Attachment B

Mitigation and Monitoring Reporting Program

ATTACHMENT C
Mitigation Reporting and Monitoring Program

Mitigation Measure BIO·1	**Incorporate into Project Plans and Specifications the Requirements from NMFS Consultations for the San Francisco Overwater Structures.** To mitigate for potentially significant adverse effects on candidate, sensitive, or special status species and Essential Fish Habitat from construction and maintenance of overwater structures, the General Waste Discharge Requirements and Water Quality Certification for the Construction and Maintenance of Overwater Structures (General WDRs/Certification) would incorporate the requirements identified in the Long-Term Management Strategy Program for Dredged Material from the San Francisco Bay Area and National Marine Fisheries Service Consultation. These requirements include the following: a) Light-transmitting materials (a minimum 40 percent transparency) must be used in any part of the structure that may shade submerged aquatic vegetation; b) Pile driving shall be conducted with the use of a vibratory hammer to avoid acoustic impacts to marine species. If the use of a vibratory hammer is not feasible, all impact pile driving within San Francisco Bay must use sound attenuation measures, such as a wood cushion and/or air bubble curtains. Impact pile driving must conform to California Department of Fish and Wildlife's (CDFW's) Interim Criteria Thresholds for Injury to Fish, which states that sound pressure levels should not exceed 206 decibels (dB) peak and 183 dB accumulated sound exposure level at ten meters from the source of impact; c) Existing piles and other wooden structures requiring replacement may not be replaced with creosote-treated material. Replacement wood piles treated with preservative (AZCA) must be wrapped with polyvinyl chloride (PVC), polyethylene, or other inert material; and d) In-water construction periods will be restricted to environmental work windows protective of aquatic species (July 1 – October 31).
Time of Implementation	During Authorization of Coverage under the General WDRs/Certification
Responsible Entity	San Francisco Bay Regional Water Quality Control Board

Compliance Verification	San Francisco Bay Regional Water Quality Control Board's Review and Authorization of Coverage under the General WDRs/Certification
Mitigation Measure BIO·2	**Implement CDFW-Recommended Measures to Avoid Disturbance of Eelgrass Beds.** To mitigate the potential for disturbance of eelgrass beds from projects proposed in areas potentially within 45 meters (150 feet) of eelgrass beds, the General WDRs/Certification would require projects within 45 meters of eelgrass beds to implement the following measures recommended by the California Department of Fish and Wildlife (CDFW): a) Conduct a preconstruction survey. The Applicant must conduct a survey of the entire project area prior to the beginning of construction. The survey requirements are as follows: • The survey must be conducted by a qualified biologist with previous experience conducting such surveys. • The survey must be conducted during the active eelgrass growth season from April to October. The survey will be valid for 60 days. • The survey must comply with all survey recommendations of Section II.B, "Surveying Eelgrass," of the California Eelgrass Mitigation Policy prepared by NMFS Southwest Region, dated October 2014. • The survey results must be provided to the Water Board upon completion for review. b) If the results of the pre-construction survey indicate that the proposed project is located within an eelgrass bed, the applicant must modify the project to avoid placing any portion of the overwater structure in or over eelgrass unless the Applicant submits an assessment of alternatives that demonstrates that it is infeasible to avoid placing the structure in or over eelgrass. c) If it is infeasible to avoid placing the structure in or over eelgrass, the Applicant must design the project to minimize impacts to eelgrass beds to the maximum extent feasible. At a minimum, decking materials above eelgrass must be comprised of slotted materials or spaced to provide a minimum 40 percent transparency thereby minimizing impacts from shading of eelgrass by allowing light penetration below the structure.

Mitigation Measure BIO·2 (Continued)	d) To compensate for any remaining unavoidable impacts to eelgrass beds, the Applicant must prepare a mitigation and monitoring plan as follows: • A mitigation and monitoring plan must be prepared by a qualified biologist with experience in surveying, monitoring, and implementing eelgrass mitigation plans. • A post-construction eelgrass survey and assessment of impacts must be completed in the same month as the preconstruction survey during the next growing season immediately following the completion of the project, or within the first 30 days of completion of construction if within the active growth period. The post-construction survey must document adverse impacts to eelgrass and any changes in density and extent of vegetative cover. The post-construction survey and impact assessment must be conducted in compliance with all recommendations of Section II.D., "Assessing Impacts to Eelgrass Habitat," of the *California Eelgrass Mitigation Policy and Implementing Guidelines* prepared by NMFS West Coast Region, dated October 2014. • The affected area must be monitored for a period of no less than 2 years following construction. • Eelgrass beds must reach a minimum recovery of 100 percent aerial coverage and 85 percent density compared to preconstruction levels. If the affected eelgrass mitigation areas have not met the recovery criteria described above at the end of the 2-year monitoring period, additional mitigation will be required at a minimum mitigation ratio of 1:1.
Time of Implementation	During Authorization of Coverage under the General WDRs/Certification and Oversight of the
Responsible Entity	San Francisco Bay Regional Water Quality Control Board
Compliance Verification	San Francisco Bay Regional Water Quality Control Board's Authorization of Coverage under the General WDRs/Certification

Mitigation Measure BIO·3	**Implement CDFW-Recommended Measures to Avoid Impacts to Ridgway's Rail and California Black Rail.** To mitigate for potential impacts to Ridgway's Rail and California Black Rail, the General WDRs/Certification would include the following prohibitions recommended by CDFW: a) Maintenance and construction activities within 700 feet of tidal marsh or suitable Ridgway's Rail and California Black Rail habitat are prohibited during rail breeding season (January 15 – August 31 for Ridgway's Rail, February 1 – August 31 for California Black Rail). b) Maintenance and construction activities within 50 feet of tidal marsh or suitable Ridgway's Rail and California Black Rail habitat are prohibited during extreme high tide events or when adjacent tidal marsh is flooded. Extreme high tides events are defined as a tide forecast of 6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides.
Time of Implementation	During Authorization of Coverage under the General WDRs/Certification
Responsible Entity	San Francisco Bay Regional Water Quality Control Board
Compliance Verification	San Francisco Bay Regional Water Quality Control Board's Authorization of Coverage under the General WDRs/Certification