

**MITIGATION MONITORING AND REPORTING PROGRAM**  
**ARAMBURU ISLAND SHORELINE PROTECTION AND ECOLOGICAL**  
**ENHANCEMENT PROJECT**  
**INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION**  
**(SCH # 2010072045)**

PREPARED FOR:

**California Regional Water Quality Control Board**  
**San Francisco Bay Region**  
**1515 Clay Street, Suite 1400**  
**Oakland, CA 94612**

PREPARED BY:

**Regional Water Quality Control Board, San Francisco Bay Region**  
**Marin County Department of Parks and Open Space**  
**Wetlands and Water Resources, Inc.**  
**Grassetti Environmental Consulting**  
**Miller Environmental Consulting**

**December 2010**



## MITIGATION MONITORING AND REPORTING PROGRAM

The Aramburu Island Shoreline Protection and Ecological Enhancement Project, Mitigation Monitoring and Reporting Program (MMRP), was developed in accordance with California Environmental Quality Act (CEQA) Section 15097 to ensure that mitigation measures imposed on the Project to avoid significant environmental effects are properly implemented. The MMRP identifies the entity responsible for implementing mitigation, mitigation timing, and monitoring and enforcement responsibilities. The MMRP accompanies the Responses to Comments and the Final Initial Study and Mitigated Negative Declaration (IS/MND).

Implementation of all mitigation measures identified in the IS/MND to reduce potentially significant impacts will be assured through Regional Water Quality Control Board (Water Board) adoption of this MMRP. The Water Board may delegate mitigation monitoring or reporting to another public agency (such as Marin County) or a private entity (such as Audubon); however, the Water Board will remain responsible for ensuring implementation of the required mitigation measures. The Mitigation Monitoring and Reporting Program would be adopted by the Water Board, or its delegate, the Executive Officer, along with adoption of the Mitigated Negative Declaration (in accordance with the CEQA Guidelines Section 15097), upon adoption of the Clean Water Act Section 401 (CWA) Water Quality Certification.

In addition to implementation of mitigation measures identified in the IS/MND, the Project would require consultation with and permit review by several Federal, State, and local agencies including U.S. Army Corps of Engineers (USACE), Water Board, U. S. Fish and Wildlife Service (USFWS), National Atmospheric and Oceanic Administration/National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), and Bay Conservation and Development Commission, as outlined in Table 1.

**Table 1 : Project Permitting Agencies**

Agency	Regulatory Authority	Consultation Options
<b>U.S. Army Corps of Engineers (USACE)</b>	CWA permit and/or a Section 10 Rivers and Harbors Act permit would be required for placement of dredge or fill material into waters of the U.S. and work within navigable waters, respectively.	The USACE may consult with USFWS and NMFS during permit review
<b>San Francisco Bay Regional Water Quality Control Board</b>	Water Quality Certification in accordance with Section 401 of the and/or Waste Discharge Requirements in accordance with the Porter-Cologne Water Quality Control Act	The Water Board may consult with USFWS, NMFS, CDFG and BDCC during permit review
<b>San Francisco Bay Conservation and Development Commission (BCDC)</b>	A San Francisco Bay Permit would be required to implement enhancement activities on Aramburu Island.	BCDC will consult with USFWS, NMFS, and CDFG during permit review.

## **SUMMARY OF MITIGATION MEASURES**

The IS/MND identifies several potentially significant impacts for which mitigation measures are required. Potentially significant impacts were identified in the following CEQA topic areas:

- Air Quality
- Biological Resources
- Geology/Soils
- Hydrology/Water Quality,
- Noise

Mitigation measures were identified and incorporated into the project to reduce impacts to these resources to a less than significant level. These mitigation measures are listed in Table 2 (Mitigation Monitoring and Reporting Program) and the entity responsible for implementation of the mitigation measure is identified. In addition, the mitigation monitoring method, timing, and monitoring and enforcement responsibility is listed. Table 2 will be used by the Water Board to track and report on implementation of mitigation measures, and the “compliance verification” section will be completed at the time of implementation of each mitigation measure.

The IS/MND did not identify potentially significant impacts for other CEQA topics and, therefore, no mitigation measures were necessary. Impacts that were found to be “Less than significant” or “No impacts” did not require mitigation measures and, therefore, the following topics are not included in Table 2.

- Aesthetics
- Agriculture and forestry resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Services

**Table 2. Aramburu Island Shoreline Protection and Ecological Enhancement Project  
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date) <sup>1</sup>
<b>AIR QUALITY</b>					
<p><b>Mitigation III-1.</b> Construction activities shall incorporate the following dust abatement measures required by BAAQMD:</p> <ul style="list-style-type: none"> <li>a. Water all active construction areas at least twice daily;</li> <li>b. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.);</li> <li>c. Replant vegetation in disturbed areas as quickly as possible.</li> </ul>	Project construction contractor	<ol style="list-style-type: none"> <li>1. Inform construction contractors of required mitigation measures.</li> <li>2. A designated mitigation monitor shall perform daily site inspections of adequacy of implementation of control measures during grading and land clearing operations.</li> </ol>	<p>Prior to and during construction</p> <p>During construction</p>	Marin County Department of Parks and Open Space	

<sup>1</sup> To be verified person responsible for mitigation measure at the time of implementation.

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date) <sup>2</sup>
<b>BIOLOGICAL RESOURCES</b>					
Refer also to the Monitoring and Adaptive Management Plan submitted to the Water Board as part of the Section 401 Water Quality Certification Application for details on biological monitoring before and after construction.					
<p><b>Mitigation IV-1.</b> To reduce impact to nesting birds, in accordance with Migratory Bird Treaty Act and California Fish and Game Code, the Richardson Bay Audubon shall have surveys conducted by a qualified biologist within two weeks of the commencement of construction activities to identify bird nests in the area. If bird nests are detected then construction activities shall be halted until either the CDFG or USFWS are contacted and their guidance on appropriate measures is provided. Typical mitigation shall require that construction be halted within 300 feet of the nest to avoid disturbing nesting birds. A qualified biologist shall monitor the status of the nest and shall determine when the offspring have left the nest. Once the offspring have left the nest construction activities would resume in accordance with CDFG and USFWS consultation and regulation. A qualified biologist shall be on site during construction and shall continue to monitor the site for nesting birds. In the event that additional nests are detected during construction, construction shall be halted within 300 feet of the active nest until the offspring have fledged. All bird surveys, monitoring, and construction timing shall be conducted in accordance with CDFG or USFWS protocol and requirements.</p>	Project biologist, Audubon	<ol style="list-style-type: none"> <li>1. A qualified biologist (e.g., experienced with the nesting behavior of bird species of the region) shall conduct a preconstruction nesting bird surveys following standard protocols. Surveys will be conducted every 2 to 4 days prior to construction.</li> <li>2. If bird nests are located the project biologist shall contact CDFG or USFWS and halt construction until offspring have fledged from the nest.</li> <li>3. Richardson Bay Audubon shall submit copies of preconstruction surveys and outcomes of any consultation with CDFG.</li> <li>4. Audubon shall obtain Water Board and USACE permits and incorporate Mitigation Measure IV-I into construction specifications.</li> </ol>	<p>No more than 14 days prior to construction</p> <p>Prior to construction</p> <p>Prior to construction</p> <p>Prior to construction</p>	<p>Audubon</p> <p>Audubon/Water Board</p> <p>Audubon California/Water Board</p> <p>Audubon/Water Board</p>	

<sup>2</sup> To be verified person responsible for mitigation measure at the time of implementation.

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date) <sup>3</sup>
		5. Evidence of these approvals shall be submitted to the County	Prior to construction		
<p><b>Mitigation IV-2.</b> Construction of the subtidal seal access channel shall be performed between June 15 and November 30, to conform with established work windows for special status fish species. All construction activities shall occur when no water is present to reduce impact on marine mammals.</p> <p>Refer also to Mitigation Measure IX-1 in the Hydrology and Water Quality section</p>	Project construction contractors	Site inspection at start and end of subtidal channel construction periods	Prior to construction	NOAA and Water Board	
<p><b>Mitigation Measure IV-3-</b> Refer to Hydrology and Water Quality Mitigation Measure IX-1</p>					

<sup>3</sup> To be verified person responsible for mitigation measure at the time of implementation.

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date) <sup>4</sup>
<b>HYDROLOGY AND WATER QUALITY</b>					
<b>Mitigation Measure IX-1.</b>					
<p>a. Installation of silt fences or straw wattles along the toes of slopes and designated staging areas, and erosion control netting (such as jute) on sloped areas, to minimize soil erosion and prevent sediment from entering adjacent waters of the fringing marsh, Bay, and navigational channel.</p>	Project construction contractor	Site inspections by Water Board or Audubon at start of construction and monthly thereafter	Prior to construction	Marin County Public Works Department	
<p>b. Winterization measures, such as mulch, planting of cover crop, and hydroseeding, of all bare soil and new plantings prior to the rainy season.</p>	Project construction contractor	October 1 inspection	Prior to October 1	Water Board	
<p>c. Staging of construction equipment in upland areas when not in use and refueling or maintenance of equipment only in upland areas, away from aquatic habitats to prevent the introduction of hazardous chemicals into the water.</p>	Project construction contractor	Site inspections by Water Board or Audubon at start of construction and monthly thereafter	Prior to and during construction	Water Board	
<p>d. Training for all contractors working on the site regarding the environmental sensitivity of the project site and surrounding area and the need to minimize impacts.</p>	Audubon	Required attendance/sign-in of on-site workers at training	Prior to start of construction work	Water Board	

<sup>4</sup> To be verified person responsible for mitigation measure at the time of implementation.

<p>e. Training for all contractors in implementation of stormwater BMPs for protection of water quality.</p> <p>f. Following construction, erosion control structures such as straw wattles, silt fences, and/or erosion control netting will be left in place along the Island perimeter (above the high tide line) to prevent the introduction of sediments from bare, graded areas on the Island terrace into Richardson Bay due to rainfall runoff or wave overwash. These structures will be left in place until adequate vegetation cover has re-established on the Island terrace (1-2 years).</p>	<p>Audubon/Water Board</p> <p>Audubon/Construction contractors</p>	<p>Required attendance/sign-in of on-site workers at training</p> <p>Monthly inspection by Audubon or Water Board</p>	<p>Prior to start of construction</p> <p>Monthly until adequate cover established</p>	<p>Water Board</p> <p>Water Board</p>	
<b>NOISE</b>					
<p><b>Mitigation XII-1</b></p> <p>In order to reduce construction and ongoing maintenance noise and to comply with Marin County’s noise ordinance to a less-than-significant level, the following measures shall be implemented:</p> <p>a. Generators or other stationary construction and maintenance equipment, that could affect residences if utilized, shall be located as far as practical from sensitive noise receptors and shielded to further reduce noise levels.</p> <p>b. Construction and maintenance equipment that is equipped, operated, and maintained with manufacturer recommended mufflers or the equivalent shall be utilized.</p> <p>c. Construction activities and post-construction maintenance (such as irrigation, vegetation management) shall be limited from 8 a.m. to 5 p.m. Monday through Friday and 9 a.m. and 5 p.m. Saturday. Loud-noise-generating construction related equipment (backhoes, generators, jackhammers) shall be limited from 8 a.m. to 5 p.m. Monday through Friday only.</p>	<p>Construction contractor</p>	<p>Audubon/County/Water Board to conduct periodic checks onsite to assure equipment is operating only during permitted hours</p>	<p>During construction</p>	<p>Water Board and County of Marin</p>	

