



Biological Resources – Site Analysis Report Doran Regional Park and Westside Regional Park Boat Launch Improvement Project Bodega Bay, Sonoma County, CA September 2012

Prepared for:

Moffatt and Nichol 2185 N California Boulevard, Suite 500 Walnut Creek, CA 94596

and

Sonoma County Regional Parks 2300 County Center Drive, Suite 120A Santa Rosa, CA 95403

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### **Report Attachments**

Figure 1:	Project Area Location Map	
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- Figure 2: Reported Special-status Species Occurrences
- Table 1:Special-status Plants Considered in the Evaluation of the Project Based on the Background<br/>Literature Review and Field Surveys
- Table 2:Special-status Animals or Species of Interest Considered in the Evaluation of the<br/>Project Based on the Background Literature Review and Field Surveys

California Department of Fish and Game, Natural Diversity Database – Bodega Head USGS Quadrangle U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Federal Endangered and Threatened Species – Bodega Head USGS Quadrangle

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# **BIOLOGICAL RESOURCES SITE ANALYSIS**

# 1 Introduction

Sonoma County Regional Parks (Regional Parks) has received a grant from the California Department of Boating and Waterways to conduct regulatory compliance planning and perform design and engineering for improvements at Doran Regional Park and Westside Regional Park boat launch facilities in Bodega Harbor, Bodega Bay, Sonoma County (Figure 1). The proposed work includes providing improved access, amenities, and safety at both boat launching facilities. For planning purposes, Regional Parks has requested a site analysis report to identify potential biological resource constraints associated with the project for initial California Environmental Quality Act (CEQA) determination. This report summarizes plant and animal reconnaissance surveys, identifies potential biological constraints, and provides recommendations for further study and development of conservation measures.

# 2 Field Survey Methodology

The purpose of the field surveys was to characterize biological communities within the project sites and to determine whether or not suitable habitat for special-status plant and animal species is present. The potential presence of and impacts on special-status species were determined based on a comparison of existing habitat conditions and presence of unique habitat features, proximity of the property to reported occurrences, and geographic range of subject species.

Surveys were completed on August 24, 29, and 31, 2012, by Jennifer Michaud, M.A., Senior Wildlife Biologist, and Joan Schwan, M.S., Vegetation Ecologist, from Prunuske Chatham, Inc., who are familiar with the region's flora and fauna. Michael Fawcett, Ph.D., Fawcett Environmental Consulting, assisted with a field survey on August 29, 2012, to examine the extent of eel grass beds.

The subject project footprint consists of two boat launch and access facilities at Doran and Westside Regional Parks, as noted above. The surveys consisted of traversing both of these sites on foot and evaluating representative habitats along the shoreline and from the docks. Aquatic surveys and sampling were not completed.

Methodology followed protocols established by California Department of Fish and Game (CDFG 2009). During the surveys, an inventory of all plant and animal species observed was compiled. The botanical inventory concentrated on locating suitable macrohabitat (e.g., general plant communities) and microhabitat (e.g., seeps, serpentine substrates) for special-status plants identified during the background literature search and documenting all plant species on the sites that were identifiable at the time of the field visit.

The wildlife surveys also concentrated on evaluating suitable habitat for common and special-status fish and wildlife species and documenting all species observed. The surveys were conducted with the aid of binoculars (Swarovski<sup>™</sup> 10 x 42). Visual cues, calls, songs, and direct observations were used to identify wildlife species. Unique habitat features (e.g., woody debris, water sources, etc.) and other plant materials were examined for presence of mammals, amphibians, reptiles, and invertebrates. The number of species observed on the sites is limited due to activity period and seasonal nature of some species, rarity of others, limited field surveys, and extent of the area surveyed.

This level of assessment is standard at this stage of project review and is meant to guide Sonoma County staff in making initial determinations for compliance with CEQA, recommendations for further study, and/or mitigation, restoration, and enhancement opportunities.

# 3 Project Setting

The proposed project will take place at two existing boat ramps and parking areas owned and operated by the County of Sonoma. These include Doran Regional Park, Doran Park Road (APN 100-130-006) and Westside Regional Park, 2400 Westshore Road (APN 100-020-014). The projects are located along the shoreline of Bodega Harbor. They are mapped on the Bodega Head USGS quadrangle. The Doran Regional Park site is located at N 38.310326° and W 123.053818°, and Westside Regional Park is at N 38.322998° and W 123.054698°. The approximate location of each site is noted on Figures 1 and 2. Representative photographs follow this report.

# 4 **Project Description**

The proposed boat launch facility improvements would include replacing the existing piles, boarding floats, and related amenities at both facilities, installing new lighting and improving the fish cleaning stations and boat wash down areas, expanding the Westside boat ramp by one lane, and dredging a low spot in the access area to the Westside boat ramp from the navigation channel.

Specific improvements under consideration at Doran Regional Park are:

- Boat Ramp Refurbishment: The boat ramp would be resurfaced, probably by using precast concrete planks. Worn out piles and boarding floats would be replaced. The replacement floating dock would include a low-freeboard portion for small boats and ADA access.
- Boat Wash: The boat wash would be moved out of the parking lot and across the street for improved traffic flow and safety. The new location would be a pullout from the east-bound lane across from (south of) the current RV dump station.

- Fish Cleaning Station: The fish cleaning station would be repaired/upgraded, which would involve structural repair or replacement, fish cleaning surface replacement, and hose upgrades.
- Parking Area: The parking area would be resurfaced and restriped. Improvements may include features such as raised islands of plants or vegetated swales. A pedestrian sidewalk would be added along the water side of the parking lot for improved safety. The gravel parking area immediately west of the currently paved area would also be surfaced and striped.

Specific improvements under consideration at Westside Regional Park are:

- Boat Ramp Refurbishment: The boat ramp would be expanded to three lanes and resurfaced with precast concrete planks. Worn-out piles and boarding floats would be replaced. Replacement floating dock would include a low-freeboard portion for small boats and ADA access.
- Channel Dredging: Accumulated sediment would be tested and, if appropriate, removed and reused in an upland area on regional parkland or on private property. If sediment sampling indicates potential contamination, alternate placement sites will be assessed.
- Boat Wash: The boat wash area would be upgraded with timed hoses for water conservation.
- Fish Cleaning Area: The fish cleaning area would be repaired/upgraded, including structural repair or replacement, fish cleaning surface replacement, and fish processing upgrades.
- Trail and Picnic Tables: A new, decomposed granite trail and picnic tables would be installed in the area between the boat launch and the fish cleaning station.

# 5 Existing Communities

The project area supports a number of biological communities, including northern foredune, salt grass flats, shoreline, tidal flats and eelgrass beds, and intertidal and subtidal habitats (e.g., pilings and floating docks). However, the majority of project-related disturbance is proposed for areas that are already developed (e.g., riprap, parking lots, existing boat ramps).

The following discussion includes a general summary of species typically associated with each community based on regional occurrence and field observations. Species composition information is not comprehensive; further field surveys would be needed to provide more detailed descriptions. Animal species' common names are used in the text because they are unequivocal. Plant species nomenclature follows The Jepson eFlora (Baldwin et al. 2012). A complete list of all vertebrate wildlife species observed within the project area is provided at the end of the section.

### Northern Foredune and Saltgrass Flats

Northern foredune vegetation is present at the proposed Doran boat wash location, the proposed disposal area for the dredged materials, and in small fragments surrounding the Doran boat ramp. This community is dominated by perennial grasses and low perennial herbs and subshrubs (Holland 1986). Adjacent to the existing Doran boat ramp, this habitat is highly disturbed and fragmented and consists of invasive non-native iceplant (*Carpobrotus* spp.), native yarrow (*Achillea millefolium*), and a few landscape plantings [e.g., lollypop tree (*Myoporum laetum*)]. Also present are a few individuals of native beach strawberry (*Fragaria chiloensis*) and silver beachweed (*Ambrosia chamissonis*).

At the proposed Doran boat wash location, dune habitat is more extensive and is dominated by invasive non-native species European beachgrass (*Ammophila arenaria*) and iceplant, but native dune species are also common, including beach strawberry, silver beachweed, coyote brush (*Baccharis pilularis*), California goldenbush (*Ericameria ericoides*), beach evening primrose (*Camissoniopsis cheiranthifolia*), and California poppy (*Eschscholzia californica*). Plantings of non-native Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*) are present at the southwestern end of these locations.

At the proposed dredge disposal area, Cypress Day-use Area near the Doran facility, dune habitat is generally similar to that of the boat wash location. However, the proposed dredge disposal area also extends oceanward onto the upper beach. At the transition between the upper beach and dunes, vegetation is much sparser, with no European beachgrass present. In this transition zone, two forbs form the dominant vegetation: European sea rocket (*Cakile maritima*) and native yellow sand verbena (*Abronia latifolia*). Approximately 7 pink sand verbena (*Abronia umbellata*) plants were also present at the western end of the proposed dredge materials disposal area. Several of these plants are in close proximity to existing picnic tables. These appear to be the rare (CNPS List 1B.1) variety, *Abronia umbellata* var. *breviflora*, for which there is a CNDDB record documented in this area. However, plants with mature fruits should be examined to confirm that they are not the more common variety, *A. umbellata* var. *umbellata*.

Salt grass flats are present at the Westside boat ramp. In this area, vegetation is comprised primarily of saltgrass (*Distichlis spicata*). This area may have supported salt marsh habitat in the past, prior to park development, but is now a highly disturbed setting. In addition to saltgrass, other natives currently present include maritime plantain (*Plantago maritima*), dune rush (*Juncus lescurii*), and alkali heath (*Frankenia salina*). Non-native rescuegrass (*Bromus catharticus*) and iceplant are also present. A few isolated individuals of pickleweed (*Salicornia pacifica*) occur immediately adjacent to the boat ramp.

These small areas of northern foredune and saltgrass flats adjacent to the Doran site provide habitat and foraging opportunities for a range of wildlife species, especially given their close proximity to the adjacent bay. Locally, northern harriers are often seen coursing low to the ground over dunes in search of small mammals and songbirds. Some of the more common bird species observed within dunes include horned lark, whitecrowned sparrow, house finch, and American goldfinch. Western snowy plovers, a winter resident in Sonoma County, can be found in dune habitats and adjacent baylands. Black-tailed jackrabbit and deer are abundant, as well as voles and mice. Some invertebrates, such as bumblebee scarab beetle and globose dune beetle, are found exclusively in coastal dune habitats.

### Shoreline

A narrow bank of shoreline consisting of rocky substrate forms the transition zone between the tidal flats and adjacent uplands. Along the length of the sites, they are reinforced with riprap. These areas are largely unvegetated with the exception of algae along the water's edge attached to rocks. Within Bodega Harbor, sea lions and harbor seals haul out in these areas. Shorelines are extensively used by birds, especially shorebirds, gulls, egrets, and herons. Along the water's edge, rocks provide habitat for fixed animals, such as barnacles, limpets, periwinkles, all of which were observed on the sites.

### Tidal Flats and Eelgrass Beds

Tidal flats (mudflats) occur between the shoreline and deeper water habitats. They occur within the intertidal zone, which is subject to the daily tidal cycle of inundation and exposure. The substrate is typically sand or mud and rich in dissolved nutrients and organic debris with scattered rocks. Algae are usually attached to rocks in the tidal zone. Representative species within the project sites include enteromorpha green algae (*Enteromorpha* sp.), sea lettuce (*Ulva* sp.), and little rockweed (*Pelvetiopsus limitata*).

Tidal flats support a wide variety of fauna. Infauna<sup>1</sup> and epifauna are both diverse and abundant. These include species such as diatoms, worms, and shellfish, which are attractive to foraging birds at low tide. At higher tide, macroinvertebrates and fish are abundant and feed extensively on these species. Common bay fish include topsmelt, Pacific herring, shiner surfperch, Pacific tomcod, striped bass, starry flounder, and bay pipefish. Mudflats provide extensive foraging opportunities for shorebirds, egrets and herons, waterfowl, gulls, and diving birds. Mudflats support few mammals; however, harbor seals occasionally use the habitat for hauling out. During the field surveys, a

<sup>&</sup>lt;sup>1</sup> "Infauna" refers to animals that live burrowed in substrates. "Epifauna" refers to benthic fauna living on the substrate or on other organisms.

number of barnacles, limpets, and chitons were observed on partially submerged rocks. Purple shore crab and yellow shore crab were also abundant.

Deeper water habitats support eelgrass beds. Eelgrass (*Zostera marina*) is a vascular, perennial marine plant that grows in large colonies or beds in soft-bodied bays and estuaries. Eelgrass typically occurs in shallow waters from 0 to 6 feet below mean low tide (Jepson Interchange 2011). Along the outer navigation channel within Bodega Harbor and lower portions of the flats, extensive eelgrass beds occur. Based on preliminary surveys, eelgrass beds are present on the west side of the Doran boat ramp and the north side of the Westside boat ramp. Two isolated clumps of eelgrass are also present in deeper water areas within the Westside launching area and on the south side of the floating dock.

Eelgrass provides a number of ecologically important functions. Eelgrass stands undergo tremendous growth in spring and summer, then foliage decays in fall and winter and regenerates the following spring, resulting in significant seasonal variation in its appearance. Eelgrass distribution can vary annually as a function of water quality, nutrient availability, and physical and chemical disturbances. Eelgrass' rapid growth enables stands to trap sediment, stabilize habitat, improve water clarity, and generate oxygen. Eelgrass also provides valuable habitat for a number of marine plant and animal species. It serves as a food source for many invertebrates, fish, and birds; provides a physical structure that supports epiphytic plants and animals; and serves as a nursery site for many commercially and recreationally important fish and shellfish. It is used by nearly all coastal salmonid species and a number of oceanic species that enter bays and estuaries to spawn and/or rear. During the field surveys, three species of crab were observed within or adjacent to the eelgrass. These included Dungeness crab, red crab, and Pacific rock crab.

## Pilings and Floating Docks

Pilings and floating docks are present within the project sites, and the proposed project will require removal and replacement of these existing structures. While this habitat does not technically constitute a separate biological community, it is extremely complex and supports species seldom observed in other habitats. Species commonly found attached to solid surfaces include sea anemones, tube-dwelling worms, tunicates, barnacles, mussels, sea stars, sea cucumbers, sponges, hydroids, and seaweeds. Free-swimming species, such as jellyfish, fish, and shrimp, can also be observed within the water column in and around pilings. In some locations, sea lions haul out on old docks. The existing boat ramps also support a rich community similar in species composition to the adjacent pilings and docks. At the Doran site, the existing grooves on the ramp are filled with red and green algae, aggregating anemone, and giant green anemone.

### Vertebrate Wildlife Species Observed

Within the project area, vertebrate wildlife observations (direct and indirect: scat, tracks, burrows) included the following: Caspian tern, house finch, willet, black-crowned night-heron, belted kingfisher, great egret, great blue heron, Hermann's gull, ring-billed gull, western gull, brown pelican, white pelican, double-crested cormorant, black turnstone, long-billed dowitcher, western sandpiper, American crow, Brewer's blackbird, marbled godwit, harbor seal, California sea lion, and black-tailed jackrabbit.

# 6 Special-status Species

## 6.1 Definition of Special-status Species

In California, special-status species include those plants and animals that are afforded legal protection under the federal and California Endangered Species Acts (ESA and CESA, respectively) and other regulations. Consideration of these species must be included during project evaluation in order to comply with CEQA<sup>2</sup> and in consultation with state and federal resource agencies.

Special-status species of California include, but may not be limited to:

- Species listed or proposed for listing as threatened or endangered under the federal ESA.
- Species listed or proposed for listing as threatened or endangered under CESA.
- Species that are recognized as candidates for future listing by agencies with resource management responsibilities such as USFWS, NOAA's National Marine Fisheries Service (NOAA Fisheries), and CDFG.
- Species defined by CDFG as California Species of Special Concern.
- Species classified as Fully Protected by CDFG.
- Plant species, subspecies, and varieties defined as rare or threatened by the California Native Plant Protection Act (California Fish and Game Code §1900 et seq.).
- Plant species listed by the California Native Plant Society (CNPS) as List 1 and 2 and some List 3 plants under CEQA (CEQA Guidelines §15380).
- Species that otherwise meet the definition of rare, threatened, or endangered pursuant to §15380 of the CEQA Guidelines.

## 6.2 Background Research

A background literature and database search was conducted to determine the potential occurrence of special-status species within the project sites based on a comparison of

<sup>&</sup>lt;sup>2</sup> Projects undertaken, funded, or requiring a permit by a state or local public agency must comply with CEQA. The primary purpose of CEQA is to inform decision makers and the public about the potential environmental impacts of the proposed activities.

existing habitat conditions and presence of unique habitat features, proximity to reported occurrences, and geographic range of subject species; see Figure 2. The search focused on reported occurrences for the Bodega Head 7.5' USGS quadrangle where the project is located and the surrounding quads (i.e., Arched Rock, Duncans Mills, Camp Meeker, Valley Ford). General references were also consulted to evaluate the potential for unique biological communities and special-status animal species. The review included, but was not limited to, the following sources:

- California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDB)<sup>3</sup> (CDFG 2012a)
- CNDDB/Spotted Owl Viewer on-line database for the reported sightings of northern spotted owl (CDFG 2012b)
- A Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009)
- Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986)
- California Department of Fish and Game Natural Communities List (CDFG 2010)
- CNPS Inventory of Rare and Endangered Vascular Plants of California on-line inventory (CNPS 2012)
- A Flora of Sonoma County (Best et al. 1996)
- Sacramento U.S. Fish and Wildlife Service (USFWS) Office Species Lists for the Bodega Head USGS Quadrangle (USFWS 2012)
- Field guides and general references for birds, mammals, reptiles, amphibians, and invertebrates (e.g., Burridge 1995; Bolander and Parmeter 2000; Brown 1997; Goals Project 2000; Jameson and Peeters 2004; Jennings and Hayes 1994; Kays and Wilson 2002; Kelly et al. 2006; Kozloff 1983; McGinnis 2006; Rickerts and Calvin 1985; Shapiro and Manolis 2007; Shuford and Gardali 2008; Sibley 2000; Stebbins 2003; Zeiner et al. 1990).

## 6.3 Special-status Plants

The background literature review identified the potential presence of a number of special-status plant species within the project area's region; see Table 1 and Figure 2. Based on the suitability of habitat within the project sites and surrounding areas and proximity of recorded sightings, these species were evaluated for potential occurrence within the sites. For the special-status plant species that occur in habitat types found

<sup>&</sup>lt;sup>3</sup> The California Natural Diversity Data Base (CNDDB) is a repository of information on sightings and collections of rare, threatened, or endangered plant and animal species within California. It is maintained by CDFG. CNDDB reports occurrences of special-status species that have been entered into the database and does not generally include inventories of more common animals or plants. The absence of a species from the database does not necessarily mean that they do not occur in the area, only that no sightings have been reported. In addition, sightings are subject to observer judgment and may not be entirely reliable as a result.

within the project sites and/or have reported sightings within close proximity to the site, status and life history characteristics, and potential for occurrences within the project are described in the attached Table 1.

During the field survey, one special-status plant species was tentatively identified within the project area, pink sand verbena; see discussion in section 5 above. Based on the background literature review and field survey, no other special-status species were identified as having more than low potential to occur in the project area. Measures to avoid impacts to the pink sand verbena should be developed during the project planning.

### 6.4 Special-status Animals

The background literature review identified the potential presence of a number of special-status or animal species of interest within the project area's region; see Table 2 and Figure 2. Based on the suitability of habitat within the project area and surrounding habitats and proximity of recorded sightings, these species were evaluated for potential occurrence within the project sites. For the animal species that occur in habitat types found within the area and/or that have reported sightings within close proximity to the project site, status and life history characteristics and potential for occurrences within the project sites are described in Table 2.

Not included in the table or further discussion are those species that do not occur in habitat types found within the project area and/or have no local occurrences and are unlikely to occur there. These include marine turtles (e.g., loggerhead, green, leatherback, and olive ridley turtle) and whales (e.g., sei, blue, finback, right, and sperm whale). While the project is located within a marine environment, the likelihood of occurrence of these marine turtles and whales is extremely low.

The special-status animals or species of local interest that were identified as having moderate to high potential for occurrence within the project sites based on the background literature review or species observed during field surveys include the following: great blue heron, great egret, western snowy plover, osprey, double-crested cormorant, California brown pelican, and steelhead – central California coast DPS. Four of these species were observed during the field surveys (great blue heron, great egret, double-crested cormorant, and brown pelican). Two species of marine mammal were observed, which are also protected; see Marine Mammal Protection Act below. Several invertebrate species of local concern are also reported or known to occur within the area. These include monarch butterfly, globose dune beetle, and bumblebee scarab beetle.

### 6.5 Protected Bird Species

Nesting native bird species are protected under both federal and state regulations. Under the federal Migratory Bird Treaty Act (MBTA), it is unlawful to take, kill, and/or possess migratory birds at any time or in any manner, unless the appropriate permits are obtained. Protections extend to active nests, eggs, and young birds still in the nest. Birds and their nests are also protected under the California Fish and Game Code (§3503 and §3503.5).

Most bird species, with a few specific exceptions, are protected under the MBTA and California Fish and Game Code. Vegetation removal and/or construction activities in areas with suitable nesting habitat during the breeding period, typically mid-March to mid-August in this region (RHJV 2004), could result in nest abandonment or loss of native nesting birds unless appropriate actions are taken (e.g., preconstruction surveys, avoidance, monitoring, etc.).

Heron and egret rookeries are also protected under the above-mentioned regulations. In addition, while not formally listed, CDFG considers rookeries to be a sensitive resource.

### 6.6 Marine Mammal Protection Act

The Marine Mammal Protection Act of 1972 (MMPA) was enacted to protect all marinedwelling mammals. The law protects whales, dolphins, seals, walruses, sea lions, sea otters, polar bears, dugongs, and manatees. The MMPA prohibits the take (i.e., hunting, killing, capture, and/or harassment) of marine mammals; provides for a moratorium on the import, export, and sale of marine mammal parts and products; and regulates scientific research and public display of captive animals. NOAA's National Marine Fisheries Service is the primary government agency responsible for enforcing the MMPA and for managing and conserving cetaceans (whales and dolphins) and pinnipeds other than the walrus.

Within Bodega Harbor, California sea lion can be found year-round. They are frequently observed foraging around the fish docks at The Tides and throughout the harbor. They are well established on the island just off Bodega Head. Pacific harbor seals are also year-round residents along coastal Sonoma County; they frequent the harbor and can be observed hauling out near the harbor entrance on jetties and adjacent beaches and foraging within the bay. They have a well-established haul-out site at the mouth of the Russian River. California sea lion and Pacific harbor seal are the most common marine mammals observed within harbor. Northern elephant seal and Steller sea lion are occasionally reported along the coast. A number of whale species are also known to occur seasonally; however, it is very uncommon for them to enter the harbor.

# 6.7 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended in 1996, established procedures to identify, conserve, and enhance Essential Fish Habitat (EFH) for federally managed species covered under Fishery Management Plans (FMP). In California, these include groundfish (various rockfish, flatfishes, sharks, skates, etc.), coastal pelagic species (northern anchovy, Pacific sardine, Pacific mackerel, jack mackerel, and market squid), and Pacific salmon (Chinook and coho salmon). EFH is defined as "those waters or substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (MSA Section 3). Impacts on EFH can result from the reduction in the quality and quantity of habitat, direct effects (e.g., contamination or physical disruption), indirect (e.g., loss of prey or reduction in species fecundity), and site-specific or habitat-wide impacts. Compliance with the MSA is accomplished through consultation with NOAA Fisheries.

Within Bodega Harbor, several species covered under the Pacific groundfish FMP could be present. Coho salmon (covered under the Pacific salmon FMP) may stray into the bay on occasion; however, Bodega Harbor tributaries are not currently known to support this species. Coastal pelagic species covered under the Coastal Pelagics Species FMP typically occupy offshore or nearshore habitats not present in the harbor. A programmatic consultation for Essential Fish Habitat has been completed by NOAA Fisheries and U.S. Army Corps of Engineers for overwater structures in the San Francisco Bay area (NOAA Fisheries 2011), excluding dredging or fill activities (e.g., boat ramps) other than pilings to support overwater structures.

## 6.8 Eelgrass Regulations

Eelgrass beds are recognized by both federal and state agencies as being sensitive and highly valuable habitat for a suite of species. They are identified as EFH for Pacific salmon, coastal pelagic, and Pacific groundfish managed under the MSA. Eelgrass beds are listed as a Habitat Area of Particular Concern (HAPC) because they are susceptible to human-induced degradation, especially ecologically important, and/or located in an environmentally stressed area. While no comprehensive mitigation policy for eelgrass beds has been adopted, it is managed in compliance with the draft California Eelgrass Mitigation Policy (NOAA Fisheries 2010). The policy establishes protocols for mitigating adverse impacts on eelgrass, provides guidelines for mapping beds, and establishes criteria for mitigation planting, monitoring, and evaluation. The programmatic consultation for Essential Fish Habitat (NOAA Fisheries 2011), noted above, also provides additional information specific to eelgrass. These documents should serve as the basis for completing any eelgrass mitigation and monitoring requirements associated with this project.

# 6.9 Jurisdictional Waters

Jurisdictional tidal waters are regulated by several resource agencies. Tidelands are regulated by the Corps under the provisions of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Any disposal of dredged or fill material and structures, as well as work in waters, require a permit from the Corps. Under Section 401 of the federal Clean Water Act, the Corps is required to meet state water quality regulations prior to granting a Section 404 permit. This is accomplished by application to the local Regional Water Quality Control Board for Section 401 certification that requirements have been met. Placement of structures in tideland may also be subject to the local city or county regulations.

# 7 Conclusions

Sonoma County Regional Parks is planning to provide improved access, amenities, and safety at two boat launching facilities in Bodega Bay. Work will occur at Doran Regional Park and Westside Regional Park. Work will occur within existing development and dune areas.

The field surveys and this report are considered a preliminary assessment of potential biological resource issues and are meant to guide the County in making preliminary CEQA determinations and recommendations for further analysis. Since the project is in the initial planning stages and engineered plans and construction specifications have not been developed, additional analysis may be required to determine the full extent of impacts.

Portions of the project will be constructed in environmentally sensitive areas. Coastal dunes where dredge material will be placed support potential habitat for sensitive plant species and native wildlife. One special-status plant, pink sand verbena, has been tentatively identified in the oceanward side of the project area. The baylands where improvements to the boat launch facilities are proposed are extremely rich in fauna and support beds of eelgrass, which are a Habitat Area of Particular Concern. The project sites support species protected under the Marine Mammal Protection Act, breeding birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, species covered under Fishery Management Plans specific to Bodega Harbor and identified Essential Fish Habitat, eelgrass beds, as noted above, and jurisdictional waters.

The following includes a list of recommendations for further study and development of conservation measures for the proposed project:

- 1. If CEQA evaluation determines that significant impacts on eelgrass habitat would occur, more extensive surveys would be needed to accurately determine species composition and distribution (NOAA Fisheries 2010 and 2011; Hanson 2004).
- If dewatering needs to occur, a comprehensive dewatering plan should be developed upon completion of engineered plans and construction specifications. This would include a set of procedures and protective measures to follow when working within the baylands. The plan would need to be developed under guidance from NOAA Fisheries.
- 3. A follow-up botanical survey should be performed to confirm the tentative identification of pink sand verbena within the proposed dredge disposal area. Alternatives should be considered during CEQA review to avoid impacts on pink sand verbena.
- 4. Construction-specific species protection measures should be developed, as required, in accordance with Fishery Management Plans specific to Bodega Harbor and Regional Parks policies, to protect terrestrial and marine environments and species. Details may include preconstruction surveys, relocation techniques and sites, fish and wildlife exclusion, on-going construction monitoring, worker education, and habitat enhancement and restoration guidelines.

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**Project Photographs – Doran Regional Park** 

Existing boat ramp and dock at Doran Regional Park.



Northwest shoreline adjacent to dock.



Eelgrass bed to the northeast of the boat ramp at Doran Regional Park.



Marine life attached to boat ramp and dock.



Looking northeast at parking lot adjacent to boat ramp and dock at Doran Regional Park.



Looking northwest at parking lot.



Existing coastal dune habitat and area of proposed boat wash at Doran Regional Park.



Pink sand verbena at the Cypress Day-use Area and proposed dredge disposal site.



# **Project Photographs – Westside Regional Park**

Existing boat ramp and docks at Westside Regional Park.



View of site from end of dock.



Upland habitat and area of proposed trail to fish cleaning station.



Existing boat washing station at Westside Regional Park.



Northwest shoreline at Westside Regional Park.



Eelgrass bed on northeast side of the dock.