# Final Mitigated Negative Declaration

## for the
## Seal Beach National Wildlife Refuge
## Thin-layer Salt Marsh Sediment Augmentation Pilot Project
## (Orange County, California)

**Date Issued:** September 16, 2014 **State Clearinghouse Number:** 2014081016

**Lead Agencies:**

**California State Coastal Conservancy** (CEQA Lead Agency)
1330 Broadway, 13th Floor, Oakland, CA 94612
Contact Person: Evyan Borgnis, Project Manager (510-286-4091)

**U.S. Fish and Wildlife Service** (NEPA Lead Agency)
San Diego National Wildlife Refuge Complex
P.O. Box 2358, Chula Vista, CA 91912
Contact Person: Kirk Gilligan, Refuge Manager (562-598-1024)

**Project Summary:** The purpose of this Final Mitigated Negative Declaration (MND) and Final Initial Study/Environmental Assessment (EA) is to describe and analyze the potential environmental effects of implementing the Seal Beach National Wildlife Refuge – Thin-layer Salt Marsh Sediment Augmentation Pilot Project. The U.S. Fish and Wildlife Service (Service or USFWS) proposes to apply a thin-layer of sediment to 10 acres of low salt marsh habitat within a 16-acre site on the Seal Beach National Wildlife Refuge (NWR or Refuge) to raise the marsh plain elevation.

The action is proposed in response to ongoing adverse effects of subsidence and sea level rise on the quality of the site's cordgrass (*Spartina foliosa*)-dominated salt marsh habitat. The purposes of the action include improving habitat quality for the endangered light-footed Ridgway's rail (*Rallus obsoletus levipes*), formerly referred to as the light-footed clapper rail, and determining if sediment augmentation is an effective sea level rise adaptation strategy coastal salt marsh habitat along the California coast. The Service will implement pre-construction monitoring and five years of post-construction monitoring to document the physical and ecological responses of the marsh to sediment augmentation. Monitoring data and lessons learned will be shared with Federal, State, and local regulatory and resource agencies, land managers, and other stakeholders to assist in further developing sea level rise adaptation strategies for coastal California.

Under the proposed action, the elevation of the affected marsh plain would be increased by approximately 8 to 10 inches [20.32 to 25.4 centimeters]) through a fairly uniform application of clean dredged sediment. The project site is located within a 565-acre tidal salt marsh protected within the boundaries of the 965-acre Seal Beach NWR.

The project is subject to both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). CEQA applies because the California State Coastal Conservancy (Conservancy), a State agency, has been asked to grant funds for the project, and NEPA applies because the U.S. Fish and Wildlife Service (Service), a Federal agency, will implement the project, and the U.S. Navy, a Federal agency, owns a portion of the project site. The California State Lands Commission is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters.

This joint MND and EA has been prepared in accordance with CEQA (Public Resources Code 21000 et seq.) and the CEQA Guidelines, (California Code of Regulations Title 14, section 15000 et seq.), and NEPA (42 USC 4341 et seq.) and the Council on Environmental Quality (CEQ) NEPA Regulations contained in C.F.R. Parts 1500-1508. The lead agency under CEQA is the Conservancy and the lead agency under NEPA is the Service. The Conservancy and Service have agreed to prepare a joint CEQA/NEPA document that complies with the administrative regulations set forth in the CEQA Guidelines and the CEQ NEPA Regulations. The analysis provided in this MND/EA will aid the Conservancy, Santa Ana Regional Water Quality Control Board, Service, U.S. Navy, and U.S. Army Corps of Engineers in their decision-making process.

**Proposed Actions/Permits:**

- California State Coastal Conservancy - Approval of Grant Funds
- U.S. Fish and Wildlife Service – Project Implementation, ESA Section 7 Compliance
- NOAA – Essential Fish Habitat Consultation, ESA Section 7 Compliance
- U.S. Navy – Concurrence on Project Implementation
- U.S. Army Corps of Engineers - Section 404, Nationwide Permit 27
- Regional Water Quality Control Board - 401 Certification
- California Coastal Commission - Coastal Consistency Determination

**Project Description:** See the accompanying Initial Study/EA.

**Effected Environment:** See the accompanying Initial Study/EA.

**Project Location:** The 16-acre pilot project site is located on the Seal Beach NWR, within the boundaries of Naval Weapons Station Seal Beach. The site occurs to the northeast of Pacific Coast Highway and to the southeast of Seal Beach Boulevard, within the corporate boundaries of the City of Seal Beach in Orange County, California.

**Proposed CEQA Finding:**

**Findings of Significant Effect on the Environment:**
Based on the analysis and conclusions presented in the Mitigated Negative Declaration, Initial Study/EA, and Initial Study Checklist, the Conservancy finds that the proposed project will not have a significant effect on the environment, and that although the proposed project has the potential for a significant effect on the environment in the areas of water quality, biological resources, and cultural

resources, measures have been incorporated into the project design to mitigate the identified effects to below a level of significance. Therefore, a Mitigated Negative Declaration has been prepared.

**Documentation:** The Final Initial Study/EA documents the reasons to support the above CEQA Finding.

**Mitigation Measures:** The measures presented here have been incorporated into the project design to mitigate potential impacts to below a level of significance. As described in the Mitigation Monitoring and Reporting Program (Attachment 1), the Service will be responsible for ensuring that these measures are implemented as described.

**Mitigation Measure BIO-1(Biological Resources) -** If, five years after sediment augmentation, reestablishment of native salt marsh vegetation to a density and percent cover similar to that present within the project site prior to sediment application has not occurred, the USFWS shall develop and implement a restoration plan to reestablish native salt marsh vegetation at a density and percent cover similar to pre-project site conditions. Site management and monitoring shall continue until salt marsh vegetation has been restored to the site in accordance with the specifications of the restoration plan.

**Mitigation Measure BIO-2 (Biological Resources) -** A qualified biologist shall be on site during construction to monitor for the presence of sensitive species and other wildlife. The biologist shall have the authority to halt construction when wildlife is observed within or near the project site. Work crews will be briefed on how to identify sea turtles and marine mammals that could occur in water areas affected by the implementation of the pilot project. The biological monitor will prepare incident reports of any observed sea turtle activity and shall provide such reports to National Marine Fisheries Service (NMFS) within 24 hours of an observation.

Any work vessels (e.g., containment barge, workboat) moving about the project site shall comply with a five-mile per hour speed limit. In the event of a collision between the containment barge or workboat and a marine mammal or sea turtle, the USFWS shall immediately contact the NMFS Southwest Regional Office's Stranding Coordinator, and submit a report to the NMFS within 24 hours.

To reduce the potential for impacts to sea turtles, sediment transport and application within the Refuge shall only occur between November 1 and February 15, when water temperatures are lower.

**Mitigation Measure BIO-3 (Biological Resources) -** A vegetated buffer shall be maintained around the 10-acre application site, and the buffer area shall be monitored during sediment application to ensure that any sediment moving off the pilot project site is being trapped within the vegetated buffer area. If monitoring indicates that the sediment has the potential to migrate from the marsh into the adjacent tidal channel, additional measures shall be implemented to minimize the loss of sediment from the site. Such measures could include, but are not limited to, installing silt fencing, silt curtains, or straw wattles along the edge of the site.

**Mitigation Measure BIO-4 (Biological Resources)** Eelgrass surveys shall be conducted within the tidal channels that abut the 16-acre pilot project site, as well as another reference site within the Refuge, during the active growth phase for the vegetation (typically March through October). The distribution, density, and relationship to depth contours of any eelgrass beds that may be impacted by project implementation shall be thoroughly mapped and mapping protocols shall be consistent with those outlined in the Southern California Eelgrass Mitigation Policy (SCEMP). The same surveys shall be conducted within 30 days of completing the sediment application process and then annually for two years following application.

If impacts to eelgrass from project implementation are identified, compliance with the SCEMP shall be initiated and monitoring of the mitigation area(s) and a suitable local reference site shall be implemented per the requirements of the SCEMP. Monitoring reports shall be filed with the resource agencies and the California Coastal Commission.

**Mitigation Measure BIO-5 (Biological Resources) -** To avoid impacts to light-footed Ridgway's rails and other avian species in the vicinity of the project site, sediment application shall not occur during the nesting season. Additionally, the three artificial light-footed Ridgway's rail nesting platforms located within and adjacent to the project site shall be removed after the end of the breeding season (after September 15) preceding sediment application to minimize the presence of rails in the area.

Prior to the daily application of sediment onto the pilot project site, a qualified biologist shall survey the 16-acre site and adjacent areas for the presence of rails and other birds. If any are present, an air horn or cracker shells will be deployed to move the birds off the site prior to sediment application. If noise proves ineffective, physical presence may be used to haze birds to move to other parts of the Refuge. Also, monitoring shall continue throughout the day to discourage rails and other birds from moving into the project site, particularly during periods when sediment is not being sprayed, such as during breaks or when adjustments in the application process are being implemented.

**Mitigation Measure CR-1 (Cultural Resources) -** In the event that cultural resources are discovered during any disturbance to subsurface material on the 16-acre pilot project site, the ground disturbing activity shall be halted, the Service's Regional Archaeologist and the Conservancy shall be notified, and additional consultation shall be initiated to ensure compliance with the NHPA and other applicable Federal regulations and policies. If any cultural resources are discovered on State lands during the implementation of this project, the USFWS and Conservancy shall also consult with the California State Lands Commission's Assistant Chief Counsel.

**Mitigation Measure WQ-1(Water Quality) -** Prior to initiation of sediment transport and application to the pilot project site, the USFWS shall submit an application to the Santa Ana Regional Water Quality Control Board for coverage under a 401 Certification. The USFWS shall implement all conditions included in the 401 Certification, including the implementation of measures to reduce potential increases in sedimentation, turbidity, and other impacts associated with the transport and beneficial use of dredge material for habitat enhancement.

**Mitigation Measure WQ-2 (Water Quality) -** To reduce the potential for sediment to enter adjacent waterways, best management practices (BMPs) shall be implemented during all phases of the project. BMPs shall include providing approximately six acres of vegetated buffer around the application site; periodic inspection of the slurried sediment pipeline (if used); and monitoring for excessive turbidity near the transport pipeline or containment barge and associated sediment distribution apparatus (e.g., rainbow sprayer, open pipe, end-of-pipe baffle impingement). If a substantial leak is identified in the slurry pipeline, the affected pipeline segment shall be immediately repaired or replaced, or a silt curtain or similar measure shall be employed to capture and retain sediment at the source of the leak.

Monitoring of sediment movement and turbidity levels shall occur during and after sediment application. Movement of sediment on the site shall be adaptively managed until adequately compacted to ensure that movement of sediment off the site is minimized. Measures such as installation of silt fencing, a silt curtain, or straw wattles shall be installed if proposed vegetative buffers around the site cannot adequately maintain the sediment within the project boundary.

**Public Review and Comment:** A notice of availability of the draft MND was sent to more than 35 parties (see Distribution List), submitted to the State Clearinghouse, and published as a legal notice in the Orange County Register. A copy of the document was available for review at the Seal Beach/Mary Wilson Public Library and available for downloading on the Coastal Conservancy and Seal Beach NWR websites. Compact discs (CDs) were disturbed to various agencies and other stakeholders and were available to others upon request.

The draft Mitigated Negative Declaration and draft Initial Study/EA were available for public comment for 32 calendar days. Public review began on August 8, 2014 and comments were accepted until 5 p.m. on September 8, 2014. Written comments were to be provided to Evyan Borgnis, Conservancy Project Manager.

During the public comment period, three comments related to the draft MND and Initial Study/EA were received. Responses to these comments are included in the Final MND as Attachment 2. Changes made to the text of the draft Initial Study/EA in response to comments received are underlined in the Final Initial Study/EA (Attachment A). Those who provided comments have been sent a compact disc (CD) containing the Final MND and accompanying Final Initial Study/EA. CDs can be obtained by contacting Evyan Borgnis, Conservancy Project Manager at eborgnis@scc.ca.gov.

The Final MND and Final IS/EA are available for downloading at:

**California Coastal Conservancy Website**, go to: www.scc.ca.gov, then click Public Notices under the Quick Links box in the upper left hand corner of the home page.

**Seal Beach National Wildlife Refuge Website**, go to: www.fws.gov/refuge/Seal_Beach/what_we_do/resource_management.html

**Distribution List:** A notice of availability of the draft MND and draft Initial Study/EA was provided to following agencies, organizations, and other interested parties.

U.S. Congress
Honorable Barbara Boxer, U.S. Senate
Honorable Dianne Feinstein, U.S. Senate
Congressman Dana Rohrabacher, 48th District

California State Legislature
State Senator Lou Correa, 34th District
State Assemblyman Travis Allen, 72nd District

Federal Agencies
Naval Weapons Station, Seal Beach
NOAA Marine Fisheries
U.S. Army, Corps of Engineers
USFWS, Carlsbad Fish and Wildlife Office
Environmental Protection Agency, Region 9

Tribes
Cahuilla Band of Indians
Gabrieleno/Tongva Indians of California
Juaneno Band of Mission Indians

California State Agencies
California Coastal Commission, Federal Consistency
California State Clearinghouse
California State Parks, State Historic Preservation Office
Department of Fish and Wildlife
State Lands Commission, Executive Officer
Santa Ana Regional Water Quality Control Board
Coastal Sediment Management Workgroup

City Governments
City of Seal Beach, Director of Community Development
City of Seal Beach, Mayor and City Council
City of Huntington Beach, City Manager

County Government
County of Orange Supervisor Moorlach
County of Orange, Parks
County of Orange, Public Works (Watersheds)
County of Orange, Vector Control

Local Libraries
Seal Beach/Mary Wilson Public Library

Organizations
California Native Plant Society
Center for Biodiversity
El Dorado Audubon
Endangered Habitats League
Friends of Seal Beach NWR
Sea and Sage Audubon
Southern California Wetlands Recovery Project
Southwest Wetlands Interpretive Association
Surfrider Foundation

Media
Huntington Beach News
Los Angeles Times
Orange County Register
Seal Beach Sun

The final documents are now posted on the Conservancy website and a printed copy is available for review at the Seal Beach/Mary Wilson Library.

Evyan Borgnis, State Coastal Conservancy
CEQA Lead Agency

August 8, 2014
Date of Draft

Evyan Borgnis, State Coastal Conservancy
CEQA Lead Agency

September 16, 2014
Date of Final

**Attachment 1:** Mitigation Monitoring and Reporting Program

**Attachment 2:** Response to Comments

**Attachment 1 - Final Mitigation Monitoring and Reporting Program**

**Seal Beach National Wildlife Refuge - Thin-layer Salt Marsh Sediment Augmentation Pilot Project**

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| **Biological Resources (BIO-1)** | | | | | |
| If the intended outcome of the pilot project is not achieved and the site does not naturally revegetate as predicted, efforts to reestablish salt marsh vegetation on the site will be necessary to avoid long-term impacts to low salt marsh vegetation. | **Biological Resources (BIO-1)**: If, five years after sediment augmentation, reestablishment of native salt marsh vegetation to a density and percent cover similar to that present within the project site prior to sediment application has not occurred, the USFWS shall develop and implement a restoration plan to reestablish native salt marsh vegetation at a density and percent cover similar to pre-project site conditions. Site management and monitoring shall continue until salt marsh vegetation has been restored to the site in accordance with the specifications of the restoration plan. | Monitoring will be conducted on the 10-acre site prior to sediment application to record vegetation density, plant species composition, and percent cover. Following sediment application, these same attributes will be monitored annually for five years or until the desired conditions are achieved. If after five years pre-project conditions are not achieved, the site will be revegetated, and monitored annually until restored in accordance with the specifications of the restoration plan. Monitoring reports will be submitted annually to the Conservancy. | Mitigation would be considered successful if salt marsh vegetation is successfully reestablished on the sediment augmentation site at a quality consistent with or better than that present on the site prior to sediment augmentation. | USFWS | Prior to and following sediment augmentation until revegetation objectives are achieved. |
| **Biological Resources (BIO-2)** | | | | | |
| Project activities (e.g., installing a temporary pipeline to slurry sediment from the dredge site to the pilot project site and/or the operation of boats to transport and/or apply the sediment to the site) occurring in the open water surrounding the pilot project site have the potential to adversely affect sea turtles and marine mammals. Mitigation | **Biological Resources (BIO-2)**: A qualified biologist shall be on site during construction to monitor for the presence of sensitive species and other wildlife. The biologist shall have the authority to halt construction when wildlife is observed within or near the project site. Work crews will be briefed on how to identify sea turtles and marine mammals that could occur in water areas affected by the implementation of the pilot project. The biological monitor will prepare incident reports of any observed sea turtle activity and shall provide such reports to National Marine Fisheries Service (NMFS) within 24 hours of an observation. | The Refuge Manager will hold a pre-construction meeting with all contractors, subcontractors, and the biological monitor. The notes and list of attendees from that meeting will be forwarded to the Conservancy.<br><br>The biological monitor will be present at all times while sediment transport and/or application are occurring and the Refuge will prepare a letter report at the end of the sediment transport and application process to document monitoring activities. Copies of any required incident reports will be provided to the Conservancy. | Mitigation would be considered successful if through monitoring efforts conducted during sediment transport and application, adverse effects to sea turtles and marine mammals are avoided. | USFWS | Just prior to and during sediment transport and application. |

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| measures have been incorporated into the scope of the project to minimize disturbance to these species. | Any work vessels (e.g., containment barge, workboat) moving about the project site shall comply with a five-mile per hour speed limit. In the event of a collision between the containment barge or workboat and a marine mammal or sea turtle, the USFWS shall immediately contact the NMFS Southwest Regional Office's Stranding Coordinator, and submit a report to the NMFS within 24 hours.<br><br>To reduce the potential for impacts to sea turtles, sediment transport and application within the Refuge shall only occur between November 1 and February 15, when water temperatures are lower. | | | | |
| **Biological Resources (BIO-3)** | | | | | |
| The extent and/or quality of the eelgrass beds present within the tidal channels that abut the project site could be adversely affected by the introduction of sediment and/or increased turbidity during the transport and application of sediment onto the pilot project site. | **Biological Resources (BIO-3):** A vegetated buffer shall be maintained around the 10-acre application site, and the buffer area shall be monitored during sediment application to ensure that any sediment moving off the pilot project site is being trapped within the vegetated buffer area. If monitoring indicates that the sediment has the potential to migrate from the marsh into the adjacent tidal channel, additional measures shall be implemented to minimize the loss of sediment from the site. Such measures could include, but are not limited to, installing silt fencing, silt curtains, or straw wattles along the edge of the site. | The sediment application process will be documented and observations regarding the effectiveness of the various measures implemented to contain the sediment on the site will be recorded. Following completion of the application process, a report will be prepared and provided to the Conservancy to demonstrate compliance with this measure. The information gathered through this process will also be included in the final report detailing the outcome of the pilot project and the lessons learned during the process. | Mitigation is considered successful if the majority of the sediment applied to the site is retained within the 16-acre project site and there are no project-induced impacts to the adjacent eelgrass beds. | USFWS | During the sediment application process |

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| **Biological Resources (BIO-4)** | | | | | |
| Sedimentation and/or increase turbidity in the tidal channels that abut the project site could impact eelgrass. There is also the potential for direct impacts to eelgrass from the temporary placement of a slurry pipeline on the channel floor and/or from boat activity associated with the transport and application of the sediment. | **Biological Resources (BIO-4):** Eelgrass surveys shall be conducted within the tidal channels that abut the 16-acre pilot project site, as well as another reference site within the Refuge, during the active growth phase for the vegetation (typically March through October). The distribution, density, and relationship to depth contours of any eelgrass beds that may be impacted by project implementation shall be thoroughly mapped and mapping protocols shall be consistent with those outlined in the Southern California Eelgrass Mitigation Policy (SCEMP). The same surveys shall be conducted within 30 days of completing the sediment application process and then annually for two years following application.<br><br>If impacts to eelgrass from project implementation are identified, compliance with the SCEMP shall be initiated and monitoring of the mitigation area(s) and a suitable local reference site shall be implemented per the requirements of the SCEMP. Monitoring reports shall be filed with the resource agencies and the California Coastal Commission. | The results of the pre-sediment application survey will be provided to the Conservancy prior to project implementation and the results and conclusions of the post-sediment application surveys will be provided to the Conservancy within two weeks of conducting the surveys.<br><br>If eelgrass restoration is deemed necessary, an eelgrass restoration plan would be prepared in accordance with the SCEMP. The restoration plan and documentation of its implementation will be provided to the Conservancy within two months of restoration.<br><br>Documentation of the results of monitoring implemented in accordance with the SCEMP will be provided to the Conservancy within two weeks of completion. | Mitigation is considered successful if there are no substantive changes in the extent or quality of the adjacent eelgrass beds or if impacted eelgrass is successfully mitigated in accordance with the SCEMP. | USFWS | Prior to and following sediment application. |

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| **Biological Resources (BIO-5)** | | | | | |
| Harm to light-footed Ridgway's rails and other avian species could occur if rails and/or other birds are present within the pilot project site during sediment application. To avoid significant impacts to these species, mitigation measures have been incorporated into the scope of the project to minimize disturbance throughout the transport and application process. | **Biological Resources (BIO-5):** To avoid impacts to light-footed Ridgway's rails and other avian species in the vicinity of the project site, sediment application shall not occur during the nesting season. Additionally, the three artificial light-footed Ridgway's rail nesting platforms located within and adjacent to the project site shall be removed after the end of the breeding season (after September 15) preceding sediment application to minimize the presence of rails in the area.<br><br>Prior to the daily application of sediment onto the pilot project site, a qualified biologist shall survey the 16-acre site and adjacent areas for the presence of rails and other birds. If any are present, an air horn or cracker shells will be deployed to move the birds off the site prior to sediment application. If noise proves ineffective, physical presence may be used to haze birds to move to other parts of the Refuge. Also, monitoring shall continue throughout the day to discourage rails and other birds from moving into the project site, particularly during periods when sediment is not being sprayed, such as during breaks or when adjustments in the application process are being implemented. | The Refuge Manager will hold a pre-construction meeting with all contractors, subcontractors, and the biological monitor. The notes and list of attendees from that meeting will be forwarded to the Conservancy.<br><br>The biological monitor will be present at all times while sediment application is occurring and the Refuge will prepare a letter report at the end of the sediment application process to document the removal of the nesting platforms and summarize the monitoring activities. | Mitigation would be considered successful if through monitoring efforts conducted during sediment application, adverse effects to light-footed Ridgway's rails and other avian species are avoided. | USFWS | Removal of nesting platforms would occur prior to sediment application. Monitoring and, if necessary, hazing to prevent harm to rails and other birds would occur during the entire sediment application process. |

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| **Cultural Resources (CR-1)** | | | | | |
| Although the potential for encountering cultural resources on the project site has been determined to be unlikely, the existence of cultural resources can never be predicted with certainty; therefore, should any cultural resources be encountered during any ground-disturbing activity on the site, measure must be implemented to avoid adverse effects to such resources. | **Cultural Resources (CR-1):** In the event that cultural resources are discovered during any disturbance to subsurface material on the 16-acre pilot project site, the ground disturbing activity shall be halted, the Service's Regional Archaeologist and the Conservancy shall be notified, and additional consultation shall be initiated to ensure compliance with the National Historic Preservation Act and other applicable Federal regulations and policies. If any cultural resources are discovered on State lands during the implementation of this project, the USFWS and Conservancy shall also consult with the California State Lands Commission's Assistant Chief Counsel. | If cultural resources are encountered during project implementation, in addition to other notification requirements, the USFWS will notify the Conservancy within 24 hours of any discoveries, and a report describing the actions taken by the Service in accordance with Federal regulations and policies will be provided to the Conservancy following completion of actions. If cultural resources are encountered on State lands, USFWS and the Conservancy will consult with the California State Lands Commission. | Mitigation would be considered successful if no adverse effects to cultural resources occur during project implementation and any required consultation is initiated in compliance with applicable Federal and State regulations and policies. | USFWS and Conservancy, if State lands are affected. | Adherence to this mitigation measure will occur throughout the implementation and monitoring phases of this project. |
| **Water Quality (WQ-1)** | | | | | |
| The project has the potential to introduce sediment into the adjacent tidal channels, potentially causing turbidity levels in adjacent waters to increase, at least temporarily. As part of the project scope, sediment movement and turbidity levels will be monitored and adaptively managed. | **Water Quality (WQ-1):** Prior to initiation of sediment transport and application to the pilot project site, the USFWS shall submit an application to the Santa Ana Regional Water Quality Control Board for coverage under a 401 Certification. The USFWS shall implement all conditions included in the 401 Certification, including the implementation of measures to reduce potential increases in sedimentation, turbidity, and other impacts associated with the transport and beneficial use of dredge material for habitat enhancement. | A copy of the 401 certification will be forwarded to the Conservancy prior to sediment application.<br><br>No later than three months following completion of the sediment application phase of the project, a report describing how all the conditions included in the 401 certification were met will be provided to the Conservancy. | Mitigation would be considered successful if increases in sedimentation and turbidity levels in the adjacent tidal channels are minimized during project implementation. | USFWS | During sediment transport and application. |

| Impact | Mitigation Measure | Monitoring/Reporting Action | Effectiveness Criteria | Responsible Agency | Timing |
|---|---|---|---|---|---|
| **Water Quality (WQ-2)** | | | | | |
| During the transport and application of sediment, sedimentation within the tidal channels that abut the project site could occur and/or turbidity levels in adjacent waters could increase. Until the applied sediments are adequately compacted on the site, there is continued potential for sedimentation and increased turbidity in adjacent waters. Post-application monitoring will evaluate sediment retention on site and turbidity levels in the adjacent tidal channels. | **Water Quality (WQ-2):** To reduce the potential for sediment to enter adjacent waterways, best management practices (BMPs) shall be implemented during all phases of the project. BMPs shall include providing approximately six acres of vegetated buffer around the application site; periodic inspection of the slurried sediment pipeline (if used); and monitoring for excessive turbidity near the transport pipeline or containment barge and associated sediment distribution apparatus (e.g., rainbow sprayer, open pipe, end-of-pipe baffle impingement). If a substantial leak is identified in the slurry pipeline, the affected pipeline segment shall be immediately repaired or replaced, or a silt curtain or similar measure shall be employed to capture and retain sediment at the source of the leak.<br>Monitoring of sediment movement and turbidity levels shall occur during and after sediment application. Movement of sediment on the site shall be adaptively managed until adequately compacted to ensure that movement of sediment off the site is minimized. Measures such as installation of silt fencing, a silt curtain, or straw wattles shall be installed if proposed vegetative buffers around the site cannot adequately maintain the sediment within the project boundary. | The report described under mitigation measure WQ-1 would be completed and submitted to the Conservancy no later than three months following completion of the sediment application phase of the project. In addition to describing how all the conditions included in the 401 certification were met, this report would outline the sedimentation and turbidity monitoring results obtained during construction, the BMPs that were implemented to minimize water quality impacts, and identify any leaks or other problems that needed to be addressed during sediment transport and application. Post-application monitoring results would be provided to the Conservancy in annual monitoring reports. | Mitigation would be considered successful if sedimentation and increases in turbidity levels in the adjacent tidal channels are minimized. | USFWS | Adherence to this mitigation measure will occur during and after sediment application. |

# Attachment 2 - Response to Comments

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

September 8, 2014

Evyan Borgnis
California State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

Subject: Seal Beach National Wildlife Refuge - Thin-layer Salt Marsh Sediment Augmentation Pilot Project
SCH#: 2014081016

Dear Evyan Borgnis:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 5, 2014, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

1 This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

RECEIVED
SEP 11 2014
COASTAL CONSERVANCY
OAKLAND, CALIF.

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

## Responses

1. No comment necessary.

STATE OF CALIFORNIA — EDMUND G. BROWN JR., *Governor*

**CALIFORNIA STATE LANDS COMMISSION**
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

**JENNIFER LUCCHESI,** *Executive Officer*
(916) 574-1800 *Fax* (916) 574-1810
*California Relay Service TDD Phone* 1-800-735-2929
*from Voice Phone* 1-800-735-2922

***Contact Phone:*** **(916) 574-1890**
***Contact FAX:*** **(916) 574-1885**

*Established in 1938*

September 5, 2014

File Ref: SCH #2014081016

Evyan Borgnis
California State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612

**Subject: Draft Mitigated Negative Declaration/Environmental Assessment (MND/EA) for the Seal Beach National Wildlife Refuge Thin-layer Salt Marsh Sediment Augmentation Pilot Project, Orange County**

Dear Ms. Borgnis:

The California State Lands Commission (CSLC) staff has reviewed the Draft MND/EA for the Seal Beach National Wildlife Refuge Thin-layer Salt Marsh Sediment Augmentation Pilot Project (Project), which has been prepared by the California State Coastal Conservancy (CSCC) and U.S. Fish and Wildlife Service (USFWS). The CSCC, a State agency, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), and the USFWS, a federal agency, is the lead agency under the National Environmental Policy Act (NEPA). The CSLC is a trustee agency because of its trust
2 responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters.

**CSLC Jurisdiction and Public Trust Lands**

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands
3 and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open

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2. The Final Mitigated Negative Declaration (MND) and Initial Study/Environmental Assessment (IS/EA) includes text that identifies the California State Lands Commission (CSLC) as a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters.

3. Comment noted.

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space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

4 The Project site at Seal Beach National Wildlife Refuge is located within lands the State patented as Tideland Location 134. The Project may also extend onto lands within the bed of Anaheim Creek or its tributary, which at this location is under CSLC jurisdiction. The site is currently under lease PRC 5963.9 to the USFWS for management as part of the Seal Beach National Wildlife Refuge. The proposed Project appears to be compatible with the operation, management, and maintenance obligations authorized by CSLC under this lease; therefore, no lease amendment will be required at this time.

5 These comments are made without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information become available. This letter is not intended, nor should it be construed as a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

**Project Description**

The USFWS proposes to apply a thin-layer of sediment (approximately 6 to 10 inches high) over approximately 10 acres of existing salt marsh habitat on the Seal Beach National Wildlife Refuge. The USFWS will document the overall effectiveness of this adaptation strategy in conserving salt marsh habitat threatened by sea level rise along the California coast, while also improving habitat quality within cordgrass (*Spartina foliosa*)-dominated salt marsh habitat to support the federally and State listed endangered light-footed clapper rail (*Rallus longirostris levipes*). Following sediment augmentation, the USFWS will monitor the physical and ecological responses of the marsh to the sediment augmentation for five years, and share the results and lessons learned from the Project to assist federal, State, and local agencies, coastal land managers, and other stakeholders in further developing sea level rise adaptation strategies for the California coast.

**Environmental Review**

CSLC staff requests that the CSCC consider the following comments on the Project's Draft MND.

Sea Level Rise

6 1. A tremendous amount of state owned lands and resources under the Commission's jurisdiction will be impacted by rising sea levels. Because of their nature and location, these lands and resources are already vulnerable to a range of natural events, such as storms and extreme high tides. The State of California released the final "Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy" (Safeguarding Plan) on July 31, 2014, to provide policy guidance for state decision-makers as part of continuing efforts to prepare for climate

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4. The language in the draft IS/EA regarding lands leased to the Service by the CSLC has been expanded in the Final IS/EA in response to this comment.

5. Statement acknowledged.

6. A discussion of Safeguarding California: Reducing Climate Risk has been added to the Background section of the Final IS/EA.

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7 risks. The Safeguarding Plan sets forth "actions needed" to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for state decision-makers. CSLC staff believes the goals of the proposed Project are consistent with the guidance and recommendations presented in the Safeguarding Plan, and that results of the study will benefit coastal management agencies' efforts to plan for more resilient shorelines and minimize adverse ecosystem impacts resulting from sea level rise. CSLC staff requests to be included among the recipients of the study findings, and further requests to be included in future adaptation strategy discussions that may be prompted by the Project's monitoring results. Please contact Kelly Keen, Division of Environmental Planning and Management (contact information at the end of this letter), for further information or questions about the CSLC's sea level rise and climate adaptation programs.

Cultural Resources

8 2. Title to Resources: The MND/EA should mention that the title to all abandoned archaeological sites and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the CSLC. CSLC staff requests that the CSCC and USFWS consult with Assistant Chief Counsel Pam Griggs (see contact information below) should any cultural resources on State lands be discovered during the sediment augmentation process. Please note that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant.

9 Thank you for the opportunity to comment on the MND/EA for the Project. Because the Project will affect land and resources subject to the CSLC's trustee agency jurisdiction, we request that you consider our comments prior to adoption of the Final MND/EA.

10 Please send copies of future Project-related documents, including electronic copies of the Final MND, Mitigation Monitoring and Reporting Program (MMRP), and Notice of Determination (NOD) when they become available, and refer questions concerning environmental review to Kelly Keen, Environmental Scientist, at (916) 574-1938 or via e-mail at Kelly.Keen@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Randy Collins, Public Land Management Specialist, at (916) 574-0900, or via email at Randy.Collins@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
R. Collins, LMD, CSLC
K. Keen, DEPM, CSLC
K. Colson, Legal, CSLC

**Responses**

7. This contact information has been added to our contact list for this project and we will distribute the Project's monitoring results to the CSLC as requested.

8. The Cultural Resources section under Affected Environment has been expanded to describe the CSLC responsibilities for cultural resources on Public Trust Lands. Mitigation Measure CR-1 has also been revised in response to this comment.

9. The comments provided by CSLC have been incorporated into the Final MND and IS/EA, a copy of the CSLC letter has been provided to the California State Conservancy Board for consideration prior to taking an action at their upcoming meeting, and the U.S. Fish and Wildlife Service (USFWS) considered the comments prior to preparing the Finding of No Significant Impact (FONSI).

10. Copies of these documents will be provided to CSLC when they are available.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
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*EDMUND G. BROWN JR., Governor*
*CHARLTON H. BONHAM, Director*

September 8, 2014

Ms. Evyan Borgnis, Conservancy Project Manager
California Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612
eborgnis@scc.ca.gov

**Subject: Comments on the Draft Mitigated Negative Declaration and Joint Initial Study/Environmental Assessment for the Seal Beach National Wildlife Refuge Thin-Layer Salt Marsh Sediment Augmentation Pilot Project, Orange County (SCH #2014081016)**

Dear Ms. Borgnis:

The Department of Fish and Wildlife (Department) has reviewed the Draft Mitigated Negative Declaration/Environmental Assessment (MND/EA) for the Thin-Layer Salt Marsh Sediment Augmentation Pilot Project (Project) at Seal Beach National Wildlife Refuge (NWR) in Orange County. The draft MND/EA was prepared by the California State Coastal Conservancy (Conservancy) acting as Lead Agency under the California Environmental Quality Act (CEQA) and the U.S. Fish and Wildlife Service (USFWS) acting as Lead Agency under the National Environmental Policy Act (NEPA).

The Project is located within the Seal Beach NWR in northwestern Orange County. The majority of the Seal Beach NWR lies within the boundaries of Naval Weapons Station Seal Beach. The Project site includes 16 acres of property owned by the U.S. Navy as well as sovereign land held by the California State Lands Commission for the benefit of the people of California and leased to the USFWS for management as a National Wildlife Refuge.

The Project includes a sea level rise adaptation strategy on a portion of coastal salt marsh within the Seal Beach NWR. The Project consists of the application of a thin-layer of clean sediment of appropriate grain size to a portion of the marsh plain within the Seal Beach NWR, followed by 5 years of annual monitoring of the physical and ecological responses of the salt marsh ecosystem to sediment application. Approximately 10,000-13,500 cubic yards of material dredged from the Main Channel West site is to be transported to the 16-acre project site for distribution over 10 acres approximately 8 to 10 inches deep using one or more methods of transport and application.

11 The entire process, which could take 4-6 weeks to complete, will be adaptively managed. The remaining 6 acres of the 16-acre site will provide a vegetated buffer around the augmentation site in an effort to minimize the movement of sediment off the site and into the adjacent tidal channels. Prior to initiating the sediment application process on the site, which is expected to occur between November 2014 and February 15, 2015, the three clapper rail artificial nesting platforms located in proximity to the project site will be temporarily removed.

The following statements and comments have been prepared pursuant to the Department's

*Conserving California's Wildlife Since 1870*

**Responses**

11. Although we hoped to implement the project in winter 2014/2015, it will likely be necessary to postpone sediment augmentation until winter 2015/2016 due to funding constraints and the timing required to obtain the necessary permits. This information has been included in the Final MND and IS/EA. Postponing the project until next year would not result in the need to change the analysis and/or conclusions presented in the draft MND and IS/EA, and pre-construction monitoring of the site is expected to begin in November 2014.

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authority as Trustee Agency with jurisdiction over natural resources affected by the project, (CEQA Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*).

**Impacts to Biological Resources**

12 1. Fully Protected Species – The draft MND/EA states that the light-footed clapper rail (*Rallus longirostris levipes*), California least tern (*Sternula antillarum browni*), and American peregrine falcon (*Falco peregrinus*) occur or has the potential to occur on the Project site. However, the draft MND/EA does not include any discussion of these species, which are
13 State-designated as fully protected (Fish and Game Code sections 3511). Except as provided in the Fish and Game Code (e.g., for necessary scientific research), take of any fully protected species is prohibited and cannot be authorized by the Department. The
14 Department recommends the Conservancy and USFWS collaborate with the Department prior to implementation of the Project to ensure that no take of fully protected species occurs as a result of the Project.

15 2. CESA Compliance – The draft MND/EA states that the Project site supports or has the potential to support federal Endangered Species Act (FESA)-listed species. However, the draft MND/EA does not include any discussion for CESA-listed species. The Department considers adverse impacts to a species protected under CESA, for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by state law (Fish and Game Code §§ 2080, 2085). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a
16 species designated as endangered or threatened, or a candidate for listing under CESA, the Department recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from the Department may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2080(b), (c)). Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, the final MND should analyze the likelihood of any CESA-listed species occurrence and adopt
17 appropriate mitigation measures for those with high or moderate likelihood of occurrence. The Department recommends biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

18 a. Impacts to Belding's Savannah Sparrow – The draft MND/EA states that Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) occur year-round at Seal Beach NWR. Belding's savannah sparrow is a State endangered species and protected under CESA. The MND/EA should provide a more detailed analysis of the potential for impacts to the species and its habitat through the implementation of the Project. If occupied Belding's savannah sparrow habitat is impacted by the Project, the Department is concerned the Project could result in direct impacts on Belding's savannah sparrow

## Responses

12. The light-footed Ridgway's rail (formerly referred to as the light-footed clapper rail) was discussed on pages 29 – 32 and pages 51 – 52 of the draft IS/EA and the California least tern was discussed on pages 32 and 52. The peregrine falcon was not addressed, as there is no potential for adverse effects to this species from the proposed project. We have however added information to the Final IS/EA (Section 5.B - Effected Environment, Biological Resources) to indicate that this species is present on the Refuge and can be seen foraging in uplands, high marsh, near the Refuge's tern colony, and on rare occasions over low marsh habitat. In addition, several sentences were added to the Endangered and Threatened Species and Other Species of Concern section of the IS/EA to clarify that these species are fully protected by the State and that the light-footed Ridgway's rail and California least tern are also listed as endangered under the California Endangered Species Act.

13. As described in the draft IS/EA, no take of listed or fully protected species will occur as a result of this project. To insure that no take occurs, mitigation measures have been incorporated into the scope of the project and will be implemented by the USFWS as presented in the MMRP and Final MND.

14. The Department was invited to participate in several agencies and stakeholder collaboration meetings organized the Service prior to finalizing the scope of the project, and when no one was able to attend, the Service offered to meet individually with Department staff to review the details of the project. We welcome the Department's involvement in project implementation and will continue to seek the Department's input as we move forward.

## Responses

15. The State listed species present on or near the site include the light-footed Ridgway's rail, California least tern, and Belding's savannah sparrow. No other State listed species, including plants, fish, and reptiles, are known to be present in the area. Response 11indicates where in the draft IS/EA the light-footed Ridgway's rail and California least tern are addressed. Page 34 of the draft IS/EA includes a discussion of Belding's savannah sparrow, including the areas of the Refuge where this species is present. This discussion has been expanded in the Final IS/EA to explain that Belding's savannah sparrows prefer to nest and forage in the mid- to upper-littoral zones of coastal salt marsh (Powell and Collier 1998).

16. The low marsh habitat present within the project site does not support nesting habitat for the Belding's savannah sparrow and little, if any, foraging opportunities are available at this site for the species. Should a Belding's savannah sparrow be present on the site during project implementation, adherence to Mitigation Measure BIO-5 (this mitigation measure, presented as BIO-4 in the draft MND and has been revised to clarify that other avian species in addition to rails would be moved off the site) would ensure that no adverse effects or take would occur to this species, the light-footed Ridgway's rail, and other avian species that may be present on the site.

17. As addressed in Responses 11, 14, and 15, this joint CEQA/NEPA document addresses all potential impacts to State and federally listed species known to occur within the areas affected by the proposed action, and all mitigation necessary to avoid significant adverse effects is assured through the Final MMRP.

**Responses**

18. As addressed in Responses 14 and 15, although the Belding's savannah sparrow is present on the Refuge, in fact in 2010 the Refuge supported the second largest number of Belding's savannah sparrow territories in California, Belding's occur in mid- and high-marsh habitats located well to the north and east of the proposed project site. Therefore, no take or adverse effects to Belding's savannah sparrows would occur as a result of sediment augmentation. To ensure that no nesting sites are disturbed by monitors wishing to access the site from NASA Island (refer to page 15 of the draft IS/EA), all potential nesting areas would be avoided during the breeding season (March 1 – September 15). This measure, which is enforced annually for all research, monitoring, and mosquito abatement activities on the Refuge, has been added to the Final MMRP to ensure compliance with established Refuge procedures.

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(e.g., foraging and breeding) and potentially a loss of future breeding success, the Department recommends that the Conservancy and USFWS consult with the Department to minimize take and discuss the potential need for take authorization under CESA as soon as possible.

19 3. Special Status Species – The draft MND/EA does not identify any species designated as California Species of Special Concern (SOC). CEQA provides protection not only for CESA and FESA-listed species, but for Rare species and any species that can be shown to meet the criteria for State listing, which includes SOC and California Native Plant Society (CNPS) Lists 1A, 1B, and 2, which consist of plants that, in a majority of cases, would qualify for listing (CEQA Guidelines Sections 15380(d), 15065(a)). The Department recommends the
20 final MND/EA include a current inventory of the biological resources associated with each habitat type on site and within the area of potential include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). Adjoining habitat areas should be included in this inventory assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

4. Temporary Loss of Habitat – Mitigation Measure BIO-1 states that "If, within five years of sediment application, reestablishment of the native salt marsh vegetation community to a density and percent cover similar to that present within the project site prior to sediment
21 application has not occurred, the Refuge shall develop and implement a restoration plan to reestablish native salt marsh vegetation at densities and a percent cover similar to pre-project site conditions."
The Mitigation Measure addresses the potential for significant impacts to sensitive species through the failure of the site to revegetate after the lifespan of the Project. The draft MND/EA should also include mitigation measures to address significant impacts to sensitive
22 species during project implementation of sediment application and during the five years of monitoring. The Project has the potential to remove approximately 10 acres of foraging habitat for Belding's savannah sparrow, California least tern, light-footed clapper rail, and other sensitive species for at least 5 years. The MND/EA should include minimization and avoidance measures during implementation to avoid and minimize significant impacts to sensitive species. In addition, the Department recommends on-site habitat restoration or enhancement, if feasible, be identified in the final MND/EA for the Project to mitigate direct and temporal loss of the habitat to below a level of significance. If it is not feasible or would not be biologically viable on-site, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

5. Impacts to Light-footed Clapper Rail – Mitigation Measure BIO-4 states "…the three artificial light-footed clapper rail nesting platforms located within and adjacent to the project site shall be temporarily removed after the end of the 2014 breeding season (after September 15)."

23 a. In order to mitigate for this temporary loss of nesting habitat in the Project area, the Department recommends the three nesting platforms plus an additional three nesting platforms be secured in a nearby section of the marsh. This should be done in advance of the winter high tide season to provide refuge for the rails.

24 b. The Department recommends using straw waddles along the edges of the Project area and/or placement of an approximately 2-foot high berm to hold the sediment that is piped in. This would promote retention of sediment until the marsh plants root and provide natural sediment retention.

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19. Table 9 has been revised to include California Bird Species of Special Concern that occur on or near the project site. Based on a review of the State's latest Special Animals List, published in September 2014, none of the invertebrate, fish, amphibian, or mammal species included on the list occur within the project site (CDFW 2014a). The eastern Pacific green turtle (*Chelonia mydas*) is included on the Special Animals List with a G3 (vulnerable) S1 (critically imperiled) ranking. A discussion of the potential for the presence of eastern Pacific green turtle in the project area is addressed on pages 32 and 33 of the draft IS/EA. In addition, implementation of Mitigation Measure BIO-2, as described in the Final MMRP, would ensure avoidance of impacts to this species.

    The California brown pelican is fully protected by the State and may be present in the area. However, the implementation of Mitigation Measure BIO-5, which addresses rails and other avian species, would ensure that individual pelicans would not be affected by the proposed project. Note that no communal brown pelican roosting areas are present within the project area. No heron or egret nesting colonies, which are addressed in the Special Animal List, occur within or adjacent to the project site. Northern harrier and osprey, identified as a Species of Special Concern, have been observed flying over the project site, but these species do not nest within the low marsh areas of the Refuge. The implementation of Mitigation Measure BIO-5 would ensure that individual raptors would not be affected by the proposed project. None of the shorebirds listed on Table 9 nest on the Refuge and the implementation of Mitigation Measure BIO-5 would ensure that individual shorebirds are not adversely affected by project implementation. This discussion has been incorporated in the Final IS/EA.

**Responses**

A review of the latest version of the State's Special Vascular Plants, Bryophytes, and Lichens List, prepared in July 2014, includes only one plant species located on the project site, estuary seablite (*Suaeda esteroa*) (CDFW 2014b). This species is described on page 35 of the draft IS/EA. The status of this plant has been updated in the Final IS/EA to indicate that this species has a rare plant ranking of 1B.2 (plants rare, threatened, or endangered in California and elsewhere).

20. A comprehensive discussion of the habitats and species present within and adjacent to the site is provided on pages 21 – 35 of the draft IS/EA.

21. As described in the draft IS/EA, no significant impacts to sensitive species or low salt marsh habitat are anticipated. The project purpose is to mitigate for ongoing adverse effects of subsidence and sea level rise on a portion of the Seal Beach NWR. We expect the project to result in benefits to the habitat quality of the project site's low salt marsh vegetation, particularly cordgrass (*Spartina foliosa*), and to the light-footed Ridgway's rail. At present, there is no natural nesting habitat available for the rail on this site. By raising the site elevation, we hope to reestablish (restore) higher quality cordgrass habitat that will support natural nesting habitat. As this is a pilot project, Mitigation Measure BIO-1 is provided to ensure that salt marsh vegetation is restored to the site should the pilot project not result in the regrowth of existing vegetation up through the new thin-layer of sediment. Based on results of similar projects conducted along the Gulf coast, we anticipate regrowth to begin almost immediately, with significant regrowth occurring by the end of year 2.

    The 5-year monitoring program will provide valuable information about the feasibility of this technique to address sea level rise in

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coastal wetlands along the California coast. As a restoration project, no mitigation is required unless the restoration project fails (in which case, Mitigation Measure BIO-1 would be implemented).

22. The low marsh habitat on the site is not occupied by Belding's savannah sparrow and does not represent important foraging habitat for the species, nor does it provide habitat to support the California least tern. The project would temporarily affect approximately 2.8 percent of the total salt marsh habitat on the Refuge, requiring light-footed Ridgway's rails to forage elsewhere in the marsh. Because the Refuge has the capacity to support a larger population of rails that currently occupy the marsh, there would be adequate foraging area for the Refuge's current rail population.

    At any one time there are between 85 and 95 artificial nesting platforms situated within the low marsh areas of the Refuge. Based on rail nesting surveys conducted on the Refuge, not all of the platforms are used in a given year. In 2011 and 2012, approximately 68 percent of the platforms were used for incubation nests and/or brood nests. As indicated in Figure 5 of the draft IS/EA, there are a significant number of platforms located in the general vicinity of the project site, providing ample opportunities for rails to find refuge from high tides and to establish incubation nests and brood nests despite the removal of the three platforms within the project site. As removal of the three platforms in the vicinity of the project site would not adversely affect the Refuge's population of rails, no mitigation is necessary. Additionally, if cordgrass height and coverage increases after sediment augmentation, as anticipated, platforms will no longer be needed in this area, as the rails can once again establish natural nests within this portion of the Refuge.

## Responses

23. At any one time there are between 85 and 95 artificial nesting platforms situated within the low marsh habitat areas of the Refuge. Based on light-footed Ridgway's rail nesting surveys conducted on the Refuge, not all of the platforms are used in a given year. In 2011 and 2012, approximately 68 percent of the platforms were used for incubation nests and/or brood nests. As indicated in Figure 5 of the draft IS/EA, there are a number of platforms located in the vicinity of the project site, providing ample opportunities for rails to find refuge from high tides and to establish incubation and brood nests. The removal of the three platforms would not adversely affect the Refuge's population of rails; therefore, no mitigation is necessary. If cordgrass height and coverage increases, as anticipated, following sediment augmentation, platforms will no longer be needed, and it will be possible for the rails to establish natural nests in the marsh.

24. As indicated on page 59 of the draft IS/EA, monitoring of sediment movement and turbidity levels will occur during the sediment application process and application methods will be adaptively managed to ensure that movement of sediment off the site is minimized. Measures such as installation of silt fencing will be installed if proposed vegetative buffers around the site cannot adequately maintain the sediment within the project boundary. Straw waddles would be another potential measure that could be used to retain sediment on the site. However, due to access constraints (i.e., the site is only accessible from adjacent tidal channels), the construction of a 2-foot berm around the site is problematic. The use of a silt curtain or silt fencing would be equally effective and considerably less expensive to install. Further, removal of the berm at the end of the project would be difficult and could result in unnecessary disturbance to the adjacent restore habitat.

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25 c. The physical presence of a biological monitor would be a more effective way to guide birds to specific direction out of the 10-acre Project site as opposed to using noise (air horn or cracker shells) that could cause birds to scatter in random directions. Therefore, the Department recommends that Mitigation Measure BIO-4 be revised to state that physical presence will be used to haze birds, and if this is ineffective, noise will then be used to haze them.

26 6. Impacts to Nesting Birds and Other Wildlife – The draft MND/EA acknowledges that Project-related activities may have potential adverse impacts to avian species and provides Mitigation Measure BIO-4 to avoid or minimize impacts to less-than-significant levels. The Department concurs that measures should be taken to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R., § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

a. Proposed Project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1-August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code, § 86), and includes take of eggs and/or young resulting from disturbances which cause abandonment of active nests. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted. Please consider the following Department's recommended protective measures for nesting native birds during Project activities.

27 i. If avoidance of the avian breeding season is not feasible, the Department recommends that, beginning thirty days prior to the initiation of Project activities, a qualified biologist with experience in conducting breeding bird surveys conduct weekly bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of Project activities. If a protected native bird is found, the Project proponent should delay all Project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests. If an active nest is located, Project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing should be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the Project activities and the nest. Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. The Project proponent should provide the County the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

## Responses

25. The project site is surrounded by tidal wetlands and salt marsh vegetation; therefore, as long as the birds disperse from the site, it does not matter in which direction they leave. As stated in the draft IS/EA, to avoid impacts to rails and other avian species, both physical presence and noise will be used to encourage dispersal. As the sediment application process proceeds, it will become difficult to access the site by foot and the biological monitor will have to rely more heavily on the use of air horns or cracker shells.

26. The application of sediment onto the project site will only be permitted between November 1 through February 15, this would avoid the nesting season for light-footed Ridgway's rail, California least tern, and Belding's savannah sparrow. This requirement is included in Mitigation Measures BIO-2 and BIO-5 of the Final MMRP. Therefore, no impacts to nesting birds are anticipated.

27. Refer to Response 25.

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28 ii. If the biological monitor determines that a narrower buffer between the Project activities and observed active nests is warranted, he/she should submit a written explanation as to why (*e.g.*, species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the Project activities and the nest and foraging areas) to the County and, upon request, the Department. Based on the submitted information, the County (and the Department, if the Department requests) will determine whether to allow a narrower buffer.

29 iii. The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the Project footprint (*i.e.*, outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to Project activities. The biological monitor shall send weekly monitoring reports to the County during the grubbing and clearing of vegetation, and shall notify the County immediately if Project activities damage active avian nests.

We appreciate the opportunity to comment on the referenced draft MND/EA. Questions regarding this letter and further coordination on these issues should be directed to Victoria Chau, Environmental Scientist at (909) 455-8443 or Victoria.Chau@wildlife.ca.gov.

Sincerely,

Betty Courtney

Betty Courtney
Environmental Program Manager I
South Coast Region

ec: Ms. Betty Courtney, CDFW, Santa Clarita
Ms. Erinn Wilson, CDFW, Los Alamitos
Ms. Marilyn Fluharty, CDFW, San Diego
Ms. Sarah Rains, CDFW, Newbury Park
Mr. Scott Morgan, State Clearinghouse, Sacramento

**Responses**

28. Refer to Response 25.

29. No grubbing or clearing of the site is proposed. Refer also to Response 25.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 12
3347 MICHELSON DRIVE, SUITE 100
IRVINE, CA 92612-8894
PHONE (949) 724-2000
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www.dot.ca.gov

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August 14, 2014

Evyan Borgnis
CA State Coastal Conservancy
1330 Broadway 13th Floor
Oakland, CA. 94612

File: IGR/CEQA
SCH#: 2014081016
Log #: 3944
SR-1

Dear Evyan Borgnis:

30 Thank you for the opportunity to review and comment on the proposed **Mitigated Negative Declaration (MND) for the Seal Beach National Wildlife Thin-layer Salt Marsh Sediment Augmentation Pilot Project.** The proposed project would apply a thin-layer of sediment over about 10 acres of existing salt marsh habitat on the Seal Beach NWR for the purposes of improving habitat quality in an area of the Refuge impacted by subsidence and sea level rise. The nearest State route to the project site is SR-1.

**The Department of Transportation (Department) is a commenting agency** on this project and has no comment at this time. However, in the event of any activity in the Department's right-of-way, an encroachment permit will be required.

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Miya Edmonson at (949) 724-2228.

Sincerely,

MAUREEN EL HARAKE
Branch Chief, Regional-Community-Transit Planning
District 12

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OAKLAND, CALIF.

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

**Responses**

30. Comment noted. As the pilot project site is located in Anaheim Bay and all access to the site will be via boat or foot, the need for an encroachment permit from Caltrans is unlikely.

## Literature Cited

California Department of Fish and Game (CDFG). 2008. California Bird Species of Special Concern. April 10, 2008.

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Powell, A.N. and C.L. Collier. 1998. Reproductive success of Belding's savannah sparrows in a highly fragmented landscape. Auk 115(2): 508-513.