

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

1.1 INTRODUCTION

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require the implementation of a monitoring program to ensure that mitigation measures included in an Environmental Impact Statement (EIS) or Environmental Impact Report (EIR) are being implemented as described in their respective documents. Under NEPA, the regulations require that “a monitoring and enforcement program shall be adopted...where applicable for mitigation” (40 CFR section 1505.2(c)). In addition, the regulations state that agencies may “provide for monitoring to assure that their decisions are carried out and should do so in important cases” (40 CFR section 1505.3). Monitoring plans and programs should be described or incorporated by reference in the agency decision documents. Under CEQA, a public agency is required to adopt a program for monitoring or reporting on the changes to a project that it has required and the measures it has imposed to mitigate or avoid significant environmental impacts (CEQA Guidelines section 15097; refer also to CEQA Guidelines section 15091(d) and section 21081.6 of the California Public Resources Code).

This Mitigation Monitoring and Reporting Program (MMRP), which is included as part of the Final EIS/EIR for the Salton Sea Species Conservation Habitat Project (SCH Project), includes a list of mitigation measures that would be implemented if the preferred alternative were approved and implemented and describes the process whereby the mitigation measures would be monitored.

1.2 OVERVIEW OF THE CORPS' PREFERRED ALTERNATIVE / CALIFORNIA NATURAL RESOURCES AGENCY'S PROPOSED PROJECT

The preferred alternative/least environmentally damaging practicable alternative/proposed project (Alternative 3 in the Draft EIS/EIR) would create approximately 3,770 acres of shallow ponds, contained within low berms, on either side of the New River at elevations less than -228 feet mean sea level. The ponds would be supplied with a combination of brackish and saline water. This water would be pumped from the New River and Salton Sea, respectively, and blended to maintain an appropriate salinity range. The SCH Project is designed as a “proof-of-concept” project in which several Project features, characteristics, and operations could be tested under an adaptive management framework. The proof-of-concept period would last for approximately 10 years after completion of construction. By that time, managers would have had time to identify those management practices that best meet the Project goals. After the proof-of-concept period, the Project would be operated until the end of the 75-year period covered by the Quantification Settlement Agreement (2078) or until funding were no longer available. The SCH ponds would be constructed and operated by the California Department of Fish and Wildlife (DFW), on behalf of the California Natural Resources Agency, who would be responsible for ensuring that mitigation measures are implemented prior to, during, and after construction of the Project. If another alternative is selected by the decision makers, or if Alternative 3 is modified as part of the approval process, this MMRP will be updated to ensure that all applicable mitigation measures are implemented.

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The categories identified in the MMRP are described below:

- **Mitigation Measure.** This column provides the text of the mitigation measures identified in the Draft EIS/EIR.

- **Timing/Schedule.** This column lists the time frame in which the mitigation would take place.
- **Implementation/Monitoring Method.** This column identifies the methods that would be used to ensure that the mitigation measure is implemented correctly.
- **Responsible Entity.** This column identifies the entity or entities responsible for complying with the requirements of the mitigation measure.
- **Check-Off.** This column is for verifying compliance and is to be dated and initialed by the responsible entity.

| SCH Project Mitigation Monitoring and Reporting Program | | | | |
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| Mitigation Measure | Timing/Schedule | Implementation/ Monitoring Method | Responsible Entity | Check-Off |
| Air Quality | | | | |
| <p>Mitigation Measure AQ-1: Implement fugitive PM₁₀ control measures. The following measures will be incorporated into the construction contract specifications in order to reduce PM₁₀ emissions from fugitive dust:</p> <ul style="list-style-type: none"> ▪ Water exposed soil so that visible dust emissions would be limited to 20 percent opacity for dust emissions at all times (as indicated by soil and air conditions). ▪ Replace ground cover in disturbed areas as quickly as possible. ▪ Limit vehicle speed for all construction vehicles to 15 miles per hour on any unpaved surface at the construction site. ▪ Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees. | Prior to and during construction. | DFW shall confirm measures are incorporated into the contract specifications; DFW or designated monitor shall confirm compliance by monitoring during construction. | DFW Project Manager and/or designated monitor. | <p>Initials:</p> <p>Date:</p> |
| <p>Mitigation Measure AQ-2: Implement diesel control measures. The following measures will be incorporated into the construction contract specifications in order to reduce PM₁₀ and NO_x emissions from diesel engines:</p> <ul style="list-style-type: none"> ▪ A schedule of low-emissions tune-ups will be developed and such tune-ups will be performed on all equipment, particularly for haul and delivery trucks. ▪ Ultra-low-sulfur (≤ 15 ppmw S) fuels will be used in all stationary and mobile equipment. ▪ Curtail construction during periods of high ambient pollutant concentrations as directed by the ICAPCD. ▪ Reschedule activities to reduce short-term impacts to the extent feasible. | Prior to and during construction. | DFW shall confirm measures are incorporated into the contract specifications; DFW or designated monitor shall confirm compliance by monitoring during construction. | DFW Project Manager and/or designated monitor. | <p>Initials:</p> <p>Date:</p> |
| Biological Resources | | | | |
| <p>Mitigation Measure BIO-1: Prepare and implement a desert pupfish protection and relocation plan. This plan is applies primarily to construction and maintenance of the drain interception ditches but will also apply to pond construction and maintenance activities as noted and will provide:</p> | Prior to and during construction and maintenance. | DFW shall confirm preparation of the plan. DFW or designated monitor shall confirm compliance by monitoring during construction and maintenance. | DFW Project Manager and/or designated monitor. | <p>Initials:</p> <p>Date:</p> |

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| <ol style="list-style-type: none"> 1. Protocols for preconstruction or premaintenance surveys to assess species presence and spawning within or immediately adjacent to work areas (e.g., in the drains/drain channels, along the shoreline if construction is in the "wet," and around the pond margins for maintenance); 2. Capture (e.g., trapping in the drains for construction and maintenance; or trapping, dip netting, and seining in the ponds if drained or if the water level is dropped) and transport methods to minimize handling and stress as well as exposure to heat, low DO, and crowding; 3. Identification of locations for release of captured desert pupfish; 4. Timing windows when construction or maintenance in shallow shoreline areas and in the drain mouths/channels may be conducted with minimal effects on desert pupfish spawning; 5. Protocols for maintenance activities in the drain interception ditches, such as a rotating schedule to ensure only a portion of the channel is maintained at one time, clearing only part of the vegetation at one time, and timing of maintenance to avoid peak spawning; 6. Maintenance protocol for the 1/8-inch mesh screen on the saline water intake until salinity reaches 68 ppt; and 7. Adaptive management procedures that include assessment of mitigation measure effectiveness, development of revised measures to improve effectiveness, and similar assessment of revised measures to verify effectiveness. <p>All desert pupfish mitigation measures will be in conformance with the Biological Opinion from USFWS for the Project.</p> | | | | |
| <p>Mitigation Measure BIO-2: Prepare and implement a preconstruction/maintenance survey plan for bird species. The plan will include preparation of suitable habitat maps that are updated periodically to focus survey locations as well as survey methods consistent with current science and regulations. Adaptive management measures will also be included in the plan.</p> | <p>Prior to and during construction and maintenance.</p> | <p>DFW shall confirm preparation of the plan. DFW or designated monitor shall confirm implementation of plan prior to construction and maintenance.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |
| <p>Mitigation Measure BIO-3: Conduct noise calculations/measurements and implement noise attenuation measures, if needed. Based on equipment specifications, calculate or measure the distance from equipment where noise would be greater than or equal to 60 A-weighted decibels (dBA) equivalent sound level (L_{eq}). This would also include multiple noise sources, if applicable. Then, use that distance to determine</p> | <p>Prior to and during construction and maintenance.</p> | <p>DFW shall confirm noise measurements and work schedule. DFW or designated monitor shall confirm compliance by monitoring during construction and maintenance.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |

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| <p>where noise could exceed 60 dBA L_{eq} within known or potential nesting habitat adjacent to the Project footprint. If any such overlaps occur, schedule work to avoid the breeding season in those areas.</p> <p>If construction must occur during the breeding season at those sites, monitor nesting activity to determine if any effects are occurring. If effects are observed, implement noise attenuation measures such as noise walls and hay bales. Monitor the noise and bird behavior to verify that attenuation measures are successful. Develop and implement additional protection measures if monitoring shows that impacts are still occurring. If noise would be less than 60 dBA L_{eq}, no additional measures are required. (Note: The threshold of 60 dBA L_{eq} used here to protect bird nesting is a conservative estimate of the level above which adverse effects could occur. The actual threshold varies by species and type of noise.)</p> | | | | |
| <p>Mitigation Measure BIO-4: Design interception ditches to avoid alteration of water levels in adjacent marshes. Design of the interception ditches will balance local surface and subsurface water movement so that the amount of water in adjacent marshes is not affected. Implementation of MM BIO-4 would avoid impacts on adjacent marsh habitat for nesting birds.</p> | <p>During Project design.</p> | <p>DFW shall confirm design; specifications shall be included in final construction plans.</p> | <p>DFW Project Manager.</p> | <p>Initials: Date:</p> |
| <p>Mitigation Measure BIO-5: Prepare and implement a Habitat Protection, Mitigation, and Restoration Program. Plan preparation will be complete prior to commencement of construction. The restoration program will address the following considerations:</p> <ol style="list-style-type: none"> 1. Avoidance of sensitive and riparian habitats to the greatest extent feasible, including avoidance of disturbances in or near these habitats during the bird breeding season. 2. Quantifying maximum area of naturally occurring plant communities that could be temporarily and permanently removed for construction of Project facilities, by plant community. 3. Restoration at a minimum rate of 1:1 for nonnative plant communities (i.e., tamarisk woodland or scrub) and 3:1 for native plant communities temporarily removed during Project construction, or as required in Project permits. Habitats restored at 1:1 will be preferentially restored where they were removed, unless it is infeasible or a more desirable off-site location is identified. Species to be used in restoration may include either those that were removed or native species that occur or occurred naturally in the Project area and are suitable | <p>Prior to construction.</p> | <p>DFW shall confirm preparation of the plan. DFW or designated monitor to confirm implementation of plan and that performance criteria are met.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |

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| <p>to the site. If native species are used to replace nonnative species, mitigation ratios can be reduced. For restoration of tamarisk temporarily removed, natural colonization of the disturbed area is likely to occur and no planting may be needed. The area would still be monitored to document restoration. Permanently removed riparian habitat within the pond area would be replaced by aquatic habitat of equal surface area with a similar or greater ecological value.</p> <p>4. Identification of locations for on- and off-site restoration, including funding for land purchases and/or easements and agreements with property owners to complete the restoration.</p> <p>5. Use of only local native seed (or propagule) sources for native species used in restoration.</p> <p>6. Details on propagation, planting/seeding, irrigation, maintenance (including weed control for species that could interfere with restoration), site access, remedial measures, monitoring, reporting, and photo-documentation. These details will be specific to each site if more than one planting area or type is addressed in the plan.</p> <p>7. Performance criteria to be met for each habitat type being restored.</p> <p>8. Monitoring, with a funding source, until performance criteria are met, which may be for a minimum of 5 years.</p> | | | | |
| <p>Mitigation Measure BIO-6: Clean equipment prior to site delivery. Specifications for ensuring that all equipment, personal gear, and materials brought to the site are clean and free of invasive plants (including seeds) and animals will be included in all construction and maintenance contracts. Equipment, gear, and other materials will be inspected to verify that it is clean.</p> | <p>Prior to and during construction, operation, and maintenance.</p> | <p>Specification shall be included in all construction and maintenance contracts. DFW or designated monitor shall confirm compliance by monitoring during construction, operations, and maintenance.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |
| <p>Cultural Resources</p> | | | | |
| <p>Mitigation Measure CR-1: Prepare and implement a survey plan and an inadvertent discovery plan. A plan for the survey of Project areas not previously surveyed would be prepared to facilitate identification of cultural resources prior to initiation of ground-disturbing activities.</p> <p>A plan for the inadvertent discovery of cultural resources and human remains also would be prepared and would provide protocols for addressing the discovery of cultural resources and human remains including, but not limited to, monitoring; immediately halting all construction in the vicinity of a discovery; investigation of the discovery by an archaeologist that meets the</p> | <p>Prior to and during construction.</p> | <p>DFW shall confirm preparation of the plan. DFW or designated monitor shall confirm compliance by monitoring during ground-disturbing activities.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |

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| Secretary of the Interior's Standards and Guidelines for Professional Qualifications in order to evaluate the eligibility of the resources pursuant to CRHR and NRHP criteria; and implementation of California Health and Safety Code section 7050.5, CCR section 15064.5(d) and (e), and, if applicable, 36 CFR part 800.13. Resources considered significant would be avoided or subject to a data recovery program. The data recovery program would be designed in consultation with appropriate state (i.e., Office of Historic Preservation) and Federal agencies and include excavation of an archaeological site to recover any buried artifacts or other data. | | | | |
| Hazards and Hazardous Materials | | | | |
| Mitigation Measure HAZ-1: Worker training will be provided to workers who may be exposed to air-borne diseases during excavation activities. Training will include recognizing symptoms and use of personal protective equipment. | Prior to and during construction. | DFW shall confirm the preparation of the plan. DFW or designated monitor shall confirm prior to and during construction. | DFW Project Manager and/or designated monitor. | Initials: Date: |
| Paleontological Resources | | | | |
| Mitigation Measure PALEO-1: Prepare and implement a survey plan and a paleontological monitoring plan. A plan for the survey of Project areas will be prepared to facilitate identification of paleontological resources prior to initiation of ground-disturbing activities. Additionally, prior to construction, a certified paleontologist retained by the lead agencies will supervise monitoring of construction excavations and produce a Paleontological Resource Management Recovery Plan. Paleontological monitoring will include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor will have authority to temporarily divert grading away from exposed fossils to recover the fossil specimens. Monitoring will take place on a full-time basis when construction occurs at depths greater than 5 feet, part-time (4 hours a day) when excavations exceed 2 feet, and on a spot-check basis on excavations less than 2 feet. The paleontologist will document interim results of the construction monitoring program with monthly progress reports. Additionally, at each fossil locality, field data forms will record that locality, stratigraphic columns will be measured, and appropriate scientific samples will be submitted for analysis. | Prior to and during construction. | DFW shall confirm preparation of the plan. DFW or designated monitor shall confirm compliance by monitoring during ground-disturbing activities. | DFW Project Manager and/or designated monitor. | Initials: Date: |
| Mitigation Measure PALEO -2: Conduct worker training. Construction supervisors and crew will receive training by a certified paleontologist in the procedures for identifying and protecting paleontological resources, as well as procedures to be | Prior to construction. | DFW or designated monitor shall confirm compliance by verifying worker training. | | Initials: Date: |

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| <p>implemented in the event fossil remains are encountered during ground-disturbing activities.</p> | | | | |
| <p>Mitigation Measure PALEO -3: Prepare and implement a paleontological resource data recovery plan. If fossils are encountered during construction, construction activities will be temporarily diverted from the discovery, and the monitor will notify all concerned parties and collect matrix for testing and processing as directed by the Project paleontologist. To expedite removal of fossil-bearing matrix, the monitor will be empowered to request heavy machinery to assist in moving large quantities of matrix out of the path of construction to designated stockpile areas. Construction will resume at the discovery location once all the necessary matrix is stockpiled, as determined by the paleontological monitor. Testing of stockpiles will consist of screen washing small samples to determine if important fossils are present. If such fossils are present, the additional matrix from the stockpiles will be water screened to ensure recovery of a scientifically significant sample. Samples collected will be limited to a maximum of 6,000 pounds per locality.</p> <p>The Project paleontologist will direct identification, laboratory processing, cataloguing, analysis, and documentation of the fossil collections. When appropriate, splits of rock or sediment samples will be submitted to commercial laboratories for microfossil, pollen, or radiometric dating analysis. Prior to construction, the lead agencies will enter into a formal agreement with a recognized museum repository and will curate the fossil collections, appropriate field and laboratory documentation, and the final Paleontological Resource Recovery Report in a timely manner following construction. A final technical report will be prepared to summarize construction monitoring and present the results of the fossil recovery program. The report will be prepared in accordance with SVP guidelines and lead agency requirements. The final report will be submitted to the lead agency and the curation repository.</p> | <p>Prior to and during construction.</p> | <p>DFW shall confirm preparation of the plan. DFW or designated monitor shall confirm compliance by monitoring during ground-disturbing activities.</p> | <p>DFW Project Manager and/or designated monitor.</p> | <p>Initials: Date:</p> |