

## Purpose of this Document

This Initial Study (IS) is a public document that assesses the environmental effects of the San Francisco Bay Area Water Emergency Transportation Authority's (WETA) Central Bay Operations and Maintenance Facility (proposed project), as required by the California Environmental Quality Act (CEQA) and in compliance with State CEQA Guidelines (14 Cal. Adm. Code 1400 et seq.). It serves as an environmental document to be used in the local planning and decision-making process, and does not recommend approval or denial of the project. As the CEQA lead agency for the project, the WETA will consider whether to adopt the related Mitigated Negative Declaration (MND) and whether to approve the project.

## Scope of this Document

Consistent with CEQA requirements, the IS evaluates the potential impacts of the proposed project in relation to the following:

- Aesthetics.
- Agricultural and forestry resources.
- Air quality.
- Biological resources.
- Cultural resources.
- Geology and soils.
- Greenhouse gas emissions.
- Hazards and hazardous materials.
- Hydrology and water quality.
- Land use and planning.
- Mineral resources.
- Noise.
- Population and housing.
- Public services.
- Recreation.
- Transportation/traffic.
- Utilities and service systems.

## Impact Terminology

The following terminology is used in this document to describe the levels of significance of impacts that would result from the project.

- The project is considered to have *no impact* if the analysis concludes that the project would not affect a particular resource topic.
- An impact is considered *less than significant* if the analysis concludes that the project would cause no substantial adverse change to the environment and that impacts would not require mitigation.
- An impact is considered *less than significant with mitigation* if the analysis concludes that the proposed project would cause no substantial adverse change to the environment with the inclusion of mitigation measures to which the applicant has agreed.
- An impact is considered *significant* if the analysis concludes that the proposed project would cause a substantial adverse change to the environment that could not be mitigated by the inclusion of mitigation measures to which the applicant has agreed.

## Organization of this Document

The content and format of this document, described below, are designed to meet the requirements of CEQA.

- Chapter 1, *Introduction*, identifies the purpose, scope, and terminology of the document.
- Chapter 2, *Project Description*, identifies the location, background, and planning objectives of the project; describes the project in detail; identifies the permits and approvals required for the project; and identifies public involvement procedures.
- Chapter 3, *Environmental Checklist*, presents the checklist responses for each resource topic. This section identifies the environmental setting, project impacts on each resource and provides a brief explanation for the determination of project impacts. It also identifies mitigation measures to which the applicant has agreed.
- Chapter 4, *References Cited*, identifies all printed references and personal communications cited in this report.
- Chapter 5, *List of Preparers*, identifies the individuals involved in preparing this document and their areas of technical specialty.

## Summary of Environmental Impacts

A summary of the proposed project's potential impacts and associated mitigation measures are summarized in Table 1.1.

**Table 1-1. Summary of Impacts and Mitigation Measures for the Proposed Project**

<b>Resource Section</b>	<b>Impact</b>	<b>Mitigation Measure</b>
<b>I. Aesthetics</b>		
	Impact AES-1: Project could result in impact to area lighting	<p><b>Mitigation Measure AES-1: Apply Minimum Lighting Standards</b></p> <p>The project proponent will ensure that the following measures are incorporated into the design and construction of all project elements.</p> <ul style="list-style-type: none"> <li>• Nighttime lighting will be used only where it is required for security or safety.</li> <li>• If nighttime lighting is required, it will be focused onsite and will be directed downward; fixtures that project upward or horizontally will not be used.</li> <li>• Any project lighting will include glare-minimizing fixtures, and the height of poles or mountings will be reduced to limit the potential for backscatter into the nighttime sky and incidental spillover of light.</li> <li>• The design of exterior light fixtures will incorporate shielding to prevent fugitive glare.</li> <li>• Luminaire mounts will have nonglare finishes.</li> <li>• Luminaire lamps will provide good color rendering and natural light qualities. Low- and high-pressure sodium fixtures that are not color-corrected will not be used. Luminaire intensity will be the minimum necessary for safety.</li> <li>• Lighting will be equipped with time-clock switches to ensure that illumination is restricted to nighttime hours.</li> </ul>
<b>II. Agricultural and Forestry Resources</b>		
	No impact	None applicable
<b>III. Air Quality</b>		
	Impact AQ-1: Project could result in the creation of construction-related fugitive dust	<p><b>Mitigation Measure AQ-1: Implement BAAQMD Basic Control Measures to Control Construction-Related Fugitive Dust</b></p>

Resource Section	Impact	Mitigation Measure
		<p>The project applicant will implement the following BAAQMD-recommended basic control measures to reduce particulate matter emissions from onshore construction activities.</p> <ul style="list-style-type: none"> <li>• All unpaved exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day.</li> <li>• All haul trucks transporting soil, sand, or other loose material off-site will be covered.</li> <li>• All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>• All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>• Post a publicly visible sign with the telephone number and contact person at the Lead Agency regarding dust complaints. This person will respond and take corrective action within 48 hours. The Air District’s phone number will also be visible to ensure compliance with applicable regulations.</li> </ul>
	<p>Impact AQ-2: Project related NO<sub>x</sub> emissions could impact air quality</p>	<p><b>Mitigation Measure AQ-2: Implement BAAQMD Basic Control Measures to Control Construction-Related NO<sub>x</sub> Emissions</b></p> <p>The project applicant will implement the following BAAQMD-recommended basic control measures to reduce NO<sub>x</sub> emissions from construction equipment.</p> <ul style="list-style-type: none"> <li>• Idling times will be minimized by shutting off equipment when it is not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.</li> <li>• All construction equipment will be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> </ul>

Resource Section	Impact	Mitigation Measure
	Impact AQ-3: Project related NO <sub>x</sub> emissions could impact air quality	<p><b>Mitigation Measure AQ-3: Modify the Construction Schedule to Ensure Daily NO<sub>x</sub> Emissions Do Not Exceed 54 Pounds</b></p> <p>The project applicant will implement the construction schedule outlined in Appendix A to ensure daily NO<sub>x</sub> emissions do not exceed 54 pounds per day. Any proposed deviation from the construction schedule outlined in Appendix A shall be reviewed by WETA prior to implementation to ensure phasing and use of in-water and on-shore equipment will not result in significant NO<sub>x</sub> emissions.</p>
<b>IV. Biological Resources</b>		
<b>Construction</b>		
	Impact BIO-1: Project could impact marine mammals during dredging and pile driving activities	<p><b>Mitigation Measure BIO-1: Minimize Harassment to Marine Mammals during Dredging and Pile Driving Activities</b></p> <ul style="list-style-type: none"> <li>• During the project permitting phase, NMFS will be consulted to determine if an Incidental Harassment Authorization would be needed for dredging or pile driving activities.</li> <li>• Work would occur only during daylight hours (7 a.m. to 7 p.m.) so that marine mammals are visible at all times during dredging and pile driving activities.</li> <li>• A qualified biological monitor would visually survey the area 1 day prior to the start of dredging or pile driving activities to establish a baseline.</li> <li>• A safe zone would be enforced during dredging and pile driving operations. A marine mammal monitor would survey the area prior to the startup of dredging or pile driving equipment.</li> <li>• Installation would not begin until no marine mammals are sighted within a designated “safe zone” for at least 15 minutes prior to the initiation of the activity.</li> <li>• For dredging or pile driving activities, the proposed safety zone would be a radius of 1,000 feet from the dredging or pile driving location or distance at which the noise would be below 180 dB.</li> <li>• Once activities begin, work would continue until completed. Between pile driving of different piles, the monitor would again confirm that the safety zone is clear of marine mammals.</li> </ul>

Resource Section	Impact	Mitigation Measure
		<ul style="list-style-type: none"> <li>The construction contractor would establish daily “soft-start” or “ramp-up” procedures for pile-driving activities. This technique would be used at the beginning of each piling installation to allow any marine mammal that may be in the area to leave before pile driving activities reach full energy. The contractor would provide an initial three strikes at reduced energy (40%), followed by a 1-minute waiting period, then subsequent 3-strike sets.</li> </ul>
	<p>Impact BIO-2: Project could impact seal haul-outs and bird nesting and roosting</p>	<p><b>Mitigation Measure BIO-2: Use Recommended Access Channel and Boat Speeds from the Draft Alameda National Wildlife Refuge Comprehensive Conservation Plan to avoid Disruption to Seal Haul-Outs and Bird Nesting and Roosting.</b></p> <p>The draft Conservation Plan for the Alameda National Wildlife Refuge includes a recommended 500-foot access corridor for all vessel traffic and a maximum 5 mile per hour speed limit to keep vessels well away from the shoreline of the main portion of the Refuge as well as from Breakwater Island, in order to protect bird species and marine mammals from disruption. All construction and maintenance vessels and all ferry boats shall utilize this access corridor and shall, under all non-emergency situations, not approach any closer than 750 feet to the shorelines of the proposed Refuge and Breakwater Island.</p>
	<p>Impact BIO-3: Project could impact special status and common fish species during in-water work</p>	<p><b>Mitigation Measure BIO-3: Coordinate with Appropriate Federal and State Agencies to Reduce Impact on Special-Status and Common Fish Species during In-Water Work</b></p> <p>WETA will consult with NMFS and DFG to implement measures to reduce impacts associated with in-water work activities to special-status fish species. These measures could include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>In-water work activities will occur outside the peak juvenile outmigration periods for special-status fish species whenever possible. June 1 to November 30 (the dredging window in the Central Bay) would avoid high migratory periods.</li> <li>Using bubble curtains to attenuate pile driving sounds.</li> <li>A vibratory hammer will be used when feasible.</li> </ul>

Resource Section	Impact	Mitigation Measure
		<ul style="list-style-type: none"> <li>• Monitoring sound attenuation.</li> </ul> <p>As a performance standard, the selected measures will represent the best available technology that is economically achievable, and will achieve maximum feasible reduction in underwater sound pressure levels (SPLs) and/or related impacts on special-status fish species.</p>
	Impact BIO-4: Project could impact nesting migratory birds and raptors	<p><b>Mitigation Measure BIO-4: Avoid and Minimize Impacts on Nesting Migratory Birds Including Raptors</b></p> <ul style="list-style-type: none"> <li>• Preconstruction bird surveys will be conducted by a qualified biologist no more than 1 week prior to the start of construction for activities occurring during the breeding season (February 1 to August 31).</li> <li>• If active raptor nests are found within 500 feet of where work is to occur, or active passerine nests are found within 100 feet of where work is to occur, a non-disturbance buffer will be established at a distance sufficient to minimize nest/roost disturbance based on the nest location, topography, cover, species' sensitivity to disturbance, and the intensity/type of potential disturbance. The buffer size would be determined in cooperation with the CDFG and the USFWS.</li> <li>• If rescheduling of work around active nests/roosts is infeasible, a qualified biologist will monitor nests for signs of disturbance. If it is determined that project activities are resulting in nest/roost disturbance, work will cease immediately and the CDFG and the USFWS will be contacted.</li> </ul>
	Impact BIO-5: Project could impact native oyster population	<p><b>Mitigation Measure BIO-5: Survey for Native Oysters and Relocate (if necessary)</b></p> <p>WETA will conduct a pre-construction diving survey to determine if native oysters are present in the study area. If found within or immediately adjacent to the construction footprint, WETA would request guidance from NMFS (or other applicable agency) as to the need and or feasibility to move affected beds.</p>

Resource Section	Impact	Mitigation Measure
<b>V. Cultural Resources</b>		
	Impact CR-1: Project could result in impacts to an unknown pre-historic and historic-era archaeological resources	<p><b>Mitigation Measure CR-1: Procedures for Unanticipated Discoveries</b></p> <p>Per Section 106 of the NHPA, if artifacts are discovered during excavation activities, WETA shall obtain the review and recommendation of a qualified archaeologist. Recommendations may include evaluation, preservation in place, archaeological test excavation and/or archaeological data recovery, and a draft and final report documenting such activities.</p>
	Impact CR-2: Project construction could potentially disturb buried human remains	<p><b>Mitigation Measure CR-2: Comply with State Laws Relating to Disposition of Human Remains</b></p> <p>The treatment of human remains discovered during excavation activities shall comply with applicable state laws. In the event that human remains are discovered, the County Coroner shall be notified immediately. If the remains are determined to be Native American, the Coroner shall be responsible for notifying the NAHC, who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec.5097.98). The archaeological consultant, WETA, and MLD shall make all reasonable efforts to develop an agreement for the dignified treatment of human remains (State CEQA Guidelines. Sec. 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains.</p>
<b>VI. Geology and Soils</b>		
	Impact GEO-1: Project construction could result in impacts to paleontological resources	<p><b>Mitigation Measure GEO-1: Stop Work If Buried Paleontological Resources Are Discovered</b></p> <p>If paleontological resources are encountered during project construction, excavation within 50 feet of the suspected resource(s) will be immediately suspended, the City of Alameda (City) will be immediately notified, and a qualified paleontologist will be retained to determine the significance of the find using the criteria set forth in State CEQA Guidelines Section 15064.5. If the find is determined to be significant, the City and project proponent, in consultation with the qualified paleontologist, will seek to avoid damaging effects on the resource whenever feasible. If avoidance is not feasible, the</p>

Resource Section	Impact	Mitigation Measure
<p>qualified paleontologist will prepare a salvage plan for mitigating the effect of the project on the qualities that make the resource unique. The qualified paleontologist shall complete the plan in accordance with the State CEQA Guidelines and submit it to the City for review and approval.</p>		
<p><b>VII. Greenhouse Gas Emissions</b></p>		
<p><b>Construction</b></p>		
	<p>Impact GHG-1: Project could have impact on Green House Gas emissions</p>	<p><b>Mitigation Measure GHG-1: Implement the BAAQMD’s Best Management Practices for GHG Emissions (Optional)</b></p> <p>The project applicant will implement, to the extent feasible, the following BMPs mentioned in the BAAQMD CEQA Guidelines:</p> <ul style="list-style-type: none"> <li>• Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15% of the construction fleet.</li> <li>• Use local building materials of at least 10%.</li> <li>• Recycle at least 50% of construction waste or demolition materials.</li> </ul>
<p><b>VIII. Hazards and Hazardous Materials</b></p>		
	<p>Impact HAZ-1: Construction of the proposed project could create the potential for upset and accident conditions involving the release of hazardous materials into the environment</p>	<p><b>Mitigation Measure HAZ-1: Prepare and Implement a Hazardous Materials Spill Prevention Control and Countermeasure Plan during Construction</b></p> <p>As part of compliance with the NPDES General Construction Permit, a Hazardous Material Spill Prevention Control and Countermeasure Plan will be prepared for the use of construction equipment for the proposed Project and will minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction of the Project. This plan will describe storage procedures and construction site housekeeping practices and identify the parties responsible for monitoring and spill response. The measures and monitoring procedures required under the General Construction Permit will minimize the potential for the release of hazardous materials to the environment. WETA will review and approve the Hazardous Materials Spill Prevention Control and Countermeasure Plan before allowing construction to begin. WETA will routinely inspect active portions of the project area to verify that the BMPs specified in the plan are properly implemented and maintained, and will immediately notify the contractor if there is a noncompliance issue that will require compliance.</p>

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		<p>The federal reportable spill quantity for petroleum products, as defined in the EPA’s CFR (40 CFR 110) is any oil spill that: (1) violates applicable water quality standards; (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline; or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.</p> <p>If a spill is reportable, the contractor’s superintendent will immediately notify the Alameda County Department of Environmental Health and the DTSC, which have spill response and cleanup ordinances to govern emergency spill response. A written description of reportable releases will be submitted to the San Francisco Regional Water Quality Control Board (RWQCB). This submittal will include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases will be documented on a spill report form.</p> <p>If a reportable spill has occurred, and results determine that project activities have adversely affected surface or groundwater quality in excess of water quality standards, a detailed analysis shall be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to ASTM standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, WETA and its contractors will select and implement measures to control contamination, with a performance standard that water quality will be returned to baseline conditions. These measures will be subject to approval by the Alameda County Department of Environmental Health and DTSC.</p>
<b>IX. Hydrology and Water Quality</b>		
	<p>Impact HYD-1: Project fuel storage, marine refueling activities, and stormwater runoff could result in impacts to water quality</p>	<p><b>Mitigation Measure HYD-1: Preparation and Implementation of Project SWPPP</b></p> <p>The project construction contractor will prepare and implement a SWPPP to protect water quality during construction. The San Francisco Bay RWQCB, the primary agency responsible for protecting water quality within the</p>

Resource Section	Impact	Mitigation Measure
		<p>project area, is responsible for reviewing and ensuring compliance with the SWPPP. The SWPPP will include a description of BMPs to be applied to minimize the discharge of pollutants from the site during construction. These construction BMPs will include, but will not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Train construction personnel in proper material delivery, handling, storage, cleanup, and disposal procedures.</li> <li>• Develop spill response and containment procedures for construction.</li> <li>• Identify all storm drains and catch basins near the construction site and ensure all workers are aware of their locations to prevent pollutants from entering.</li> <li>• Protect all storm drains and catch basin inlets.</li> <li>• Develop an erosion control and sediment control plan for wind and rain.</li> <li>• Refuel vehicles and equipment away from San Francisco Bay to prevent runoff and to contain spills.</li> <li>• Minimize the potential for contamination of San Francisco Bay by maintaining spill containment and clean up equipment onsite, and by properly labeling and disposing of hazardous waste.</li> <li>• Inspect site regularly to ensure that all BMPs are intact and maintain as needed.</li> <li>• Conduct daily site cleanings as needed.</li> <li>• Maintain written records of inspections, spills, BMP-related maintenance activities, corrective actions, and visual observations of offsite discharge of sediment or other pollutants, as required by the RWQCB.</li> </ul>
	Impact HYD-2: Project could result in impact on turbidity	<p><b>Mitigation Measure HYD-2: Monitor for Turbidity during Dredging Activities</b></p> <p>The San Francisco RWQCB makes certain exceptions for dredging activities, and the typical Basin Plan standards for turbidity may not apply in the mixing zone of the dredging activities. However, outside of the mixing zone, which could be more than 500 feet, WETA or its contractor would need to monitor and ensure Basin Plan standards for turbidity are met. Basin Plan standards</p>

Resource Section	Impact	Mitigation Measure
		<p>are as follows:</p> <ul style="list-style-type: none"> <li>• Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU.</li> <li>• Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20%.</li> <li>• Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.</li> <li>• Where natural turbidity is greater than 100 NTUs, increases shall not exceed 1%.</li> </ul> <p>The specific monitoring schedule including any additional timing information and quality assurance shall be determined by WETA in collaboration with the San Francisco RWQCB.</p>
	Impact HYD-3: Project could result in impacts to stormwater	<p><b>Mitigation Measure HYD-3: Implement RWQCB Provision C.3 for Control of Stormwater and BMPs for Operational Protection of Water Quality</b></p> <p>Under Provision C.3, WETA will develop a compliance plan to ensure runoff is adequately collected and treated prior to discharge, and that peak flows and flow durations match pre-project conditions. BMPs included in the compliance plan may require operational maintenance such as cleaning and sweeping to ensure that the fuel storage vaults and fueling areas are kept clean and stormwater runoff does not collect contaminants such as urea and diesel stored at the site. The final compliance plan shall be approved by the San Francisco RWQCB.</p>
	Impact HYD-4: Project facility could be subject to tidal flooding	<p><b>Mitigation Measure HYD-4: Provide Tidal Flood Wall (or other Improvements) to Address Tidal Flooding After 2050</b></p> <p>If the facility is still in operation after 2050, it may be subject to tidal flooding during extreme tide events. As necessary to address potential flooding after 2050, WETA shall install a flood wall or earthen berm to protect land-side facilities (including the outdoor fuel storage tanks) that provides sufficient freeboard to protect the facility from the damage in the event of a 100-year high tide. Based on current estimates, this improvement is not estimated to be required until sometime after 2050.</p>

<b>Resource Section</b>	<b>Impact</b>	<b>Mitigation Measure</b>
<b>X. Land Use and Planning</b>		
	No impact	Not applicable
<b>XII. Noise</b>		
	Impact N-1: Maintenance dredging could exceed City of Alameda noise standards	<p><b>Mitigation Measures N-1: Limit When Maintenance Dredging Occurs</b></p> <p>WETA will limit maintenance dredging to the hours between 7 a.m. and 7 p.m. on weekdays and 8 a.m. to 5 p.m. on Saturdays per the City of Alameda Municipal Code, Chapter 4.10.</p>
<b>XIII. Population and Housing</b>		
	No impact	Not applicable
<b>XIV. Public Services</b>		
	No impact	Not applicable
<b>XV. Recreation</b>		
	No impact	Not applicable
<b>XVI. Transportation/Traffic</b>		
	Impact TRA-1: Project construction could impact area traffic	<p><b>Mitigation Measure TRA-1: Develop and Implement a Traffic Control Plan</b></p> <p>The construction contractor will mitigate the proposed project's construction-related traffic impacts by developing and implementing a Traffic Control Plan as part of the overall Construction Management Plan, in accordance with City of Alameda policies. The Traffic Control Plan will be implemented throughout the course of project construction, and will include the following elements:</p> <ul style="list-style-type: none"> <li>• Communication plan to notify transit providers, emergency service providers, residences, and businesses located in the project vicinity of the construction plans.</li> <li>• Identify roadway segments or intersections that are at, or approaching, LOS that exceeds local standards, and provide for</li> </ul>

Resource Section	Impact	Mitigation Measure
		<p>construction-generated traffic to avoid these locations at the peak periods, either by traveling different routes or by traveling at non-peak times of day.</p> <ul style="list-style-type: none"> <li>• Restrict delivery of construction materials to between the hours of 8 a.m. and 3 p.m. to avoid more congested morning and evening hours.</li> <li>• Require that written notification be provided to contractors regarding appropriate routes to and from the construction site, and the weight and speed limits on local roads used to access the construction site.</li> <li>• Provide for adequate parking for construction trucks, equipment, and construction workers within the designated staging areas throughout the construction period.</li> <li>• Specify that a sign be posted at all active construction areas giving the name and telephone number or e-mail address of the City of Alameda staff person designated to receive complaints regarding construction traffic.</li> </ul>
<b>XVII. Utilities and Service Systems</b>	No impact	Not applicable
<b>XVIII. Mandatory Findings of Significance</b>	No impact	Not applicable