

Appendix J

Osprey and Great Blue Heron Protection Plan

Osprey and Great Blue Heron Protection Plan

Vicky Reynolds, Wetland Biologist
Revised May 2005

The project proponent shall implement the following measures to avoid short-term and long-term disturbance of nesting osprey and great blue heron in and near the action area.

During the first non-nesting period for ospreys and great blue herons, following issuance of all permits and prior to any off-loading activities at the DMDF, the light fixtures at both Piers 34 and 35 will be removed and/or fenced off to eliminate future nesting opportunities at either of these piers. The light fixtures will be removed and re-located in two-phases; Phase 1 (2006-2007) will include temporary nest removal and relocation; and Phase 2 (2008-2010) will include permanent nest relocation. The following discussion contains preliminary concepts and program constraints.

Phase 1. Temporary and/or Experimental Relocation of Nesting Platforms

Phase 1 of the nest removal and relocation program includes a temporary and/or experimental relocation of nesting platforms.

This phase will involve removing two of the three light fixtures from Pier 34 and two of the light fixtures at Pier 35 to areas outside of the limits of UXO clean-up proposed for the shoreline at the southern portion of Mare Island tentatively scheduled to occur in the 2006 – 2007. For Pier 34, the two southerly light fixtures will be removed (one is currently being used by ospreys the other by great blue herons) while the most northerly light fixture (currently being used by great blue herons for nesting purposes) will be protected from human activities by a cyclone fence, as shown on Figure XX, Phase 1 Nest Relocation (Preliminary). Both light fixtures will be removed at Pier 35.

Temporary nesting structures for both species, with appropriate platforms/framework to support nest building, will be located north of the new exclusionary fence within the Navy's former Production Manufacturing Area (PMA), along the west bank of Mare Island Strait. These activities include adding 1 – 2 additional nesting structures adjacent to the northern light fixture at the northern end of Pier 34 wharf to attract great blue herons who nest communally. Possible nesting locations for the new structures are one targeted toward attracting ospreys along the shoreline near the Harry Mann Building, or one in the vicinity of Uhuru Drive and Building A-224, or one on the existing asphalt slab adjacent to a narrow marsh on the west bank of Mare Island Strait.

Any new nesting structures in the PMA would require an installation technique that does not directly disturb the underlying soils. Such installation might involve anchoring of nesting structures onto existing concrete slabs or wharf structures. Other options include

utilizing old keel blocks once used in supporting submarine keels while in the dry docks, or fabricating concrete foundation blocks for that purpose, moving these concrete blocks in place with a crane or similar equipment. Utilizing concrete blocks would allow locating nesting structures along the shoreline, or in open locations, such as former parking lots, without disturbing underlying sediments.

Some additional experimental installation of nesting structures will precede or occur concurrent with nest removal from the two piers to determine acceptability of nesting sites by the two bird species, and/or as a means of mitigation. Potential locations for experimental nest platforms, particularly for ospreys who are solitary nesters with a large territory (see below), include the old General Mills plant and/or Kewitt-Pacific site, both on the east bank of Mare Island Strait across from the Phase 1 relocation areas at the former PMA; City of Vallejo's River Park, also on the east bank of Mare Island Strait, but downstream of the Causeway; and/or in the vicinity of the old destroyer ways, a site directly northwest of the Causeway, to be transferred to SLC. Potential experimental nesting locations for great blue herons include adding up to two additional nesting structures in the vicinity of the old salt water reservoir and a current heron nesting area north of and in the vicinity of the former officer's housing above the southern shoreline area of Mare Island.

Phase 2. Permanent Nest Relocation

During Phase 2 relocation, nests that were left intact (light fixture at northern end of Pier 34 wharf) or temporarily relocated into the PMA will require relocation to avoid conflicts during UXO removal operations in that vicinity, tentatively scheduled for 2008 - 2010.

Any experimental nesting locations outside of the PMA will not be removed.

Permanent nesting locations for ospreys are currently being considered in the Pier 35 cove, and/or possibly along Dike 14 and/or the eastern end of Dike 12, while heron nest sites may include several structures along Dike 14.

Requirements and Constraints

The following requirements or constraints will further guide Phase 1 and 2 nest relocation activities:

For Great Blue Herons

To address the colonial nesting needs of this species, each nesting structure will include several nesting platforms spaced far enough apart along the height of the pole such that the birds can land directly on their individual nesting platform. A group of two or three nesting poles may be installed in close proximity to increase nesting sites within the colony.

Hérons create their nests from loosely placed masses of nesting materials. To contain these materials, each nesting platform will have a small lip around the outer edge (± 2 inches high) to hold the nests together. According to local heron monitors, existing nesting areas on the light fixtures that have similar lips have higher numbers of fledged

chicks because the nesting materials and young chicks are less likely to fall from the platform (NeVille and Leong 2005)

For Ospreys

Ospreys are solitary nesters, requiring some distance between adjacent nests of other birds, regardless of species. At Mare Island, distance between other osprey nesting sites that have raised chicks in the past average about ¼ mile (NeVille 2005). In the case of the osprey nests on Pier 34 (most southerly pole) and Pier 35 (most easterly pole), they are separated by approximately 2,600 feet, closer to a distance of ½ mile. The closest great blue heron nest site to the osprey nest on Pier 34 is about 600 feet. Proposed nesting platforms for ospreys will not be closer than ¼ mile apart.

Height and location of the nesting platforms for ospreys are also critical. The light fixtures on the two piers are about 65 feet tall, and the nests are located toward the top of the fixtures. Two other current osprey nests located along Mare Island Strait are located at heights of 80 to 100 feet. As such, new nest platforms will be a minimum 65 feet above the ground. New nesting locations should be within visual distance of former nests (Burns 2004). Therefore, the experimental nesting platforms at the east end of Dike 12, the old General Mills plant and/or in the vicinity of the Harry Mann Building satisfy initial nest movement from the two piers relative to visibility.

Osprey nest locations should be very close to or over the water. Osprey can hunt from their nests in such situations, or conversely ospreys are able to observe their nest from their hunting grounds (NeVille and Leong 2005).