

*California State Lands Commission*

# **PART I – PREFACE**

Final Environmental Impact Report for the San Francisco Bay and  
Delta Sand Mining Project, September 2012

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## PART I. PREFACE TO THE FINAL ENVIRONMENTAL IMPACT REPORT

### PURPOSE

This document is the Final Environmental Impact Report (Final EIR, or EIR) for the San Francisco Bay and Delta Sand Mining Project (Project). The Final EIR has been prepared for consideration by the California State Lands Commission (CSLC), as the Lead Agency for this Project, pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.) and in accordance with the State CEQA Guidelines (Cal. Code of Regs., tit.14, § 15000 et seq.).

### ORGANIZATION OF FINAL EIR

This Final EIR, which is reproduced for convenience in one document, replaces the November 2011 Revised Draft EIR. Consistent with State CEQA Guidelines section 15132, the Final EIR consists of the following elements:

- **Part I** – Preface;
- **Part II** – Comments and Responses to Comments received on the Revised Draft EIR during the 60-day public comment period, including a list of persons, organizations, and public agencies that provided comments; and
- **Part III** – Revisions to the Revised Draft EIR and any other information added to the EIR by the CSLC as Lead Agency. Part III includes the entire text of the Revised Draft EIR, as revised, including revisions to the text of the Revised Draft EIR in response to comments received or for reasons that include: to update information; to refine discussions and resolve internal inconsistencies; and to make minor format changes. Some changes have resulted in a shifting of text from one page to another. Except for minor format changes, all revisions to the Revised Draft EIR are shown as follows:
  - Additions to the text of the Revised Draft EIR are underlined; and
  - Deletions from the text of the Revised Draft EIR are shown as ~~strikeout~~.

The Final EIR may be viewed at the following repository locations and on the CSLC website ([www.slc.ca.gov/Division\\_Pages/DEPM/DEPM\\_Home\\_Page.html](http://www.slc.ca.gov/Division_Pages/DEPM/DEPM_Home_Page.html))

Berkeley Central Library 2090 Kittredge Street Berkeley, CA 94704 (510) 981-6119	CSLC, Marine Facilities Division 750 Alfred Noble Drive, Ste. 201 Hercules, CA 94547 (510) 741-4950
San Francisco Main Library 100 Larkin Street San Francisco, CA 94102 (415) 557-4400	CSLC, Attn: Christopher Huit 100 Howe Avenue, Ste.100-South Sacramento, CA 95825 (916) 574-1889 <a href="mailto:huittc@slc.ca.gov">huittc@slc.ca.gov</a>

## **PROJECT DESCRIPTION**

The mining of sand for use as a construction material has occurred within the Central Bay and Delta for more than seven decades. Channel and harbor dredging to remove sand and other sediment deposits from the Bay began in the 1800s, and construction sand mining within the Bay-Delta estuary began in the 1930s. The CSLC has received an application from Hanson Marine Operations (Hanson) and Jerico Products/Morris Tug and Barge (Jerico), collectively the Applicants, for new mineral extraction leases to continue dredge mining of construction-grade sand from certain lease parcels in 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). The CSLC is considering granting new 10-year leases to the Applicants to continue mining sand until 2023 within these lease areas, which are shown in Figure 1-1 in Section 1.0, Introduction (see Part III of this Final EIR). Table I-1 shows the volumes of sand the Applicants propose to mine.

Sand mining leases require discretionary approval of the CSLC. Other agencies that have regulations or inspection requirements or that have granted existing, or may grant new, permits and approvals, include:

- California Department of Fish and Game (CDFG);
- San Francisco Bay Conservation and Development Commission (BCDC);
- San Francisco Bay Regional Water Quality Control Board (SFBRWQCB);
- State Mining and Geology Board and Office of Mine Reclamation;
- U.S. Army Corps of Engineers (ACOE);
- National Marine Fisheries Service (NMFS)
- U.S. Fish and Wildlife Service (USFWS); and
- Bay Area Air Quality Management District (BAAQMD).

Examples of permits and approvals that may be required include an Incidental Take Permit from CDFG; and permits for mineral extraction from each lease area from BCDC.

In comparison with the permitted annual mining volume during the previous lease period, the Applicants propose a 350,000 cubic yard per year (cy/yr) increase in volume from the CSLC lease areas and a 550,000 cy/yr decrease in volume from the private lease area, resulting in a net decrease of 200,000 cy/yr in allowed mining volume from all lease areas (CSLC and private). As shown in Table I-1, the Applicant-proposed volumes, if approved, would also result in an increase in the annual average volume of sand actually mined from the Project lease areas from 2002 to 2007 (see also Table 1-2 in Section 1.0, Introduction, in Part III).

**Table I-1. Currently Permitted, Baseline, and Proposed Annual Sand Mining Volumes (in cubic yards per year)**

	Applicants' Current Permit Limits	Baseline Volume (2002-2007 Average) <sup>1</sup>	Proposed <sup>2</sup>	Difference (Proposed vs. Baseline Volume)	Proposed Increase as Percentage of Baseline Volume
<b>State Lands Commission Central Bay Lease Areas (and Current Leaseholder)</b>					
PRC 709: Presidio, Alcatraz, and Point Knox Shoals (Hanson)	540,000	290,331	340,000	49,669	+ 17%
PRC 2036: Point Knox South (Hanson)	300,000	252,637	450,000	197,363	+ 78%
PRC 7779: Point Knox Shoal (Hanson)	400,000	390,440	550,000	159,560	+ 41%
PRC 7780: Alcatraz South Shoal (Hanson)	150,000	127,248	200,000	72,752	+ 57%
PRC 5871 (CEMEX) <sup>3</sup>	NA	80,383	NA	NA	(- 100%)
<b>Subtotal: State Lands Central Bay Leases<sup>4</sup></b>	<b>1,390,000</b>	<b>1,141,039</b>	<b>1,540,000</b>	<b>398,961<sup>5</sup></b>	<b>+ 35%</b>
<b>State Lands Commission Suisun Bay/Delta Lease Area (and Current Leaseholder)</b>					
PRC 7781: Suisun Bay/Western Delta (Suisun Associates)	100,000	85,746	300,000	214,254	+ 250%
<b>State Lands Lease Totals: Central Bay &amp; Suisun Bay/Delta<sup>3</sup></b>	<b>1,490,000</b>	<b>1,226,785</b>	<b>1,840,000</b>	<b>613,215</b>	<b>+ 50%</b>
<b>Private Suisun Bay Parcel and Current Leaseholder</b>					
Grossi Middle Ground: BCDC Permit 10-90 (Hanson)	500,000	0	50,000	50,000	NA
Grossi Middle Ground: BCDC Permit 16-78 (M) (Jerico)	250,000	199,866	150,000	-49,866	- 25%
<b>Private Lease Totals: Middle Ground<sup>4</sup></b>	<b>750,000</b>	<b>199,866</b>	<b>200,000</b>	<b>134</b>	<b>0%</b>
<b>All Lease Totals<sup>4</sup></b>	<b>2,240,000</b>	<b>1,426,650</b>	<b>2,040,000</b>	<b>613,349<sup>5</sup></b>	<b>+ 43%</b>

Notes: NA = Not Applicable

<sup>1</sup> Refer to Table 1-1 for mining volumes by year at each parcel.

<sup>2</sup> 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.

<sup>3</sup> A new lease is not proposed at this parcel, which therefore is not part of the proposed Project.

<sup>4</sup> Cells may not total exactly due to rounding.

<sup>5</sup> This figure takes into account the 80,383 cubic yards of material mined from PRC 5871 during the baseline period.

Source: CSLC 1998, 2008, 2011; BCDC 2008, 2009a, 2009b

Hanson and Jerico use similar equipment for sand mining, including a hydraulic suction dredge and barge, and propose to continue mining sand within the lease areas shown in Table I-1 using similar methods and equipment to those currently employed. Mining occurs within the Central Bay, Middle Ground Shoal in Suisun Bay, and areas north of the Federal navigation channels of Suisun Bay and western Delta. Sand mining does not occur uniformly within the region, but rather is clustered in specific areas, typically characterized by high river or tidal velocities and sand deposits that contain a low percentage of fine material (silts, clay, and mud). Mining events typically last approximately 3.0 to 4.5 hours, during which time approximately 1,500 to 2,500 cubic yards of sand are excavated. During mining, water is entrained into the suction head or pipe, creating a water and sand slurry that mobilizes the sand and allows it to be pumped into the barge. Hydraulic pump capacity varies among individual sand mining barges from approximately 4,000 to 15,000 gallons per minute.

Sand mining within the Central Bay typically occurs at water depths ranging from 30 to 90 feet (individual sand mining barges have a maximum operating depth of either 80 or 90 feet). Mining within the navigation channels of Middle Ground Shoal and the Suisun Bay/Delta parcel typically occurs in waters that are 15 to 45 feet deep.

## **DECISION-MAKING PROCESS**

The State CEQA Guidelines stipulate that an EIR must be prepared for any project that may have a significant impact on the environment. The CSLC has determined that: (1) the San Francisco Bay and Delta Sand Mining Project is a “project” as defined by the Guidelines; (2) the Project may have a significant adverse impact on the environment; and (3) an EIR is required. The CSLC will use this Final EIR as part of its review process, including determining whether or not to issue leases of State lands for continued mining operations. If the EIR is certified and the Project approved, the CSLC will set the conditions of the lease agreements and incorporate mitigation measures for Project implementation. The CSLC must certify that:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the CSLC in a public meeting and the CSLC reviewed and considered the information contained in the Final EIR prior to considering the proposed Project; and
- The Final EIR reflects the CSLC’s independent judgment and analysis (State CEQA Guidelines § 15090).

In conjunction with certification of the Final EIR, the CSLC must prepare one or more written findings of fact for each significant environmental impact identified in the document. These findings must either state that:

- The Project has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact;
- Changes to the Project are within another agency’s jurisdiction and have been or should be adopted by such other agency; or

- Specific considerations make mitigation measures or alternatives infeasible.

If any impacts identified in the EIR cannot be reduced to a level that is less than significant, the CSLC may issue a Statement of Overriding Considerations for Project approval if specific social, economic, or other factors justify the Project's unavoidable adverse environmental effects. If the CSLC approves a project for which a Final EIR has been prepared and certified, the CSLC will issue a Notice of Determination.

## **PROJECT CEQA CHRONOLOGY**

The following is a brief chronology of the CEQA review process associated with the proposed Project (see also Part III, Section 1.2, Public Review and Comment).

**July 10, 2007.** Notice of Preparation (NOP) published.

**July 30, 2007.** Two scoping meetings held in Oakland, California.

**July, 27, 2010 – November 27, 2010.** Draft EIR released for public review with comments accepted by mail, email, facsimile transmission, and in person at two public meetings held in Berkeley, California on August 23, 2010.

**November 16, 2011 – January 3, 2012.** Revised Draft EIR released for public review with comments accepted by mail, email, facsimile transmission; 12 written comment sets were received.

**January – September 2012.** In preparing this Final EIR, the CSLC staff responded to all comments received, obtained additional information as needed to respond to comments, and prepared revisions to the Revised Draft EIR (see Parts II and III). The CSLC hearing on the Final EIR and action on the proposed Project are tentatively scheduled for October 19, 2012.

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