APPENDIX D

Species Tables

Appendix D Species Tables

Table D-1 Special-Status Plant Species

Species	Status (Fed/State/ Other/CNPS)	Potential to Occur on or Adjacent to the Study Area
<i>Abronia villosa</i> var. <i>aurita /</i> chaparral sand- verbena	-/-/BLMS/1B.1	Potential adjacent. Annual herb that occurs in creosote scrub and desert dune habitats. Flowers January through September. Known from one record located in the Salton Sea State Recreation Area from 1949. This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
Astragalus insularis var. harwoodii / Harwood's milk- vetch	<i>- - </i> 2B.2	Potential adjacent. Annual herb that occurs in creosote scrub, desert dune habitats. Flowers January through May. Known from one record located 4 miles north of Highway 86 and 78 intersection from 1996. This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
Astragalus lentiginosus var. coachellae / Coachella Valley milkvetch	FE/-/-/1B.2	Potential adjacent. Annual or perennial herb that occurs in dunes and sandy areas in desert scrub. It is known from a location approximately 6 miles north of the Sea and east of the unincorporated community of Mecca from 1927. A number of additional records have been recorded in the vicinity (CCH 2020). This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
Astragalus tricarinatus / Triple-ribbed milkvetch	FE/-/-/1B.2	Potential adjacent. Perennial herb that occurs in gravely and sandy areas in desert scrub and Joshua tree woodland. The nearest location is about 9 miles northwest of the exposed lakebed in the Santa Rosa Mountains from 1985 (CCH 2020). This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
Astragalus sabulonum / gravel milk-vetch	-/-/2B.2	Potential. Annual herb that occurs in sandy, gravelly flats, washes, and roadsides. Blooms February through June. Known from one record located near the entrance to Hidden Spring Canyon from 1939. Due to its tolerance of disturbance, this species may be present in areas that have been previously disturbed, either due to human causes or natural processes and may occur on or adjacent to project areas.
<i>Chylismia arenaria /</i> sand evening-primrose	<i>- - </i> 2B.2	Potential adjacent . Annual or perennial herb that occurs in creosote bush scrub. Blooms November through May. Known from one record located near the intersection of Highway 86 and 81st Avenue from 1924. This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
<i>Machaeranthera cognata /</i> Mecca aster	-/-/BLMS/1B.2	Potential adjacent. Perennial herb that occurs in desert scrub. Flowers January through June. Nearest location is approximately 1.5 miles northeast of the exposed lakebed near Mortmar in 1949. A number of additional records have been recorded in the vicinity within the last 10 years (CCH 2020). This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.

Species	Status (Fed/State/ Other/CNPS)	Potential to Occur on or Adjacent to the Study Area
Petalonyx linearis / narrow-leaf sandpaper-plant	-/-/2B.3	Potential adjacent. Perennial shrub that occurs in creosote bush scrub. Blooms March through May. Known from one record located 1.5 miles southeast of the city of Oasis from 1961. This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.
<i>Salvia greatae /</i> Orocopia sage	-/-/BLMS/1B.3	Potential adjacent. Perennial shrub that occurs in creosote scrub. Flowers March through April. Known from two records located along the eastern edge of the sea, located approximately 0.25 mile north of Bombay Beach and 1.25 miles northeast of the mouth of Salt Creek, from 1980 and undated, respectively. This species may occur at upland sites adjacent to the projects but would be unlikely to occur between the 2003 and 2028 shorelines.

All common and scientific names taken from California Department of Fish and Wildlife's California Natural Diversity Database (CDFW 2020).

Federal Status (determined by USFWS):

FE = Endangered. In danger of extinction throughout all or a significant portion of its range.

- FT = Threatened. Likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- BCC = Bird of Conservation Concern. Migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent highest conservation priorities

State Status (determined by CDFW):

- SE = Endangered
 - = Threatened
- SSC = Species of Special Concern
- FP = Fully Protected

Other Status:

ST

BLMS = Bureau of Land Management Sensitive

California Native Plant Society (CNPS):

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

2B = CNPS list 2B. Plants considered rare, threatened, or endangered in California, but more common elsewhere Sources: CDFW 2020; CalFlora 2020; CCH 2020

able D-2 Special-Status Wildlife Species		
Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
Mammals		
Eumops perotis californicus / western mastiff bat	-/SSC/BMLS	Low Potential. Inhabits areas with rock crevices for roosting and open areas, usually within desert scrub, chaparral, and conifer and oak woodland habitats. Known from multiple nearby records, with the closest located along the north-western edge of the Salton Sea State Recreation Area in 1967. In addition, the species has been observed multiple times in and around the unincorporated community of Mecca and Painted Canyon. Suitable rock crevice roosting habitat is not likely present within the study area; however, roosting habitat is present nearby, and the species may be found in the study area foraging or as a flyover.
<i>Lasiurus xanthinus /</i> western yellow bat	-/SSC/-	Moderate Potential. Inhabits riparian corridors with trees, especially palm trees, for roosting within valley foothill, desert wash, and palm oasis habitats. Known to occur in abandoned date palm plantations. Recorded in the unincorporated community of Mecca in February 2020 and city of Oasis in 1976. Roosting and foraging habitat may be present in or adjacent to the study area.
<i>Ovis canadensis nelsoni /</i> peninsular bighorn sheep	FE/ST+FP/-	Low Potential. Inhabits dry, desert habitat with rocky hillsides, canyons, washes, and alluvial fans. The species is known to occur in the Santa Rosa Mountains over 5 miles northwest of the Sea, and suitable desert habitat is not likely present within the study area.
Perognathus longimembris bangsi / Palm Springs pocket mouse	-/SSC/BLMS	Low Potential. Inhabits desert scrub habitat with moderate shrub cover usually within loose sandy and course soils. Known from one nearby record located approximately 2.3 miles off the north-eastern edge of the Sea in 1999. Suitable dry scrub habitat is not likely present within the study area.
<i>Sigmodon</i> <i>hispidus eremicus</i> / Yuma hispid cotton rat	-/SSC/-	High Potential. Inhabits areas with dense grass and other vegetation cover within wetland habitats. Known from four nearby records, all located within approximately 3.5 miles, but as close as 1.5 miles, of the southern edge of the Sea in moist soils dominated by bulrush and saltgrass within an agricultural drainage canal in 2008. Suitable wet, densely vegetated habitat is likely present within the study area.
<i>Taxidea taxus /</i> American badger	-/SSC/-	Low Potential. Inhabits dry, open grasslands and other open areas with loose soil and a supply of rodent prey. Known from one record located in the Alamo Duck Preserve along the southern edge of the Sea in 1937. Suitable dry grassland habitat is not likely present within the study area.
Xerospermophilus tereticaudus chlorus / Coachella Valley round-tailed ground squirrel (Palm Springs round-tailed ground squirrel)	-/SSC/BLMS	Moderate Potential. Inhabits sandy soils suitable for burrowing within dune, wash, and scrub habitats with enough vegetation to provide adequate cover. Known from one record located approximately 2.8 miles north of the Sea around the unincorporated community of Mecca in 1938. Suitable scrub and wash habitat may be present within the study area.

 Table D-2
 Special-Status Wildlife Species

Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
Reptiles and Ampl	nibians	
<i>Gopherus agassizii /</i> desert tortoise	FT/ST/-	Low Potential. Inhabits arid habitats with washes, alluvial fans, dunes, canyon bottoms, rocky hillsides, or creosote habitat with sandy/gravelly soils for burrowing. The closest observations of the species occur over 8 miles northwest of the Sea, and suitable desert habitat is not likely present within the study area.
<i>Phrynosoma</i> <i>mcallii /</i> flat-tailed horned lizard	-/SSC/BLMS	High Potential. Inhabits sparsely vegetated areas with fine sand within dune, wash, and sandstone habitats. Known from many nearby records located along the southwestern and eastern edges of the Sea, as close as 0.5 mile to the shoreline. Records are dated from 1966 to 2015. Suitable sandy habitat is present within the study area.
Scaphiopus couchii / Couch's spadefoot	-/SSC/BLMS	High Potential. Inhabits desert and arid regions with sandy washes within grassland, prairie, mesquite, and creosote bush habitats. Known from three nearby records located off the northern and eastern edges of the Sea, as close as 2 miles to the shoreline, within flooded desert scrub in 2007 and 1993.
Uma notata / Colorado Desert fringe-toed lizard	-/SSC/BLMS	Moderate Potential. Inhabits sparsely vegetated areas with loose, sandy soils within dune and wash habitats. Known from historical nearby records around the unincorporated communities of Thermal and Mecca in 1975 and 1959 and a recent observation at the Salton Sea Test Base and near San Felipe Creek (CDFW Personal Communication 2021). Suitable sandy habitat is present within the study area.
Birds		
Antigone canadensis canadensis / lesser sandhill crane	-/SSC/- (wintering)	Moderate Potential (wintering). Inhabits open, shallow, freshwater wetlands and marshes, as well as grasslands and agricultural habitats. No CNDDB records for the species occur within 5 miles of the study area. The wetlands around the Sea region, particularly along the southern shoreline, host only wintering sandhill cranes. Suitable habitat is present in the study area; however, the species use of the area is infrequent and unpredictable.
Antigone canadensis tabida / greater sandhill crane	-/ST+FP/BLMS	Moderate Potential. Inhabits open, shallow, freshwater wetlands and marshes, as well as grasslands and agricultural habitats. No CNDDB records for the species occur within 5 miles of the study area. The wetlands around the Sea region, particularly along the southern shoreline, host only wintering sandhill cranes. Suitable marsh habitat is present in the study area.
Athene cunicularia / burrowing owl	BCC/SSC/ BLMS (burrow sites)	High Potential (burrow sites). Found in habitats with minimal vegetation cover such as prairie, desert, and coastal grassland. Known from many recent, nearby records concentrated in the southern and south-eastern edges of the Sea, as close as 0.4 mile from the shoreline. Records are dated from 2006 to 2008. Suitable burrowing habitat is present in the study area.
<i>Aythya americana</i> / redhead	-/SSC/- (nesting)	High Potential (nesting). Inhabits wetlands and marsh habitats dominated with grasses, sedges, and forbs. Breeding sites are constructed in tall, dense vegetation within deeper, more permanent wetlands. No CNDDB records for the species occur within 5 miles of the study area. Suitable nesting habitat is present within the study area.

Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
Charadrius nivosus nivosus / western snowy plover (Interior population)	BCC/SSC/- (nesting)	High Potential (nesting). Inhabits coastal beaches as well as salt pond levees, river bars, and estuarine flats. Known from two nearby records directly along the Sea shoreline in 1999, one from Bombay Beach to the mouth of the Alamo River, and one from Desert Shores to the mouth of San Felipe Creek. The species has been known to nest in the study area.
Charadrius nivosus nivosus / western snowy plover (Pacific Coast population)	FT+BCC/SSC/- (nesting)	Low Potential (nesting). Inhabits coastal beaches as well as salt pond levees, river bars, and estuarine flats. The Pacific Coast population of western snowy plovers is not known to inhabit areas as far inland as the Sea.
<i>Charadrius montanus /</i> mountain plover	BCC/SSC/BLMS (wintering)	High Potential (wintering). Inhabits short grass prairies and open semidesert habitats. Known from multiple nearby records, mostly concentrated along the southern shoreline of the Sea. Records date from 2006 to 2011. The species has been known to winter in the study area.
Coccyzus americanus occidentalis / western yellow- billed cuckoo	FT+BCC/SE/ BLMS (nesting)	Low Potential (nesting). Inhabits relatively large, dense riparian areas usually dominated by cottonwoods, willows, and salt cedar. No CNDDB records for the species occur within 5 miles of the study area. However, other sources have reported sightings of the species as an occasional visitor near the Sea (Clark et al. 2014; USFWS 2008). In addition, suitable riparian habitat is present in the study area.
<i>Dendrocygna bicolor /</i> fulvous whistling-duck	-/SSC/- (nesting)	Moderate Potential (nesting). Inhabits shallow freshwater wetlands, sometimes flooded pastures and agricultural fields. No CNDDB records for the species occur within 5 miles of the study area. Suitable wetland habitat is present within the study area.
<i>Elanus leucurus /</i> white-tailed kite	-/FP/BLMS (nesting)	Moderate Potential (nesting). Inhabits a wide range of habitat types, including grassland, savannah, agricultural, oak woodland, and wetland habitats. Nests in the tops of taller trees, frequently on the edge of forested areas. No CNDDB records for the species occur within 5 miles of the study area. Suitable habitat is present; however, suitable nesting trees may not be present within the study area.
<i>Empidonax traillii extimus /</i> southwestern willow flycatcher	FE/SE/- (nesting)	Moderate Potential (nesting). Inhabits dense, shrub- and small tree- dominated areas around a water source, usually within riparian habitats. Known from one nearby record approximately 4.3 miles from the south-eastern edge of the Sea in 2007. Suitable riparian habitat may be present within the study area.
Falco mexicanus / prairie falcon	BCC/-/- (nesting)	Low Potential (nesting). Inhabits a wide range of habitat types; however, nesting usually occurs in a crevice, pothole, or cliff ledge with an overhang. Known from 2 non-site-specific records, dated 1976 and 1977. Suitable nesting sites are not likely present within the study area and the species would only be found foraging or as a flyover.
<i>Falco peregrinus anatum /</i> American peregrine falcon	BCC/FP/- (nesting)	Low Potential (nesting). Inhabits a wide range of habitat types; however, nesting usually occurs in open areas with cliffs with ledges for their nest site. No CNDDB records for the species occur within 5 miles of the study area. Suitable nesting sites are not likely present within the study area and the species would only be found foraging or as a flyover.
<i>Gelochelidon nilotica /</i> gull-billed tern	BCC/SSC/- (nesting colony)	High Potential (nesting colony). Breeds on gravelly, sandy beaches. Known from six nearby records largely concentrated at the southern end of the sea, with one record located near the mouth of the Whitewater river. Records date from 1992 to 1998. Suitable nesting colony habitat is present within the study area.

Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
<i>Haliaeetus leucocephalus /</i> bald eagle	BCC/SE+FP/ BLMS	Moderate Potential. Inhabits forested areas near wide, open bodies of water for foraging. No CNDDB records for the species occur within 5 miles of the study area. Suitable nesting and perching habitat is not present within the study area; however, the Sea does provide suitable foraging habitat so the species would only be observed during the non-nesting season.
<i>Hydroprogne caspia /</i> Caspian tern	BCC/-/- (nesting colony)	High Potential (nesting colony). Breeds on open ground, oftentimes islands, around large bodies of water. Known from one record of a large group observed adjacent to Rock Hill, Salton Sea National Wildlife Refuge on the earthen impoundment islands, dated 1998. Suitable nesting colony habitat is present within the study area.
<i>Icteria virens /</i> yellow-breasted chat	-/SSC/- (nesting)	Moderate Potential (nesting). Inhabits riparian corridors and densely vegetated shrubland and nests in low, dense vegetation. Known from two records located at Bombay Beach and the northern end of the Imperial Wildlife Area Wister Unit, dated 1960 and 1961, respectively. Suitable nesting habitat may be present in the study area.
<i>Ixobrychus exilis /</i> least bittern	BCC/SSC/- (nesting)	High Potential (nesting). Inhabits a wide range of wetland habitats and nests in freshwater and brackish wetlands with tall aquatic vegetation. Known from one nearby record approximately 3.9 miles from the north-eastern edge of the Sea in an artificial freshwater marsh in 2015. Suitable nesting habitat is present in the study area.
<i>Lanius Iudovicianus /</i> loggerhead shrike	BCC/SSC/- (nesting)	High Potential (nesting). Inhabits a wide range of habitat types such as grasslands, sage scrub, chaparral, oak woodlands, riparian woodlands, and agricultural areas. Nests in shrubs and small trees, frequently within thorny vegetation. No CNDDB records for the species occur within 5 miles of the study area. Suitable shrub nesting habitat is present within the study area.
<i>Laterallus jamaicensis coturniculus /</i> California black rail	BCC/ST+FP/ BLMS	High Potential. Inhabits fresh and saltwater marshes with cattails, sedges, and other tall grasses. Known from many nearby records, largely concentrated along the southwestern edge of the Sea, with two outliers located near the Salton Sea State Recreation Area. Records date from 1947 to 2012. Suitable marsh habitat is present within the study area.
<i>Melanerpes uropygialis /</i> Gila woodpecker	BCC/SE/BLMS	Low Potential. Inhabits desert environments with trees for nesting near swales, arroyos, and riparian corridors. Known from two records, one located near the Sonny Bono Salton Sea NWR, and one located just south of Obsidian Butte, in 1949 and 1950, respectively. Suitable tree habitats are not likely present within the study area.
<i>Mycteria americana /</i> wood stork	-/SSC/-	Moderate Potential. Inhabits a wide range of shallow freshwater and brackish wetlands and nests in trees surrounding these wetlands. No CNDDB records for the species occur within 5 miles of the study area. Suitable foraging habitat is present within the study area; however, nesting habitat is not present so the species would likely only be observed during the non-nesting season.
Passerculus sandwichensis rostratus / large- billed savannah sparrow	-/SSC/- (wintering)	High Potential (wintering). Inhabits saltmarshes with nearby shrub vegetation during the wintering season. No CNDDB records for the species occur within 5 miles of the study area. Suitable wintering habitat is present within the study area.

Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
Pelecanus erythrorhynchos / American white pelican	-/SSC/- (nesting colony & communal roosts)	High Potential (communal roost). Nesting colonies occur on islands within freshwater lakes or shallow wetlands. Roosting locations occur on exposed areas within or on the edges of foraging habitat in shallow waters. No CNDDB records for the species occur within 5 miles of the study area. Suitable nesting island habitat does not occur at the Sea; however, suitable roosting habitat is widely present in the study area.
Pelecanus occidentalis californicus / California brown pelican	-/FP/BLMS (nesting colony)	Moderate Potential (nesting colony). Inhabits mainly coastal marine and estuarine habitats, sometimes inland wetlands habitats during the wintering season. Nesting colonies usually occur at the tops of tall trees and sometimes on steep, rocky slopes or ridges. Known from six nearby records located along the southern edge of the Sea. Records date from 1996 to 2004. Suitable nesting colony habitat may occur in sparse locations within the study area.
<i>Rallus obsoletus yumanensis /</i> Yuma Ridgway's rail	FE/ST+FP/-	High Potential. Inhabits marsh and swamp habitats with dense emergent vegetation. Known from many nearby records largely concentrated on the southern edge of the Sea between the Sonny Bono Salton Sea NWR and Bombay Beach. Isolated records occur at the southern end of the Salton Sea State Recreation Area and at the mouth of the Whitewater River. Records date from 1977 to 2009.
<i>Rynchops niger /</i> black skimmer	BCC/SSC/- (nesting colony)	High Potential (nesting colony). Nests in sparsely vegetated sandy and gravelly areas or on wide mats of dead vegetation. Known from four nearby records, one located on an artificial island east of the mouth of the Whitewater River, and the additional three located along the southern edge of the Sea (Mullet Island, south of Rock Hill, and the mouth of the New River). Records date from 1973 to 1998. Suitable nesting colony habitat is present in the study area.
<i>Setophaga petechia /</i> yellow warbler	BCC/SSC/- (nesting)	Moderate Potential (nesting). Inhabits dense riparian areas usually dominated by willows. Known from one record located at the southern end of the Imperial Wildlife Area Wister Unit, from 1952. Suitable nesting habitat may be present in the study area.
<i>Toxostoma</i> <i>crissale /</i> Crissal thrasher	-/SSC/BLMS	Moderate Potential. Inhabits dense, scrubby vegetation within desert, foothill, and riparian scrub habitats. Known from only two historical records, one located approximately 1.5 miles off the south-eastern edge of the Sea in 1969 and the other approximately 4 miles off the northern edge in 1930. Suitable desert riparian habitat may be present in the study area.
<i>Toxostoma lecontei /</i> Le Conte's thrasher	BCC/SSC/ BLMS	Moderate Potential (nesting). Inhabits lowland deserts with sandy soils such as open flats, dunes, arroyos, and alluvial fans. Known from five nearby records mostly located around the southern end of the Sea. Records date from 1908 to 2009. Suitable open desert habitat may be present in the study area.
Vireo bellii pusillus / least Bell's vireo	FE/SE/-	Moderate Potential. Inhabits dense shrub and tree vegetation localized around riparian habitats. No CNDDB records for the species occur within 5 miles of the study area. While the species is not known to inhabit the area, suitable riparian shrub habitat is present in the study area.
Xanthocephalus xanthocephalus / yellow-headed blackbird	-/SSC/- (nesting)	Moderate Potential (nesting). Inhabits meadows and grasslands associated with wetlands as well as shallow areas within marshes, ponds, and rivers. Nests most often within cattails, rushes, and reeds within standing water. No CNDDB records for the species occur within 5 miles of the study area. Suitable nesting habitat is present within the study area.

Species	Status (Fed/State/ Other)	Potential to Occur on or Adjacent to the Study Area
Fish		
Cyprinodon macularius / desert pupfish	FE/SE/-	High Potential. Habitat consists of seeps, springs, slow-moving streams. Known from 62 records, located around the edges of the Sea, dated from 1985 to 2009. Habitat also consists of irrigation drains and associated shoreline pools/ponds currently (or historically) connected to the Salton Sea, marinas (Varner Harbor, North Shore Beach and Yacht Club), and nearshore areas of the Salton Sea. However, given the increasing salinity of the Sea, it is expected that pupfish will soon be extirpated from the Sea proper unless near a freshwater source.
<i>Xyrauchen texanus /</i> razorback sucker	FE/SE+FP/-	Low Potential. Extirpated from most of its historic range. Inhabits medium and large streams and rivers, usually at depths below ultraviolet light. Known from three historic records, near Bombay Beach, the Alamo River, and Garner Wash, dated 1956, 1949, and 1951 respectively.

All common and scientific names taken from California Department of Fish and Wildlife's California Natural Diversity Database (CDFW 2020) or CaliforniaHerps.com (CalHerps 2020).

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- FΡ Fully Protected =

Other Status:

Bureau of Land Management Sensitive BLMS =

Sources: BLM 2014; CDFW 2020; CalHerps 2020; USFWS 2021