

**Regional Map of Sand Mining Lease Locations**

Source: San Francisco Bay and Delta Sand Mining EIR . 207475



U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

SAN FRANCISCO NORTH QUADRANGLE  
CALIFORNIA  
7.5-MINUTE SERIES

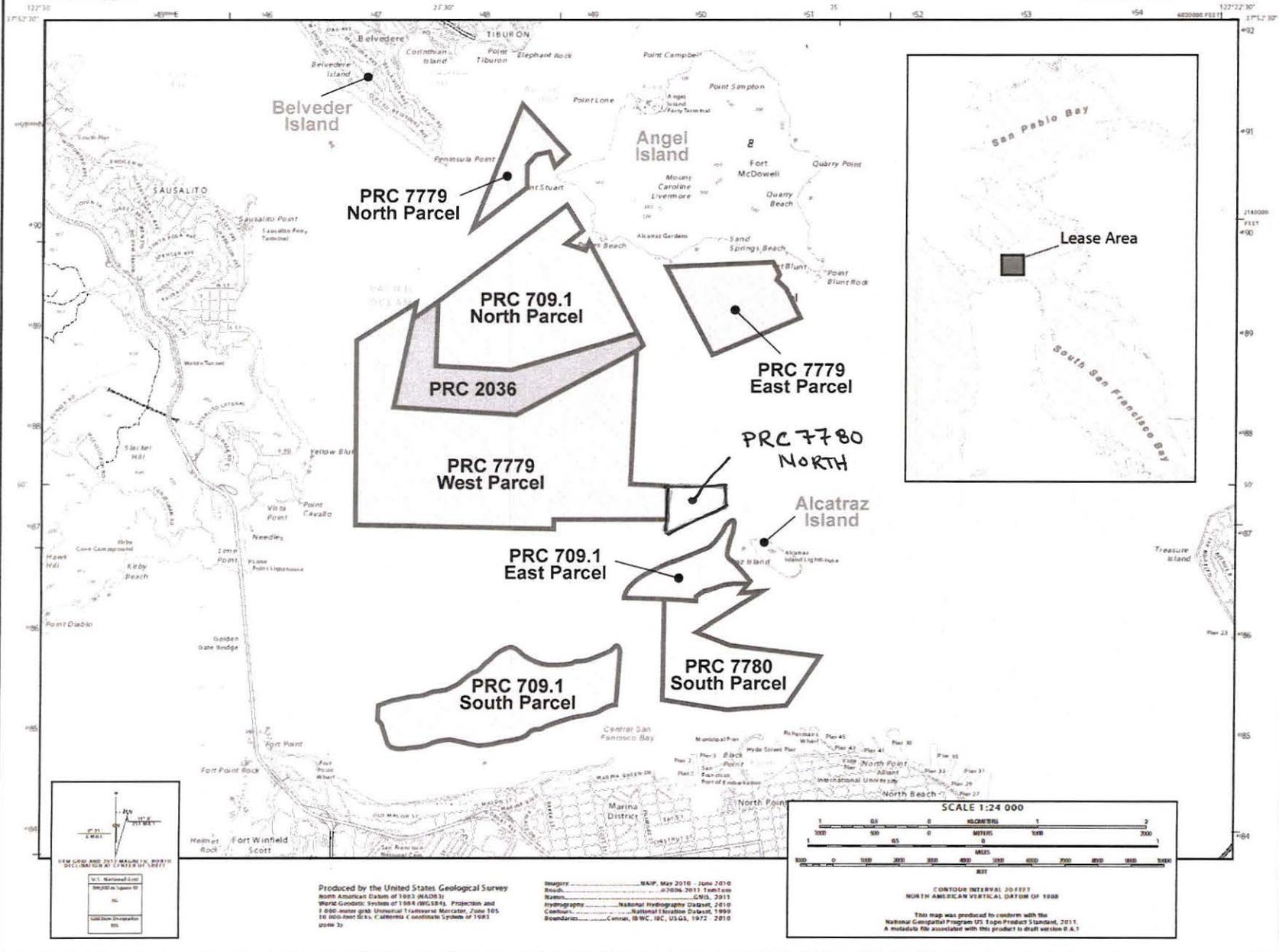
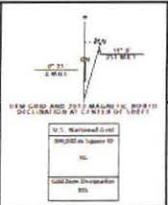


EXHIBIT B

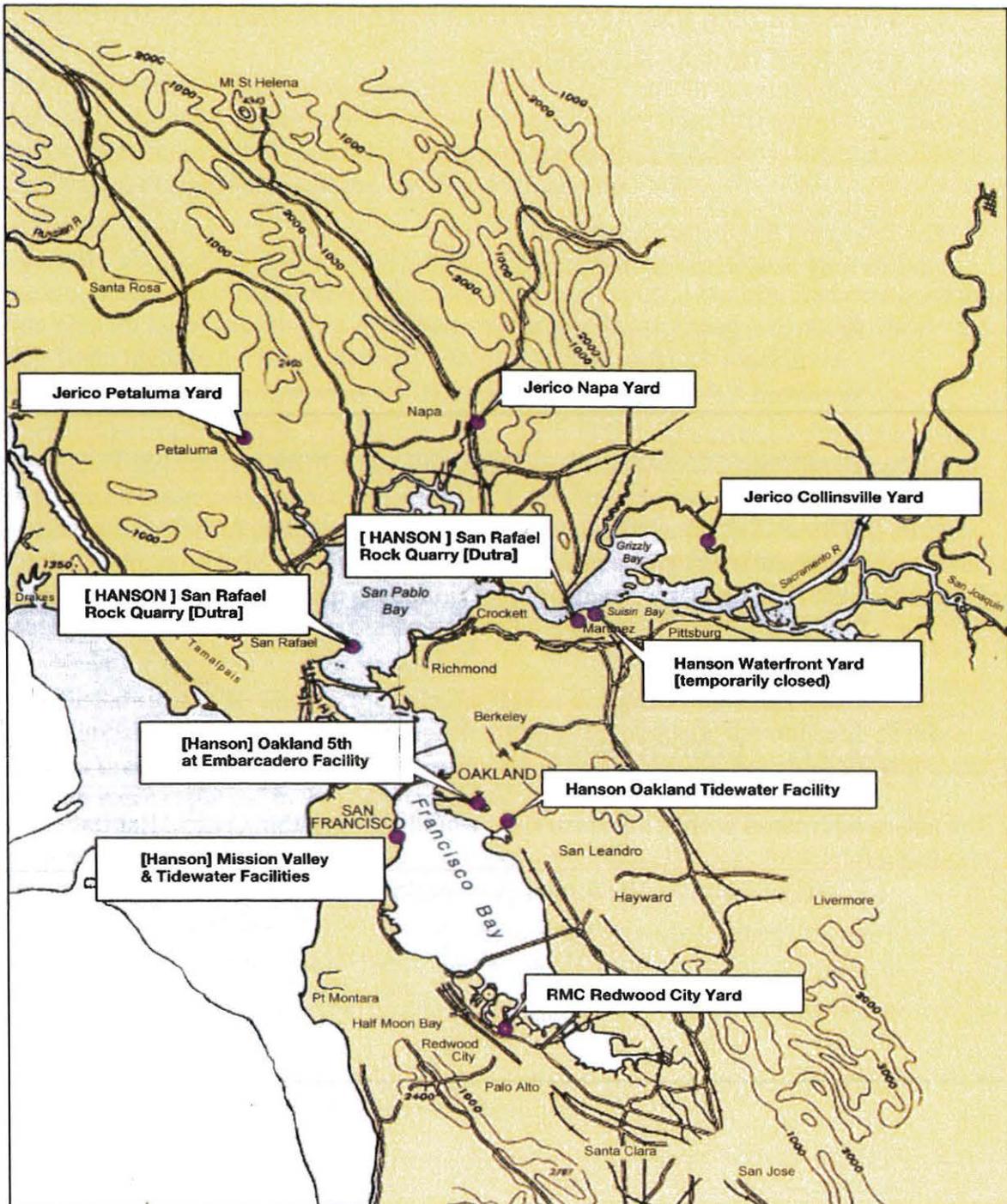


Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84) Projection and  
3 000-meter grid Universal Transverse Mercator, Zone 10S  
10 800,000 East, California Coordinate System of 1983  
zone 3

Source: NAIP, May 2010 - June 2010  
Roads: #2006-2011 1km/1mi  
Name: #2006-2011 1km/1mi  
Hydrography: National Hydrography Dataset, 2010  
Contour: National Elevation Dataset, 1989  
Boundaries: Census, BWC, ISC, USGS, 1972-2010



SCALE 1:24 000  
CONTOUR INTERVAL: 20 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geospatial Program US Topographic Standard, 2011  
A metadata file associated with this product is draft version 0.4.1



Marine sand offload locations within the Bay-Delta estuary.

EXHIBIT C

# Sediment Samples in Central Bay

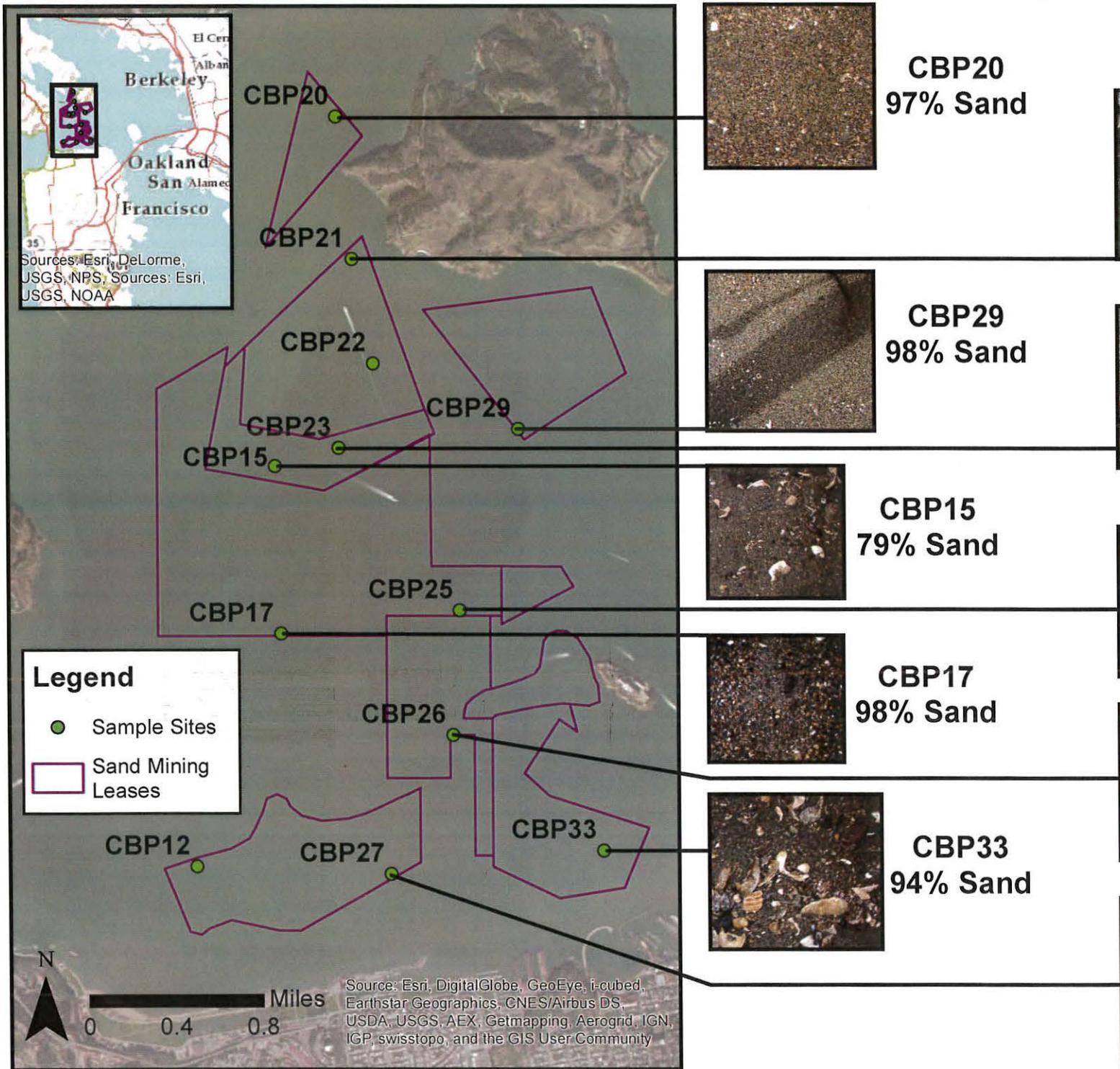


EXHIBIT D

**SUMMARY OF STATE LANDS COMMISSION CEQA FINDINGS  
FOR THE SAN FRANCISCO BAY AND DELTA SAND MINING PROJECT**

**PROJECT BACKGROUND**

In October 2012, the California State Lands Commission (“SLC”), as lead agency pursuant to the California Environmental Quality Act (“CEQA”) certified an Environmental Impact Report (“EIR”) for the San Francisco Bay and Delta Sand Mining Project (“Project”), adopted a Statement of Findings and Statement of Overriding Considerations, and adopted a Mitigation and Monitoring Program (“MMP”). The Project evaluated in the EIR involves Hanson Marine Operations (“Hanson”), Jerico Products/Morris Tug and Barge (“Jerico”), and Suisun Associates (a joint venture between Hanson and Jerico) (collectively the “Applicants”), entering into new 10-year mineral extraction leases of California sovereign lands to enable the continuation of dredge mining of construction-grade sand. The SLC leases are located in Central San Francisco Bay (“Central Bay”), Suisun Bay, and the western Sacramento-San Joaquin River Delta area (“Delta”). The proposed SLC lease renewals involve the same lease parcels currently mined by Hanson and Jerico, although the boundaries of some of the Central Bay parcels were adjusted in 2011 to avoid overlapping Federal lands.

The EIR analyzed the lease areas described below, but only the Central Bay leases to Hanson were part of the SLC’s Project approval in October 2012. SLC subsequently approved the Suisun Associates lease in February 2013.

- Central Bay: Hanson Leases PRC Nos. 709 (Presidio, Alcatraz North, and Point Knox North Shoals); 2036 (Point Knox South); 7779 (Point Knox Shoal); and 7780 (Alcatraz South Shoal).
- Suisun Bay/Delta: Suisun Associates Lease PRC 7781.
- Middle Ground Shoal, Suisun Bay: Privately owned parcel, TLS 39, owned by the Grossi family and not under SLC’s jurisdiction.

Ten-year leases were previously granted for PRC Nos. 709, 2036, 7779, 7780, and 7781, which expired on June 30, 2008. The Project applications for the leases proposed to increase the volume of sand currently permitted to be mined at the lease parcels as provided in **Table 1** below.

**Table 1: Currently Permitted, Baseline, and Proposed Annual Sand Mining Volumes (cy/yr)**

Region	Applicants Current Permit Limits	Baseline Volume (2002- 2007 Average) <sup>1</sup>	Proposed <sup>2</sup>	Difference (Proposed vs. Baseline Volume)
<b>SLC Central Bay Leases</b>				
<b>PRC 709.1:</b> Presidio, Alcatraz, and Point Knox Shoals (Hanson)	540,000	290,331	340,000	49,669
<b>PRC 2036.1:</b> Point Knox South (Hanson)	300,000	252,637	450,000	197,363
<b>PRC 7779.1:</b> Point Knox Shoal (Hanson)	400,000	390,440	550,000	159,560

PRC 7780.1: Alcatraz South (Hanson)	150,000	127,248	200,000	72,752
PRC 5871: (CEMEX) <sup>3</sup>	NA	80,383	NA	NA
Subtotal SLC Central Bay Leases	1,390,000	1,141,039	1,540,000	398,961 <sup>5</sup>
<b>Suisun Bay / Western Delta Leases</b>				
PRC 7781.1: Suisun Bay/Western Delta (Suisun Associates)	100,000	85,746	300,000	214,254
<b>Private Leases</b>				
Grossi Middle Ground: BCDC Permit 10-90 (Hanson)	500,000	0	50,000	50,000
Grossi Middle Ground: BCDC Permit 16-78 (M) (Jerico)	250,000	199,866	150,000	-49,866
Private Least Totals: Middle Ground	750,000	199,866	200,000	134
<b>ALL Lease Totals</b>	<b>2,240,000</b>	<b>1,426,650</b>	<b>2,040,000</b>	<b>613,349<sup>5</sup></b>

Notes: NA = Not Applicable

1 Refer to Table 1-1 for mining volumes by year at each parcel.

2 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.

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

4 Cells may not total exactly due to rounding.

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

Source: SLC September 2012 EIR

#### **ALTERNATIVES TO THE PROPOSED PROJECT**

The EIR analyzed a total of four Project alternatives: (1) No Project Alternative; (2) Long-term Management Strategy ("LTMS") Conformance Alternative; (3) Clamshell Dredge Mining Alternative; and (4) Reduced Project Alternative. The EIR identifies the Reduced Project Alternative as the environmentally superior alternative.

**1. No Project Alternative** - Under the No Project Alternative, the SLC would not issue proposed new mining leases. Mining would cease within the areas under the jurisdiction of SLC. In addition, other regulatory agencies would not renew permits to allow sand mining to continue at Middle Ground Shoal, which is privately held, after the expiration of current permits (e.g., the BCDC permits expire in July 2012).

**2. LTMS Conformance Alternative** - This alternative would require sand mining to comply with temporal and spatial restrictions on dredging contained in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region Management Plan 2001 ("LTMS Management Plan"). This alternative would place time and location restrictions on sand mining in conformance with the environmental "work windows" contained in the LTMS, which indicate when

dredging may occur in different parts of the Bay. All other aspects of this alternative, including Project Applicants (Hanson and Jerico), mining locations, off-loading locations, and mining volumes, would be the same as for the proposed Project.

**3. Clamshell Dredge Mining Alternative** - The Clamshell Dredge Mining Alternative would employ a method other than suction dredge mining for recovery of sand from the floor of the Bay and Delta. The method employed would use a clamshell bucket and crane. Clamshell dredging is accomplished by using a barge-mounted crane to lower a clamshell bucket to the sea floor until it sinks into the sediment. A bucket load of sediment is scooped up and brought back to the barge and deposited on it. Clamshell dredging does not require the creation of a slurry, and does not therefore use a large volume of seawater. The potential for entrainment of fish associated with suction dredge mining is consequently substantially reduced. Accidental capture or injury to fish is unlikely, as fish can avoid the bucket. The applicants do not own or currently operate any clamshell dredge mining equipment and would be required to purchase or rent this equipment to mine sand at the same volume as suction dredging. All other aspects of this alternative, including Project applicants, mining locations, off-loading locations, and mining volumes, would be the same as for the proposed Project.

**4. Reduced Project Alternative** –This alternative would reduce permitted annual mining volumes in all of the lease areas to a level equivalent to the baseline mining volumes (i.e., the 2002 to 2007 average mined at each Project parcel). Mining methods and off-loading would be the same as proposed, and mining would be conducted both by Hanson and Jerico.

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#### **ENVIRONMENTAL IMPACTS AND MITIGATION**

Based on initial scoping, the Project was anticipated to have no impact on the following resource areas:

- Aesthetics
- Agricultural Resources
- Geology and Soils
- Noise
- Population and Housing
- Public Services
- Transportation
- Utilities and Service Systems

After conducting an analysis in the EIR, it was determined that the Project would have less than significant impacts on the following resource areas:

- Hydrology and Water Quality
- Mineral Resources

The EIR found that the Project would have a *potentially* significant impact in the following areas:

- Biological Resources
- Hazards and Hazardous Materials
- Air Quality and Greenhouse Gases
- Cultural Resources
- Land Use and Recreation

In its CEQA Findings, the SLC determined that mitigation measures specified in the EIR and Mitigation Monitoring Program (attached to this summary) would avoid or substantially lessen the Approved

Project's significant environmental effect of the impacts in the areas of (1) Hazards and Hazardous Materials, (2) Cultural Resources, and (3) Land Use and Recreation.

Although the Applicants designed the Project to minimize environmental effects, the SLC imposed mitigation measures to further reduce impacts (see attached MMP). Even though the Approved Project was designed to further reduce impacts, the SLC determined that certain impacts to Biological Resources and Air Quality, including GHG emissions, could not be mitigated to below a level of significance (see Table 2).

**Table 2: List of Significant Impacts Identified for the Approved Project**

Impact	Impact Description
<b>BIO-8: Entrainment and mortality of delta and longfin smelt</b>	The Approved Project will result in a significant impact to delta smelt and longfin smelt as a result of entrainment and mortality during sand mining operations.
<b>AIR-1: Emissions of criteria pollutants</b>	The Approved Project will likely have greater air quality impacts than the proposed Project, since it is assumed that sand will be mined from the Bay and Delta only up to the volume of the baseline scenario and that the remainder of sand will be replaced with sand mined at land-based quarries (e.g., half from local quarries and half from British Columbia). Consequently, the Approved Project will indirectly result in higher total emissions of criteria pollutants, including PM10 and NOx than the Project as proposed. Within the Bay Area Air Basin (Basin), PM10 emissions will be higher, and NOx emissions will be lower than with the Project. Both PM10 and NOx emissions will likely be higher outside of the Basin, because of ocean transport of sand from British Columbia. The increase in PM10 in the Basin under the Approved Project will be significant. No feasible mitigation is available to the SLC to address the increase in emissions associated with non-Project-related importation of sand by vessels from outside the Project area (such as British Columbia) and/or increased production at land-based Bay Area quarries because these impacts to air quality are beyond its control and outside its jurisdiction; the impact would be significant and unavoidable. Should the applicants exercise the option to increase mining volumes to Proposed Project levels in the future, this indirect significant impact will be reduced to a level below significant.
<b>AIR-2: Potential impacts on climate change</b>	The Approved Project will indirectly result in higher emissions of GHGs compared to the proposed Project, mostly due to the assumed ocean transport of some sand to the Bay Area from British Columbia. This will be a significant impact. Since the increase in GHG emissions associated with the Approved Project will be from sources beyond the control and outside the jurisdiction of the SLC, Mitigation Measure AIR-2, which requires the applicants to report and reduce GHG emissions directly caused by mining activities, and which will reduce those GHG emissions to less than significant, will not be applicable, and the impact will be significant and unavoidable. Should the applicants exercise the

	option to increase mining volumes to Proposed Project levels in the future, this indirect significant impact will be reduced to a level below significant.
<b>AIR-3: Potential health risk from diesel particulate matter</b>	Since, under the Approved Project, sand offloading facilities would continue to be used to receive, stockpile, and ship sand or other aggregate materials, toxic air contaminant emissions in the vicinity of those facilities, and resultant human health risks, are assumed to be similar to the Project as proposed. However, a potentially significant indirect impact of the Approved Project relates to the assumed increase in production at Bay Area land-based quarries leading to higher health risks, since toxic air contaminant emissions from landbased quarries and land transportation may be more likely to impact residential developments and other sensitive receptors than offshore mining activities and ocean transportation; such human health effects could be significant. Because the operation of land-based quarries is beyond the control and jurisdiction of the SLC, no feasible mitigation measures are available, and the impact is considered significant and unavoidable. Should the applicants exercise the option to increase mining volumes to Proposed Project levels in the future, this indirect significant impact will be reduced to a level below significant.

**STATEMENT OF OVERRIDING CONSIDERATIONS**

For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable and the decision making agency may approve the underlying project (14 Cal. Code Regs. § 15092(b)(2)(B)). As described above, the EIR identified significant impacts of the approval of the Central Bay leases and the Suisun Bay lease, as well as Project alternatives, that cannot be feasibly mitigated to below a level of significance. Therefore, the SLC issued a Statement of Overriding Considerations in support of its October 2012 approval of the Central Bay leases and its February 2013 approval of the Suisun Bay lease.

**Alternatives and Mitigation Measures**

The SLC found that all mitigation measures identified in the EIR that are applicable to the Approved Project have been imposed to avoid or lessen impacts to the maximum extent feasible. The SLC also found that other alternatives analyzed in the EIR, the No Project Alternative, the Clamshell Mining Alternative, and the LTMS Conformance Alternative (described above), are infeasible or are not environmentally superior for the following reasons.

1. *No Project Alternative* – The SLC found that while the No Project Alternative could avoid most of the significant impacts of the Project, including the significant and unavoidable impact to delta smelt and longfin smelt, Impact BIO-8, it would require the Bay Area construction industry to acquire sand from other sources including land-based quarries in the Bay area and more distant sources such as British Columbia, with consequent increases in air emissions, including greenhouse gases (GHGs) and

diesel particulate matter. Therefore, the SLC determined that the No Project Alternative is not environmentally superior to the other alternatives or to the proposed Project.

2. *The LTMS Conformance Alternative* – The SLC found that the LTMS Conformance Alternative could reduce or avoid some impacts of the proposed Project, but that it could also result in significant unavoidable air quality impacts. This Alternative would limit mining seasonally, potentially resulting in more intensive mining during these periods and consequently greater daily emissions of criteria air pollutants and toxic air contaminants. For this reason, the SLC concluded that the LTMS Conformance Alternative was not the environmentally superior alternative.

3. *Clamshell Dredge Mining Alternative* - The SLC found that the Clamshell Dredge Mining Alternative, while potentially reducing biological resources impacts related to entrainment of marine organisms in the suction dredge, would be less efficient, potentially resulting in a longer duration of mining events and consequently increased emissions of criteria pollutants and diesel particulate matter. For these reasons, the SLC concluded that the LTMS Conformance Alternative was not the environmentally superior alternative.

4. *Reduced Project Alternative* – The Reduced Project Alternative would reduce the intensity of the Project's significant impacts, and would likely render mitigation measures easier to implement and achieve. Even though the Reduced Project Alternative may result in significant unavoidable air quality impacts associated with importing sand and obtaining sand from quarries, the overall intensity of impacts would be less than the other alternatives. Therefore, the Reduced Project Alternative is considered the Environmentally Superior Alternative.

Based on the analysis in the Final EIR, information provided by the Applicants, information obtained through the public review process, and other information in the record before the SLC, the SLC did not adopt the Reduced Project Alternative. In both the SLC's approval of the Central Bay leases and its approval of the Suisun Bay lease, it **adopted a modified version of the proposed Project, referred to as the "Reduced Project Alternative with Increased Volume Option," referred to as the "Approved Project."** For both the Central Bay and the Suisun Bay leases, the Approved Project consists of the Reduced Project Alternative with the option of increasing the volumes to the proposed Project levels upon the applicant's request and the submittal to the Commission of the following documents for each lease area: (1) a copy of the Incidental Take Permit ("ITP") issued by the California Department of Fish & Wildlife ("CDFW"); and (2) a letter to the SLC reciting submittal to the California Air Resources Board of its Compliance Plan and Demonstration of Compliance to Operate under Title 17, California Code of Regulations, section 93118.5. Upon meeting these conditions, the SLC's Executive Officer or his delegate must authorize the mining of the increased volumes as set forth in the Central Bay and Suisun leases and the EIR. **Table 3** below compares the proposed Project and Reduced Project volumes for the Central Bay and Suisun leases.

**Table 3 – Proposed Project Compared with Reduced Project Mining Volumes (cy/yr)**

<b>SLC Leases for Central Bay (Hanson)</b>	<b>Proposed</b>	<b>Reduced Project</b>
<b>PRC 709:</b> Presidio, Alcatraz, and Point Knox Shoals	340,000	290,331
<b>PRC 2036:</b> Point Knox South	450,000	252,637
<b>PRC 7779:</b> Point Knox Shoal	550,000	390,440
<b>PRC 7780:</b> Alcatraz South Shoal	200,000	127,248
<b>PRC 7781:</b> Suisun Bay/Western Delta	300,000	85,746
<b>Total: Central Bay and Suisun Leases</b>	<b>1,840,000</b>	<b>1,146,402</b>

**Overriding Considerations**

The SLC balanced the benefits of the Project against the significant unavoidable impacts that would remain after selection of the Approved Project and with implementation of all feasible mitigation in the EIR. The SLC found that the benefits of the Approved Project (summarized below) outweighed the significant and unavoidable adverse environmental effects of the Approved Project and considered such effects acceptable. Each benefit set forth below constituted an overriding consideration of the SLC warranting approval of the Project.

- Continuing the existing mining operations for 10 years under the Central Bay leases and Suisun lease will have numerous benefits to the State of California and Bay-Delta region, including generation of substantial royalties to the state.
- Issuance of the four Central Bay leases and the Suisun Bay lease under the Approved Project will continue to provide jobs for tug and barge operators and other employees associated with mining operations, that otherwise might be lost. This will benefit the Bay Area economy. If the sand mining leases were not approved, sand mining operations from the SLC lease parcels would cease. This may result in the loss of jobs associated with sand mining.
- Sand is delivered to a number of off-loading facilities located throughout the Bay and Delta. The combination of use of efficient suction dredge equipment for extraction of the sand resource from the Bay floor; barge transportation of large loads (up to 2,000 cubic yards) of sand to off-loading facilities located throughout the region; and the resulting relatively limited use of ground transportation to ship the material to its point of use, result in a relatively energy efficient means of producing and transporting construction aggregate. If the sand mining leases were not approved, meeting the San Francisco Bay region’s demand for construction aggregate would require obtaining sand from other sources, likely including quarries in the region as well as imports from Canada. These other sources would be able to meet demand, but with greater environmental consequences, particularly air quality impacts.
- A benefit of the Approved Project is that should mining increase to the Proposed Project volumes as anticipated, the Project’s indirect significant Air Quality impacts, AIR-1, AIR-2, and AIR-3 caused by acquiring sand from other sources, will be reduced to less than significant.
- The 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 would not be met if the sand mining leases were not approved.

7.0 Mitigation Monitoring Program

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)	<p>BIO-8a: Applicants shall implement operational measures to minimize the potential for entrainment and mortality of delta and longfin smelt.</p> <ul style="list-style-type: none"> <li>Timing of dredging relative to X2:</li> </ul> <p><u>To protect delta and longfin smelt and potentially eggs and young larvae from mortality related to entrainment, sand mining activities shall be restricted upstream of the X2 location (i.e., the location of 2 parts per thousand (ppt) salinity) from December 1 through June 30 each year. This location changes during the water year in response to river flows and its location is tracked on the following website: <a href="http://cdec.water.ca.gov/cgi-progs/queryDaily?X2">http://cdec.water.ca.gov/cgi-progs/queryDaily?X2</a>. The degree and duration of mining restrictions, and the specific locations where mining should be restricted during this sensitive seasonal period will be based on factors including the specific location of X2 relative to mining activities, species presence and relative abundance in the Project area based on sampling data from the nearest survey stations, and the overall status of the species (population trend).</u></p>	Suisun 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. <u>BCDC would be unable to issue new permits for sand mining – needed for the Project to proceed – prior to the CDFG issuing an Incidental Take Permit for the Project.</u>	CSLC / CDFG	Within 12 months of issuance of new leases approval.

Table 7-1. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<p><u>Specific seasonal restrictions will be set through consultation with the California Department of Fish and Game (CDFG) and would likely be a requirement of any Incidental Take Permit that may be issued for the Project.</u></p> <ul style="list-style-type: none"> <li>• <u>Current restrictions on sand mining operations;</u></li> </ul> <p><u>As specified in the National Marine Fisheries Service Biological Opinion (NMFS 2006) and the U.S. Fish and Wildlife Service Letter of Concurrence (USFWS 2006), serve to avoid and minimize take of delta smelt. Currently there are no Federal restrictions on longfin smelt. Due to similar life stages, however, State delta smelt restrictions and conditions will be applied to both smelt species. These conditions include restrictions on pump priming, limiting the total mining volume, prohibiting mining in areas of shallow water depth and in proximity to shorelines, restricting mining to the designated lease areas which are away from sensitive habitat, and monitoring and reporting the location of each mining event.</u></p> <ul style="list-style-type: none"> <li>• <u>Additional requirements and restrictions to minimize and avoid take.</u></li> </ul> <p><u>Will be set through consultation with the CDFG and would likely be a</u></p>					

7.0 Mitigation Monitoring Program

Table 7-1. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<p><u>requirement of any Incidental Take Permit that may be issued for the Project. To further minimize take, the Applicants shall keep the end of the pipe and drag head as close to the bottom as possible, and no more than three feet from the bottom, whenever feasible when priming the pump or clearing the pipe. Additional requirements and restrictions may be set through consultation with CDFG.</u></p>					
	<p><b>BIO-8b:</b> Applicants shall provide off-site mitigation to compensate for the impacts of the taking that may be unavoidable.</p>	<p>Suisun Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates; Central Bay.</p>	<p>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.</p>	<p>Evidence of a CDFG approved Incidental Take Permit and compliance with its conditions. <u>BCDC would be unable to issue new permits for sand mining – needed for the Project to proceed – prior to the CDFG issuing an Incidental Take Permit for the Project.</u></p>	<p>CSLC / CDFG</p>	<p>Within 12 months of issuance of new leases approval.</p>
<p><b>BIO-9:</b> Green sturgeon, Chinook salmon, and steelhead trout will be impacted during sand mining. (Class II)</p>	<p><b>BIO-9a:</b> Sand mining halted during peak Chinook salmon migration.</p>	<p>Suisun Bay and Western Delta lease areas, including Middle Ground Shoal and Suisun Associates.</p>	<p>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</p>	<p>Evidence that no sand mining has taken place during the peak outmigration period, as defined and reported by USFWS.</p>	<p>CSLC</p>	<p>Sand mining closure period to be determined prior to April 1 of each year. Confirmation of closure by June 1 of each year.</p>

Table 7-1. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
			(E-trac data) that no sand mining occurs during the peak outmigration period.			
	BIO-9b: Sand mining limited to daylight hours from January 1 to May 31.	Suisun 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.

7.0 Mitigation Monitoring Program

**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 California State Lands Commission and Army Corps of Engineers.	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, AIR-2, 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.