Malibu Creek Ecosystem Restoration Study

Los Angeles and Ventura Counties, California

Appendix T

Mitigation Monitoring and Reporting Program



U.S. Army Corps of Engineers

Los Angeles District



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Mitigation Monitoring and Reporting Program

The California Environmental Quality Act (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development.

CEQA Guidelines Section 15091(d) states:

When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be enforceable through permit conditions, agreements, or other measures.

CEQA Guidelines Section 15097(a) states:

This section applies when a public agency has made the findings required under paragraph (1) of subdivision (a) of section 15091 relative to an EIR or adopted a mitigated negative declaration in conjunction with approving a project. In order to assure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring and 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 final EIR for the proposed project includes mitigation measures to reduce potential environmental effects of the proposed project, which are summarized in Section 9 of the EIR. Following CDPR's certification of the final EIR, and approval of the findings of the EIR and this MMRP, the mitigation measures that are within the jurisdiction and responsibility of CDPR that have been required or incorporated into the project will be monitored in the manner specified in this MMRP.

Mitigation Monitoring and Reporting Program Summary for the Malibu Creek Ecosystem Restoration Project EIR				
Mitigation Measure	Monitoring or Reporting Action	Monitoring or Reporting Entity	Timing	Enforcement Entity
Environmental Commitments	and Associated Monito	ring & Report	ing	
Ear	th Resources			
ER-1. Stabilization of Slopes. A slope stability exploration and geotechnical evaluation will be conducted prior to project construction during pre-construction engineering and design phase. Stabilization measures to the extent practical will be implemented to protect Malibu Canyon Road, and other areas as determined necessary and as recommended in Appendix D from landslide and soil destabilization effects that may be produced by the project.	Perform slope stability exploration.	USACE	During PED	USACE
ER-2. Develop and Implement Erosion-Control and Spill Response Plan. Prior to construction, the USACE will ensure the construction contractor prepares an erosion-control and spill response plan to be implemented at all construction, stockpile, and sediment storage areas, as appropriate. This plan will be developed concurrently with the Stormwater Pollution Prevention Plan (SWPPP; see WR-1) and will include erosion-control best management practices (BMPs) during construction and implementation of geotechnical recommendations described in the Appendix D, including re-vegetation of disturbed areas, sloping the final impound surface at the end of each construction year, cutting the dam simultaneously with reducing impound elevations, construction of a cofferdam for control of flows, removal of the cofferdam during the winter season, dewatering sediments, diverting water around construction through pumping and/or piping, development of slope stability measures for groundwater saturation, construction ramp stability measures, and erosion- control measures at disposal sites.	Develop an erosion control and spill response plan.	USACE (construction contractor)	Developed prior to construction, implemented during construction	LARWQCB

 ER-3. Additional Sediment Analysis for Nearshore Placement. Additional sediment grain size analysis will be performed prior to and during excavation of the sand layer to confirm the material grain size is beach quality sand prior to nearshore placement. This testing and analysis would be coordinated with the SC-DMMT. Sampling for grain-size gradation of the receiving nearshore placement area would also be performed. Additionally, quality control and quality assurance measures will be identified during PED and implemented during construction to ensure the material that is identified as beach quality sand is the material that is placed at the nearshore site. 	Have qualified engineer perform sediment analysis and develop appropriate measures for quality of sediment. Verify that measures ensure impacts remain less than significant.	USACE	During PED Phase	USACE
Wa	ter Resources			
 WR-1. Develop and Implement a Stormwater Pollution Prevention Plan During Construction and Winter Months. Prior to construction, the USACE will ensure the construction contractor prepares a stormwater pollution prevention plan (SWPPP) to address potential impacts to stormwater from construction equipment, construction crews, and construction practices. The SWPPP shall include BMPs to prevent accidental spills and other contamination of Malibu Creek, Las Virgenes Creek, or Cold Creek. The SWPPP shall include provisions for in-the-dry construction at to the extent practicable, and regular monitoring of water quality, including turbidity, during construction and in the winter runoff season. In-the-dry techniques may include, but are not limited to, excavation during the dry season, dewatering of sediments, use of coffer dams, or pumping/piping water around work sites. The SWPPP shall contain a visual monitoring program and a water quality-monitoring program for non-visible pollutants to determine construction site BMP effectiveness. The SWPPP will include a provision for adaptive measures to be taken in the event of excess contamination or turbidity. 	Develop a SWPPP prior to construction, submit to LARWQCB for enrollment under CGP. Implement all required monitoring and reporting during construction.	USACE (construction contractor)	Developed prior to construction, implemented during construction	LARWQCB

The USACE will ensure the construction contractor implements the SWPPP during construction.				
WR-2. Water Quality Monitoring During Nearshore Placement. The USACE will ensure the construction contractor conducts appropriate water quality monitoring, including turbidity, during nearshore sediment placement, and implements adaptive measures necessary in the event of excess turbidity or other concerns identified by monitoring.	Develop a water quality monitoring plan and report as appropriate. Verify measures ensure impacts remain less than significant.	USACE (construction contractor)	Developed prior to construction, implemented during construction	LARWQCB
WR-3. Water Temperature Monitoring. The water quality monitoring in WR-1 would include monitoring of water temperatures in order to evaluate suitability for steelhead. Water temperature, however, is primarily driven by factors outside of the influence of the restoration efforts. Therefore, the monitoring would be limited to gathering data for reporting and to inform resource agencies in support of broader steelhead-related efforts.	Monitor water temperature during construction.	USACE (construction contractor)	During construction.	
WR-4. Hydraulic and Sediment Transport Modeling for Alternative 2. Refined hydraulic and sediment transport modeling would be undertaken during PED to verify potential effects on downstream flood risks. If modeling indicates an increase in creek bed elevation due to the dam and impounded sediment removal compared to the no action scenario, non-structural measures to address potential increases in creek bed elevation and would be refined, during PED, and implemented during construction, as needed.	Refine modeling.	USACE	During PED	USACE
Biolo	gical Resources			
BIO-1. Qualified biologist oversight. A qualified biologist will be responsible for overseeing compliance with conservation measures included in environmental commitments (BIO-10 to BIO-16) during clearing and construction activities within designated areas. The biologist will also provide general construction oversight for biological and environmental concerns, such as compliance with Clean Water Act requirements, implementation and oversight of required surveys and monitoring, and invasive species control. The biologist will have stop work authority in the event compliance is not occurring to resolve any issues.	Have a qualified biologist oversee construction.	USACE	During construction	USACE

BIO-2. Oil Spill Control. Oil-absorbing floating booms will be kept onsite and the construction contractor will respond to aquatic spills during construction.	Ensure on-site oil- absorbing booms are present.	USACE	During construction	USACE
BIO-3. Equipment Maintenance and Cleanliness. Vehicles and equipment will be kept in good repair, without leaks of hydraulic or lubricating fluids. If such leaks or drips do occur, they will be cleaned up immediately. Equipment maintenance and/or repair will be confined to one location. Runoff in this area will be controlled to prevent contamination of soils and water.				
Vehicles and equipment will be kept clean to limit the spread of non- native species during construction. This includes cleaning all equipment before it is used on-site to prevent the spread of species from previous work, and cleaning equipment prior to entering the job-site to ensure residual soils are removed, and ensure egg deposits from plants pests are not present. The contractor will be required, as necessary, to consult with the USDA Plant Protection and Quarantine (USDA-PPQ) jurisdictional office for additional cleaning requirements that may be necessary.	Monitor vehicle and equipment maintenance.	USACE	During construction.	USACE
BIO-4. Vegetation Removal Outside of Nesting Season. Vegetation will be removed outside of the nesting season for migratory birds (February 1 through August 15) to the extent possible. If vegetation removal must be conducted during the nesting season, the area will be surveyed by a qualified biologist and appropriate buffers will be identified in consultation with the USFWS and CDFW to ensure impacts to nesting birds do not occur.	Have a biologist oversee any removal of vegetation during breeding season in coordination with USFWS and CDFW. Verify that measures ensure impacts are less than significant.	USACE	During construction	USACE, USFWS, and CDFW
BIO-5. Construction Speed Limit. Construction crews will be required to maintain a 15-m.p.h. speed limit on all unpaved roads to reduce the chance of wildlife being harmed if struck by construction equipment.	Confirm speed limits are followed.	USACE	During construction	USACE
BIO-6. Vehicle Travel During Daylight Hours. Project-related vehicle travel and construction activities will be limited to daylight hours, as wildlife and some special-status species could be found on roadways primarily at night.	Confirm vehicle travel limited to daylight hours.	USACE	During construction	USACE

 BIO-7. Employee Education Program. Prior to construction, an employee education program will be developed. Each employee (including temporary, contractors, and subcontractors) will participate in a training/awareness program prior to working on the project. Prior to the onset of construction activities, the contractor will provide all personnel who will be present on work areas within or adjacent to the project area the following information: A detailed description of all listed species including color photographs; The protection listed species receive under the Endangered Species Act and possible legal action or that may be incurred for violation of the Endangered Species Act; The conservation measures (BIO-10 to BIO-18) being implemented to conserve all listed species during construction activities associated with the project; Requirements from any permits or regulatory documents (water quality certification, Biological Opinion, Streambed Alteration Agreement, etc.). A point of contact if listed species are observed; SWPPP and erosion control and spill response plan will be provided along with consequences for violations incurred by non-compliance with SWPPP provisions; Issue identification cards to shift supervisors with photos, descriptions, and actions to be taken upon sighting for the listed species that may be encountered during construction; and 	Implement and document employee education program.	USACE	Prior to and during construction	USACE
BIO-8. Revegetation and Planting Plan. Several areas required require revegetation post-construction, including Rindge Dam upland and riparian areas, construction areas for upstream barriers, and other construction sites such as access roads and staging areas. A Revegetation and Planting Plan will be developed to revegetate these areas during PED, in coordination with appropriate resource agencies and stakeholders. The plan will include a plant palette and proposed sizes, maintenance	Develop and implement a revegetation and planting plan.	USACE	Developed during PED, implemented during construction	USACE, USFWS, and CDFW

procedures during establishment period, including irrigation, if any, and replanting of dead vegetation.				
BIO-9. Wildlife Fencing. During site preparation activities, wildlife exclusion fencing will be installed to deter animal entry into work areas. The location and extent of wildlife fencing will be determined by the qualified biologist (see BIO-1), in coordination with construction staff and resource agencies, as appropriate.	Verify fencing installation.	USACE	Prior to construction	USACE
BIO-10. Steelhead Conservation Measures. Preconstruction surveys will be conducted in the spring of each year of construction to identify the presence/absence of fish below the dam and within the construction zone. For the purposes of this measure, the construction zone extends along the Malibu Creek reach that includes the Main Dam Pool and the Undercut Boulder Pool. Blocking nets will be installed across Malibu Creek downstream of the Big Boulder Pool to prevent steelhead from swimming back upstream into either of these two pools. There is a location between the downstream end of that pool and a short run/riffle complex where nets could reasonably be set. Blocking nets will need to be long enough to cover bank full width, 2 m tall and mesh can be 0.25 -1 cm. They can be anchored with fence posts and zip ties.	A qualified biologist will oversee pre-construction surveys. If steelhead are present, biologist will develop a fish rescue plan and report relocation results as appropriate.	USACE	During construction	USACE, NMFS, CDFW

accompanied by CDPR staff, or their designees, familiar with the area providing access to the pools.				
BIO-11. Arroyo Chub Conservation Measures. During work within channels where arroyo chub could occur (including upstream tributaries), measures will be taken to avoid or reduce impacts on arroyo chub under the supervision of a qualified fisheries biologist and in coordination with USFWS and CDFW. Surveys will be conducted within the sediment and dam removal areas. If needed, a fish rescue and relocation effort plan will be developed prior to commencing work in areas where this species occurs and exclusion barriers are needed to divert flow around the work area. The fish rescue and relocation will be conducted under the supervision of a qualified biologist and will entail measures to reduce effects to arroyo chub and other fish associated with inwater construction activities.	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, USFWS, CDFW
BIO-12. Special Status Amphibian Conservation Measure. Prior to the implementation of construction activities, a qualified biologist will conduct surveys to ensure no newts or frogs are present within the area in which construction activities are to occur. If no newts are observed, then no further measures will be implemented. If newts found to be present, they will be captured and relocated to suitable habitat in consultation with CDFW. If frogs are found to be present, the USACE will revisit its effects determination and consult with the USFWS under section 7 of the ESA, if required. This measure applies to the coast range newt and California red-legged frog.	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, USFWS, CDFW
BIO-13. Special Status Reptiles Conservation Measures. Prior to the implementation of construction activities, a qualified biologist will conduct surveys to ensure no special-status reptiles are present within the area in which construction activities at Malibu Creek are to occur. This measure applies to the California Horned Lizard, Coast Patch-nosed Snake, Coastal Whiptail, San Diego Mountain Kingsnake, Silvery Legless Lizard, Two-Striped Garter Snake, and Western Pond Turtle. If none of the listed special- status reptiles are observed, then no further conservation measures will be implemented. If any of these species are present,	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, USFWS, CDFW

they will be captured and relocated to suitable habitat in consultation with CDFW.				
BIO-14. Least Bell's Vireo & Southwestern Willow Flycatcher Conservation Measures. Prior to the implementation of construction activities, a qualified biologist will conduct pre- construction surveys (three surveys 10-14 days apart for presence/absence of territorial males) for presence/absence of these species within the area of suitable habitat in which construction activities are to occur. If no vireo or flycatcher are observed, then no further conservation measures will be implemented. If this species is present, the USACE will revisit its effects determination and consult with the USFWS under section 7 of the ESA, if required. A monitoring and avoidance/minimization plan would then be developed.	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, USFWS, CDFW
 BIO-15. Special Status Mammal Conservation Measures. Prior to the implementation of construction activities, a qualified biologist will conduct surveys to determine if badger, ringtail, or bat roosts are present within the project area, particularly denning and roosting sites. If these species are not observed, then no further conservation measures will be implemented. If bats are found during an August – October survey, appropriate exclusion devices approved by CDFW and the USFWS shall be installed by a qualified bat biologist. Once the bats have been excluded, tree removal may occur. Exclusion devices shall be placed by a qualified bat biologist in accordance with CDFW and USFWS guidance. This measure applies to the American Badger, California leafnosed bat, Ring-tail Cat, Spotted Bat, Western Mastiff Bat, and Yuma Myotis. 	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, USFWS, CDFW
BIO-16. Special-Status Plant Species Conservation Measures. Prior to the implementation of vegetation removal or sediment deposition, a USFWS-approved biologist will conduct surveys. If no special-status plant species are observed, then no further conservation measures will be implemented. If any federally-listed plant species are determined to be present on site, the USACE will	Qualified biologists will perform pre-construction surveys. Confirm that special status species previously considered	USACE	Prior to construction	USACE, USFWS, CDFW

reconsider its effects determination and consult under section 7 of the ESA with the USFWS, if required. Individual plants will be enumerated, photographed, and flagged. Timing of field surveys will correspond with blooming or growth seasons when species are conspicuous and recognizable. Seed collection from individuals with mature seed that are likely to be impacted will be conducted for post-construction propagation.	absent are not within project footprint.			
 BIO-17. Rocky Reef and Surf Grass Nearshore Monitoring and Adaptive Management Plan. During PED, the additional inclusion and placement of cobbles and boulders from Rindge Dam at the nearshore placement site shall be discussed with the CDPR, NMFS, CDFW, LACDBH and others. Prior to nearshore placement of sediment during construction, the USACE shall conduct a nearshore marine survey, to include the intertidal zone, to characterize location and abundance of protected habitats such as rocky reef and surfgrass in order to further avoid such resources as they exist at the time of construction. An adaptive management plan shall be developed to account for results from the survey above, addressing any potential loss of rocky habitat reef or surf grass HAPC quality or quantity. Furthermore, during sediment placement, sensitive habitats in the vicinity of the placement area will be monitored for direct and indirect burial impacts to allow for refined placement locations and methodologies, if necessary. 	Qualified biologists will perform pre-construction surveys. Confirm that special status species or protected habitats previously considered absent are not within project footprint.	USACE	Prior to construction	USACE, NMFS, CDFW
Cult	ural Resources			
CR-2. Rindge Water Pipeline. The amount of the Rindge Water Pipeline removed from Malibu Canyon will be limited to actions directly associated with the deconstruction of the Rindge Dam concrete arch.	Verify removal of Rindge Dam Pipeline is minimized in development of plans and during implementation.	USACE	During PED and construction.	USACE
	Aesthetics			
AES-1. Reduce Visibility of Construction Activities and Construction-related Equipment. Construction activities and construction related equipment, including staging areas, laydown areas, stockpiles, conveyors, and equipment storage will be temporarily screened throughout construction when visible from	Verify appropriate screening is implemented.	USACE	During construction	USACE

roads, trails, scenic overlooks, residences to the extent practicable. Screening will consist of temporary screening fences with colors and materials to reflect the natural surroundings.				
 AES-2. Blend restoration features with surrounding areas A re-vegetation and planting plan will be developed during PED (see 5.4.2 and BIO-8). The restoration of slopes affected by construction will be designed to ensure they aesthetically blend into surrounding areas. The re-vegetation and planting plan will include a plant palette and proposed sizes, maintenance procedures during establishment period, including irrigation, if any, and replanting of dead vegetation. During construction, the affected slopes will be planted with a combination of fast growing native plants and/or larger native plants to obscure scarring from construction activities, particularly in areas visible from Malibu Canyon Road and/or residences. 	A qualified biologist or restoration ecologist will develop a revegetation plan	USACE	Developed during PED, implemented during construction	USFWS, CDFW, USACE
AES-3. Incorporate aesthetic considerations into road improvement plans. The contractor will develop road improvement plans for required reconstruction or maintenance incorporating the use of aesthetic features. Plans will be submitted to the USACE for review and approval prior to implementation. Aesthetic features include, but are not limited to, drainage, slopes, retaining walls, and screenings to match surroundings.	Construction contractor will develop a road improvement plan	USACE	Developed prior to construction, implemented during construction	USACE
Tr	ansportation			
T-1. Transportation Management Plan. During the design phase, a Transportation Management Plan (TMP) will be prepared to address any transportation related issues. This plan will be circulated to the City of Calabasas, City of Malibu, Los Angeles County, and Caltrans for review to minimize temporary traffic impacts during construction. The TMP will cover all aspects of construction and will include haul routes, material hauling activities to the landfill and Ventura Harbor, all traffic control measures required including traffic signals, and all aspects of construction necessary during construction of the project. The plan will evaluate traffic flow and potential traffic impacts, and traffic control measures will be developed, for implementation during construction, to minimize impacts to traffic to the maximum extent practical. This	USACE will develop a transportation management plan that results in minimization of traffic impacts to the maximum extent practicable.	USACE	During PED	USACE

plan would be developed by a registered Civil or Traffic Engineer who would be qualified to perform traffic studies and is familiar with the project area.				
T-2. Road Repair. A road repair plan will be prepared prior to construction to address anticipated road repairs required as a result of project induced impacts. The construction contractor(s) will be required to make appropriate repairs to project-induced impacts to the road surface from trucks entering and exiting Malibu Canyon Road during interim construction years, and after construction is complete, in the vicinity of the access ramps to the Rindge Dam impounded sediment area. The overall distance for construction-related road repairs is estimated to be 0.5 miles in length from the Malibu Canyon Road tunnel to the midpoint between the two ramps for the northbound direction to allow for normal use after construction, and an equal 0.5 mile distance from the mid-point of the two ramps for the southbound direction of the road. The road repair mitigation plan will also take into account aesthetic considerations during design of any required repairs (see AES-3).	Construction contractor will prepare a road repair plan for USACE review. Implementation of plan will ensure impacts are less than significant	USACE	Developed prior to construction, implemented after construction	USACE
T-3. Construction Hauling Restrictions. During school sessions, trucking will only occur between 9 AM and 2 PM on Malibu Canyon and Las Virgenes Roads. On weekdays when school is not in session, trucking will only occur between 9 AM and 3 PM on Malibu Canyon and Las Virgenes Roads. No truck and outbound worker trips will occur during the PM peak hour (peak one hour between 4 PM and 6 PM), except when construction would extend until 4:30 PM to haul material the Calabasas Landfill.	Verify contractor adheres to hauling restrictions.	USACE	During construction.	USACE
	Noise			
N-1. Noise Ordinances. The construction contractor will obey all local noise ordinances. Title 12 Section 12.08.440 of the LAC code, restricts construction activities to the hours between 7:00 a.m. and 8:00 p.m. Construction is prohibited on Sundays and legal holidays. Construction and demolition activities that occur in Los Angeles County are anticipated to occur only during the day.	Verify contractor obeys local noise ordinance.	USACE	During construction	USACE
N-2. Heavy Equipment Operations. The construction contractor will stagger heavy equipment operations to the maximum extent practicable, but in a manner as to not interfere with the construction	Develop construction schedule to include	USACE	During construction	USACE

schedule. Noise reduction will be achieved by reducing the numbers and types of equipment that are operating at the same time. Unnecessary idling of heavy equipment will be limited to five minutes (see AIR-1). Standard masonry saw blades will be replaced with "Damped" masonry saw blades.	staggering heavy equipment use.			
N-3. Electrically Powered Tools. The construction contractor will use electrically powered tools when possible.	Verify implementation of electrical power tools.	USACE	During construction	USACE
N-4. Engine Covers and Mufflers. Heavy equipment should be equipped with manufacturer recommended mufflers and adequate engine covers. Engine covers should be kept shut during operation	Verify engine covers and mufflers are utilized.	USACE	During construction	USACE
N-5 Terrain Maximization. Maximization of surrounding terrain, such as a canyon, to reduce noise levels will occur.	During development of plans and specifications, maximize terrain to reduce noise.	USACE	During PED.	USACE
N-6. Additional Noise Attenuation Techniques. The construction contractor will implement additional noise attenuation techniques such as sound blankets on noise generating equipment and the placement of temporary sound barriers between construction areas and sensitive receptors.	Monitor construction to verify implementation of noise attenuation.	USACE	During construction.	USACE
N-7. Jake Braking. The use of engine or jake braking will be prohibited.	Monitor construction contractor to verify jake brakes are not used.	USACE	During construction.	USACE
	Air Quality			
AQ-1. Limit Equipment Trips. Minimize use and trips of heavy equipment to the maximum extent practicable. Limit unnecessary idling of heavy equipment to five minutes.	Monitor construction contractor equipment use and trips.	USACE	During construction.	USACE
AQ-2. Engine Maintenance. Maintain and tune engines per manufacturer's specifications to perform to EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.	Verify contractor maintenance records.	USACE	During construction.	USACE
AQ-3. Equipment Inspections. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.	Verify contractor equipment inspections.	USACE	During construction.	USACE

AQ-4. Equipment Modifications. Prohibit tampering with engines and require continuing adherence to manufacturer's recommendations.	Verify tampering has not occurred.	USACE	During construction.	USACE
AQ-5. Operating Permits. A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization for each applicable unit of equipment.	Verify contractor has appropriate operating permits.	USACE	During construction.	USACE
AQ-6. Facility Surveys. Prior to construction, facility surveys shall be performed in compliance with SCAQMD Rule 1403 – Asbestos Demolition/Renovation Activities. During construction, all applicable requirements contained in SCAQMD Rule 1403, to include training, reporting, handling, and disposal requirements, will be implemented during construction.	Survey facilities during PED to verify the absence of asbestos. If asbestos is present, monitor for compliance with SCAQMD Rule 1403.	USACE	During PED and construction.	USACE
AQ-7. Engine Guidelines. All vehicles will have Tier 3 or higher engines based on CARB/EPA guidelines due to the estimated start date of construction.	Verify construction contractor's use of Tier 3 or higher vehicles.	USACE	During construction.	USACE
AQ-8. Vehicle Age. Any construction activities occurring beyond the year 2027 will require the use of model year 2023 or newer vehicles.	In 2027 and beyond, verify contractor use of model 2023 or newer vehicles.	USACE	During construction.	USACE
Safe	ty and Hazards			
HAZ-1. Reduce risk of wildfires. The construction contractor will develop a fire prevention and response plan appropriate for the use of heavy equipment in a high fire hazard area, approved by the USACE, the CDPR Department, and the Los Angeles County Fire Department, prior to the initiation of construction.	Construction contractor will develop a fire response plan. Implementation of plan will ensure impacts are less than significant.	USACE	Prior to construction	USACE, CDPR, LACFD
HAZ-2. Hazardous Substances Control Plan. The construction contractor will prepare a Hazardous Substance Control and Emergency Response Plan. The plan will develop an emergency response plan for the safe cleanup up accidental hazardous substance spills. To reduce the potential for spills during construction and equipment maintenance the plan will include hazardous materials handling procedures. Areas where refueling,	Construction contractor will develop an HZCERP. Implementation of plan will ensure impacts are less than significant.	USACE	Prior to construction	USACE

equipment maintenance activities, and storage of hazardous materials, will be identified in the plan.				
HAZ-3. Traffic Safety Plan on Surface Streets. The construction contractor will prepare a traffic safety plan. The plan will address the safe exit and entry of trucks and construction equipment onto surface streets, including the use of flagging personnel where needed.	Construction contractor will develop a Traffic Control Plan. Implementation of plan will ensure impacts are less than significant.	USACE	Prior to construction	USACE
HAZ-5. Contingency Plan for Contaminated Soil. Prior to the initiation of construction the contractor will develop a contingency plan for the detection and removal of contaminated soil that may be encountered during construction. This plan will be approved by the USACE prior to the initiation of construction.	Construction contractor will develop a contingency plan for contaminated soils. USACE will confirm plan reduces impacts to less than significant levels.	USACE	Prior to construction	USACE
	Utilities			
U-1. Utility Locations. Prior to construction during the PED phase, utility locations within the vicinity of each project feature shall be identified and verified, in coordination with each utility provider. If relocation of a utility line is determined to be required and cannot be avoided, the appropriate utility service provider would be consulted to sequence construction activities to avoid or minimize interruptions in service. Any relocation or modification to utilities shall comply with permit conditions and such conditions shall be included in the contract specifications.	USACE will evaluate utilities during PED. If relocations are necessary, USACE will ensure relocations implemented in a manner that results in less than significant impacts.	USACE	During PED	USACE
U-2. Disruption of Services. If utility service disruption is necessary, residents and businesses in the project area would be notified a minimum of two to four days prior to service disruption through local newspapers, and direct mailings to affected parties.	USACE will ensure proper notification if any utility outages are required and confirm that impacts are less than significant.	USACE	Prior to and during construction	USACE
U-3. Water Use During Construction. Water use during construction will be limited to temporary use for revegetated areas and routine dust suppression.	Monitor water use during construction.	USACE	During construction.	USACE

U-4. Wastewater. Wastewater will be collected from portable toilets and disposed at a wastewater treatment facility on a routine basis.		USACE	During construction.	USACE
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Mitigation, Monitoring & Reporting					
Cultural Resources					
MM-CR-1. A Monitoring and Treatment Plan (MTP) shall be developed by the USACE in consultation with the SHPO, CDPR, and concurring parties during the pre-construction engineering and design phase of the project. The USACE shall implement the MTP, incorporated into this MOA as Attachment B, post-execution of the MOA and prior to initiation of construction. The MTP shall require archaeological and Native American monitors, a controlled grading procedure for culturally sensitive areas, and additional measures for protection of cultural resources as outlined in the Final Environmental Impact Report/Environmental Impact Statement for the Project.	Prepare and implement an MTP.	USACE & CDPR	Developed during PED, implemented during construction.	SHPO	
 MM-CR-2. The USACE shall ensure that the following mitigation tasks are implemented to resolve adverse effects to the Rindge Dam historic property as a result of the undertaking: Document the history of Rindge Dam in publicly accessible and comprehensible media, including: Prior to the start of any work that could adversely affect any character-defining features of the Rindge Dam, the USACE will consult with the National Park Service (NPS), Pacific West Region, Historic American Building Survey, Historic American Engineering Record, or Historic American Landscape Survey (HABS/HAER/HALS) Program to determine the type and level of HABS/HAER/HALS documentation required. USACE will then complete the documentation that NPS recommends as a result of that consultation. Produce a publicly available series of online articles about the Rindge Dam, including descriptions of its construction, its importance in the history and development of the Malibu community, including a short overview of historic concrete arch dams in California and the place of Rindge Dam in this typology. Illustrate the importance of Rindge Dam to the history and development of the Malibu area by: 	Develop the required historical media, implement the Sheriff's Overlook interpretive site, and salvage a portion of the dam for display.	USACE and CDPR	During PED and construction.	SHPO	

 CDPR construction of an interpretive overlook with historic timeline panels at the Sheriff's Overlook site, Produce a CDPR web page about the dam and its history; Salvage a distinctive portion of the dam construction, such as the concrete date stamp, to place with other interpretive panels, at the Adamson House or other location, as appropriate, within the park. 				
Tr	ansportation		•	
MM-T-1. Implementation of Transportation Management Plan Findings. All feasible measures identified in the Transportation Management Plan that reduce traffic and parking-related impacts shall be implemented during construction to reduce impacts to the maximum extent practicable.	Implement the transportation management plant.	USACE	During construction.	USACE
Monitoring an	d Adaptive Management			
An Adaptive Management Team (AMT) will be established, which shall include USACE, CDPR, and interested resources agencies. The AMT will focus on the ecological function of habitats through related management actions to maintain and provide functional riverine habitat for general and special status species within the study area, as outlined in the Monitoring and Adaptive Management Plan (MAMP).	Establish the AMT	USACE	Prior to construction completion	USACE
 A qualified restoration biologist will develop will coordinate restoration monitoring after construction completion, as described in the MAMP. Monitoring will proceed post-construction for a minimum period of 5-years, but no longer then 10-years, to evaluate success and determine adaptive management needs. Monitoring and reporting actions include: Identification of a reference site Evaluate performance standards to ensure objectives related to hydrologic regime, vegetation, wildlife, and overall habitat are achieved. Submit annual reports Provide photo-documentation 	USACE	USACE	Post- construction for 5 to 10 years	USACE

 Implement adaptive management actions, as necessary and appropriate, in coordination with the AMT 		

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