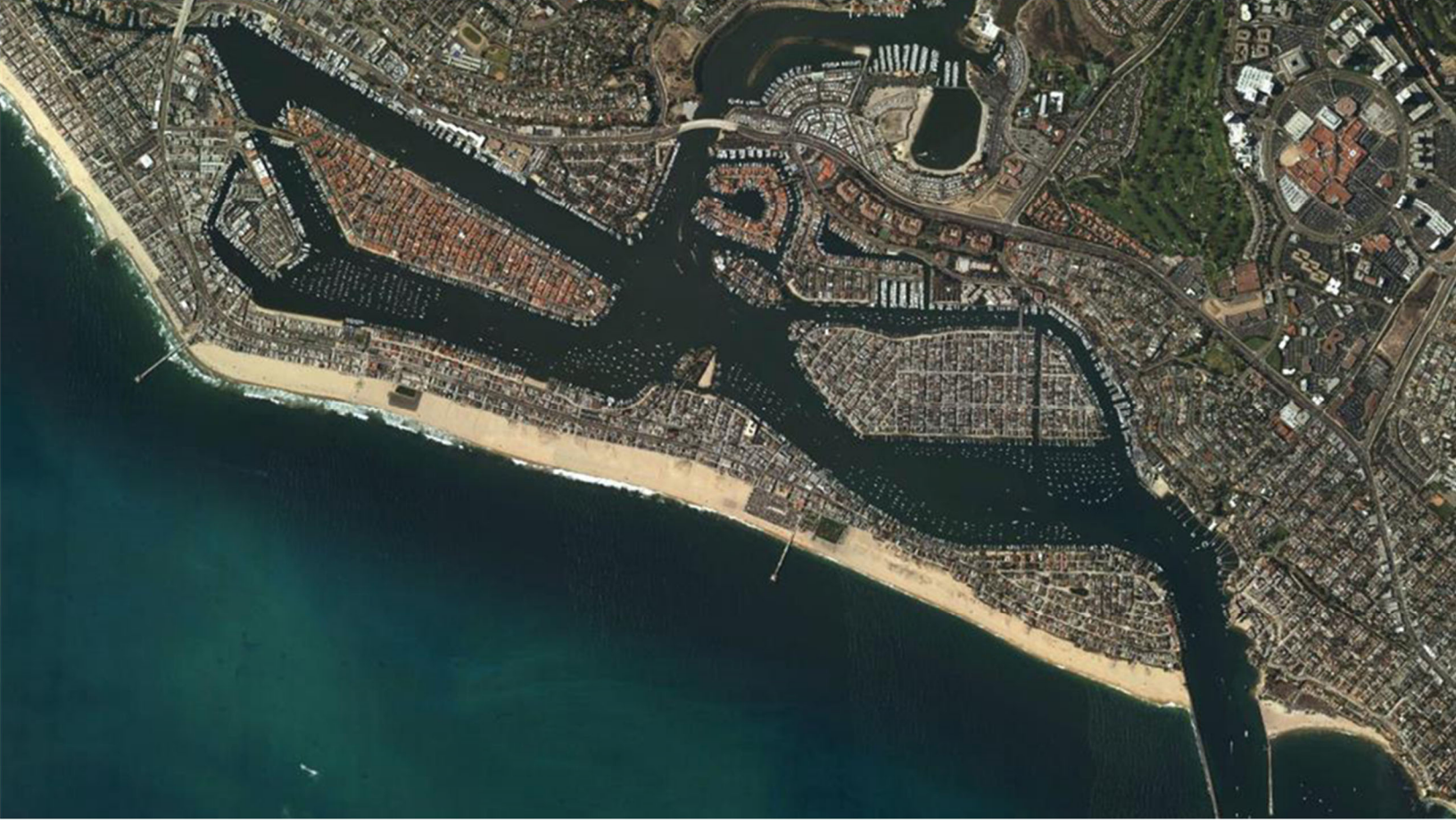

May 20, 2021
Lower Newport Bay Confined Aquatic Disposal (CAD) Construction Project (PA2019-020)
State Clearinghouse Number: 2019110340

Mitigation Monitoring and Reporting Program

Prepared for the City of Newport Beach

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Mitigation Monitoring Reporting Program

Prepared for
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Project Number: 160377-01.02

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1 Introduction

On May XX, 2021, the City of Newport Beach (City) in compliance with the California Environmental Quality Act (CEQA; California Public Resources Code, Division 13, Section 21000 et seq.) and CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.) certified a Final Environmental Impact Report (EIR) to support the approval of the proposed Lower Newport Bay Confined Aquatic Disposal (CAD) Facility Construction Project (PA2019-020), hereafter referred to as the proposed Project, in accordance with 22 CCR Section 66265 et seq. Under the proposed Project, the City would construct a CAD facility in the central portion of Lower Newport Bay between Bay Island, Lido Isle, and Harbor Island where dredged sediment unsuitable for open ocean disposal or nearshore placement can be contained. Clean material suitable for beach nourishment generated from constructing the CAD facility will be transported and disposed of at an approved open ocean disposal site (LA-3 Ocean Dredged Material Disposal Site) or along the nearshore ocean beaches. The City is also proposing to allow maintenance dredging in sections of the Harbor outside the Federal Channels maintenance dredging program area to re-establish safe navigation.

Assembly Bill 3180 (AB 3180), codified in Public Resources Code Section 21081.6, became effective January 1, 1989, and requires a Lead or Responsible Agency to adopt a mitigation monitoring and reporting program (MMRP) when approving or carrying out a project. The purpose of this program is to ensure that when an environmental document, either an EIR or a negative declaration, identifies measures to reduce potential adverse environmental impacts to less-than-significant levels, that those measures are implemented as detailed in the environmental document. As lead agency for the EIR, the City is responsible for implementation of this MMRP.

The EIR prepared for the proposed Project addresses the potential environmental impacts and, where appropriate, recommends measures to mitigate these impacts. As such, this MMRP is required to ensure that adopted mitigation measures are successfully implemented and a monitoring strategy is prepared for each mitigation measure. Once the City adopts the MMRP, the applicable City departments will include the mitigation monitoring and reporting requirements in the appropriate documents. Therefore, in accordance with the aforementioned requirements, this document lists each mitigation measure, describes the methods for implementation and verification, and identifies the responsible party or parties.

2 Monitoring Program

Pursuant to AB 3180, this MMRP was prepared and is accompanied by the associated reporting forms used to verify compliance with individual mitigation measures. This MMRP identifies each mitigation measure or project condition by discipline, the entity or organization responsible for implementation, and the monitoring phase required for each measure. Certain inspections and reports may require preparation by qualified individuals; these are specified as needed. The method of verification for each measure is also specified.

Table 1
Mitigation and Monitoring Program

Mitigation Monitoring Program Lower Newport Bay Confined Aquatic Disposal Construction Project		
Mitigation Measure	**Implementation and Responsible Party**	**Monitoring Phase**
MM-AQ-1 Tugboats Used During Construction: The tugboats used during construction must meet USEPA Tier 4 engine standards by 2024; if Tier 4 tugboats are not available in years 2021 and 2022, tugboats must meet Tier 3 compliant standards.	The City shall require the following equipment is used as part of construction contracts: tugboats meeting USEPA Tier 4 engine standards by 2024; if Tier 4 tugboats are not available in years 2021 and 2022, tugboats must meet Tier 3 compliant standards. If applicable Tier-compliant tugboats are not available, the City shall purchase ERCs from SCAQMD to offset the exceedance of NO_X emissions for each year of construction where emissions would exceed thresholds. The City shall retain a qualified air quality specialist. Within 60 days following the conclusion of each operational year, the City shall direct the air quality specialist to perform updated emission calculations as determined by the final equipment list secured by the contractor and using industry-accepted air modeling calculation methods. The City shall purchase enough ERCs to offset the updated emissions.	Prior to commencement and during construction
MM-BIO-1 Pre- and Post-Construction Survey: Consistent with the CEMP (NOAA 2014) and *Caulerpa Control Protocol* (NOAA 2008), a pre-construction eelgrass and *Caulerpa* survey shall be performed by the City in the proposed Project area 30 to 60 days prior to commencement of proposed construction activities in the Harbor.	The City shall retain a qualified biologist to perform pre-construction eelgrass and *Caulerpa* surveys. If eelgrass is located during the pre-construction survey, the City shall retain a biologist to perform a post-construction survey within 30 days following completion of construction to evaluate any immediate effects to eelgrass habitat. If *Caulerpa* is found, the City will immediately notify the Southern California *Caulerpa* Action Team and construction shall not be conducted until such time as the infestation has been isolated and treated, or the risk of spread from the proposed construction is eliminated.	Prior to construction

Mitigation Monitoring Program Lower Newport Bay Confined Aquatic Disposal Construction Project		
Mitigation Measure	**Implementation and Responsible Party**	**Monitoring Phase**
MM-BIO-2 Eelgrass Mitigation: If a post-construction survey is required and indicates loss of eelgrass habitat within the proposed Project area, any impacts to eelgrass that have not previously been mitigated for will be mitigated in accordance with the CEMP (NOAA 2014). In-kind compensatory mitigation is the creation, restoration, or enhancement of habitat to mitigate for adverse impacts to the same type of habitat. Per the CEMP guidelines for Southern California, for each square meter of vegetated eelgrass cover adversely impacted, 1.38 square meters of new habitat with suitable conditions to support eelgrass should be planted with a comparable bottom coverage and eelgrass density as impacted habitat (NOAA 2014). The 1.38:1 ratio assumes the following: 1) there is no eelgrass function at the mitigation site prior to mitigation efforts; 2) eelgrass function at the mitigation site is achieved within 3 years; 3) mitigation efforts are successful; and 4) there are no landscape differences (e.g., degree of urban influence and proximity to freshwater source) between the impact site and the mitigation site.	The City shall retain a qualified biologist to determine the area of impact and mitigation needs. Per the CEMP guidelines for Southern California, for each square meter of vegetated eelgrass cover adversely impacted, 1.38 square meters of new habitat with suitable conditions to support eelgrass should be planted with a comparable bottom coverage and eelgrass density as impacted habitat (NOAA 2014). The City shall work with NOAA to identify an area and protocol for mitigation planting.	Prior to construction if eelgrass is identified
MM-CHR-1 Stop Work in the Area If Prehistoric or Historical Archaeological Resources Are Encountered: In the event that any artifact, or an unusual amount of bone, shell, or non-native stone, is encountered during construction, work would be immediately stopped and relocated to another area. Examples of such cultural materials might include ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; historic artifacts such as bottles or ceramics; or resource gathering items such as fish weir stakes.	The City shall include requirements in all construction contracts. Per contract requirements, the contractor would stop dredging until a qualified archaeologist can be retained by the City to evaluate the find (36 CFR 800.11.1 and 14 CCR 15064.5[f]). Native American tribes and the Office of Historic Preservation would be notified by the City of the find. Native American tribes consulted on the proposed Project to date include the Gabrieleño Band of Mission Indians – Kizh Nation and the Juaneño Band of Mission Indians Acjachemen Nation. If the resources are found to be significant, they would be avoided or mitigated.	Prior to commencement and during construction

Mitigation Monitoring Program Lower Newport Bay Confined Aquatic Disposal Construction Project		
Mitigation Measure	**Implementation and Responsible Party**	**Monitoring Phase**
MM-GEO-1 Periodic Monitoring of the CAD Facility: The City shall conduct periodic monitoring of the CAD facility, including bathymetric surveys and cap coring.	The City shall retain a qualified geologist to perform annual inspections of the CAD facility. In addition, inspection shall occur following any significant earthquakes.[1] If the geologist notes any changes in environmental conditions or design assumptions become apparent, then the City shall consider management actions for the CAD facility. Initial management actions would likely include increasing the level or frequency of monitoring. If indicated, the CAD facility cap design would be augmented in one or more of the following ways: • Adding more sediment to form a thicker cap • Changing the cap material to a coarser, more erosion-resistant material type (coarse sand or gravel) • Adding enhanced materials to the cap, such as less porous or chemically absorbent materials	Annually and immediately following any significant earthquake (assuming safe to monitor)
MM-GHG-1 Purchase GHG Emission Offsets: The City shall purchase annual GHG offset credits to offset GHG emissions during the life of the project. Off-site mitigation credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in Health and Safety Code section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols consistent with the criteria set forth in Section 95972, subdivision (a), of Title 17 of the CCR, and shall not allow the use of offset projects originating outside of California, except to the extent that the quality of the offsets, and their sufficiency under the standards set forth herein, can be verified by SCAQMD.	GHG credits must be purchased within 90 days following the conclusion of each operational year through one of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; (ii) any registry approved by CARB to act as a registry under the California Cap and Trade program; or (iii) through the CAPCOA GHG Rx and the SCAQMD. The City shall retain a qualified air quality specialist. Within 60 days following the conclusion of each operational year, the City shall direct the air quality specialist to perform updated emission calculations as determined by the final equipment list secured by the contractor and using industry-accepted GHG calculation methods. The City shall purchase enough credits to offset the updated GHG emissions. Proof of purchase of the off-site mitigation credits shall be retained by the City.	Annually during construction

<table>
<tr><th colspan="3">Mitigation Monitoring Program
Lower Newport Bay Confined Aquatic Disposal Construction Project</th></tr>
<tr><th>Mitigation Measure</th><th>Implementation and Responsible Party</th><th>Monitoring Phase</th></tr>
<tr><td>MM-HYDRO-1 Conduct Water Quality Monitoring During All Construction Activities

Table HYDRO-1
<table>
<tr><th rowspan="2">Parameter</th><th colspan="2">Receiving Water Limitation</th></tr>
<tr><th>Eelgrass Present Within 300 Feet</th><th>Eelgrass Not Present Within 300 Feet</th></tr>
<tr><td>Transmissivity</td><td>38%</td><td>16%</td></tr>
<tr><td>Turbidity</td><td>16 NTU</td><td>47 NTU</td></tr>
<tr><td>pH</td><td colspan="2">7 < pH < 8.6; < 0.2 change from ambient</td></tr>
<tr><td>Dissolved Oxygen</td><td colspan="2">>5 mg/L</td></tr>
</table></td><td>The City shall obtain the required permits under the Regional Water Quality Control Board and/or the U.S. Army Corps of Engineers. The City will retain a qualified biologist to perform water quality monitoring. Water quality monitoring will be implemented to comply with numeric receiving water limitations (Table HYDRO-1) and other permit requirements during construction activities to minimize potential water quality impacts to Lower Newport Bay.</td><td>Prior to commencement and during construction</td></tr>
<tr><td>MM-HYDRO-2 Implement Water Quality BMPs</td><td>The City shall require construction contractors to use BMP water quality controls to ensure compliance with the water quality standards identified herein. Measures could include use of a silt curtain during dredging and/or material placement, a floating boom to be maintained around the proposed Project area, and daily inspection of construction equipment for leaks or malfunction. Storage or stockpiling of materials related to construction may be prohibited where such materials could enter the waters of Lower Newport Bay.</td><td>Prior to commencement and during construction</td></tr>
<tr><td>MM-HYDRO-3 Material Placement Will Take Place Outside Tidal Extremes: These measures will limit the loss of fill material outside the CAD facility during placement operations.</td><td>The City shall require construction contractors to limit material placement to neap and non-peak tides (i.e., plus or minus 2 hours from slack tide) to limit the horizontal distribution of fill material due to reduced current speeds, where possible. In addition, placement activities should be conducted during a non-peak flood tide versus a non-peak ebb tide.</td><td>During material placement within the CAD facility</td></tr>
</table>

Mitigation Monitoring Program Lower Newport Bay Confined Aquatic Disposal Construction Project		
Mitigation Measure	**Implementation and Responsible Party**	**Monitoring Phase**
MM-REC-1 Coordinate with Sailing Centers	The City shall coordinate with the sailing organizations and yacht clubs to relocate recreational and mooring activities and minimize the disruption to marine recreational activities	Prior to commencement of and during construction

Notes:

1. According to NOAA National Centers for Environmental Information, a significant earthquake "is classified as one that meets at least one of the following criteria: caused deaths, caused moderate damage (approximately $1 million or more), magnitude 7.5 or greater, Modified Mercalli Intensity (MMI) X or greater, or the earthquake generated a tsunami." (NOAA 2020)

NOAA (National Oceanic and Atmospheric Administration), 2008. Caulerpa *Control Protocol. Version 4*. February 25, 2008.
NOAA, 2014. *California Eelgrass Mitigation Policy and Implementing Guidelines*. October 2014. Available at: https://media.fisheries.noaa.gov/dam-migration/cemp_oct_2014_final.pdf.
NOAA, 2020. NCEI/WDS Global Significant Earthquake Database, 2150 BC to Present. Last Modified September 3, 2020. Available at: https://data.noaa.gov//metaview/page?xml=NOAA/NESDIS/NGDC/MGG/Hazards/iso/xml/G012153.xml&view=getDataView&header=none#:~:text=A%20significant%20earthquake%20is%20classified,the%20earthquake%20generated%20a%20tsunami.

BMP: best management practice
CAD: confined aquatic disposal
CAPCOA: California Air Pollution Control Officers
CARB: California Air Resources Board
CCR: California Code of Regulations
CEMP: California Eelgrass Mitigation Policy
CFR: Code of Federal Regulations
City: City of Newport Beach
ERC: Emission Reduction Credit
GHG: greenhouse gas
mg/L: milligrams per liter
MM: Mitigation Measure
NO_X: nitrogen oxides
NTU: nephelometric turbidity unit
SCAQMD: South Coast Air Quality Management District
USEPA: U.S. Environmental Protection Agency