7.0 MITIGATION MONITORING PROGRAM

As the Lead Agency under the California Environmental Quality Act (CEQA), the California State Lands Commission (CSLC) is required to adopt a program for reporting or monitoring regarding the implementation of mitigation measures (MMs) for the proposed San Francisco Bay and Delta Sand Mining Project (Project), if it is approved, to ensure that the adopted MMs are implemented as defined in this Environmental Impact Report (EIR). This Lead Agency responsibility originates in Public Resources Code section 21081.6(a) (Findings, Mitigation Monitoring and Reporting), and the State CEQA Guidelines sections 15091(d) (reporting on or monitoring mitigation) and 15097 (Mitigation Monitoring or Reporting).

7.1 MONITORING AUTHORITY

The purpose of a Mitigation Monitoring Program (MMP) is to ensure that measures adopted to mitigate or avoid significant impacts are implemented. A MMP can be a working guide to facilitate not only the implementation of mitigation measures by the Project proponents, but also the monitoring, compliance and reporting activities of the CSLC and any monitors it may designate.

The CSLC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies, such as affected jurisdictions and cities, and the California Department of Fish and Game (CDFG). The number of monitors assigned to the project will depend on the number of concurrent mining activities and their locations. The CSLC or its designee(s), however, will ensure that each person delegated any duty or responsibility is qualified to monitor compliance.

Any mitigation measure that requires the approval of the CSLC must allow at least 60 days for adequate review time. When a MM requires that a mitigation program be developed during the design phase of the project, the Applicant must submit the final program to CSLC for review and approval for at least 60 days before mining begins. Other agencies and jurisdictions may require additional review time. It is the responsibility of the environmental monitor assigned to each measure to ensure that appropriate agency reviews and approvals are obtained.

The CSLC or its designee will also ensure that any deviation from the procedures identified under the monitoring program is approved by the CSLC. Any deviation and its correction

shall be reported immediately to the CSLC or its designee by the environmental monitor assigned to the mining event.

7.2 ENFORCEMENT RESPONSIBILITY

The CSLC is responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to each mining event. Any assigned environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CSLC or its designee.

7.3 MITIGATION COMPLIANCE RESPONSIBILITY

The Applicant is responsible for successfully implementing all the mitigation measures in the MMP, and is responsible for assuring that these requirements are met by all of its mining contractors and field personnel. Standards for successful mitigation also are implicit in many MMs that include such requirements as obtaining permits or avoiding a specific impact entirely. Other MMs include detailed success criteria. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of the MMs.

7.4 GENERAL MONITORING PROCEDURES

Environmental Monitors. Monitoring procedures will be conducted during the mining events. The CSLC and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the mining events in coordination with the Applicant. To oversee the monitoring procedures and to ensure success, the environmental monitor assigned to each mining event must be on site during that portion of an event that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

General Reporting Procedures. Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor assigned to the relevant mining events. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each MM and to ensure that the timing specified for the procedures is adhered to. The

environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

Public Access to Records. The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CSLC or its designee on request.

7.5 MITIGATION MONITORING TABLES

The following mitigation monitoring tables list the following information for each significant impact:

- Impact (impact number, title, and impact class);
- Mitigation Measure (summary text of the measure);
- Location (where the impact occurs and the mitigation measure should be applied);
- Monitoring/reporting action (the action to be taken by the monitor or Lead Agency);
- Effectiveness criteria (how the agency can know if the measure is effective);
- Responsible agency; and
- Timing (during operation, etc.).

Table 7-1. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
BIO-6: Sand mining could result in smothering or burial of, or mechanical damage to, infauna and epifauna, and reduced fish foraging. (Class II)	BIO-6: Establish a 100-foot buffer around hard bottom areas within and adjacent to Central Bay mining leases.	Hard bottom areas within and adjacent to Central Bay mining leases.	Applicant to submit quarterly E-trac data of Central Bay mining events.	Evidence that sand mining has taken place only outside the 100 foot buffer and hard bottom areas in the vicinity of Central Bay leases.	CSLC	Quarterly E-trac data to be submitted.
BIO-8: Regular operation of sand mining activities will cause entrainment and mortality of delta and longfin smelt. (Class I)	BIO-8a: Applicants shall implement operational measures to minimize the potential for entrainment and mortality of delta and longfin smelt.	Suisan Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates; Central Bay.	Applicants shall submit to CSLC written documentation that they have obtained an Incidental Take Permit and have complied with the conditions contained in the permit.	Evidence of a CDFG approved Incidental Take Permit and compliance with its conditions.	CSLC / CDFG	Within 12 months of issuance of new leases approval.
	BIO-8b: Applicants shall provide off-site mitigation to compensate for the impacts of the taking that may be unavoidable.	Suisan Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates; Central Bay.	Applicants shall submit to CSLC written documentation that they have obtained an Incidental Take Permit and have complied with the conditions contained in the permit.	Evidence of a CDFG approved Incidental Take Permit and compliance with its conditions.	CSLC / CDFG	Within 12 months of issuance of new leases approval.
BIO-9: Green sturgeon, Chinook salmon, and steelhead trout will be impacted during sand mining. (Class II)	BIO-9a: Sand mining halted during peak Chinook salmon migration.	Suisan Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates.	Beginning March 1 of each year that the sand mining leases are in effect, the applicants shall communicate weekly with USFWS and CSLC to determine the timing of that year's outmigration peak. CSLC shall confirm in writing, based on physical inspection and/or electronic tracking data (E-trac data) that no sand mining occurs during the peak outmigration period.	Evidence that no sand mining has taken place during the peak outmigration period, as defined and reported by USFWS.	CSLC	Sand mining closure period to be determined prior to April 1 of each year. Confirmation of closure by June 1 of each year.

Table 7-1. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	BIO-9b: Sand mining limited to daylight hours from January 1 to May 31.	Suisan Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates.	Applicant to submit quarterly E-trac data, including time of mining events. CSLC to confirm in writing that all mining events in Suisun Bay and Western Delta lease areas have occurred only during daylight hours from January 1-May 31 of each year.	Evidence that sand mining has taken place only during daylight hours during the period peak outmigration period January 1-May 31 of each year.	CSLC	Quarterly E-trac data to be submitted within one month of end of each quarter. CSLC written confirmation of compliance within two months of the end of each quarter.

Table 7-2. Mitigation Monitoring Program – Hazards and Hazardous Materials

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
HAZ-1: Potential for accidental leak or spill of hazardous materials. (Class II)	HAZ-1: Provide a California Non-tank Vessel Contingency Plan (CANTVCP) to the CSLC.	Not applicable	Jerico to provide evidence of CDFG approval of CANTVCP.	Evidence of approved CANTVCP.	CDFG/CSLC	Within three months of certification of the EIR.

Table 7-3. Mitigation Monitoring Program – Air Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
AIR-2: Potential impacts on climate change. (Class II)	AIR-2: Prepare and implement a Greenhouse Gas Reduction Plan.	Project area	Applicants to submit and CSLC to review and approve GHG Reduction Plan. Applicants to provide annual evidence of confirmed GHG inventory and report of GHG Reduction Plan implementation.	Confirmed annual GHG inventories must demonstrate reduction or offset of GHG emissions to target level.	CSLC	Within three months of lease issuance.

Table 7-4. Mitigation Monitoring Program – Cultural Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
CUL-1: Inadvertent discovery of historical resources or "unique archaeological resources." (Class II)	CUL-1: Cease operations and notify CSLC and ACOE.	Project area	Applicants to provide immediate notification of any inadvertent discovery and evidence that operations have ceased in the immediate area of the discovery. Applicants to provide annual report of all inadvertent discoveries and responses.	Evidence of appropriate response to inadvertent discovery, including reporting and ceasing operations in the vicinity of the discovery.	CSLC	Ongoing during lease period; annual reports to be submitted by January 31 of each year.
CUL-3: Inadvertent discovery of human remains. (Class II)	CUL-3: Cease operations and notify County Coroner.	Same as CUL-1	Same as CUL-1	Same as CUL-1	Same as CUL-1	Same as CUL-1

Table 7-5. Mitigation Monitoring Program – Land Use and Recreation

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
LU-4: Conflicts with regional or local land use plans or policies. (Class II)	LU-4. Implement MM BIO-6, BIO-8a, BIO-8b, BIO-9a, BIO-9b, HAZ-1, CUL-1, and CUL-3.	Varies	See specific actions above for each mitigation measure.	See criteria above for each mitigation measure.	See responsible agencies above for each mitigation measure.	See above for each mitigation measure.