1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE PROPOSED PROJECT AND PROJECT ENVIRONMENTAL IMPACT REPORT (EIR)

1.1.1 Project Summary

As lead agency under the California Environmental Quality Act (CEQA; Pub. Resources Code § 21000 et seq.), the California State Lands Commission (CSLC) has prepared this Final Revised Draft EIR (RDEIR) for the proposed San Francisco Bay and Delta Sand Mining Project (Project). This Final EIR document replaces is based on, responds to comments on, and includes revisions to the Revised-a Draft EIR for this Project that the CSLC released for public review and comment in November 2011 July 2010.

The CSLC holds title to and manages tidelands and submerged lands and beds of navigable waterways for the benefit of all people of the State for statewide Public Trust purposes, which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The CSLC may grant leases on these State lands for such purposes as, but not limited to, ports, marinas, docks and wharves, and dredging.

The CSLC received an application from Hanson Marine Operations (Hanson) and Jerico Products/Morris Tug and Barge (Jerico) for new 10-year mineral extraction leases to continue dredge mining of construction-grade sand from certain delineated areas (lease parcels) of Central San Francisco Bay (Central Bay), Suisun Bay (the easternmost of the four main basins that comprise San Francisco Bay), and the western Sacramento-San Joaquin River Delta area (Delta). Hanson (acting on its own behalf and on behalf of Suisun Associates [a joint venture between Hanson and Jerico]) and Jerico, which are collectively the Applicants, propose to mine sand from the following areas (see Figure 1-1 below and Figures 2-1a, 2-1b, and 2-2 in Section 2.0, Project Description).

- Hanson proposes to lease the following lease parcels, all of which are sovereign lands under the CSLC’s jurisdiction:
  - PRC 709 (Presidio, Alcatraz North, and Point Knox North Shoals);
  - PRC 2036 (Point Knox South);
  - PRC 7779 (Point Knox Shoal); and
  - PRC 7780 (Alcatraz South Shoal).1

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1 The numbering of the CSLC lease parcels sometimes includes a decimal designation, such as “PRC 709.1.” Throughout this EIR, no decimal is used, unless the reference is to the lease document itself.
1.0 Introduction

- Hanson, on behalf of Suisun Associates, also proposes to lease PRC 7781 (Suisun Bay/Delta), which is also sovereign land under the jurisdiction of the CSLC, and which is located in Suisun Bay and the western Delta in the San Joaquin and Sacramento River channels upstream of Suisun Bay.

- Hanson and Jerico propose to continue sand mining of an additional, privately owned parcel in Suisun Bay (Middle Ground Shoal, owned by the Grossi Family, and referred to as TLS 39). This parcel is not under the jurisdiction of the CSLC.

The proposed new CSLC leases involve the same lease parcels currently mined by Hanson and Jerico, although, as discussed below, the boundaries of some of the Central Bay parcels were adjusted in 2011 to avoid overlapping Federal lands. The CSLC previously granted these mineral extraction leases to the Applicants for a 10-year period, with an option to apply for new leases for an additional 10 years. The initial 10-year period expired on July 30, 2008; however, pending completion of the environmental review and permitting process, the CSLC is allowing the continuation of sand mining on a month-to-month basis.

1.1.2 Summary of Revisions to the 2010 Draft EIR

The Revised Draft EIR document replaces a Draft EIR for this Project that the CSLC released for public review and comment in July 2010. The CSLC staff determined that the following changes constituted significant new information and that recirculation of a full Revised Draft EIR (RDEIR) addressing the changes as appropriate was necessary.

- The CSLC staff, in consultation with the National Park Service and U.S. Coast Guard, recently completed a review of historical data relevant to the Central Bay mining lease boundaries and determined that several lease boundaries must be revised to avoid encroaching on federally-held lands at Angel Island and Alcatraz Island. The area reduced by these boundary adjustments is roughly 5 percent of PRC 709 (about 42 of 873 acres were removed) and 1 percent of PRC 7779 (about 20 of 1,357 acres were removed). The land area removed from the parcels is near the two islands and not where sand mining occurs. The revised boundaries are shown in Figure 2-1a in Section 2.0, Project Description.

- As noted in Section 1.1.6, Definition of Baseline and Future Conditions, the CSLC staff re-evaluated the baseline used in the 2010 Draft EIR. Because sand mining activity levels can fluctuate substantially from year to year depending on market demand and other factors, the CSLC staff concluded that a baseline that

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2 The Notice of Preparation (NOP) for this EIR was issued on July 10, 2007, at which time the initial 10-year leases were still in effect, and 2007 mining volumes were selected as a part of the Project baseline.
1.0 Introduction

accounts for mining levels over several years provides a more accurate measure of the current level of mining activity against which to evaluate Project impacts. Therefore, the baseline for the analysis in this–the RDEIR is–was the average annual volume of sand mined in the proposed Project area per year from 2002 to 2007 (i.e., the average of the five years of mining that occurred prior to Notice of Preparation (NOP) issuance). Additionally, sand mined from Central Bay lease PRC 5871 was added to the baseline volume because the lease was mined during the baseline period and thus contributed to physical conditions existing when the NOP was issued. The California Supreme Court confirmed that, while conditions at the time of the NOP “normally” constitute the baseline for the environmental analysis under CEQA, the lead agency has flexibility in defining the appropriate baseline (Communities for a Better Environment v. South Coast Air Quality Mgmt. Dist. (2010) 48 Cal.4th 310, 328).

- The RDEIR evaluated a revised Reduced Project Alternative than from that considered in the 2010 Draft EIR alternatives analysis (see discussion of alternatives in Section 3.0, Alternatives and Cumulative Projects).

- The RDEIR considered other new information that has come to light since publication of the 2010 Draft EIR, including information on sediment transport and deposition in San Francisco Bay and the regulatory status of threatened and endangered species that could be affected by sand mining.

The Final EIR is based on the RDEIR, which was released for public review and comment in November, 2011. Please see Part I of the Final EIR regarding the EIR process.

1.1.3 Project Objective

This EIR has been prepared in accordance with CEQA and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). Consistent with State CEQA Guidelines section 15126.6(a), the EIR describes both the proposed Project and a range of reasonable alternatives to the Project that would feasibly attain most of the basic objectives of the Project but avoid or substantially lessen any of the Project’s significant effects. Therefore, in order to explain the need for the Project, and to guide in development and evaluation of alternatives, the Applicants identified the following Project objective:

- To obtain renewal of all necessary permits and approvals to continue mining sand at an economically viable level in San Francisco Bay for the next 10 years.

For the purpose of this EIR, the new leases and the issuance of other permits and entitlements necessary to continue sand mining for 10 more years are considered the “Project.”
1.0 Introduction

1.1.4 Purpose and Intended Uses of the EIR

State CEQA Guidelines section 15124(d) requires that an EIR contain a statement within the project description briefly describing the intended uses of the EIR. The State CEQA Guidelines also indicate that the EIR should identify the ways in which the lead agency and any responsible agencies would use this document in their approval or permitting processes. The following discussion summarizes the roles of the agencies and the intended uses of the EIR.

This EIR provides detailed information about the effect that the proposed Project is likely to have on the environment, lists ways in which the Project’s significant effects might be minimized (e.g., through implementation of recommended mitigation measures), and indicates alternatives to the Project. The document is intended to provide the CSLC with the information required to exercise its jurisdictional responsibilities with respect to the proposed Project, which would be considered at a separate noticed public meeting of the CSLC. For example, the EIR will be used by the CSLC in determining whether or not to grant new 10-year leases of California sovereign lands to the Applicants for the purpose of mining sand.

This document is also intended to provide information needed by other State and local agencies that issue permits associated with the Project to exercise their responsibilities in issuing those permits (see Section 1.3, Permits, Approvals, and Regulatory Requirements). In order to continue sand mining from the lease parcels and privately owned TLS 39 site, the Applicants also require discretionary approvals of responsible agencies, including the San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), State Mining and Geology Board (SMGB), and California Department of Fish and Game (CDFG). In addition, approval of the U.S. Army Corps of Engineers (ACOE), in conjunction with required consultation and coordination with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), would be necessary.

CEQA requires that the lead agency shall neither approve nor implement a project for which an EIR has been prepared unless the significant environmental impacts have been eliminated or reduced to an acceptable level where feasible, and the agency has determined that any remaining significant environmental effects are acceptable due to overriding considerations. An acceptable level is defined as eliminating, avoiding, or

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3 Subsequently renamed National Oceanic and Atmospheric Administration (NOAA) Fisheries, the agency continues to be referred to as NMFS or NOAA Fisheries; it is referred to herein as NMFS.
substantially lessening the significant environmental effects to below a level of
significance. If the certified EIR for a project identifies one or more significant
environmental effects, the lead agency is required to make written Findings for each of
the significant effects. If the lead agency approves the project even though significant
impacts identified in the Final EIR cannot be avoided or substantially lessened with
feasible measures, the lead agency must state in writing the reasons for its action based
on the EIR and/or other information in the record. Findings and, if there are unavoidable
significant impacts, a Statement of Overriding Considerations (SOC), must be included in
the record of project approval and mentioned in the Notice of Determination (NOD) to
carry out the project.

1.1.5 Scope of the EIR

This EIR is presented in several sections as shown in Table 1-1. Section 4.0, Environmental Analysis, of the EIR analyzes potential impacts related to the following environmental issue areas:

- Biological Resources;
- Mineral Resources;
- Hydrology and Water Quality;
- Hazards and Hazardous Materials;
- Air Quality;
- Cultural Resources; and
- Land Use and Recreation.

The study area of this EIR extends beyond the proposed sand mining boundaries. For example, the analysis of potential impacts on sediment supply considers whether the Project could adversely affect natural sand replenishment occurring at such locations as Ocean Beach and Crissy Field in San Francisco, while the air quality impact analysis focuses primarily on the Bay Area Air Basin, but also considers the Project’s contribution to global warming effects.

Based upon preliminary review and for the reasons stated below, CSLC staff has determined that the proposed Project would have a less-than-significant impact or no impact on the following issue areas that are typically considered in an EIR.

- **Aesthetics.** The Project is not anticipated to involve any changes to current operations that would have an adverse effect on a scenic vista, substantially damage scenic resources, degrade the existing visual character or quality of the area, or create new sources of light and glare. Therefore, no impact on the visual quality of the Project area would occur.
1.0 Introduction

Table 1-1. Organization of This EIR

<table>
<thead>
<tr>
<th>Section Number and Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0. Introduction</td>
<td>Introduces the proposed Project and Project EIR.</td>
</tr>
<tr>
<td>2.0. Project Description</td>
<td>Describes the proposed Project, including its location, layout, and facilities, and presents an overview of Project operations.</td>
</tr>
<tr>
<td>3.0. Alternatives and Cumulative Projects</td>
<td>Describes the alternatives to the proposed Project that were carried forward for analysis, the alternatives that were considered but eliminated from detailed evaluation, and also identifies the cumulative projects that are considered in the cumulative impact analyses.</td>
</tr>
<tr>
<td>4.0. Environmental Analysis</td>
<td>Describes existing environmental conditions, Project-specific impacts and mitigation measures, and analyzes the impacts of the Project alternatives for each issue area. This section also evaluates the impacts of the Project in conjunction with the cumulative projects identified in Section 3.0, Alternatives and Cumulative Projects.</td>
</tr>
<tr>
<td>5.0. Socioeconomic Effects and Environmental Justice</td>
<td>Evaluates the Project's socioeconomic effects and the potential of the Project to disproportionately affect minority or lower-income communities.</td>
</tr>
<tr>
<td>6.0. Other Required CEQA Sections and Environmentally Superior Alternative</td>
<td>Addresses other required CEQA elements, including the consideration of any significant irreversible environmental changes that the Project would cause and the Project's growth-inducing impacts, and identifies the environmentally superior alternative.</td>
</tr>
<tr>
<td>7.0. Mitigation Monitoring Program</td>
<td>Describes the Mitigation Monitoring Program that the CSLC, as lead agency, will adopt to ensure that measures required to mitigate or avoid significant impacts are implemented.</td>
</tr>
<tr>
<td>8.0. Report Preparation Sources</td>
<td>Presents information on the report preparers and sources consulted.</td>
</tr>
<tr>
<td>9.0. References</td>
<td>Lists reference materials used to prepare the EIR.</td>
</tr>
<tr>
<td>Appendices (see attached CD)</td>
<td>Appendix A to this EIR contains the mailing list of the persons and entities notified of the availability of this document. Appendix B contains the NOP and comments received on the NOP, and identifies where the comments were addressed in the Draft EIR (July 2010). Other technical appendices are also included in this EIR; see the Table of Contents for the complete listing.</td>
</tr>
</tbody>
</table>
1.0 Introduction

- **Agricultural Resources.** No agricultural resources lie within the area of potential effect of the Project; therefore, no impact on agricultural resources would occur.

- **Geology and Soils.** The Project would continue to remove and disturb the Bay substrate within the proposed lease areas, but is not anticipated to involve any changes to current operations. Current operations have no significant impact related to geology or soils, such as the loss of topsoil or the exposure of people and structures to seismic hazards, landslides, or other geologic hazards. Therefore, no new impacts would occur. Effects on the geomorphology of the Bay floor, on sediment supply and transport, and on the hydrodynamics of Bay waters are considered in Section 4.3, Hydrology and Water Quality.

- **Noise.** The Project is not anticipated to involve operational noise greater than that presently resulting from current operations, and therefore is not expected to expose people to higher levels of noise than are currently experienced, or to cause new sources of noise or vibration. Therefore, no noise impact would occur. Potential impacts of noise and vibration on aquatic wildlife are considered in Section 4.1, Biological Resources.

- **Population and Housing.** The Project would not result in direct construction of new housing or infrastructure nor displace people from existing housing. Therefore, the Project would not have an impact on population and housing.

- **Public Services.** The Project would not directly increase demands on or require the construction of additional fire or police facilities, school facilities, parks, or any other public service. Therefore, no impact on public services would occur.

- **Transportation.** The Project is not anticipated to involve any changes to current operations that would affect land or water transportation, including possible effects on roadways, parking, and navigational channels. Therefore, no new impact on transportation would occur.

- **Utilities and Service Systems.** The Project would not require the expansion of existing utilities, including water supply, wastewater treatment, and power. Thus, no impact on utilities and service systems would occur.

1.1.6 Definition of Baseline and Future Conditions

The principal purpose of an EIR is to inform the public and decision-makers of the potential effects of a proposed project on the physical environment. With an existing, ongoing operation for which the applicant is seeking entitlements to continue activities, (rather than to initiate new activities), both the project and the baseline condition against which impacts are to be measured must be defined carefully to ensure that the environmental analysis focuses on any proposed changes that constitute the project. With respect to the environmental setting assumed for the impact analysis, State CEQA Guidelines section 15125(a) states, in part, the following:
1.0 Introduction

An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.

The California Supreme Court confirmed that, while conditions at the time of the NOP “normally” constitute the baseline for the environmental analysis under CEQA, the lead agency has flexibility in defining the appropriate baseline (*Communities for a Better Environment v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 328).

The NOP for this Project EIR was issued on July 10, 2007, at which time the initial 10-year leases were in effect, and 2007 mining volumes were selected as a part of the baseline for the Draft EIR analysis. After evaluating comments received on the 2010 Draft EIR, the CSLC staff concluded that an average over several years of mining in the Central Bay, Suisun Bay, and the western Delta more accurately represented year-to-year fluctuations, and thus existing conditions, in terms of annual sand mining activity than did a single year of sand mining. The annual quantity of sand mined fluctuates substantially due to changes in demand, economic conditions, capacity, and other factors. The quantity of sand mined in the 2007 mining year was in the low range compared with previous years, depressing the baseline. Therefore, consistent with the State CEQA Guidelines and case law, the baseline condition for the analysis of Project impacts in this EIR is defined as the existing physical effects of mining operations occurring at a level equal to the average of the five years preceding issuance of the NOP and the physical effects of past sand mining operations. Because Central Bay lease parcel PRC 5871 was being mined during this period, and thus contributed to the physical conditions existing at the time the NOP was issued, it is included in the revised baseline even though a new mining lease is not proposed as part of the Project.

Using this baseline, the impact analysis examines the differences between the proposed sand mining operations and the sand mining that occurred, on average, under the original lease agreements in the five years before the NOP was issued (see Table 1-2). Overall, the Applicants propose a net increase of about 613,350 cubic yards per year (cy/yr) over the baseline volume of 1,426,650 cy/yr. This represents an overall decrease of 200,000 cy/yr in the mining volume allowed under the previous leases (see Section 2.3, Proposed Project). Specific baseline assumptions for each environmental issue area include the following.
### Table 1-2. Sand Mining Volumes 2002-2007 Compared with Currently Permitted and Proposed Volumes (cubic yards)

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td><strong>State Lands Commission, Central Bay Lease Parcels (and Current Leaseholder)</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>PRC 709: Presidio, Alcatraz, and Point Knox Shoals (Hanson)</td>
<td>353,498</td>
<td>126,364</td>
<td>334,418</td>
<td>432,009</td>
<td>205,366</td>
<td>290,331</td>
<td>540,000</td>
<td>340,000</td>
</tr>
<tr>
<td>PRC 2036: Point Knox South (Hanson)</td>
<td>257,831</td>
<td>300,000</td>
<td>266,948</td>
<td>183,781</td>
<td>254,626</td>
<td>252,637</td>
<td>300,000</td>
<td>450,000</td>
</tr>
<tr>
<td>PRC 7779: Point Knox Shoal (Hanson)</td>
<td>397,647</td>
<td>393,918</td>
<td>400,000</td>
<td>363,977</td>
<td>396,656</td>
<td>390,440</td>
<td>400,000</td>
<td>550,000</td>
</tr>
<tr>
<td>PRC 7780: Alcatraz South Shoal (Hanson)</td>
<td>127,420</td>
<td>143,576</td>
<td>123,795</td>
<td>133,129</td>
<td>108,318</td>
<td>127,248</td>
<td>150,000</td>
<td>200,000</td>
</tr>
<tr>
<td>PRC 5871: Alcatraz Shoal (Cemex)</td>
<td>87,970</td>
<td>51,663</td>
<td>98,887</td>
<td>80,391</td>
<td>83,005</td>
<td>80,383</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal: State Lands Central Bay Leases</strong></td>
<td>1,224,366</td>
<td>1,015,521</td>
<td>1,224,048</td>
<td>1,193,287</td>
<td>1,047,971</td>
<td>1,141,039</td>
<td>1,390,000</td>
<td>1,540,000</td>
</tr>
<tr>
<td><strong>State Lands Commission, Suisun Bay/Delta Lease Parcel (and Current Leaseholder)</strong></td>
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</tr>
<tr>
<td>PRC 7781 Suisun Bay/Western Delta (Suisun Associates)</td>
<td>98,269</td>
<td>96,989</td>
<td>80,855</td>
<td>67,210</td>
<td>85,407</td>
<td>85,746</td>
<td>100,000</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>State Lands Lease Totals: Central Bay &amp; Suisun Bay/Delta</strong></td>
<td>1,322,635</td>
<td>1,112,510</td>
<td>1,304,903</td>
<td>1,260,497</td>
<td>1,133,378</td>
<td>1,226,785</td>
<td>1,490,000</td>
<td>1,840,000</td>
</tr>
<tr>
<td><strong>Private Parcel, Middle Ground Shoal</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grossi Middle Ground Shoal TLS 39</td>
<td>161,189</td>
<td>230,305</td>
<td>195,005</td>
<td>217,884</td>
<td>194,945</td>
<td>199,866</td>
<td>750,000</td>
<td>200,000</td>
</tr>
<tr>
<td><strong>All Lease Totals</strong></td>
<td>1,483,824</td>
<td>1,342,815</td>
<td>1,499,908</td>
<td>1,478,381</td>
<td>1,328,323</td>
<td>1,426,650</td>
<td>2,240,000</td>
<td>2,040,000</td>
</tr>
</tbody>
</table>

1. The Applicants propose to mine up to the proposed level of 2,040,000 cubic yards per year beginning in 2014 when upgrades to diesel engines used to power mining equipment are required to be completed; until 2014 the Applicants propose to mine no more than the baseline level of 1,426,650 cubic yards per year.

2. While both Applicants have BCDC permits to mine at Middle Ground Shoal (TLS 39), all mining during the baseline period was conducted by Jerico. Source: CSLC 2011, BCDC 2009a, Hanson Marine Operations 2008
1.0 Introduction

- **Biological Resources.** Impacts on biological resources are assumed to have occurred since sand mining in the Project areas first started, and the ongoing disturbance that occurred during this time is considered part of the baseline condition. The EIR examines the effects of any changes in mining practices or methods, locations, and level of intensity relative to the average level of operations occurring from 2002 to 2007, and also examines the potential for cumulative effects of future sand mining in combination with past sand mining.

- **Mineral Resources.** The effects of past sand mining on the availability of sand resources are considered part of the baseline condition. The EIR examines the potential for continued sand mining to result in loss of access to other mineral resources, as well as long-term or permanent depletion of sand resources.

- **Hydrology and Water Quality.** The effects of past sand mining on Bay and Delta water quality, bathymetry, geomorphology, and hydrodynamics are considered part of the baseline condition. The impact analysis is limited to the consideration of future effects of this kind relative to the level of mining operations that occurred, on average, from 2002 to 2007, as well as the cumulative effects of proposed future mining in combination with past mining.

- **Hazardous Materials and Hazards.** Past sand mining effects that are considered part of the Project baseline condition include any past accidents or upsets associated with mining operations that resulted in the release of, or exposure to, hazardous substances. The EIR considers the potential for new impacts of this kind (see also the discussion of human health risks in Section 4.5, Air Quality).

- **Air Quality.** The annual level of emissions of criteria air pollutants and toxic air contaminants from mining operations occurring, on average, between 2002 and 2007 is considered the baseline for the air quality analysis. The EIR examines if air emissions would increase due to the proposed changes in mining level intensity or duration relative to baseline operations. The analysis also considers the potential for increased human health risk associated with 10 additional years of exposure to toxic air contaminants and increased global warming effects associated with 10 more years of greenhouse gas (GHG) emissions.

- **Cultural Resources.** Impacts on submerged cultural resources could have occurred during past sand mining events. Such past disturbance is considered part of the baseline condition. This EIR considers the potential for future disturbance of submerged cultural resources.

- **Land Use and Recreation.** The EIR examines whether the proposed sand mining operations would conflict with current plans and policies of the various agencies with land use and similar authority over Bay and Delta resources and evaluates potential Project conflicts with recreational uses in the Central Bay and Delta. This section also considers the potential for residual impacts at down-current beaches resulting from Project impacts on sediment supply and transport within the Bay-Delta system. (Potential changes to sediment supply and transport are examined in more detail in Section 4.3, Hydrology and Water Quality.)
1.0 Introduction

- Socioeconomic Effects and Environmental Justice. While the social and economic effects of the Project and the potential for the Project to disproportionately impact low income and/or minority communities are not considered part of the environmental impact analysis, Section 5.0 of this EIR addresses the Project’s impacts with respect to socioeconomic effects and environmental justice issues. Regional socioeconomic conditions are based on 2007 population and employment data. The socioeconomic effects of mining operations occurring at the average level of operations between 2002 and 2007 are considered the baseline condition for the evaluation of the Project’s economic impacts. Any environmental impacts of past sand mining operations that disproportionately affected environmental justice communities (including predominantly minority and low-income communities) are considered part of the baseline condition for the analysis of potential Project impacts that would disproportionately affect minority and/or low-income communities. Section 5.0 examines the potential for future sand mining under the proposed Project, as well as the cumulative effects of sand mining combined with other industrial activities in the area, to affect environmental justice communities.

1.2 PUBLIC REVIEW AND COMMENT

1.2.1 Repository Sites

Placing CEQA documents in “repository” sites can be an effective way of providing ongoing information about a project to a large number of people. Four repository sites in or near the proposed Project area have been established, and documents are also posted online on the CSLC website (www.slc.ca.gov). The EIR is available to the public at the following locations:

<table>
<thead>
<tr>
<th>Berkeley Central Library</th>
<th>San Francisco Main Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>2090 Kittredge Street</td>
<td>100 Larkin Street</td>
</tr>
<tr>
<td>Berkeley, CA 94704</td>
<td>San Francisco, CA 94102</td>
</tr>
<tr>
<td>(510) 981-6119</td>
<td>(415) 557-4400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CSLC, Attn: Christopher Huitt</th>
<th>CSLC, Marine Facilities Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Howe Avenue, Suite100-South</td>
<td>Northern California Field Office</td>
</tr>
<tr>
<td>Sacramento, CA 95825</td>
<td>750 Alfred Nobel Drive, Suite 201</td>
</tr>
<tr>
<td>(916) 574-1938</td>
<td>Hercules, CA 94547</td>
</tr>
<tr>
<td><a href="mailto:huittc@slc.ca.gov">huittc@slc.ca.gov</a></td>
<td>(510) 741-4950</td>
</tr>
</tbody>
</table>

1.2.2 Scoping

The CSLC, as the CEQA lead agency, determined that the proposed Project could result in potentially significant adverse environmental impacts and therefore required
1.0 Introduction

preparation of an EIR pursuant to and in accordance with CEQA, the State CEQA Guidelines, and CSLC regulations for implementing CEQA.

On July 10, 2007, the CSLC staff provided the NOP for the proposed Project to responsible and trustee agencies and the public, requested written and verbal comments on the EIR’s scope during a 30-day comment period, and announced two forthcoming public scoping meetings. On July 30, 2007, the CSLC staff held two public scoping meetings in Oakland, California, to solicit verbal comments on the EIR. In response to the NOP, written comments were received from the staffs of three agencies:

- Patrick L. Barnard, Research Geologist, U.S. Geological Survey (USGS);
- Brenda Goeden, Dredging Program Manager, BCDC; and
- Tony Warrington, Regional Manager, CDFG, Marine Region.

Appendix B includes a copy of the NOP, the letters received, and an index of where the scoping comments were addressed in the Draft EIR. In addition, the CSLC has consulted on a continuous basis with the responsible agencies, both before and since the issuance of the NOP and in preparing the Draft EIR and the RDEIR, to ensure that the EIR addresses the concerns of these agencies.

1.2.3 Public Review of the Previous Draft EIR

In July 2010, a Notice of Completion/Notice of Availability was distributed announcing the release of the Draft EIR. The Notice summarized the conclusions of the Draft EIR and included information on how to access the Draft EIR. It also presented the date, times, and location of the public hearings on the Draft EIR.

The Draft EIR that was released for public review on July 27, 2010, included a detailed analysis of impacts in the seven environmental resource areas discussed above. Copies of the Draft EIR were delivered to the California State Clearinghouse for distribution to governmental agencies, to other agencies, and to individuals and community organizations that expressed interest in the proposed Project. In compliance with CEQA procedures, the CSLC provided a public review period of 60 days for the Draft EIR. The public review period extended from July 27, 2010, through September 27, 2010. The Lead Agency allowed comments on the Draft EIR to be submitted by mail, verbally at the public hearings, via e-mail, and in person to the CSLC office in Sacramento.
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Pursuant to Section 15087 of the State CEQA Guidelines, the CSLC also scheduled two public meetings for receiving oral and written comments on the Draft EIR at the Berkeley Central Library Meeting Room in Berkeley, on August 23, 2010, at 3:00 p.m. and 6:00 p.m. At those hearings, the public had opportunities to ask questions about the Draft EIR and present verbal and/or written testimony on the Draft EIR and its contents. The decision-making process of the CSLC was also explained at the public hearings.

The CSLC received 10 sets of comments on the original Draft EIR from the following agencies, organizations, and individuals:

- Brenda Goeden, BCDC
- Charles Armor, CDFG
- Victor J. Izzo, Central Valley RWQCB
- Stephen M. Testa, California State Mining and Geology Board (SMGB)
- Arthur Feinstein, Citizens Committee to Complete the Refuge
- Barbara Salzman, Marin Audubon Society
- Jason F. Wren, San Francisco Baykeeper
- David Lewis, Save the Bay
- Orville Magoon
- William H. Butler, Hanson Aggregates/Hanson Marine (Project Applicant)

Where relevant, responses to these comments were have been incorporated into the text, analysis, and mitigation measures of the RDEIR. However, it should be noted that changes to the Project Description and circumstances surrounding the Project may have rendered portions of comments received on the previous 2010 Draft EIR inapplicable to the RDEIR and Final EIR.

1.2.4 Public Comment on the RDEIR

Section 15088.5(a) of the State CEQA Guidelines provides for the recirculation of an EIR “when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification.” New information can include “changes in the project or environmental setting as well as additional data or other information.”

The RDEIR was circulated to local and State agencies and interested individuals for review and comment for 4564 days (November 1, 2011, to January 3, 2012). Written comments may be submitted to the CSLC during this period. The CSLC received 12 sets of comments on the RDEIR from the following agencies, organizations, and individuals:
1.0 Introduction

- Brenda Goeden, BCDC
- Michael Machado, Delta Protection Commission
- Kevan Samsam, Delta Stewardship Council (withdrawn)
- Marija Vojkovich, California Department of Fish and Game
- Steve Testa and Will Arcand, California State Mining and Geology Board (SMGB)
- J. W. McPherson, United States Coast Guard
- Carin High, Citizens Committee to Complete the Refuge
- Ian Wren, San Francisco Baykeeper and David Lewis, Save the Bay
- Peter Bay
- Libby Lucas
- Orville Magoon
- Mike Roth, Hanson Aggregates / Hanson Marine Operations, and on behalf of Jerico Products / Morris Tug and Barge (Project Applicants)

The All comments on the RDEIR have been received will be addressed in a Part II, Responses to Comments document, which, together with the revised text of the RDEIR, will constitutes the Final EIR for the proposed Project. As provided by State CEQA Guidelines section 15088.5(f)(1):

When an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period. The lead agency shall advise reviewers, either in the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The lead agency need only respond to those comments submitted in response to the recirculated revised EIR.

Because the entire Draft EIR was is being recirculated, written responses to comments received on the 2010 Draft EIR are not provided. The Final EIR will provides written responses to comments on this RDEIR that are submitted during the RDEIR public review period, as provided by State CEQA Guidelines section 15088.5(f).

1.3 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS

1.3.1 Agencies

Sand mining in the Bay and Delta is a highly regulated activity. Agencies other than the CSLC that have regulatory or oversight authority over the proposed Project include, but may not be limited to, the following:
1 State Agencies

- **California State Lands Commission.** The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. All tidelands and submerged lands, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust. Public Trust purposes include, but are not limited to, waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. Because the proposed Project involves the use of State sovereign lands under the CSLC's jurisdiction, it is subject to the CSLC's leasing requirements.

- **Bay Conservation and Development Commission:** BCDC is charged with the protection and enhancement of San Francisco Bay. The McAteer-Petris Act (California Gov. Code, § 66632, subd. (a)) requires the issuance of a BCDC permit for any activity that extracts materials from San Francisco or Suisun Bays. The BCDC makes a determination of consistency with applicable BCDC policies, including the Subtidal Areas policy and the Fish, Aquatic Organisms and Wildlife policy, as part of authorizing permits that regulate sand mining within the estuary. BCDC is also the federally-designated state coastal management agency for the San Francisco Bay segment of the California coastal zone. This designation empowers BCDC to use the authority of the federal Coastal Zone Management Act to ensure that federal projects and activities are consistent with the policies of the Bay Plan and state law.

- **California Department of Fish and Game:** The California Endangered Species Act (ESA) allows the CDFG to authorize project proponents to take state-listed threatened, endangered, or candidate species if certain conditions are met. The permitting program administers the incidental take provisions of the California ESA to ensure regulatory compliance and statewide consistency. The CDFG consults with lead and responsible agencies and provides the requisite biological expertise to review and comment on environmental documents and potential project-related impacts on fish, wildlife, and their habitats. In addition, CDFG's Lake and Streambed Alteration Program determines whether an agreement is needed for an activity that will substantially modify a river, stream or lake. If CDFG determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement that includes reasonable conditions necessary to protect those resources will be prepared.

- **San Francisco Bay Regional Water Quality Control Board:** Under the Porter-Cologne Water Quality Control Act (Pub. Resources Code, § 13000 et seq.), the SFBRWQCB has jurisdiction over sand mining activities for the purpose of protecting water quality in San Francisco Bay and the western Delta, and would issue waste discharge requirements covering Project operations. In its comments on the 2010 Draft EIR, the Central Valley RWQCB requested more detail on the
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location of CSLC Lease PRC 7781 to determine if it had any jurisdiction over sand mining within the lease parcel, which is located in Suisun Bay and the western Delta in the San Joaquin and Sacramento River channels upstream of Suisun Bay; the boundaries of that parcel are shown below.

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<thead>
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<th>Corner</th>
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<th>Longitude</th>
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</thead>
<tbody>
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<td>11</td>
<td>38° 02' 52.0&quot; N</td>
<td>121° 53' 04.0&quot; W</td>
</tr>
</tbody>
</table>

- **State Mining and Geology Board and Office of Mine Reclamation (California Department of Conservation):** Pursuant to the Surface Mining and Reclamation Act (SMARA) (Pub. Resources Code, § 2710 et seq.), the Department of Conservation Office of Mine Reclamation and SMGB are responsible for reviewing reclamation plans, and SMGB serves as the SMARA lead agency for marine sand mining operations in the San Francisco Bay-Delta area, and is responsible for the review and approval of authority over the reclamation plans, financial assurances, and environmental review documents pertinent to such operations prepared for the sand mining sites, pursuant to SMARA. Upon completion and certification of this EIR, and renewal of the subject leases, the SMGB will require the current reclamation plans and financial assurances to be amended and re-approved, as necessary.

**Federal Agencies**

- **U.S. Army Corps of Engineers:** The ACOE has jurisdiction over sand mining under Section 10 of the Rivers and Harbors Act. The ACOE issues permits regulating sand mining within the Bay-Delta estuary.

- **U.S. Fish and Wildlife Service and National Marine Fisheries Service:** USFWS and NMFS consult on proposed Federal actions, including approval of ACOE permits for sand mining, to ensure that these activities do not jeopardize federally listed endangered or threatened species under their respective jurisdictions or adversely modify designated critical habitat for such species within the estuary. NMFS also consults on activities that could affect Essential Fish Habitat designated under the Magnuson-Stevens Act.

**Regional Agencies**

- **Bay Area Air Quality Management District (BAAQMD) The BAAQMD is responsible for attaining and maintaining Federal and State air quality standards within the Bay Area Air Basin. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the Basin and to develop and implement strategies to attain the applicable Federal and State standards.**
1.3.2 Current Permits and Permit Conditions

In addition to the CSLC leases, which contain numerous conditions and requirements, sand mining is regulated by the BCDC, SFBRWQCB, SMGB, and ACOE. Current permits issued by these agencies, shown in Table 1-3, contain numerous conditions, limitations, and restrictions, as well as various monitoring and reporting requirements. Conditions relevant to the environmental analysis of the Project are summarized below.

Table 1-3. Permits Associated with Project Sand Mining Sites

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<thead>
<tr>
<th>Agency</th>
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<th>Private Leases</th>
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<tr>
<td></td>
<td>Presidio Shoals(^1)</td>
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<tr>
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<td>M98-19.4</td>
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<tr>
<td>SMGB(^4)</td>
<td>4</td>
<td>M99-7.4(^5)</td>
</tr>
<tr>
<td>RWQCB</td>
<td>Regional Board Order No. 95-177, as Amended by Order No. 00-048 (applies to all parcels)</td>
<td></td>
</tr>
</tbody>
</table>

1 Lease covers Alcatraz North Shoal, Point Knox North, and Presidio Shoals.
2 Referred to in the Notice of Preparation as Point Knox.
3 Referred to in the Notice of Preparation as Alcatraz.
4 The SMGB has approval authority over the reclamation plans prepared pursuant to SMARA for the sand mining sites. SMGB adopted resolution 2005-02 in February 2005, approving the reclamation plans for 10 marine sand mining leases in the Central Bay, Suisun Bay and western Delta. The SMGB approval of the reclamation plans for the current Central Bay, Suisun Bay and Delta sites is limited to the term of the leases that expired in 2008.
5 The easternmost portion of PRC 7781.1 is outside the jurisdiction of BCDC and therefore not covered by M99-7.4. (Please refer to Figure 4.7-1 in Section 4.7, Land Use, for a map showing the jurisdictional boundary at PRC 7781.1.)


CSLC Lease Terms

- Each lease limits annual mining volumes (see Table 2-1 in Section 2.0, Project Description) and contains various monitoring and reporting requirements. For example, the lessee:
  - must implement the mitigation measures contained in the relevant environmental document prepared pursuant to CEQA;
  - cannot impair waters or interfere with navigation, nor deposit refuse into the water;
  - must prevent waste of or damage to minerals, fisheries, or wildlife on property; operations may be suspended if there is an immediate or serious threat to these resources; and
must adhere to the relevant reclamation plan for each lease area prepared pursuant to the SMARA.

**BCDC Permit Conditions**

- Limits annual mining volumes;
- Must follow monitoring and reporting requirements;
- Prohibits dredging within 200 feet of shoreline or within 250 feet of any water 4 feet or under mean lower low water (MLLW) for Middle Ground Shoal, and mining within 100 feet of Alcatraz Island or in waters shallower than 30 feet MLLW in the Central Bay;
- Must use potholing method for Middle Ground Shoal (see Section 2.3.2, Description of Sand Mining Methods, Equipment, and Locations);
- Priming the pump must occur at no more than 3 feet off the bottom;
- Must mitigate for take of listed species;
- Must complete entrainment study (study was completed in 2006);
- Must allow for inspections;
- Operations may be suspended or limited if there is substantial depletion of sand or significant adverse impacts;
- Must adhere to an approved Reclamation Plan; and
- At offloading sites, must minimize muddying of waters, dikes must be waterproof, and any seepage back to the Bay is subject to RWQCB regulations.

**SFBRWQCB Permit Conditions**

- Sediment collected must be largely sand;
- Cannot discharge into waters with “beneficial uses” anywhere in San Francisco Bay, where dilution ratio is not at least 10:1, or in any non-tidal water, dead-end slough, or confined water;
- For Middle Ground Shoal, no dredging within 200 feet of shoreline and 250 feet of any water 4 feet or less at MLLW;
- Cannot degrade water supply or cause a nuisance;
- Cannot operate in areas less than 10 feet MLLW;
- Must minimize wasteful dredging and discharges;
- Must not result in exceeding set limits for dissolved oxygen, dissolved sulfide, pH, or toxic substances in downstream water; and
- Must follow monitoring and reporting requirements and allow for inspections.
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SMGB Resolution 2005-02 (February 2005)

- Approval of operators’ reclamation plans and financial assurances that sufficient funds would be available to accomplish reclamation in accordance with SMARA (http://www.consrv.ca.gov/smgb/staffreports2005/FEB/0210b-4.pdf).
- The approved reclamation plans for the current mining operations state that plan approval is limited to the term of the leases.

ACOE Permit Conditions

- Limits annual mining volumes;
- Must not mine within 200 feet of shoreline or within 250 feet of water less than 4 feet MLLW, and in 7780 prohibits dredging under 30 feet MLLW;
- Must allow inspections;
- Can suspend operations if there are adverse impacts to aquatic resources;
- Must avoid underground utility lines;
- Must follow monitoring and reporting requirements; and
- Must implement recommendations of sand mining study.