

**Mitigation Monitoring and Reporting Program (MMRP)
Measure DD Implementation Project**

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Environmental Impact Report (EIR) prepared for the Measure DD Implementation Project in the City of Oakland. This MMRP is in compliance with Section 15097 of the *CEQA Guidelines*, which requires that the Lead Agency “adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” The MMRP lists mitigation measures recommended in the EIR and identifies mitigation monitoring requirements.

Each impact and mitigation measure is numbered according to the topical section to which it pertains in the EIR. As an example, Mitigation Measure LAND-1 is the first impact and mitigation measure identified in the EIR. The Project group to which the mitigation applies is indicated in parentheses following the name of the impact. Group 1 is the Lake Merritt and Lake Merritt Channel group, Group 2 is the Oakland Waterfront Trail and Access Improvements, Group 3 is the North and East Oakland Recreational Facilities and Group 4 is the City-wide Creeks Restoration, Preservation, and Acquisition group.

The impact and mitigation measure are followed by the names of the “Responsible Implementing Party(ies),” which identifies the party(ies) responsible for carrying out the required action, and the “Monitoring Party,” which identifies the party ultimately responsible for ensuring that the mitigation measure is implemented. The first column, “Action(s) and Implementation Timing,” identifies the specific actions to be taken and the time the mitigation measure should be initiated. “Action(s) by Monitor” outlines the steps for monitoring the action identified in the mitigation measure. The third column, entitled “Monitoring Timing,” states the time period within which or by which the monitor must ensure that the mitigation measure has been implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.

LAND-1 (Group 2): Installation of the Hanson Aggregate Trail Connection could result in a land use compatibility conflict.

Mitigation: A steel canopy shall be designed by a registered professional engineer, the design shall be reviewed by a safety professional, and the canopy shall be installed by the City under the conveyor belt to protect pedestrians using the trail. The canopy shall be installed prior to the opening of this segment of the Waterfront Trail. Implementation of this mitigation measure would reduce Impact LAND-1 to a less-than-significant level. However, this measure is dependent upon the City successfully entering into an agreement with the property owner to construct the steel canopy. Because the mitigation measure is needed to prevent a safety hazard as well as a land use conflict, the City shall not construct the trail across the property without including the protective canopy in the project design while the conveyor is in operation on the site. Should the property owner decline to allow the City to construct the canopy, the City shall not construct the trail on the property and instead reroute it onto City streets until such time as the use of the conveyor ceases or the property owner agrees to allow the City to construct the canopy.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division and engineering and construction contractors

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. A protective steel canopy shall be designed by a registered professional engineer during the design phase and the specifications for the canopy shall be included in contract bid documents	1. Review and approve final design of canopy	1. Prior to issuing bid documents	Name: Date:
2. Install and inspect steel canopy before trail is opened to public	2. Confirm that canopy construction is complete and to specification	2. Prior to allowing trail to open	Name: Date:

TRANS-1 (Group 1): For Existing Conditions Plus the Project, the Santa Clara Avenue/Grand Avenue intersection would degrade to LOS E during the PM peak hour.

Mitigation: The City shall optimize the signal timing at the Santa Clara Avenue/Grand Avenue intersection to improve traffic operations during the PM peak hour.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
Optimize signal timing at the Santa Clara Avenue/Grand Avenue intersection upon implementation of the EI Embarcadero reconfiguration	Review the signal timing for the intersection and confirm that it has been optimized	Prior to filing the Notice of Completion with the County for modifications to EI Embarcadero	<i>Name:</i> <i>Date:</i>

TRANS-2 (Group 1): For Existing Conditions Plus the Project, the average vehicle delay at the Lake Park Avenue/Lakeshore Avenue intersection would increase by 38.6 seconds during the AM peak hour to a LOS F.

Mitigation: The City shall make the following modifications at the Lake Park Avenue/Lakeshore Avenue intersection to improve traffic operations:

- Convert the center northbound lane on Lakeshore Avenue from a through movement to a left turning movement and provide split signal phasing for eastbound and westbound Lakeshore Avenue traffic movements; and
- Optimize traffic signal timing.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. The lane modifications shall be funded and included in the final design and contract bid documents for the reconfiguration of El Embarcadero	1. Confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents for the reconfiguration of El Embarcadero	Name: Date:
2. Optimize signal timing at the Lake Park Avenue/Lakeshore Avenue intersection and provide split signal phasing on Lakeshore	2. Review the signal timing for the intersection and confirm that it has been optimized	2. Prior to filing the Notice of Completion with the County for the reconfiguration of El Embarcadero	Name: Date:

TRANS-3 (Group 1): For Existing Conditions Plus the Project, the average vehicle delay at the MacArthur Boulevard/Lakeshore Avenue intersection would increase by 13.8 seconds during the PM peak hour where the LOS is rated F without the project.

Mitigation: The City shall make the following modifications at the MacArthur Boulevard/Lakeshore Avenue intersection to improve traffic operations:

- Convert the combination left-through lane on eastbound MacArthur Boulevard to a through-only lane, resulting in one left-turn lane, two through lanes and one combination through-right turn lane;
- Convert the center southbound lane on Lakeshore Avenue from a through movement to a combined through-left turning movement and provide split signal phasing for Lakeshore Avenue traffic movements; and
- Optimize traffic signal timing.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. The lane modifications on MacArthur Boulevard shall be funded and included in the final design and contract bid documents for the reconfiguration of El Embarcadero	1. Confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents for the reconfiguration of El Embarcadero	Name: Date:
2. The lane modifications on Lakeshore Avenue and the split signal phasing shall be funded and included in the final design and contract bid documents for the reconfiguration of El Embarcadero	2. Confirm that specifications are included in the contract bid documents	2. Prior to issuing bid documents for the reconfiguration of El Embarcadero	Name: Date:
3. Optimize signal timing at the MacArthur Boulevard/Lakeshore Avenue intersection	3. Review the signal timing for the intersection and confirm that it has been optimized	3. Prior to filing the Notice of Completion with the County for the reconfiguration of El Embarcadero	Name: Date:

TRANS-4 (Group 1): For Existing Conditions Plus the Project the average vehicle delay at the 27th Street/Bay Place/Harrison Street intersection would increase by 4.6 seconds during the AM peak hour where the LOS is rated F without the project.

Mitigation: The City shall optimize the signal timing at the 27th Street/Bay Place/Harrison Street intersection to reduce the total intersection average vehicle delay by 49.9 seconds during the AM peak hour.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
Optimize signal timing at the 27 th Street/Bay Place/Harrison Street intersection	Review the signal timing for the intersection and confirm that it has been optimized	Prior to filing the Notice of Completion with the County for improvements at 20 th and Harrison Street	Name: Date:

TRANS-8 (Group 1): Under the Cumulative Plus Project Conditions, the 10th Street/Oak Street intersection would degrade to LOS F during the AM peak hour.

Mitigation: The City shall optimize the signal timing (modify the phase splits) at the 10th Street/Oak Street intersection to improve traffic operations.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
Optimize signal timing at the 10 th Street/Oak Street intersection	Review the signal timing for the intersection and confirm that it has been optimized	Prior to filing the Notice of Completion with the County for the 12 th Street reconstruction	Name: Date:

TRANS-9 (Group 1): Under the Cumulative Plus Project Conditions, the 7th Street/Oak Street intersection would degrade to LOS F during the PM peak hour.

Mitigation: The City shall optimize the signal timing (modify the phase splits) at the 7th Street/Oak Street intersection to improve traffic operations.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
Optimize signal timing at the 7 th Street/Oak Street intersection	Review the signal timing for the intersection and confirm that it has been optimized	Prior to filing the Notice of Completion with the County for the 12 th Street reconstruction	Name: Date:

BIO-1 (Group 2): Construction of an observation structure at the 66th Avenue Gateway site may impact state or federally listed tidal marsh species.

Mitigation: BIO-1a (Group 2): Ground disturbance in the vicinity of Damon Marsh shall be conducted only when high tides are not at their winter or summer extremes, to reduce the likelihood that tidal marsh rails and SMHM will be present in the construction footprint. Ground disturbance shall be avoided during the highest tides of June–July and December–January (± one week each month).

Responsible Implementing Party(ies): City of Oakland Project Delivery Division and construction contractor

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Include specifications in the contract bid documents for the Damon Marsh that restrict ground disturbance to times outside the highest tides of winter and summer	1. Confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents	Name: Date:
2. Implement plan and monitor site during construction	2. Visit construction site and verify that measures are being implemented	2. During construction	Name: Date:

Mitigation: BIO-1b (Group 2): Prior to ground disturbance, a qualified biologist experienced with SMHM exclusion procedures shall prepare a site-specific SMHM avoidance plan. The plan shall be implemented during construction at each specific site. At a minimum, the plan shall include (1) the installation of silt fencing around the entire portion of the work area (that is within 100 feet from the edge of the marsh) to exclude SMHM from entering, (2) the clearing of all ground vegetation within the fenced area, and (3) the relocation to Damon Marsh of any SMHM found during the vegetation removal effort. Construction work shall start as soon as possible (and no longer than one week) after vegetation has been cleared. All exclusion measures and initial ground disturbance activities shall be monitored by a biologist, who has the necessary state and federal permits to handle and relocate SMHM.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division and construction contractor

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Prepare Salt Marsh Harvest Mouse avoidance plan	1. Prepare avoidance plan and confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents	Name: Date:
2. Implement plan and monitor site during construction	2. Visit construction site and verify that measures are being implemented	2. During construction	Name: Date:

Mitigation: BIO-1c (Group 2): To avoid potential disturbance to nesting tidal marsh rails, construction of the observation structure shall be conducted during the non-breeding season (September 1 through January 31), unless prior surveys indicate that marsh habitat within 100 feet of the construction footprint is not part of an active rail breeding territory. Such surveys must be conducted in accordance with a project-specific survey protocol prepared in accordance with the USFWS and CDFG guidelines.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division and construction contractor

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Include specifications in contract bid documents to limit construction of observation structure to non-breeding season for tidal marsh rails (September 1 through January 31)	1. Confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents	Name: Date:
Or			
1. Conduct preconstruction surveys for rails in accordance with USFWS and CDFG guidelines and include specifications in contract bid documents to limit work to areas more than 100 feet from active rail breeding territory (i.e., outside exclusion area)	2. Visit construction site and verify that measures are being implemented	2. During construction	Name: Date:
2. Implement construction in accordance with contract specifications for avoidance of tidal marsh rails			

BIO-2 (Group 2): Construction of the pile-supported boardwalks along the Waterfront Trail may impact fisheries resources within the Oakland Inner Harbor.

Mitigation: BIO-2 (Group 2): To avoid adverse impacts to Pacific herring, federally listed salmonids (chinook salmon, coho salmon, and steelhead), and EFH, pile driving shall occur within the June 1 to November 30 work window in accordance with NMFS guidelines.¹ Any pile driving occurring outside this period will require informal or formal consultation with the NMFS (for listed salmonids and EFH) and CDFG (for Pacific herring) prior to the Corps' issuance of a Section 404 permit for impacts to waters of the U.S.

Responsible Implementing Party(ies): City of Oakland Project Delivery Division and construction contractor

Monitoring Party: City of Oakland Project Delivery Division

¹ National Marine Fisheries Service (NMFS). San Francisco Bay Project Impact Evaluation System (PIES) website. <<http://mapping.orr.noaa.gov/website/portal/pies/faqs.html>> Accessed April 12, 2007.

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Include specifications in contract bid documents that limit pile driving at Group 2 locations to the June 1 to November 30 work window in accordance with NMFS guidelines	1. Confirm that specifications are included in the contract bid documents	1. Prior to issuing bid documents	Name: Date:
<i>Or</i>			
1. Conduct consultations with NMFS and CDFG as part of Section 404 permit process to obtain permission for pile driving outside of the work window			
2. Include specifications in contract bid documents in accordance with NMFS and CDFG requirements	2. Visit construction site and verify that measures are being implemented	2. During construction	Name: Date:

BIO-3 (Groups 1, 2, and 4): Construction of some components within the Lake Merritt and Lake Merritt Channel, Waterfront Trail, and City-wide Creeks groups may impact waters of the U.S. and State.

Mitigation: BIO-3a (Groups 1, 2, and 4): All Measure DD-funded activities within jurisdictional waters shall first obtain authorization from the appropriate agencies (Corps, Water Board, CDFG, and BCDC). At a minimum, each activity will likely require a Section 404 Corps permit and Section 401 water quality certification from the Water Board. Creek restoration activities may also require a CDFG Lake or Streambed Alteration Agreement, depending on site-specific conditions. Construction of the fixed pier boardwalks along the Waterfront Trail will require BCDC approval since it proposes construction over and filling of Bay waters (i.e., concrete piers).

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Obtain Section 404 permit from the U.S. Corps of Engineers and Section 401 water quality certification from the Water Board prior to construction and include any requirements in contract bid documents	1. Confirm that permits have been obtained	1. Prior to issuing bid documents	Name: Date:
2. Obtain BCDC permit and include any requirements in contract bid documents	2. Confirm that permits have been obtained	2. Prior to issuing bid documents	Name: Date:

Mitigation: BIO-3b (Groups 1, 2, and 4): Impacts to jurisdictional wetlands shall be mitigated at a minimum replacement ratio of 1:1 (i.e., one acre created [and preserved] for every acre impacted). If feasible, replacement habitat shall be created/preserved in the same general area as the original impact. Off-site mitigation may be approved if the amount of required replacement habitat exceeds that which is available near a given impact site. A wetland mitigation and monitoring plan (MMP) shall be developed and implemented for each mitigation site, detailing the mitigation design, wetland planting design, adaptive management, maintenance and monitoring requirements, reporting requirements, and success criteria for the created wetland(s).

Responsible Implementing Party(ies): City of Oakland Project Delivery Division

Monitoring Party: City of Oakland Project Delivery Division

Action(s) and Implementation Timing:	Action(s) by Monitor:	Monitoring Timing	Verification of Compliance Name/Date
1. Design project to replace jurisdictional wetlands at a minimum 1:1 replacement ratio	1. Confirm that construction plans comply with requirements of Mitigation Measure BIO-3b	1. Prior to issuing bid documents	Name: Date:
2. Prepare and implement wetland mitigation and monitoring plan for each mitigation site	2. Visit mitigation site and verify that success criteria are being met	2. During project operation	Name: Date: