytscha)		spawning. Central Valley rivers and	foraging habitat for	present.	
		streams; critical habitat for winter-	the species may be	Adult chinook use	
		run Chinook designated in San Pablo	present within	open water areas	
		Bay (58 FR 33213). The chinook	aquatic habitats near	within the Bay	
		salmon is an anadromous fish,	Bair Island.	during migration.	
		spawning in freshwater rivers and	Adult chinook use		
		streams, but spends most of its	open water areas		
		adult life at sea. Almost all chinook	within the Bay during		
		salmon occurring in San Francisco	migration and may		
		Bay are from the Sacramento-San	occasionally be		
		Joaquin watershed. Chinook salmon	present in the slough		
		have not historically spawned in	channels at Bair		
		streams flowing into South San	Island Juveniles also		
		Francisco Bay. Since the mid-1980s,	may forage within		
		however, small numbers of fall-run	the tidal waters		
		chinook salmon have been found in	adjacent to Bair		
		several such streams, including	Island.		
		Coyote Creek, Los Gatos Creek, and			
		the Guadalupe River. These fish are			
		probably strays from Central Valley			

#### H.1 Table H-1. Special-status Aquatic Species with Potential to Occur in the Project Area-Dredge Sites and SF-DODS

<sup>&</sup>lt;sup>1</sup> Confirmed using the 2015 Threatened and endangered animal list, Threatened, Endangered and Rare Plant List, and Fully Protected Animal List. <u>http://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/</u>. Accessed 3/3/2015.

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Common Name	Federal/State <sup>1</sup> / CNPS				
(Scientific Name)	Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		runs. These fall-run chinook salmon			
		typically arrive in South San			
		Francisco Bay streams in October or			
		later. No spawning occurs in streams			
		adjacent to Bair Island. Juvenile fish			
		of all runs could forage in tidal			
		wetlands throughout San Francisco			
		Bay, including those around Bair			
		Island.			
Chinook salmon -	FT/ST	Spawns in fresh water; juveniles rear	Low potential to	Low potential to	Low potential to
Central Valley		in fresh and estuarine water before	occur. Adult and	occur. Adult and	occur.
spring-run ESU		migrating to the ocean. Require	juveniles chinook	juveniles chinook	
(Oncorhynchus		clean, cold water and gravel beds for	may use open water	may use open water	
tshawytscha)		spawning. Central Valley rivers and	areas during	areas during	
		streams; critical habitat for winter-	migration.	migration.	
		run Chinook designated in San Pablo			
		Bay (58 FR 33213). The chinook salmon is an anadromous fish,			
		spawning in freshwater rivers and			
		streams, but spends most of its			
		adult life at sea. Almost all chinook			
		salmon occurring in San Francisco			
		Bay are from the Sacramento-San			
		Joaquin watershed. Chinook salmon			
		have not historically spawned in			
		streams flowing into South San			
		Francisco Bay. Since the mid-1980s,			
		however, small numbers of fall-run			
		chinook salmon have been found in			

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		several such streams, including Coyote Creek, Los Gatos Creek, and the Guadalupe River. These fish are probably strays from Central Valley runs. These fall-run chinook salmon typically arrive in South San Francisco Bay streams in October or later. No spawning occurs in streams adjacent to Bair Island. Juvenile fish of all runs could forage in tidal wetlands throughout San Francisco Bay, including those around Bair Island.			
Chinook salmon - Sacramento River winter-run ESU (Oncorhynchus tshawytscha)	FE/SE	Spawns in fresh water; juveniles rear in fresh and estuarine water before migrating to the ocean. Require clean, cold water and gravel beds for spawning. Central Valley rivers and streams; critical habitat for winter- run Chinook designated in San Pablo Bay (58 FR 33213). The chinook salmon is an anadromous fish, spawning in freshwater rivers and streams, but spends most of its adult life at sea. Almost all chinook salmon occurring in San Francisco Bay are from the Sacramento-San Joaquin watershed. Chinook salmon have not historically spawned in	Low potential to occur. Adult and juveniles chinook may use open water areas during migration.	Low potential to occur. Adult and juveniles chinook may use open water areas during migration.	Low potential to occur.

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		streams flowing into South San Francisco Bay. Since the mid-1980s, however, small numbers of fall-run chinook salmon have been found in several such streams, including Coyote Creek, Los Gatos Creek, and the Guadalupe River. These fish are probably strays from Central Valley runs. These fall-run chinook salmon typically arrive in South San Francisco Bay streams in October or later. No spawning occurs in streams adjacent to Bair Island. Juvenile fish of all runs could forage in tidal wetlands throughout San Francisco Bay, including those around Bair Island.			
Coho salmon - central California coast ESU (Oncorhynchus kisutch)	FE/SE	Rears and forages for first half of life in streams and small freshwater tributaries. Spawns in small streams with stable gravel substrates. The remainder of the life cycle is spent foraging in estuarine and marine waters of the Pacific Ocean. Need cool, clear water with instream cover in streams. Spawn in tributaries to large rivers or streams directly connected to the ocean.	Not expected to occur. Spawns in streams directly connected to the ocean.	Not expected to occur. Spawns in streams directly connected to the ocean.	Low potential to occur.
Delta smelt	FT/SE	Inhabit slightly brackish and turbid	Not expected to	Not expected to	Not expected to

Common Name	Federal/State <sup>1</sup> / CNPS				
(Scientific Name)	Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
(Hypomesus		deltas, estuaries, backwater sloughs	occur. No suitable	occur. No suitable	occur. No suitable
transpacificus)		and marshes, or other edgewaters.	habitat within the	habitat within the	habitat within the
		School in open surface waters.	Project Area.	Project Area.	Project Area.
		Found primarily in the Delta below			
		Isleton on the Sacramento River and			
		below Mossdale on the San Joaquin			
		River, as well as in Suisun Bay			
		Designated critical habitat for the			
		Delta smelt includes the Delta west			
		to the Carquinez Bridge. Spawning			
		occurs primarily in sloughs and			
		shallow edge-waters of channels in			
		the upper Delta and in the			
		Sacramento River.			
North American	FT/NMFS-	An anadromous fish that spawns in	Low potential to	Low potential to	Low potential to
Green sturgeon,	SC/SSC	well-oxygenated, cool, riverine	occur. Not known to	occur. May use	occur.
Southern DPS		habitat; juveniles rear in estuarine	spawn in South Bay.	open water areas	
(Acipenser		waters. Spends majority of life in	Known to be present	during migration.	
medirostris)		nearshore oceanic waters, bay, and	in the South Bay and		
		estuaries. Spawns in Sacramento	expected to occur		
		River but not known to spawn in	only as a rare and		
		South Bay. Expected to occur only as	irregular visitor to		
		a rare and irregular visitor to	estuarine habitats in		
		estuarine habitats in the South Bay /	the South Bay.		
		Alviso Slough. Green sturgeon is			
		known to forage in estuaries and			
		bays, including San Francisco Bay.			
		Adult green sturgeon probably enter			
		the San Francisco Bay estuary and			

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Longfin smelt, Bay-Delta DPS	FC/ST/SSC	move up the Sacramento River in early spring. The San Joaquin- Sacramento Delta and San Francisco Bay including the South Bay is are critical habitat for the green sturgeon Southern DPS. Adult habitat includes bays, estuaries, and nearshore coastal	Potential to occur. Found south to	Potential to occur. Found south to	Low Potential to occur. Longfin
(Spirinchus thaleichthys)		areas. Longfin smelt migrate into low salinity or freshwater reaches of coastal rivers and tributary streams to spawn. Spawns in lower Sacramento-San Joaquin River and Suisun Bay; pre-spawning adults and juveniles inhabit shoal areas of San Pablo Bay. Spawns in tidally influenced freshwater wetlands and seasonally submerged uplands. Generally found in estuarine bays. Occurs in Alviso Slough. Spend the majority of their lives within the San Francisco Bay, moving upstream to spawn in low salinity waters in winter/spring.	Dumbarton Bridge	Dumbarton Bridge	smelt occasionally migrate between estuaries on the West Coast.
River lamprey ( <i>Lampreta ayresii</i> )	-/SSC	Lower Sacramento and San Joaquin Rivers, Napa River, Sonoma Creek, Alameda Creek, Salmon Creek, Russian River tributaries, and tributaries to San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name	Federal/State <sup>1</sup> / CNPS				650000
(Scientific Name)	Status	Geographic Distribution/Habitats Spawn in fresh water habitats in gravelly riffles; ammocoetes (juveniles) rear in fresh water for 3– 5 years before migrating to the ocean (Sears Point 2009)	RWC Channel	SBS Channel	SFDODS
Sacramento splittail (Pogonichthys macrolepidotus)	-/-/SSC	The species is tolerant of brackish water and can be found in Suisun Bay, San Pablo Bay, the Napa River, and the Carquinez Strait following high fresh water outflows from the Delta Region. At present, its range includes the main channel of the Sacramento River, the lower part of the Delta, the Napa and Petaluma Rivers, and sloughs adjoining Suisun Bay and San Pablo Bay. Spawn over submerged vegetation in flooded areas, typically where the water depth is at least 3 feet. Spawning habitat includes disjunct segments of floodplain adjacent to the Sacramento and San Joaquin rivers and tributaries.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Steelhead - central California coast DPS (Oncorhynchus mykiss irideus)	FT/-	Spawns in fresh water; juveniles rear in fresh and estuarine water before migrating to the ocean. Cool streams with suitable spawning habitat and conditions allowing migration, as well as marine	Potential to occur. Steelhead use estuarine habitats as rearing habitat for juveniles, and move through the South	Potential to occur. Steelhead use estuarine habitats as rearing habitat for juveniles, and move through the	Potential to occur.

Common Name	Federal/State <sup>1</sup> / CNPS				
(Scientific Name)	Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		habitats. Steelhead use estuarine	Bay on their	South Bay on their	
		habitats as rearing habitat for	migrations to and	migrations to and	
		juveniles, and move through the San	from upstream	from upstream	
		Francisco Bay on their migrations to	spawning areas.	spawning areas.	
		and from upstream spawning areas.	Suitable spawning		
		Steelhead usually migrate upstream	habitat not present		
		to spawning areas in late fall or early	within streams near		
		winter. Spawning occurs between	the Project Area,		
		December and March in streams in	however adult		
		the San Francisco Bay Area. Critical	steelhead may utilize		
		habitat is Coastal streams in	the slough channels		
		California; critical habitat in San	along Bair Island for		
		Pablo Bay (70 FR 52571). The	foraging during		
		Central California Coast ESU	migration.		
		occupies includes all naturally			
		spawned anadromous steelhead			
		populations below natural and			
		manmade impassable barriers in			
		California streams from the Russian			
		River, Sonoma County, CA,			
		(inclusive) to Aptos Creek, Santa			
		Cruz County, CA, (inclusive), and the			
		drainages of San Francisco and San			
		Pablo Bays eastward to the Napa			
		River (inclusive), Napa County, CA.			
		Occurs in Alviso Slough.			
Steelhead -	FT/-	Spawns in fresh water; juveniles rear	Potential to occur.	Potential to occur.	Potential to occur.
Central Valley DPS		in fresh and estuarine water before	Steelhead use	Steelhead use	
(Oncorhynchus		migrating to the ocean. Cool	estuarine habitats as	estuarine habitats	

Common Name	Federal/State <sup>1</sup> / CNPS				
(Scientific Name)	Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
mykiss irideus)		streams with suitable spawning	rearing habitat for	as rearing habitat	
		habitat and conditions allowing	juveniles, and move	for juveniles, and	
		migration, as well as marine	through the South	move through the	
		habitats. Steelhead use estuarine	Bay on their	South Bay on their	
		habitats as rearing habitat for	migrations to and	migrations to and	
		juveniles, and move through the San	from upstream	from upstream	
		Francisco Bay on their migrations to	spawning areas.	spawning areas.	
		and from upstream spawning areas.			
		Steelhead usually migrate upstream			
		to spawning areas. Critical habitat is			
		Coastal streams in California; critical			
		habitat in San Pablo Bay (70 FR 52571).			
INVERTEBRATES		52571).			
				No	
Black abalone	FE/-	During low tides, these marine	Not expected to	Not expected to	Not expected to
(Haliotes		gastropods can typically be found	occur. No suitable	occur. No suitable	occur. No suitable
cracherodii)		wedged into crevices, cracks, and holes of intertidal and shallow	habitat within the	habitat within the	habitat within the
			Project Area.	Project Area.	Project Area.
		subtidal rocks, where they are fairly concealed. They generally occur in			
		areas of moderate to high surf.			
		However, when immersed or during			
		night time, they have been observed			
		using their muscular feet to move			
		freely over rock surfaces. Black			
		abalone can withstand extreme			
		variation in temperature, salinity,			
		moisture, and wave action.			
Mammals			1		<u> </u>

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Blue whale (Balaenoptera musculus)	FE/-	Inhabits and feeds in both coastal and pelagic environments. Blue whales are frequently found on the continental shelf (e.g., in areas off the California coast) and also far offshore in deep water (e.g., in the northeastern tropical Pacific)	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Suitable habitat within the Project Area.
Finback (=fin) whale (Balaenoptera physalus)	FE/-	Fin whales are found in deep, offshore waters of all major oceans, primarily in temperate to polar latitudes, and less commonly in the tropics. They occur year-round in a wide range of latitudes and longitudes, but the density of individuals in any one area changes seasonally.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Suitable habitat within the Project Area.
North Pacific right whale (Eubalaena japonica)	FE/SFP	Most known right whale nursery areas are in shallow, coastal waters. Right whales have occurred historically in all the world's oceans from temperate to subpolar atitudes. They primarily occur in coastal or shelf waters, although movements over deep waters are known. Right whales migrate to higher latitudes during spring and summer.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Suitable habitat within the Project Area.
Sei whale <i>(Balaenoptera</i>	FE/-	Sei whales prefer subtropical to subpolar waters on the continental	Not expected to occur. No suitable	Not expected to occur. No suitable	Potential to occur. Suitable habitat

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
borealis)		shelf edge and slope worldwide. They are usually observed in deeper waters of oceanic areas far from the coastline.	habitat within the Project Area.	habitat within the Project Area.	within the Project Area.
Sperm whale (Physeter catodon (=macrocephalus) )	FE/-	Sperm whales are found in the Atlantic, Pacific, Indian, and Arctic Oceans: sperm whales roam the deep waters of all the oceans, though they seldom approach polar ice fields and are most common in temperate and tropical latitudes. They have also been seen occasionally near coastlines in the Gulf of Mexico, where they were once quite common. Sperm whales swim through deep waters to depths of 3,219external link m, apparently limited in depth only by the time it takes to swim down and back to the surface. Their distributions depend upon season and sexual/social status, however they are most likely to be found in waters inhabited by squid—at least 1,000 external link m deep and with cold-water upwellings. (MarineBio 2015)	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur Suitable habitat within the Project Area.
REPTILES		·	•		· ·
Leatherback sea	FE/-	Leatherbacks are pelagic (open	Low potential to	Low potential to	Potential to occur

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Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
turtle (Dermochelys coriacea)		ocean) animals but also forage in coastal waters. Leatherbacks are the most migratory and wide ranging of sea turtle species. They can tolerate very cold water temperatures. Leatherbacks mate in the waters adjacent to nesting beaches and along migratory corridors. After nesting, female leatherbacks migrate from tropical waters to more temperate latitudes. NMFS designated additional critical habitat to provide protection for endangered leatherback sea turtles along the U.S. West Coast (77 FR 4170).	occur.	occur.	Suitable habitat within the Project Area.
Loggerhead sea turtle-North Pacific DPS (Caretta caretta)	FE/-	Loggerheads occupy three different ecosystems during their lives: beaches (terrestrial zone), water (oceanic zone), and nearshore coastal areas. Loggerheads nest on ocean beaches and immediately after hatchlings emerge from the nest, they begin to move from their nest to the ocean. Migrations of adult loggerheads along the mid- and southeast U.S. coasts have also been documented. Juvenile loggerheads occur off the California	Low potential to occur.	Low potential to occur.	Potential to occur. Suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>1</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		coast.			
Olive (=Pacific) ridley sea turtle (Lepidochelys olivacea)	FT/-	The olive ridley is mainly a "pelagic" sea turtle, but has been known to inhabit coastal areas, including bays and estuaries. They occur from Southern California to northern Chile. Olive ridleys mostly breed annually and have an annual migration from pelagic foraging, to coastal breeding and nesting grounds, back to pelagic foraging. Trans-Pacific ships have observed olive ridleys over 2,400 from shore. Olive ridleys dive to depths of about 500 feet (150 m) to forage on "benthic" invertebrates.	Low potential to occur.	Low potential to occur.	Low potential to occur.
Federal Listing Code	es		California State Listing	Codes	
FE - Federally listed			SE - State listed as Endangered		
FT - Federally listed	as Threatened		ST - State listed as Thre	eatened	
FPT - Federally prop	osed for listing	as Threatened	SCT - State candidate for listing as Threatened		
FDL-Federally Deliste	ed		SDL-State Delisted		
	•	ner Category 1 candidates)	SSC - California Species	s of Special Concern	
•		FS regulated species only)	SFP- Fully Protected		
BCC-USFWS Bird of		oncern	FDL-Federally delisted		
ESU-Ecologically significant unit			WL - Watch List		
DPS-Distinct Populat	tion Segment		SR-State Rare (no Fede	eral rare classification)	

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H.2	Table H-2. Special-status Aquatic Species with Potential to Occur at Placement Sites in the Project Area – Eden, Alviso,
	Cullinan, Montezuma

Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
FISH	•	1	1		1
Chino ok salmon - Central Valley fall / late fall- run ESU (Oncorhynchu s tshawytscha)	NMFS- SC/SSC	Potential to occur. Chinook salmon occur in Coyote Creek. Known to be present in several South Bay area creeks (including Coyote Creek and Alameda Creek) and associated marshes and small channels in the study area, especially as habitat for smolts as they transition to life in a marine environment. Suitable spawning habitat is not present in the Project Area, but individual strays from the Sacramento and San Joaquin River systems have been observed	Potential to occur. Suitable foraging habitat for the species may be present. Adult chinook use open water areas within the Bay during migration. Known to be present in several South Bay area creeks (including Alameda Creek) and associated marshes and small channels in the study area, especially as habitat for smolts as they transition to life in a marine environment.	Potential to occur. Suitable foraging habitat for the species may be present. Adult and juveniles chinook use open water areas during migration. Juveniles migrating to the ocean may occur in Dutchman's Slough.	Potential to occur. Suitable foraging habitat for the species may be present. Adult and juveniles chinook use open water areas during migration.
		spawning in Coyote Creek and presumably move			

<sup>&</sup>lt;sup>2</sup> Confirmed using the 2015 Threatened and endangered animal list, Threatened, Endangered and Rare Plant List, and Fully Protected Animal List. <u>http://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/</u>. Accessed 3/3/2015.

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Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
		through the area in search of suitable spawning habitat in Coyote Creek. However, Coyote Creek provides limited, low-quality spawning habitat and does not support a population of fall- and late-fall-run Chinook salmon. Nonetheless, during certain times of the year, Coyote Creek, and Alviso Slough may contain migrating or rearing Chinook salmon.			
Chino ok salmon - Central Valley spring-run ESU (Oncorhynchu s tshawytscha)	FT/ST	Low potential to occur. Adult and juveniles chinook may use open water areas during migration.	Low potential to occur. Adult and juveniles chinook may use open water areas during migration.	Potential to occur. Suitable foraging habitat for the species may be present. Adult and juveniles chinook use open water areas during migration.	Potential to occur. Suitable foraging habitat for the species may be present. Adult and juveniles chinook use open water areas during migration.
Chino ok salmon - Sacramento River winter-	FE/SE	Low potential to occur. Adult and juveniles chinook may use open water areas during	Low potential to occur. Adult and juveniles chinook may use open water areas during	Potential to occur. Juveniles migrating to the ocean may occur in Dutchman's Slough. San	Potential to occur. Suitable foraging habitat for the species may be present. Adult and

Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
run ESU (Oncorhynchu s tshawytscha)		migration.	migration.	Pablo Bay is within the critical habitat for Chinook salmon.	juveniles chinook use open water areas during migration.
Coho salmon - central California coast ESU (Oncorhynchu s kisutch)	FE/SE	Not expected to occur. Spawns in streams directly connected to the ocean.	Not expected to occur. Spawns in streams directly connected to the ocean.	Not expected to occur. Spawns in streams directly connected to the ocean.	Not expected to occur. Spawns in streams directly connected to the ocean.
Delta smelt (Hypomesus transpacificus )	FT/SE	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Low potential to occur. From January to July they move into freshwater for spawning and, during high flows, they can be washed downstream into San Pablo Bay.	Potential to occur. Suitable habitat is present.
North American Green sturgeon, Southern DPS (Acipenser medirostris)	FT/NMFS- SC/SSC	Low potential to occur- Present in the South Bay; unlikely to be inside ponds. Green sturgeon has been caught infrequently by anglers in the South Bay. Although one acoustically tagged green sturgeon was identified by a receiver	Low potential to occur. Not known to spawn in South Bay. Known to be present in the South Bay and expected to occur only as a rare and irregular visitor to estuarine habitats in the South Bay.	Potential to occur. Adults migrate through San Pablo Bay on their way to spawning grounds in the Sacramento River juveniles and sub-adults rear in San Pablo Bay.	Potential to occur. Adults migrate through San Pablo Bay on their way to spawning grounds in the Sacramento River.

Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
Namej	Status	located on the		cullinari i roject	Montezana omoduci
		Dumbarton Railroad			
		Bridge during 2012, it is			
		likely that green sturgeon			
		are present infrequently,			
		and in low numbers, in			
		Alviso Sloughs and in the			
		portions of the open bay			
		adjacent to Pond A9.			
Longfi	FC/ST/SSC	Potential to occur- Occurs	Potential to occur- Occurs	Potential to occur.	Potential to occur.
n smelt (Spirinchus		year round in the SF Bay and known to occur in the	year round in the SF Bay and known to occur in the	Suitable foraging habitat for the species is present;	Suitable foraging habitat for the species is present;
thaleichthys)		South Bay. Longfin smelt	South Bay.	spawns in upper end of	spawns in upper end of
thuleichthysj		have been caught in	South Bay.	Suisun Bay and the Delta.	Suisun Bay and the Delta.
		Coyote Creek and Alviso		Suistin bay and the Delta.	Suisun bay and the Delta.
		Slough. Seasonally			
		documented (winter			
		assemblage) in the tidal			
		sloughs of the Alviso pond			
		complex.			
River	-/SSC	Not expected to occur. No	Not expected to occur. No	Potential to occur. May	Potential to occur. May
lamprey		suitable habitat within the	suitable habitat within the	occur in San Pablo Bay	occur in San Pablo Bay
(Lampreta		Project Area.	Project Area.	during migration.	during migration.
ayresii)					
Sacra	-/-/SSC	Not expected to occur. No	Not expected to occur. No	Low Potential to occur.	Potential to occur.
mento		suitable habitat within the	suitable habitat within the	Suitable habitat present	
splittail		Project Area.	Project Area.	and although not known	
(Pogonichthys				to occur at Cullinan.	

Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
macrolepidot					
us)					
Steelh	FT/-	Potential to occur-	Potential to	Potential to	Potential to
ead - central		Known to be present in	occur-	occur. Juveniles migrating	occur. Adults migrating to
California		several South Bay creeks	Known to be present in	to the ocean may occur in	the spawning habitat and
coast DPS		(including Coyote,	several South Bay creeks	Dutchman's Slough.	juveniles migrating to the
(Oncorhynchu		Alameda Creeks, and the	(including Coyote and		ocean.
s mykiss		Guadalupe River) and	Alameda Creeks and the		
irideus)		associated slough	Guadalupe River) and		
		channels within the	associated slough		
		project area. Suitable	channels within the		
		spawning habitat is not	project area. Suitable		
		present in the project	spawning habitat is not		
		area, but this species	present in the project		
		moves through the area	area, but this species		
		to spawn upstream.	moves through the area		
		Steelhead use estuarine	to spawn upstream.		
		habitats as rearing habitat	Steelhead use estuarine		
		for juveniles, and move	habitats as rearing habitat		
		through the project area	for juveniles, and move		
		Steelhead are present in	through the project area		
		Alviso Slough during	on their migrations to and		
		upstream migration of	from upstream spawning		
		adults to spawning areas	areas.		
		in the Guadalupe River			
		watershed and			
		downstream migration of			
		both adults and smolts			

Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
		heading toward the ocean. The Guadalupe River and Coyote Creek are both designated critical habitat for this Steelhead DPS.			
Steelh ead - Central Valley DPS (Oncorhynchu s mykiss irideus)	FT/-	Potential to occur. Steelhead use estuarine habitats as rearing habitat for juveniles, and move through the South Bay on their migrations to and from upstream spawning areas	Potential to occur. Steelhead use estuarine habitats as rearing habitat for juveniles, and move through the South Bay on their migrations to and from upstream spawning areas	Potential to occur. Juveniles migrating to the ocean may occur in Dutchman's Slough.	Potential to occur. Adults migrating to the spawning habitat and juveniles migrating to the ocean.
Tidew ater goby (Eucyglobius newberryi)	FE/-/SSC	Not expected to occur. No suitable habitat within the Project Area. Species is believed to have been extirpated from San Francisco Bay due to habitat loss.	Not expected to occur. No suitable habitat within the Project Area. Species is believed to have been extirpated from San Francisco Bay due to habitat loss.	Not expected to occur. No suitable habitat within the Project Area. Species is believed to have been extirpated from San Francisco Bay due to habitat loss.	Not expected to occur. No suitable habitat within the Project Area. Species is believed to have been extirpated from San Francisco Bay due to habitat loss.
INVERT	EBRATES				
Black abalone (Haliotes cracherodii)	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Mamm	als				

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Common Name (Scientific Name)	Federal/St ate <sup>2</sup> / CNPS Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
Blue whale (Balaenoptera musculus)	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Finba ck (=fin) whale (Balaenoptera physalus)	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
North Pacific right whale (Eubalaena japonica)	FE/SFP	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Sei whale (Balaenoptera borealis)	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Sper m whale (Physeter catodon (=macrocepha lus)	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
REPTIL	ES	·			
Leath erback sea turtle	FE/-	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name	Federal/St ate <sup>2</sup> /							
(Scientific	CNPS							
Name)	Status	Alviso A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader			
(Dermochelys								
coriacea)								
Logge	FE/-	Not expected to occur. No	Not expected to occur. No	Not expected to occur. No	Not expected to occur. No			
rhead sea		suitable habitat within the	suitable habitat within the	suitable habitat within the	suitable habitat within the			
turtle-North		Project Area.	Project Area.	Project Area.	Project Area.			
Pacific DPS								
(Caretta								
caretta)								
Olive	FT/-	Not expected to occur. No	Not expected to	Not expected to	Not expected to			
(=Pacific)		suitable habitat within the	occur. No suitable habitat	occur. No suitable habitat	occur. No suitable habitat			
ridley sea		Project Area.	within the Project Area.	within the Project Area.	within the Project Area.			
turtle								
(Lepidochelys								
olivacea)								
	Listing Codes		California State Listing Codes					
	lerally listed a	0	SE - State listed as Endangered					
	lerally listed a		ST - State listed as Threatened					
	ederally propo	sed for listing as		te for listing as Threatened				
Threatened			SDL-State Delisted					
	derally Deliste			cies of Special Concern				
	deral candidat	e species (former Category	SFP- Fully Protected					
1 candidates)			FDL-Federally delisted					
	SC – Species of	f Concern (NMFS regulated	WL - Watch List					
species only)			SR-State Rare (no Federal rare classification)					
		onservation Concern						
	ologically sign							
DPS-Dis	stinct Populati	on Segment						

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Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
BIRDS					
Alameda song sparrow (Melospiza melodia pusillula)	-/-/BCC/SSC	Breeds and forages in tidal salt marshes of San Francisco Bay. Typically nests low in gumplant ( <i>Grindelia</i> ) shrubs and in pickleweed ( <i>Salicornia</i> ). Endemic to California, where it is restricted to tidal salt marshes along the edges of San Francisco Bay. The species is a year- round resident (nonmigratory), and breeds from late February to mid- August. Alameda song sparrows prefer upland marsh vegetation, along tidal marsh edges. It is most abundant in the taller vegetation found along tidal sloughs.	Not expected to occur. No suitable habitat within the project site but suitable habitat is likely adjacent to the project site. Suitable breeding habitat for this species is present at Bair Island and adjacent tidal marshes.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
American peregrine falcon (Falco peregrinus anatum)	-/SFP (nesting)	Year-round resident widely distributed around the Bay. Nests on bridges, towers, and buildings, often at bay edge. Forages in many habitats. Regular forager (on other birds) in the region, primarily during migration and winter. Species has been confirmed nesting in the plan area as recently as 2007 in the south	Potential to occur: Regular foragers but no suitable breeding habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

### H.3 Table H-3. Special-status Terrestrial Species with Potential to Occur at Dredge Sites in the Project Area and SF-DODS

<sup>&</sup>lt;sup>3</sup> Confirmed using the 2015 Threatened and endangered animal list, Threatened, Endangered and Rare Plant List, and Fully Protected Animal List. <u>http://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/</u>. Accessed 3/3/2015.

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Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		BAy near the Project Area.			
American white pelican (Pelecanus erythrorhynchos)	-/-/SSC (nesting) )	Special status only at nesting sites. Use exposed mudflats as roosting or loafing areas when they are available. When the tides rise, most of these birds will return to roosting areas in salt ponds or other alternate habitats. Also forages in freshwater lakes and rivers. Nests at freshwater lakes in northeast California, usually on small islands or remote dikes. Species nests colonially, and will commute long distances between foraging and nesting areas (50-184 miles). Breeding occurs April to September.	Potential to occur: Regular foragers but unlikely to breed. Species forages within salt ponds and tidal marsh habitats in San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Ashy storm-petrel (Oceanodroma homochroa)	-/-/SSC (nesting)	Ashy storm-petrels feed near their nesting islands in the offshore waters of the California Current. Nests in islands off the California coast. Forages in ocean. Fifty percent of the world's population of ashy storm- petrels breed on San Miguel, Santa Barbara, Santa Cruz and Anacapa islands.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Bald eagle	/SE/SFP <sup>4</sup>	Occurs mainly along seacoasts,	Low Potential to	Not expected to	Not expected to
(Haliaeetus	(nesting and	rivers and lakes; nests in tall trees	occur. Suitable	occur. No suitable	occur. No
leucocephalus)	wintering)	or on cliffs. Feeds mostly on fish.	habitat not present.	habitat within the	suitable habitat
		Breeds usually by lakes, large rivers	There are no known	Project Area.	within the Project
		and on coasts. Nest is a large	nesting or roosting		Area.
		conspicuous structure with a wide	sites for bald eagle		
		view, in a large tree, rocky outcrop,	within or adjacent		
		or on the ground on islands. Swoops	to the Project Area.		
		from hunting perches to catch fish	May occur as a		
		from the water. Roosts communally	flyover due to large		
		in winter in dense conifer stands.	habitat range.		
		Breeding begins in May.			
Bank swallow	-/ST (nesting)	Nests on vertical banks or cliffs with	Low Potential to	Not expected to	Not expected to
(Riparia riparia)		fine-textured soils, near water. Nests	occur: uncommon	occur. No suitable	occur. No
		in colonies in vertical banks along	to rare foragers but	habitat within the	suitable habitat
		creeks, rivers and sea cliffs with	unlikely to breed.	Project Area.	within the Project
		friable soils. Breeds from April to	Suitable nesting		Area.
		August. Most of California's nesting	habitat not present.		
		colonies occur along the upper			
		Sacramento River. Breeding begins in			
		April.			
Barrow's	-/-/SSC	Nests in freshwater marshes by lakes	Low potential to	Not expected to	Not expected to
goldeneye	(nesting)	and rivers, winters in coastal marine	occur: Uncommon	occur. No suitable	occur. No
(Bucephala		habitats. This species is an	winter visitor; does	habitat within the	suitable habitat
islandica)		uncommon visitor to San Francisco	not breed in the in	Project Area.	within the Project
		Bay. Breeding begins mid-May.	or adjacent to		Area.
			Project Area.		

<sup>&</sup>lt;sup>4</sup> Although this species is federally delisted it is still protected by the Bald and Golden Eagle Act, Migratory Bird Treaty Act, and the Lacey Act (USFWS. 2013. Bald Eagle. July 2. <u>http://www.fws.gov/midwest/eagle/</u>. Accessed March 2, 2015. The Bald Eagle continues to be listed as endangered in California (CDFW. Bald Eagles in California. <u>https://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/bald\_eagle/</u>. Accessed March 2, 2015.

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Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Belding's savannah sparrow (Passerculus sandwichensis beldingi)	-/SE/-	Sparrow is a salt marsh endemic, ranging historically from Goleta in Santa Barbara County, California on the north, south to el Rosario, Baja California, Mexico. Nests in salt marsh. Forages in low, tidally influenced habitats, adjacent ruderal areas, and moist grasslands.	Not expected to occur. No suitable habitat in the RCH Channel or adjacent habitat.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Black skimmer (Rynchops niger)	-/-/BCC/SSC (nesting)	Nests on abandoned levees and islands in salt ponds and marshes of San Francisco Bay. Breeding for this species in San Francisco Bay has been documented only from 1994. Breeding begins early-May. Black skimmers forage mainly in tidal waters of bays, estuaries and lagoons but also utilize rivers, and salt marsh pools, creeks, and ditches. Forage while gliding along the surface of the water. This species primarily breeds in southern California, but has become more common in northern California including San Francisco Bay.	Potential to Occur. Suitable foraging habitat in San Francisco Bay. Suitable nesting habitat may be present in habitat adjacent to the Project Area.	Potential to Occur. Suitable foraging habitat in San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.
Brant (Branta bernicla)	-/-/SCC-	A common winter resident along the coast of California. Species forages within coastal waters during migratory movements along coast. Grazes on eelgrass and other aquatic	Low potential to occur. Marginally suitable habitat in San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
(Sciencijic Name)	/ CNPS Status	plants. Does not breed in California.	KWC Channel	SBS Channel	SFDODS
Bryant's savannah	-/-/-/SSC	A subspecies of savannah sparrow			Not expected to
•	-/-/-/350				occur. No
sparrow		(Passerculus sandwichensis), Bryant's			suitable habitat
(Passerculus sandwichensis		savannah sparrow is endemic to			
		California. Occurs only in the narrow			within the Project
alaudinus)		coastal strip from Humboldt Bay in			Area.
		the north to the Morro Bay area in			
		the south with its center of			
		abundance in the San Francisco Bay			
		area. Is a year-round resident of			
		California's coastal prairies and			
		marshes. Savannah sparrows avoid			
		areas with unusually tall grasses.			
		Birds nest on the ground in open-cup			
		nests that are near grass bunches or			
		under matted plants. The nests are			
		hidden under the grass canopy.			
Burrowing owl	-/-/BCC/SSC	Forages and nests in grasslands and	Not expected to	Not expected to	Not expected to
(Athene	(burrowing	open scrub with small mammal	occur. No suitable	occur. No suitable	occur. No
cunicularia)	and some	burrows. Flat grasslands and ruderal	habitat within the	habitat within the	suitable habitat
	wintering	habitats. Wintering observations	Project Area.	Project Area.	within the Project
	site)	with/without a burrow in San			Area.
		Francisco, Ventura, Sonoma, Marin,			
		Napa and Santa Cruz counties.			
		Breeding begins in March. For			
		Western burrowing owl (Athene			
		cunicularia hypugaea)-Burrowing			
		owls occur in lowlands and at the			
		edge of tidal wetlands, especially in			
		the non-breeding season. This			

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		species is largely extirpated from			
		former breeding sites around the			
		Bay. Nearly all of the remaining			
		nesting burrowing owls in the Bay			
		area are between Palo Alto and the			
		Fremont-Newark area of the South			
		Bay. The only sites that support			
		viable breeding populations are the			
		NASA Ames Research Center and the			
		San Jose Airport.			
California black rail	-/ST/BCC/SFP	A year-round resident of California's	Not expected to	Not expected to	Not expected to
(Laterallus		coastal prairies and marshes. Salt	occur in or adjacent	occur. No suitable	occur. No
jamaicensis		marshes bordering larger bays;	to RCH channel.	habitat within the	suitable habitat
coturniculus)		pickleweed typically present. Tidal		Project Area.	within the Project
		salt marshes associated with heavy			Area.
		growth of pickleweed; also occurs in			
		brackish marshes or freshwater			
		marshes at low elevations. Breeds in			
		fresh, brackish, and tidal salt marsh			
		.The species does not appear to			
		migrate. Lack of suitable habitat (high			
		marsh) may limit nesting in the south			
		bay however tidal marsh restoration			
		projects may be increasing habitat for			
		this species. Resident population is			
		confined almost entirely to San Pablo			
		and Suisun Bays and restricted to the			
		tidal and brackish marsh vegetation.			
California brown	-/SFP	Occurs in nearshore marine habitats	Potential to occur	Not expected to	Not expected to
pelican (Pelecanus		and coastal bays. Nests on islands in	both in the Project	occur. No suitable	occur. No

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	<b>RWC Channel</b>	SBS Channel	SFDODS
occidentalis		Mexico and southern California.	Area and adjacent	habitat within the	suitable habitat
californicus)		Roosts on levees in the interiors of	habitat. No nesting	Project Area.	within the Project
		pond complexes, forages in salt	areas within the		Area.
		ponds and Bay. Visitor to San	Project Area but		
		Francisco Bay in non-breeding	species forages in		
		season, from May through	San Francisco Bay		
		November; forages in shallow	and may roost on		
		nearshore waters.	Bair Island.		
California gull	-/-/-/	California gulls nest on freshwater	Potential to Occur.	Not expected to	Not expected to
(Larus californicus)	WL	lakes, inland areas, and in salt ponds	Common resident.	occur. No suitable	occur. No
		in San Francisco Bay. Forages at	Breeds and forages	habitat within the	suitable habitat
		landfills and within tidal marshes	throughout the	Project Area.	within the Project
		throughout the San Francisco Bay.	South Bay area.		Area.
		Year round resident of California.	Forages throughout		
		Breeding begins early May.	study area. (		
California least tern	FE/SE/SFP	Nests along the coast on bare or	Low potential to	Not expected to	Not expected to
(Sternula		sparsely vegetated flat substrates	occur within the	occur. No suitable	occur. No
antillarum browni)		The South Bay is an important post-	Project Area	habitat within the	suitable habitat
		breeding staging area for Least Terns,	although	Project Area.	within the Project
		although this species does not	marginally suitable		Area.
		currently breed within the Project	habitat may be		
		Area at Alviso but least terns could	present in adjacent		
		occasional forage in nearby t ponds.	areas. Species has		
		The species nests in California, and	been historically		
		migrates to California in April and	recorded nesting at		
		remains through August; wintering	Bair Island but not		
		takes place south of the United	since the early		
		States. They nest in colonies on bare	1980"s. Potential		
		or sparsely vegetated sandy beaches,	nesting habitat is		
		alkali flats and landfills. Presently,	present within Bair		

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status		RWC Channel	SBS Channel	SFDODS
		most nesting occurs on beaches or in	Island and adjacent		
		coastal wetlands near estuaries, bays,	upland areas near		
		harbors or the ocean and feeds on	San Francisco Bay.		
		small fish. Active nesting sites near			
		the Project Area are located at			
		Montezuma Slough, Napa Plant Site			
		and Montezuma Slough wetlands.			
		They have also nested historically at			
		Bair Island.			
Cassin's auklet	-/-/BCC/SSC	San Miguel Island and its islets,	Not expected to	Not expected to	Potential to
(Ptychoramphus		particularly Prince Island and Castle	occur. No suitable	occur. No suitable	forage in the
aleuticus)		Rock, provide the most important	habitat within the	habitat within the	area.
		nesting sites for the Cassin's auklet in	Project Area.	Project Area.	
		the Southern California bight. It also			
		breeds colonially on the other islands			
		of the Channel Islands National Park,			
		except Santa Rosa Island. During the			
		non-breeding seasons, Cassin's			
		auklets will spend most of their time			
		at sea.			
Cooper's hawk	-/-/WL	Inhabits primarily open, interrupted	Low potential to	Not expected to	Not expected to
(Accipiter cooperii)	(nesting)	or marginal woodlands. Nests mainly	occur. No suitable	occur. No suitable	occur. No
		in riparian groves of deciduous trees	habitat within the	habitat within the	suitable habitat
		in canyon bottoms on river flood-	Project Area	Project Area.	within the Project
		plains. Also nests in coast live oak.	although may		Area.
		Forages in many habitats in winter	forage in adjacent		
		and migration. Breeding begins in	areas.		
		April.			
Eleant tern	WL	Coastal waters, occasionally ocean			Not expected to

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status		RWC Channel	SBS Channel	SFDODS
(Thalasseus elegans)		far from land. Breeds on low, flat, sandy islands. (Cornell Lab of Ornithology 2015)			occur. No suitable habitat within the Project Area.
Ferruginous hawk <i>(Buteo regalis)</i>	WL	Does not nest in California; winter visitor along the coast from Sonoma County to San Diego County. Open terrain in plains and foothills where ground squirrels and other prey are available.	Not expected to occur. No suitable habitat within the Project Area. Species is rarely detected in San Mateo County.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Forster's tern (Sterna forsteri)	WL (nesting)	Foster's terns nest on inland lakes of California and marshes of San Francisco Bay. The species forages within San Francisco by diving for small fish. Year round resident of California. Breeding begins mid-May.	Potential to occur. Suitable foraging habitat is present within the Project Area. No suitable habitat for nesting but may nest in adjacent area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Golden eagle (Aquila chrysaetos)	-/-/SFP/WL (nesting and wintering)	Nest on cliffs or in large trees or electrical towers, forages in open areas. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals.	Not expected to occur. No suitable habitat within the Project Area. May occasionally forage in habitat along adjacent channels, primarily during the nonbreeding season.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Least bittern (Ixobrychus exilis)	-/-/BCC/SCC (nesting)	Forages and breeds in freshwater or brackish marshes with tall emergent vegetation. Ground nester in dense stands of vegetation. Very rare inhabitant of fresh to brackish marshes with dense emergent vegetation. More likely to occur in Delta than San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Loggerhead shrike (Lanius ludovicianus)	-/-/BCC/SSC (nesting)	Nests in dense shrubs and trees, forages in grasslands, marshes, and ruderal habitats. Inhabits a variety of habitats from open grasslands and scrub to woodlands and riparian areas. Species typically uses fenceposts, shrubs and small trees for perching while foraging in open habitats. Year- round resident of California. Breeding begins in February.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Long-billed curlew (Numenius americanus)	-/-/BCC/WL (nesting)	Nests on prairies and short-grass fields; forages on mudflats, marshes, pastures, and agricultural fields. Nests in northeastern California in Modoc, Siskiyou, and Lassen Counties on prairies and short-grass fields. Winters along the coast and in interior valleys west of Sierra Nevada. During migration and in winter;	Potential to occur. Forages on mudflats, marshes, and grasslands and roosts on levees, diked marshes, and ponds as a migrant and winter resident. Species does not	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		frequents coastal beaches and mudflats and interior grasslands and agricultural fields.	nest within Project Area.		
Marbeled murrelet (Brachyramphus marmoratus)	FT/SE (nesting)	Occurs year-round in marine subtidal and pelagic habits from Oregon to Point Sal, Santa Barbara. Uses stands of mature Douglas fir and redwoods up to 40 miles inland for nesting. Nests from May to September. Adults may commute from ocean to nest site daily.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Northern harrier (Circus cyaneus)	-/-/SSC- (nesting)	Nests and forages in marshes, grasslands, and ruderal habitats. Inhabits coastal salt and freshwater marshes.	Potential to Occur. Suitable foraging in a variety of habitats. May also breed in adjacent habitat in small numbers in marsh habitats in the Species has been recorded nesting at Bair Island.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Rhinoceros auklet (Cerorhinca monocerata)	WL	Mostly pelagic; nests on islands in ground burrows. (Cornell Lab of Ornithology 2015)	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to forage in the area.
Ridgway's rail, formerly California clapper rail ( <i>Rallus</i> <i>obsoletus</i>	FE/SE/SFP	Salt and brackish marsh habitat and tidal sloughs usually dominated by pickleweed and cordgrass. Resident in SF Bay with entire population	Potential to occur. Forage in the Project area. Suitable breeding	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project
Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status		RWC Channel	SBS Channel	SFDODS
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obsoletus, formerly Rallus longirostris obsoletus)		restricted to tidal marshlands of San Pablo, Central, and South Bays. Sloughs and channels along the Bay shore provide critical habitat with birds occupying vegetated marsh along the full range of tidal influence.	habitat for this species is present at Bair Island, Greco Island, and adjacent tidal marshes but they are not known to nest in the area.		Area.
Redhead (Aythya americana)- (Waterfowl)	SCC	Found in Southern Don Edwards Wildlife Refuge. Forages and breeds in ponds and lakes. Nests are floating.	Potential to occur. Forage in the Project area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
San Pablo song sparrow ( <i>Melospiza melodia</i> samuelis)	-/-/BCC/SSC	Inhabits salt marshes bordering north side of San Pablo and San Francisco Bay. Nests in grindelia spp. (marsh gumplant) bushes. Forages over mudbanks and in the pickleweed.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Saltmarsh common yellowthroat <i>(Geothlypis trichas sinuosa)</i> aka San Francisco common yellowthroat	-/-/BCC/SSC	Year-round resident of the San Francisco Bay Area. Found only in San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties. Nests in freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover. Breeding begins in April. Forages in	Not expected to occur. No suitable habitat within the Project Area. Suitable habitat maybe present adjacent to the Project Area within tidal marshes and associated uplands.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Short-eared owl (Asio flammeus)	-/-/SSC (nesting)	all marsh types. Nests on ground in tall emergent vegetation or grasses, forages over a variety of open habitats. Inhabits open grasslands, prairies, marshes and agricultural fields with sufficient cover and abundant small mammal prey. Breeding begins in April.	Not expected to occur. No suitable habitat within the Project Area. Suitable habitat maybe present adjacent to the Project Area where species has been recorded nesting in adjacent habitat at Bair Island.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Short-tailed albatross (Diomedea albatrus)	FE/-/SCC	Short-tailed albatross forage at sea but specific geographic and seasonal distribution patterns within the marine range are not well understood. The short-tailed albatross is a frequent visitor to the productive waters in shelf break areas of the Northern Gulf of Alaska, Aleutians Islands, and Bering Sea. The marine range of the short-tailed albatross within U.S. territorial waters includes Alaska's vast coastal shelf break areas and the marine waters of Hawaii for foraging, but we do not know how much or to what extent it utilizes open ocean areas of the Gulf of Alaska, North Pacific	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to forage in the area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		Ocean, and Bering Sea.			
Alameda song sparrow ( <i>Melospiza melodia</i> <i>Pusillula</i> )	-/-/-/SSC	Breeds in salt marsh habitats in the San Francisco Bay Area. Forages in salt marsh habitat. It is most abundant in the taller vegetation found along tidal sloughs, including salt marsh cordgrass and marsh gumplant. Present in suitable habitat throughout the South Bay being particularly abundant in more extensive marshes but also present fairly commonly in narrower marshes along tidal sloughs such as Alviso	Not expected to occur. No suitable habitat within the Project Area. Suitable habitat maybe present adjacent to the Project Area where species may forage within the tidal marshes. Species forages within tidal	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
		Slough as long as taller herbaceous vegetation for nesting is present.	marsh habitats in San Francisco Bay.		
Suisun song sparrow (Melospiza melodia maxillaris)	-/-/BCC/SSC	Suisun Song Sparrows occur in virtually every tidal marsh in Suisun Bay, though densities vary considerably, presumably reflecting variation in habitat suitability. Dense vegetation is required for nesting sites, song perches, and cover for refuge from predators. Suisun Song Sparrows are associated primarily with tidal channels, especially in marshes where Pickleweed dominates and Gumplant lines the channels. Sparrow territories are lined single file every 10 to 50 m along sloughs, providing each pair			Not expected to occur. No suitable habitat within the Project Area.

Common Name	Federal/State <sup>3</sup>	Coographic Distribution / Habitate	PW/C Channel	SPS Channel	SEDODS
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats with access to the slough and its overhanging banks for food and cover. In marshes where there are no sloughs, some tidal influence is still required; few Song Sparrows occur in diked areas with stagnant water. In brackish or freshwater marshes with substantial cover of tall Scirpus maritimus, Tule (S. acutus), or cattail, the association of Song Sparrows	RWC Channel	SBS Channel	SFDODS
Tricolored blackbird (Agelaius tricolor)	SE <sup>5</sup> /BCC/SSC (nesting colony)	with channels is weaker. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Breeds near fresh water in dense emergent vegetation and sites with blackberries, nettles, thistles, and grainfields.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Vaux's swift <i>(Chaetura vauxi)</i>	-/-/SSC (nesting)-	Nest in snags in costal coniferous forest or occasionally chimneys.	Not Expected to Occur: No suitable habitat. This species is rarely detected in San Mateo County.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Western snowy plover (Charadrius	FT/-/BCC/SSC (nesting)	Nests in sandy substrate such as sandy coastal beaches, salt panne	Low potential to occur. Suitable	Not expected to occur. No suitable	Not expected to occur. No

<sup>&</sup>lt;sup>5</sup> Emergency state status until 6/2015 (CDFW list).

Redwood City Navigation Improvement

Feasibility Report and Integrated EIS/EIR

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
alexandrinus		habitat, coastal dredged spoils sites,	habitat maybe	habitat within the	suitable habitat
nivosus)		dry salt ponds, salt pond levees, and	present in mudflats	Project Area.	within the Project
		gravel bars. and forages in sandy	and adjacent to the		Area.
		marine and estuarine bodies.	Project Area where		
		Population defined as those birds	species may forage		
		that nest adjacent to or near tidal	within the tidal		
		waters, including all nests along the	marshes. Species		
		mainland coast, peninsulas, offshore	has been recorded		
		islands, and adjacent bays and	nesting at Bair		
		estuaries. Nest in San Francisco Bay.	Island though no		
		Most nesting in San Francisco Bay is	nesting has been		
		associated with emergent or dry salt	documented since		
		pond beds, or sometimes levee	the late 1970 <sup>°</sup> s.		
		roads. Breeding locations in the	Potential nesting		
		Estuary at Eden Landing Ecological	habitat is present		
		Reserve/ Baumberg North, Alviso,	within Bair Island		
		and Ravenswood. In the North Bay	and adjacent upland		
		nesting occurs at Ponds 7 and 7A in	areas near San		
		the Napa Sonoma Marshes Wildlife	Francisco Bay.		
		Area and at the Montezuma Slough			
		Wetland Restoration site.			
White-tailed kite	-/-/SFP	Nests in tall shrubs and trees, forages	Not expected to	Not expected to	Not expected to
(Elanus leucurus)	(nesting)	in grasslands, marshes, and ruderal	occur. No suitable	occur. No suitable	occur. No
		habitats. Inhabits grasslands,	habitat within the	habitat within the	suitable habitat
		agriculture fields, oak woodlands,	Project Area.	Project Area.	within the Project
		savannah and riparian habitats in	Suitable habitat		Area.
		rural and urban areas. Feeds	may be present in		
		primarily on California voles. Forages	adjacent habitat.		
		over grassland and nests in shrubs	Species has been		
		and trees. Year-round resident of	recorded nesting at		

Common Name	Federal/State <sup>3</sup>				655.050
(Scientific Name)	/ CNPS Status		RWC Channel	SBS Channel	SFDODS
		Central and Coastal California.	Bair Island.		
		Breeding begins in February.			
Yellow-headed	-/-//SSC	Nests in freshwater emergent	Not expected to	Not expected to	Not expected to
blackbird		wetlands with dense vegetation and	occur. No suitable	occur. No suitable	occur. No
(Xanthocephalus		deep water, often along the borders	habitat within the	habitat within the	suitable habitat
xanthocephalus)		of lakes and ponds. Often forages in	Project Area.	Project Area.	within the Project
		fields, typically wintering in large,			Area.
		open agricultural areas.			
Yellow warbler	-/-/BCC/SSC	Breeds in riparian woodlands,	Not expected to	Not expected to	Not expected to
(Dendroica	(nesting)	particularly those dominated by	occur. No suitable	occur. No suitable	occur. No
petechia brewsteri)		willows and cottonwoods.	habitat within the	habitat within the	suitable habitat
		Species forages in suitable habitat	Project Area.	Project Area.	within the Project
		during migration in the fall.			Area.
MAMMALS					
Guadalupe fur-seal	FT/ST/SFP	Guadalupe fur seals reside in the	Not expected to	Not expected to	Low potential to
(Arctocephalus		tropical waters of the Southern	occur. No suitable	occur. No suitable	occur.
townsendi)		California/ Mexico region. During	habitat within the	habitat within the	
		breeding season, they are found in	Project Area.	Project Area.	
		coastal rocky habitats and caves.			
		Little is known about their			
		whereabouts during the non-			
		breeding season.			
Pacific Harbor Seal	Fed: MMPA	Pacific harbor seals inhabit near-	Potential to occur.	Potential to occur.	Not expected to
(Phoca vitulina		shore coastal and estuarine areas	Suitable habitat	Suitable habitat	occur.
richardsi )		from Baja California, Mexico to	within the Project	within the Project	
		Alaska. Pacific harbor seals are the	Area. Haul-out and	Area.	
		only species of marine mammal that	pupping sites for		
		breed and bear young in San	this species are		
		Francisco Bay. Harbor seals are	present at Bair		
		present in the Bay year-round and	Island and Greco		

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	<b>RWC Channel</b>	SBS Channel	SFDODS
		use it for foraging, resting, and	Island adjacent to		
		reproduction. Mating occurs from	the project site.		
		April to July. There are 12 haul-out			
		sites and rookeries in the Bay. At Bair			
		Island and Greco Island, seals use			
		haul-outs on the outer shore of Outer			
		Bair Island, and several sites within			
		Corkscrew Slough. The primary haul-			
		out in Corkscrew Slough is along the			
		west bank of the slough, near the			
		bend closest to Redwood Creek (RWC			
		GP DEIR 2010)). Known pupping sites			
		are: Bair Island, Corkscrew Slough,			
		Greco Island, Newark Slough, and			
		Mowry Slough.			
Pallid bat	-/-//SSC	Uncommon to rare foragers but	Not expected to	Not expected to	Not expected to
(Antrozous		unlikely to breed. (SBSP Restoration	occur. No suitable	occur. No suitable	occur. No
pallidus)		Project Biology and Habitat Exiting	habitat within the	habitat within the	suitable habitat
		conditions Report March 2005).	Project Area.	Project Area.	within the Project
		Inhabits rocky terrain in open areas in			Area.
		lowlands, foothills and mountainous			
		areas near water throughout			
		California below 2,000 meters. Roost			
		in caves, rock crevices, mines, hollow			
		trees, buildings and bridges in arid			
		regions in low numbers (<200). Active			
		from March-November; migrates in			
		some areas, but may hibernate			
		locally. Preys on large beetles and			
		scorpions. This species is typically			

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		found in dry grasslands and oak			
		savannah habitats, and currently can			
		be detected in the south and east San			
		Francisco Bay area. (RWC GP DEIR			
		2010)			
Salt-marsh harvest	FE/SE/SFP	The salt marsh harvest mouse is	Not expected to	Not expected to	Not expected to
mouse		restricted to the salt and brackish	occur. No suitable	occur. No suitable	occur. No
(Reithrodontomys		water marshes in San Francisco Bay.	habitat within the	habitat within the	suitable habitat
raviventris)		Found in salt marsh habitat	Project Area.	Project Area.	within the Project
		dominated by pickleweed , mature	Suitable habitat		Area.
		brackish marshes, and tidal and diked	may be present in		
		salt marshes that can include dense	adjacent habitat.		
		plant cover of pickleweed and fat hen	This species has		
		. Marshes fringing Alviso Slough lack	been documented		
		pickleweed and are thus not	to occur on Bair and		
		considered prime habitat. The	Greco Islands.		
		species was found in brackish marsh			
		dominated by alkali bulrush (Scirpus			
		robustus). Does not occur in the small			
		isolated patch of diked pickleweed			
		within the Pond A8. Could occur in			
		suitable habitat year-round. The			
		species is adapted to life within the			
		tidal zone, and can escape tidal			
		inundation through climbing upward			
		within the marsh vegetation, and is a			
		good swimmer. The species can drink			
		saltwater. Young are born from			
		spring to fall, and breeding occurs 2-3			
		times per year.			

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status		RWC Channel	SBS Channel	SFDODS
Salt-marsh wandering shrew (Sorex vagrans halicoetes)	-/-/-/SSC	Species is restricted to salt marshes in San Francisco Bay. Feeds mainly on invertebrates and some plant material within a low, dense cover of Salicornia. Most young are born March to May. Occurs in middle and high marsh zones with abundant driftwood and pickleweed.	Not expected to occur. No suitable habitat within the Project Area. Suitable habitat may be present in adjacent habitat. Species has been detected at Bair Island.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Suisun shrew (Sorex ornatus sinuosus)	-/-/-/SSC	Restricted to San Pablo Bay and Suisun Bay, both in Solano and Sonoma County. Tidal, salt, and brackish marshes containing pickleweed, grindelia, bulrushes, or cattails; requires driftwood or other objects for nesting cover.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Townsend's big- eared bat (Corynorhinus townsendii) (AKA Pacific Townsend or western big eared bat)	-/-/SCT/SSC	An obligate cave rooster and moth specialist. Inhabits caves, bridges, mines, buildings, rock crevices and tree hollows in coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters. Exhibits high site fidelity and is highly sensitive to disturbance. Forages along edge habitats near water; may travel long distances during foraging. This species has been detected in the north and east	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		San Francisco Bay area. Very sensitive			
		to disturbances and may abandon a			
		roost after one onsite visit.			
Western mastiff bat <i>(Eumops perotis californicus)</i>	-/-//SSC	Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. Primarily a cliff roosting species. Inhabits a variety of vegetation communities near suitable cliff roosting habitat throughout central and southern California below 3,000 meters. Often forages high above the ground and over great distances. Highly sensitive	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
		to human disturbance. This species ranges from San Francisco southward. It has been detected in the San Francisco Bay area (East Bay hills and in the south bay).			
REPTILES	(22.2				1
Western pond turtle <i>(Emys</i> marmorata)	-/SSC	Aquatic habitats including ponds, streams, and irrigation ditches. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks. (Permanent or nearly permanent fresh or brackish water in a variety of habitats.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
PLANTS					
Alkali milk-vetch	-/-/1B.2	Alkaline soils in playas, vernal pools,	Not expected to	Not expected to	Not expected to

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
(Astragalus tener		and adobe clay areas within	occur. No suitable	occur. No suitable	occur. No
var. tener)		grassland. Alameda, Merced, Solano,	habitat in RCH	habitat in SBS	suitable habitat
		and Yolo counties. A recently	Channel area.	Channel area.	within the Project
		rediscovered population in seasonal			Area.
		wetlands at the Pacific Commons			
		Preserve in Fremont. Considered			
		extirpated from Santa Clara County.			
		Currently no suitable habitat in			
		Alviso Slough Restoration Project or			
		SBSP Phase 2 area. Occurs in mesic			
		coastal dunes, coastal salt marshes,			
		swamps and stream sides.			
Congdon's tarplant	-/-/1B.1	Moist, alkaline soils within grassland.	Not expected to	Not expected to	Not expected to
(Centromadia		Tolerates disturbance. Annual;	occur. No suitable	occur. No suitable	occur. No
parryi ssp.		blooms June through November.	habitat in RCH	habitat in SBS	suitable habitat
Congdonii)		Known from Alameda, Contra Costa,	Channel area.	Channel area.	within the Project
		San Mateo, Monterey, San Luis			Area.
		Obispo, and Santa Clara counties			
		Known from several locations in			
		Newark, Fremont, Alviso, and			
		Sunnyvale. The species requires			
		disturbance to establish, and so, it is			
		unlikely that any population could			
		establish within the Alviso restoration			
		Project area except ephemerally.			
		Population locations and sizes are			
		likely to fluctuate. Recent			
		populations have been reported from			
		South San Francisco Bay localities in			
		or in the vicinity of diked baylands			

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		(Newark to Sunnyvale). May			
		potentially occur along high tidal			
		marsh edges .			
Delta tule pea	-/-/1B.2	High marsh zone in brackish and	Not expected to	Not expected to	Not expected to
(Lathyrus jepsonii		freshwater marshes. Known from	occur. No suitable	occur. No suitable	occur. No
var. jepsonii)		Suisun Marsh (Sacramento, San	habitat in RCH	habitat in SBS	suitable habitat
		Joaquin, Solano and Contra Costa	Channel area.	Channel area.	within the Project
		counties) and Napa marshes.			Area.
		Perennial; blooms May through			
		September. Historic and current			
		records from North Bay area only.			
		Occurs along tidal marsh banks of			
		sloughs in Napa-Sonoma. May be			
		difficult to detect during droughts			
		(saline years) in Napa Marsh.			
Lyngbye's sedge	-/-/2B	Coastal salt marsh and brackish			Not expected to
(Carex lyngbyei)		marshes. Known from central and			occur. No
		northern coastal California.			suitable habitat
					within the Project
					Area.
Marin knotweed	-/-/3.1	Coastal Marin, Napa, and Sonoma	Not expected to	Not expected to	Not expected to
(Polygonum		Counties. Salt marsh (Sears Pt 2009).	occur. No suitable	occur. No suitable	occur. No
marinense)		Formerly restricted in San Francisco	habitat in RCH	habitat in SBS	suitable habitat
		Bay to tidal marshes near Larkspur	Channel area.	Channel area.	within the Project
		(Marin County), but this species has			Area.
		spread widely across the North Bay			
		and western Suisun Bay area.		No	
Mason's lilaeopsis	-/SR/1B.1	Exposed banks of tidal meanders and	Not expected to	Not expected to	Not expected to
(Lilaeopsis masonii)		channels within brackish to	occur. No suitable	occur. No suitable	occur. No
		freshwater marsh. Locally common in	habitat in RCH	habitat in SBS	suitable habitat

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		Suisun Marsh. Not known to occur in	Channel area.	Channel area.	within the Project
		the Alviso Slough Project area;			Area.
		historic and current records in Suisun			
		Bay area only. Typically restricted to			
		brackish tidal marsh banks subject to			
		slumping or wave erosion, or nearby			
		tidal marsh; also occurs in mud on			
		rip-rap or concrete. Known			
		populations occur from northern San			
		Pablo Bay (Tolay Creek mouth) east			
		through Suisun Marsh and Contra			
		Costa shoreline.			
Point Reyes salty	FE/SE/1B.2	Coastal salt marsh habitats, growing	Not expected to	Not expected to	Not expected to
bird's-beak		with pickleweed and saltgrass,	occur. No suitable	occur. No suitable	occur. No
(Chloropyron		swamps (and coarser substrates	habitat in RCH	habitat in SBS	suitable habitat
maritimum ssp.		within salt	Channel area. It	Channel area.	within the Project
Palustre)		marsh (high marsh pans, sandy	may occur in		Area.
		barrier beaches). Known from	adjacent salt		
		Northern California, from	marshes in Bair		
		Oregon to Santa Clara County;	Island.		
		Oregon. Extirpated from the South			
		Bay Area. Historically found in coastal			
		salt marshes in Alameda, Humboldt,			
		Marin, Santa Clara, San Francisco,			
		San Mateo, and Sonoma Counties.			
		Presumed extirpated from Alameda,			
		Santa Clara and San Mateo counties.			
Saline clover	-/-/1B.2	Edges of salt marshes, alkali	Not expected to	Not expected to	Not expected to
(Trifolium		meadows, and vernal pools along the	occur. No suitable	occur. No suitable	occur. No
hydrophilum)		coast from Sonoma County south to	habitat in RCH	habitat in SBS	suitable habitat

Common Name	Federal/State <sup>3</sup>				
(Scientific Name)	/ CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
		San Luis Obispo, as well as in the	Channel area. It	Channel area.	within the Project
		inland counties of Solano and Colusa.	may occur in		Area.
		Annual Historic collection (in 1886)	adjacent salt		
		from Belmont Slough; not recorded	marshes in Bair		
		since in the South Bay area. Occurs in	Island.		
		marshes and swamps and valley and			
		foothill grassland and vernal pools.			
Soft salty bird's-	FE/SR/1B.2	Coastal salt marshes and swamps. An	Not expected to	Not expected to	Not expected to
beak (Chloropyron		annual, herb with fluctuating	occur. No suitable	occur. No suitable	occur. No
molle ssp. molle)		population levels. Occurs in upper	habitat in RCH	habitat in SBS	suitable habitat
		tidal marsh near the limits of tidal	Channel area.	Channel area.	within the Project
		action with pickleweed, salt grass,			Area.
		fleshy jaumea, alkali heath, perennial			
		ryegrass, arrow grass, and Suisun			
		marsh aster.			
Suisun marsh aster	-/-/1B.2	Found in Sacramento–San Joaquin	Not expected to	Not expected to	Not expected to
(Symphyotrichum		Delta, Suisun Marsh, Suisun Bay,	occur. No suitable	occur. No suitable	occur. No
lentum)		Contra Costa county, Solano county.	habitat in RCH	habitat in SBS	suitable habitat
		Brackish and freshwater marsh.	Channel area or	Channel area.	within the Project
		Typically forming colonies along	adjacent habitat.		Area.
		brackish or freshwater marsh banks			
		or upland edges tidal marshes in			
		northern San Pablo Bay eastward to			
		Suisun Marsh and Contra Costa			
		shoreline. Presumed extirpated in			
		San Francisco Bay.			

Common Name (Scientific Name)	Federal/State <sup>3</sup> / CNPS Status	Geographic Distribution/Habitats	RWC Channel	SBS Channel	SFDODS
Federal Listing Code	S		California State Listing	g Codes	
FE - Federally listed a	as Endangered		SE - State listed as End	langered	
FT - Federally listed a	as Threatened		ST - State listed as Thr	eatened	
FPT - Federally propo	osed for listing as <sup>-</sup>	Threatened	SCT - State candidate f	for listing as	
FDL-Federally Deliste	ed		Threatened		
FC - Federal candidat	te species (former	Category 1 candidates)	SSC - California Specie	s of Special Concern	
BCC-USFWS Bird of C	Conservation Conc	ern	SFP- Fully Protected		
DPS-Distinct Populat	ion Segment		WL - Watch List		
			SR-State Rare (no Fede	eral rare	
			classification)		

H.4	Table H-4. Special-status Terrestrial Species with Potential to Occur at Placement Sites in the Project Area – Eden, Alviso,
	Cullinan, and Montezuma

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
BIRDS					
Alameda song sparrow (Melospiza melodia pusillula)	-/- /BCC/SSC	Potential to occur. Common resident foraging in tidal salt marsh and may breed near the Project Area.	Low potential to occur. Common resident foraging in tidal salt marsh		Not expected to occur. No suitable habitat at the Montezuma offloader.
American peregrine falcon (Falco peregrinus anatum)	-/SFP (nesting)	Potential to occur. Regular foragers but no suitable breeding habitat within the Project Area.	Potential to occur. Regular foragers but no suitable breeding habitat within the Project Area.	Potential to occur. Regular foragers but no suitable breeding habitat within the Project Area.	Not expected to occur. No suitable habitat at the Montezuma offloader.
American white pelican (Pelecanus erythrorhynchos)	-/-/SSC (nesting))	Potential to occur. Found in or near ponds A1, A2w, A9, and other Alviso ponds. Occur as foragers but not known to breed in the pond complex. Regular visitor from late summer to spring.	Potential to occur. Found in or near Eden Landing ponds. Occur as foragers but nesting sites are not located in the pond complex.		
Ashy storm- petrel (Oceanodroma	-/-/SSC (nesting)	Low Potential to occur. May be occasional winter visitor; does not breed in	Low Potential to occur. May be occasional winter visitor; does not breed in		Not expected to occur. No suitable habitat at the Montezuma

<sup>&</sup>lt;sup>6</sup> Confirmed using the 2015 Threatened and endangered animal list, Threatened, Endangered and Rare Plant List, and Fully Protected Animal List. <u>http://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/</u>. Accessed 3/3/2015.

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Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
homochroa)		the Project Area.	the Project Area.		offloader.
Bald eagle (Haliaeetus leucocephalus)	/SE/SFP <sup>7</sup> (nesting and wintering)	Potential to occur. Uncommon to rare foragers most likely during fall migration but unlikely to breed.	Potential to occur. Uncommon to rare foragers most likely during fall migration but unlikely to breed.		
Bank swallow (Riparia riparia)	-/ST (nesting)	Low Potential to occur. uncommon to rare foragers but unlikely to breed. Suitable nesting habitat not present.	Low Potential to occur. uncommon to rare foragers but unlikely to breed. Suitable nesting habitat not present.		Not expected to occur. No suitable habitat at the Montezuma offloader.
Barrow's goldeneye (Bucephala islandica)	-/-/SSC (nesting)	Potential to occur. Uncommon winter visitor; does not breed in the Project Area.	Potential to occur. Uncommon winter visitor; does not breed in the Project Area.		Not expected to occur. No suitable habitat at the Montezuma offloader.
Belding's savannah sparrow (Passerculus sandwichensis beldingi)	-/SE/-	Potential to occur. Common breeder in salt marsh (including diked, muted tidal, and tidal) and adjacent ruderal/grassland habitat in the study area.	Potential to occur. Common breeder in salt marsh (including diked, muted tidal, and tidal) and adjacent ruderal/grassland habitat		

<sup>&</sup>lt;sup>7</sup> Although this species is federally delisted it is still protected by the Bald and Golden Eagle Act, Migratory Bird Treaty Act, and the Lacey Act (USFWS. 2013. Bald Eagle. July 2. <u>http://www.fws.gov/midwest/eagle/</u>. Accessed March 2, 2015. The Bald Eagle continues to be listed as endangered in California (CDFW. Bald Eagles in California. <u>https://www.dfg.ca.gov/wildlife/nongame/t\_e\_spp/bald\_eagle/</u>. Accessed March 2, 2015.

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Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2 in the study area.	Cullinan Project	Montezuma Offloader
Black skimmer (Rynchops niger)	-/- /BCC/SSC (nesting)	Potential to occur. Likely to forage and may breed adjacent to the Project Area, particularly on islands in salt ponds.	Potential to occur. Likely to forage and may breed adjacent to the Project Area, particularly on islands in salt ponds.		
Brandt (Branta bernicla)	-/-/SCC-				
Bryant's savannah sparrow (Passerculus sandwichensis alaudinus)	-/-//SSC				
Burrowing owl (Athene cunicularia)	-/- /BCC/SSC (burrowing and some wintering site)	Low potential to occur. May forage within marshes.	Low potential to occur. May forage within marshes.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat at the Montezuma offloader.
California black rail ( <i>Laterallus</i> <i>jamaicensis</i> <i>coturniculus</i> )	/ST/BCC/SF P	Potential to occur. Individuals winter in small numbers in tidal marsh within the Project Area and a likely breeder. Fourteen individuals were captured adjacent to SBSP Project Pond A15 in 2012 during the breeding season.	Potential to occur. Individuals may winter in tidal marsh within the Project Area.	Potential to occur. Suitable nesting and foraging habitat along the outboard levees. Known to occur at the site.	

	Federal/Stat				
Common Name (Scientific Name)	e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
California brown	-/SFP	Potential to occur. Regular	Potential to occur. May		
pelican		but not abundant during	<b>r</b> oosts on levees in the		
(Pelecanus		nonbreeding season	interiors of pond		
occidentalis		(summer and fall) in Alviso.	complexes; forages in		
californicus)			ponds and in San		
			Francisco Bay.		
California gull	-/-/-/	Potential to occur.	Potential to occur.		
(Larus	WL	Common resident,	Common resident,		
californicus)		breeding on several salt	breeding on several salt		
		ponds in the Project Area.	ponds in the Project		
		The colony in Pond A6 is	Area.		
		the second largest colony			
		in California. Forages			
		throughout SBSP area.			
California least	FE/SE/SFP	Potential to occur. The	Potential to occur.		Not expected to occur.
tern <i>(Sternula</i>		South Bay is an important			No suitable habitat at
antillarum		post-breeding staging area			the Montezuma
browni)		for least terns, though			offloader.
		species does not currently			Active nesting sites are
		breed within the Project			located at Montezuma
		Area. Forages and roosts in			Slough and Montezuma
		a number of South Bay			Slough wetlands
		ponds, especially Alviso			
		ponds in the vicinity of the			
		Moffett Federal Airfield.			
Cassin's auklet	-/-	Not expected to occur. No	Not expected to occur.	Not expected to occur.	Not expected to occur.
(Ptychoramphus	/BCC/SSC	suitable habitat within the	No suitable habitat	No suitable habitat	No suitable habitat
aleuticus)		Project Area.	within the Project Area.	within the Project Area.	within the Project Area.
Cooper's hawk	-/-/WL	Potential to occur.	Potential to occur.		

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
(Accipiter cooperii)	(nesting)	Observed on SBSP Restoration area as a migrant and winter resident. Breeds in limited numbers in upland habitats adjacent to the SBSP Restoration area, within the South Bay, but not within the immediate SBSP Restoration Project pond complexes.	Observed on SBSP Restoration area as a migrant and winter resident. Breeds in limited numbers in upland habitats adjacent to the SBSP Restoration area, within the South Bay, but not within the immediate SBSP Restoration Project pond complexes.		
Elegant tern (Thalasseus elegans)	WL				
Ferruginous hawk (Buteo regalis)	WL	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Suitable foraging habitat present.	Not expected to occur. No suitable habitat within the Project Area.
Forster's tern (Sterna forsteri)	WL (nestin g)	Potential to occur. Suitable foraging habitat present. Although not in the Project Area it has been identified as breeding on ponds A1, A2W and A8 (prior to flooding).	Potential to occur. Suitable foraging habitat present and nest in the South Bay.		
Golden eagle (Aquila chrysaetos)	-/-/SFP/WL (nesting and	Low Potential to occur. Uncommon to rare foragers primarily during	Low Potential to occur. Uncommon to rare foragers primarily during		

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status wintering)	Alviso Ponds A2W and A9 the nonbreeding season and unlikely to breed. No nesting records within the SBSP Area.	Eden Landing Pond E2 the nonbreeding season and unlikely to breed. No nesting records within the SBSP Area.	Cullinan Project	Montezuma Offloader
Least bittern (Ixobrychus exilis) Loggerhead	-/- /BCC/SCC (nesting) -/-	Not expected to occur. No suitable habitat within the Project Area. Potential to occur. Breeds	Not expected to occur. No suitable habitat within the Project Area. Potential to		
shrike (Lanius Iudovicianus)	/BCC/SSC (nesting)	in Alviso Pond Complex. Resident in low numbers in adjacent habitat within the Project Area.	occur. Resident in low numbers in adjacent habitat within the Project Area.		
Long-billed curlew (Numenius americanus)	-/-/BCC/WL (nesting)	Potential to occur. Forages on mudflats, marshes, and grasslands and roosts on levees, diked marshes, and ponds within the SBSP area as a migrant and winter resident. Does not nest in the Project Area.	Potential to occur. Forages on mudflats, marshes, and grasslands and roosts on levees, diked marshes, and ponds within the SBSP area as a migrant and winter resident. Does not nest in the Project Area.	Potential to occur. Suitable foraging habitat present. Known to occur at the site.	
Marbeled murrelet (Brachyramphus marmoratus)	FT/SE (nesting)				
Northern harrier (Circus cyaneus)	-/-/SSC- (nesting)	Potential to occur. Breeds in small numbers in marsh habitats in the SBSP	Potential to occur. Breeds in small numbers in marsh habitats in the	Potential to occur. Suitable foraging habitat present and	

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
		restoration areas, forages in a variety of habitats. Northern harriers nest on transmission towers in several ponds, in Alviso, complex.	SBSP restoration areas, forages in a variety of habitats. Northern harriers nest on transmission towers in several ponds, including the Eden Landing.	known to occur.	
Rhinoceros auklet (Cerorhinca monocerata)	WL	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Ridgway's rail, formerly California clapper rail ( <i>Rallus</i> <i>obsoletus</i> <i>obsoletus,</i> <i>formerly Rallus</i> <i>longirostris</i> <i>obsoletus</i> )	FE/SE/SFP	Potential to Occur. Ridgway's rails occur in a number of locations. The highest numbers are likely to occur within the more extensive tidal salt marshes along Coyote Creek, although this species is also present in Alviso Slough, and in smaller marsh remnants along sloughs and the Bay edge . Recorded using tidal marsh habitats along Coyote Creek and Alviso Slough	Potential to occur. Forage in the Project area. Primary habitat in adjacent marsh.	Low potential to occur. Incidental occurrence.	
Redhead (Aythya americana)- (Waterfowl)	SCC	Potential to occur. Common winter visitor; does not breed in the	Potential to occur. Forage in the Project Area.		

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9 Project Area.	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
San Pablo song sparrow ( <i>Melospiza melodia</i> samuelis)	-/- /BCC/SSC	Inhabits salt marshes bordering north side of San Pablo and San Francisco Bay. Nests in grindelia spp. (marsh gumplant) bushes. Forages over mudbanks and in the pickleweed.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	
Saltmarsh common yellowthroat <i>(Geothlypis</i> <i>trichas sinuosa)</i> aka San Francisco common yellowthroat	-/- /BCC/SSC	Potential to Occur. Common resident, breeding in freshwater and brackish marshes (and possibly to a limited extent in salt marshes), and foraging in all marsh types during the nonbreeding season.	Potential to Occur. Common resident, breeding in freshwater and brackish marshes (and possibly to a limited extent in salt marshes), and foraging in all marsh types during the nonbreeding season.	Potential to occur. Suitable foraging habitat present.	Potential to Occur. Common resident, breeding in freshwater and brackish marshes (and possibly to a limited extent in salt marshes), and foraging in all marsh types during the nonbreeding season.
Short-eared owl (Asio flammeus)	-/-/SSC (nesting)	Low Potential to occur. Uncommon. Has bred in small numbers within the SBSP Area, although current breeding status unknown. Most numerous in area in migration and winter.	Low Potential to occur. Uncommon. Has bred in small numbers within the SBSP Area, although current breeding status unknown. Most numerous in area in migration and winter .	Potential to occur. Suitable foraging habitat present.	
Short-tailed albatross	FE/-/SCC	Not expected to occur. No suitable habitat within the	Not expected to occur. No suitable habitat	Not expected to occur. No suitable	Not expected to occur. No suitable habitat

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
(Diomedea albatrus)		Project Area.	within the Project Area.	habitat within the Project Area.	within the Project Area.
Alameda song sparrow ( <i>Melospiza melodia</i> Pusillula)	-/-/-/SSC	Potential to occur. Species forages within tidal marsh habitats in San Francisco Bay.	Potential to occur. Species forages within tidal marsh habitats in San Francisco Bay.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.
Suisun song sparrow (Melospiza melodia maxillaris)	-/- /BCC/SSC				
Tricolored blackbird (Agelaius tricolor)	SE <sup>8</sup> /BCC/SS C (nesting colony)	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area. Suitable foraging habitat present in adjacent areas.	Not expected to occur. No suitable habitat within the Project Area.
Vaux's swift <i>(Chaetura vauxi)</i>	-/-/SSC (nesting)-	Potential to occur. Uncommon to rare foragers but unlikely to breed. Forages over SBSP area during spring. No nesting habitat within area.	Potential to occur. Uncommon to rare foragers but unlikely to breed. Forages over SBSP area during spring. No nesting habitat within area.		
Western snowy	FT/-	Potential to Occur. In the	Potential to Occur. May	Low potential to occur.	Not expected to occur.

<sup>8</sup> Emergency state status until 6/2015 (CDFW list).

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Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
plover (Charadrius alexandrinus nivosus)	/BCC/SSC (nesting)	past, prior to the levee breach, western snowy plovers have bred in Pond A8. Breeds and forages at sites near the Project Area including Ponds A16, A17, A23 and Pond A13. Additional birds are present in the study area during winter. Species may forage in mudlfats and tidal salt marsh.	forage in the Project Area. Snowy plovers are present at Eden Landing with the largest number of nests at Ponds E8 and E8A. Species may forage in mudlfats and tidal salt marsh.	Species may forage in mudlfats and tidal salt marsh	No suitable habitat within the Project Area nut suitable habitat may be present in adjacent areas. In the North Bay nesting occurs at the Montezuma Slough Wetland Restoration site
White-tailed kite (Elanus leucurus)	-/-/SFP (nesting)	Potential to occur. Common resident; breeds within the SBSP Area where suitable nesting habitat occurs.	Potential to occur. Common resident; breeds within the SBSP Area where suitable nesting habitat occurs.	Potential to occur. Suitable foraging habitat present and known to occur at Cullinan.	
Yellow-headed blackbird (Xanthocephalus xanthocephalus)	-/-/-/SSC	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.		Not expected to occur. No suitable habitat within the Project Area.
Yellow warbler (Dendroica petechia brewsteri)	-/- /BCC/SSC (nesting)	Low Potential to occur: uncommon to rare foragers but unlikely to breed. Observed on site as a migrant. No nesting habitat within the immediate SBSP pond complexes.	Low Potential to occur: uncommon to rare foragers but unlikely to breed. No nesting habitat within the immediate SBSP pond complexes.		
MAMMALS					

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
Guadalupe fur- seal (Arctocephalus townsendi)	FT/ST/SFP	Not expected to occur.	Not expected to occur.	Not expected to occur.	Not expected to occur.
<i>Phoca vitulina richardsi</i> Pacific Harbor Seal	Fed: MMPA	Potential to occur. Suitable habitat within the Project Area.	Potential to occur. Suitable habitat within the Project Area.	Not expected to occur. No known haul out or pupping sites.	Not expected to occur. No known haul out or pupping sites.
Pallid bat (Antrozous pallidus)	-/-//SSC	Low Potential to occur: uncommon but suitable foraging habitat present.	Low potential to occur. Suitable foraging habitat present.	Low Potential to occur: uncommon but suitable foraging habitat present.	Not expected to occur.
Salt-marsh harvest mouse ( <i>Reithrodontomy</i> <i>s raviventris</i> )	FE/SE/SFP	Potential to Occur. Salt marsh harvest mouse habitat in the Alviso pond complex is limited, but occurs in tidal salt marshes that fringe the existing salt ponds. Salt marsh harvest mice have been recently discovered in Alviso brackish marsh areas. While their use of these brackish habitats in the South Bay is not well understood, early indications are that populations in the brackish marshes are not as dense	Potential to occur. Suitable habitat within the Project Area.	Not expected to occur.	Not expected to occur.

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
		as those in mature salt marsh dominated by pickleweed			
Salt-marsh wandering shrew (Sorex vagrans halicoetes)	-/-//SSC	Potential to occur. May occur in salt marshes throughout the SBSP area.	Potential to occur. May occur in salt marshes throughout the SBSP area.		
Suisun shrew (Sorex ornatus sinuosus)	-/-/-/SSC	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Low potential to occur. Suitable habitat may be present along outboard levee.	Not expected to occur. No suitable habitat within the Project Area.
Townsend's big- eared bat (Corynorhinus townsendii) (AKA Pacific Townsend or western big eared bat)	-/-/SCT/SSC	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Suitable foraging habitat present.	Not expected to occur. No suitable habitat within the Project Area.
Western mastiff bat (Eumops perotis californicus)	-/-/-/SSC	Low potential to occur.	Low potential to occur.	Potential to occur. Suitable foraging habitat present.	Not expected to occur. No suitable habitat within the Project Area.
REPTILES					
Western pond turtle (Emys marmorata)	-/SSC	Low potential to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat at the offloader.
PLANTS Alkali milk-vetch	-/-/1B.2	Not expected to occur. No	Not expected to occur.	Not expected to occur.	Not expected to occur.

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Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
(Astragalus tener var. tener)		suitable habitat within the Project Area.	No suitable habitat within the Project Area.	No suitable habitat within the Project Area.	No suitable habitat at the Montezuma offloader.
Congdon's tarplant (Centromadia parryi ssp. Congdonii)	-/-/1B.1	Low Potential to occur. Known from several locations in Newark, Fremont, Alviso, and Sunnyvale. Peripheral halophyte or disturbed upland zones but not currently associated with salt marsh.	Low Potential to occur. Known from several locations in Newark, Fremont, Alviso, and Sunnyvale. Peripheral halophyte or disturbed upland zones but not currently associated with salt marsh.		Not expected to occur. No suitable habitat at the Montezuma offloader.
Delta tule pea (Lathyrus jepsonii var. jepsonii)	-/-/1B.2	Not expected to occur. No suitable habitat within the Project Area.	Not expected to occur. No suitable habitat within the Project Area.	Potential to occur. Could occur in Cullinan although no species have been identified in the immediate area.	Not expected to occur. No suitable habitat at the Montezuma offloader.
Lyngbye's sedge (Carex lyngbyei)	-/-/2B				Not expected to occur. No suitable habitat at the Montezuma offloader.
Marin knotweed (Polygonum marinense)	-/-/3.1	Not expected to occur. No suitable habitat.	Not expected to occur. No suitable habitat.	Potential to occur. Could occur in Cullinan although not recorded.	Not expected to occur. No suitable habitat at the Montezuma offloader.
Mason's lilaeopsis <i>(Lilaeopsis</i>	-/SR/1B.1	Not expected to occur. No suitable habitat in the Project Area.	Not expected to occur. No suitable habitat in the Project Area.	Potential to occur. Could occur in Cullinan although not recorded.	Not expected to occur. No suitable habitat at the Montezuma

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
masonii)					offloader.
Point Reyes salty bird's-beak (Chloropyron maritimum ssp. Palustre)	FE/SE/1B.2	Low potential to occur. Assume extirpated in the Southern San Francisco Bay.	Low potential to occur. Assume extirpated in the Southern San Francisco Bay.		Not expected to occur. No suitable habitat at the Montezuma offloader.
Saline clover (Trifolium hydrophilum)	-/-/1B.2	Not expected to occur. No suitable habitat.	Not expected to occur. No suitable habitat.	Low potential to occur. May occur in diked or tidal marsh habitats of northern San Pablo Bay and Suisun Marsh.	Not expected to occur. No suitable habitat at the Montezuma offloader.
Soft salty bird's- beak (Chloropyron molle ssp. molle)	FE/SR/1B.2			Potential to occur. Could occur in Cullinan although not recorded.	Not expected to occur. No suitable habitat at the Montezuma offloader.
Suisun Marsh aster (Symphyotrichum lentum)	-/-/1B.2	Not Expected to Occur. No suitable habitat.	Not Expected to Occur. No suitable habitat.	Potential to occur. Could occur in Cullinan although not recorded.	Not expected to occur. No suitable habitat at the Montezuma offloader.

Common Name (Scientific Name)	Federal/Stat e <sup>6</sup> / CNPS Status	Alviso Ponds A2W and A9	Eden Landing Pond E2	Cullinan Project	Montezuma Offloader
Federal Listing Code FE - Federally listed FT - Federally listed FPT - Federally prop FDL-Federally Delist FC - Federal candida BCC-USFWS Bird of DPS-Distinct Popula	as Endangere as Threatene osed for listin ed ate species (fo Conservation	d g as Threatened rmer Category 1 candidates) Concern	SSC - California Spec SFP- Fully Protected WL - Watch List	ndangered	