FINAL
MITIGATED NEGATIVE DECLARATION

SAND COMPATIBILITY & OPPORTUNISTIC USE PROGRAM
(SCOUP) PILOT PROJECT SITE

CITY OF OCEANSIDE
300 NORTH COAST HIGHWAY
OCEANSIDE, CALIFORNIA 92054

Prepared by:
EDAW, Inc.
1420 Kettner Boulevard, Suite 620
San Diego, California 92101

Under Contract to:
Moffatt & Nichol
3780 Kilroy Airport Way, Suite 600
Long Beach, California 90806
FINAL
MITIGATED NEGATIVE DECLARATION
FOR THE
SAND COMPATIBILITY AND OPPORTUNISTIC
USE PROGRAM (SCOUP) PILOT PROJECT SITE
CITY OF OCEANSIDE

Lead Agency:
City of Oceanside
300 N. Coast Highway
Oceanside, California  92054
Attn:  Jerry Hittleman

Other Interested Agencies:
California Coastal Sediment Management Workgroup
135 Ridgeway Avenue
Santa Rosa, California  95401
Attn:  Clif Davenport

and

San Diego Association of Governments (SANDAG)
401 B Street, Suite 800
San Diego, California  92101
Attn:  Shelby Tucker

Prepared by:
EDAW, Inc
1420 Kettner Boulevard, Suite 620
San Diego, California  92101
Attn:  Teri Fenner

For:
Moffatt and Nichol
3780 Kilroy Airport Way, Suite 600
Long Beach, California  90806
Attn:  Chris Webb

December 2005
PREFACE

This is a Final Mitigated Negative Declaration (MND), prepared pursuant to the California Environmental Quality Act (CEQA), addressing potential environmental consequences of the implementation of the Sand Compatibility and Opportunistic Use Program (SCOUP) Pilot Project in the City of Oceanside. The Draft MND was circulated for public review for a 30 day period that concluded on September 29, 2005. The California Department of Fish and Game was the only agency to provide a comment letter and another comment letter was submitted by an individual (Ms. Diane Nyaard). Both comment letters and responses to those letters are provided following this preface. The MND was provided to the State Clearinghouse and documentation regarding its distribution of the document is included as well.
Response to State Clearinghouse letter

Comment 1

This comment letter has been received and noted. No response is necessary.
**Document Details Report**

**State Clearinghouse Data Base**

**SCH#** 2009081126

**Project Title** Sand Compatibility and Opportunistic Use Program (Scoop) Pilot Project

**Lead Agency** Oceanside, City of

<table>
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<th>Type</th>
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<tr>
<td>Description</td>
<td>The proposed project is placement of up to 156,000 cubic yards per year of sand on a portion of the beach in the City of Oceanside over a 5-year permit period. The plot project is generally located from Oceanside Boulevard to just north of Loma Alta Creek, a distance of approximately 1,700 feet.</td>
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**Lead Agency Contact**

<table>
<thead>
<tr>
<th>Name</th>
<th>Jerry Hittman</th>
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<tbody>
<tr>
<td>Agency</td>
<td>City of Oceanside</td>
</tr>
<tr>
<td>Phone</td>
<td>750-430-3335</td>
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<tr>
<td>Fax</td>
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<tr>
<td>Address</td>
<td>300 North Coast Highway</td>
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<td>City</td>
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<td>State</td>
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<td>Zip</td>
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**Project Location**

<table>
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<td>City</td>
<td>Oceanside</td>
</tr>
<tr>
<td>Region</td>
<td>Oceanside</td>
</tr>
</tbody>
</table>

| Cross Streets | Oceanside Boulevard and Pacific Street |
| Parcel No. | |
| Township | |

**Proximity to:**

| Highways | 76 |
| Airports | San Diego North Field |
| Railways | Pacific Ocean and Loma Alta Creek |
| Waterways | |
| Schools | Beach / Open Space / Open Space |

**Project Issues**

- Aesthetic/Visual
- Air Quality
- Coastal Zone
- Drainage/Abatement
- Geologic/Seismic
- Minerals
- Noise
- Recreation/Parks
- Traffic/Circulation
- Water Quality
- Wildlife

**Reviewing Agencies**

- Resources Agency; Department of Fish and Game, Region 3; Department of Fish and Game, Marine Region; California Coastal Commission; Department of Boating and Waterways; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 11; Native American Heritage Commission; State Lands Commission; Regional Water Quality Control Board, Region 3

**Date Received** 08/25/2005  
**Start of Review** 09/23/2005  
**End of Review** 09/23/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.
Response to California Department of Fish and Game letter

Comment 2

The text of the Final MND has been clarified to confirm that if any grunion are present, the monitor will coordinate with CDFG and NOAA Fisheries to determine the appropriate action. The text has also been expanded to reflect the results of grunion monitoring activities which occurred for the RBSP in spring 2001, in close coordination with CDFG staff. In that several month period, there were 10 grunion monitoring events. Of those, two events had no grunion. Another two events were determined to be substantial based on the number of individuals (ranging from 3,000 to over 45,000) and the receiver site footprint was modified in consultation with CDFG. In the remaining six events, a small number of individuals were sighted and CDFG concurred these were not substantial events. The beach nourishment activities proceeded as planned.
beach building activities can have negative impacts on these organisms and habitats. The proposed project includes a monitoring program (for grunion, turbidity, beach profiles, and surf conditions) that will provide data to confirm no significant impacts or to modify the project as necessary. Page 16 of the MMD describes the monitoring program to detect spawning grunion and measures to avoid impacts to grunion. The third paragraph states that if a grunion run is substantial, described as an event involving thousands of fish, avoidance measures would be taken. These measures include placement of sand above high tide line or in the nearshore zone, and avoiding the mapped spawning area. The paragraph further states that if a grunion run is not substantial, then beach nourishment would proceed as planned. The Department disagrees with this latter statement. We believe that if grunion are present, regardless of the numbers of fish, coordination with the Department and avoidance measures must be taken. Additionally, it should be noted that placement of sand in the nearshore zone must not impede grunion’s access to the beach for spawning.

As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To arrange for a discussion please contact Ms. Marilyn Fluharty, Environmental Scientist, California Department of Fish and Game, 4848 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

John Ugoretz
Nearshore Ecosystem/MLPA Coordinator
Marine Region

State Clearinghouse, Sacramento (original sent to Lead Agency)
Marilyn Fluharty, Department of Fish and Game, San Diego
Robert Hoffman, NOAA Fisheries, Long Beach
Kurt Roblik, FWS, Carlsbad
Response to Letter from Diane Nygaard

Comment 3a

The Environmental Checklist included in the MND addresses mitigation measures associated with the project in the specified discussions for air quality and noise as well as providing a summary table in Section XVIII “Mitigation Measures.” In addition, Section 8 of the MND provides a description of the monitoring programs associated with the project to be implemented to prevent adverse impacts to biological resources (grunion), water quality (turbidity), and recreation (surf conditions). The monitoring program also requires beach profiles to track sand movement before and after nourishment. Other design features related to trucking, pedestrian safety and other issues are listed in Section 8. The Final MND has been clarified that these would be made project conditions for any future specific beach nourishment activity. Further, the summary table in Section XVIII “Mitigation Measures” has been revised to include the monitoring programs.

Comment 3b

As noted in Section 8 of the MND, the project consists of placing up to a maximum total of 150,000 cy/yr of sand on the Oceanside pilot site over 5 years based on the availability of material. However, the project would start with relatively small-scale projects of 5,000 to 20,000 cy for each of the first 2 years for a maximum total of 490,000 cy over 5 years. The MND also notes this site received 400,000 cy as part of the RBSP in one year. These are not significantly different totals.

Comment 3c

It it true that the land side issues associated with the SCOUP project (trucking, stockpiling etc.) were not relevant in the RBSP EIR/EA
because that project had a different sand source and delivery method. However, the MND does disclose potential impacts associated with the terrestrial components of the SCOUP project and there are relevant design features and mitigation measures that will be made project conditions to reduce those impacts to below a level of significance.

**Comment 3d**

As noted in the MND, annual monitoring reports for the (RBSP) have been prepared for SANDAG by Coastal Frontiers Corporation and AMEC and are available at www.sandag.org. The monitoring conclusions are briefly stated in Section 8 of the MND. The intent of the RBSP monitoring was to verify no significant impacts and that conclusion has been supported. The monitoring and mitigation measures in the RBSP were unique to that project, although data collected on sediment processes in the Oceanside littoral cell is appropriate for reference in this MND. The design features and monitoring programs for the SCOUP project are based upon the lessons learned from RBSP and others in southern California, and the potential impacts associated with this unique project. A consolidated list is provided in Section XVIII of the MND.

**Comment 3e**

The MND is very clear that the sand characteristics such as quantity, percent fines, etc, are maximums, not recommendations (See Table1 of the MND).

**Comment 3f**

Based upon the assumption of 15,000 cy per week, and each truck holding 14 cy, then the weekly truck trip volume is 1,071. Therefore, under the assumption of 6 work days, the daily trip number is 179. In spring/summer season the number of work days would reduce to 5 but the allowable quantity of material would also be less. Refer to Table 2 of the MND.
Comment 3g

The comment has been received and noted. The text has been revised and no further response is necessary.

Comment 3h

City staff has recommended that the up to 5-acre stockpile site occupy an area within the 15 acre green waste area. The stockpile site and green waste area would be separated with appropriate signage and traffic control measures. Circulation of trucks will be determined for each project with a traffic control plan to be approved by the City prior to construction.

Comment 3i

The maximum percent fines and amount of sand to be placed is provided in Section 8 and Table 1 of the MND; however, it is not a part of the monitoring program. Because of the opportunistic nature of the program it is highly likely that individual nourishment events will generate much less than 150,000 cy so the City will have to track beach nourishment over the course of a year to ensure that the total opportunistic material doesn’t exceed 150,000 cy in a year. There will be turbidity monitoring.

Comment 3j

The El Corazon stockpile site would not be located in the restored habitat area along Oceanside Boulevard. If the green waste site is relocated, the stockpile site would still be located with the green waste facility and further applicable review of siting issues would be conducted as part of the environmental analysis for El Corazon.

Comment 3k

The requirement to monitor turbidity in the morning is based on observing potential turbidity during calm conditions and optimal
light conditions for photography and visual observations. Turbidity monitoring is also required in the late afternoon after work has occurred and wind has caused turbulence and mixing of the surface, but photography and observations can be more difficult due to glare.

Turbidity may occur if the ocean is in contact with the material placed at the beach, regardless of whether earthmoving equipment is working at the site. The only way to reduce turbidity at the coast for this type of project is to reduce the application rate of sand at the beach. No technical devices (e.g., silt curtains) function in the surf zone at this location due to damage by waves. Construction techniques such as containment dikes function to manage turbidity for hydraulic pumping operations, but would not apply for this program as it is anticipated to rely mainly on dry land earthmoving operations to apply material to the shoreline. Based on observations of turbidity made for several other similar projects, turbidity was minimal and no measures to reduce turbidity were required, so this conclusion is expected to apply to this project as well. If turbidity is severe, sand application will be decreased or halted temporarily.

**Comment 3l**

As noted in Section 8 of the MND, turbidity monitoring and water quality standards will be specified in the 401 Water Quality Certification to be issued for this project by the Regional Water Quality Control Board (RWCQB). The 401 Certification is also identified as a permit in Section 10 of the MND. Permits identified for this project are separate from the previous SANDAG project because the methodology is different.

**Comment 3m**

The estimated number of truck deliveries per hour is 18. The length of beach to be worked on at any give time is anticipated to be approximately 200 feet, requiring nearly one week to fill. Upon completion of construction at this example reach of beach, this reach
would reopen to the public and construction would shift to an adjacent 200-foot-long reach of beach.

The number of earthmovers and rate of earthmovers traveling to and from the drop point may vary depending on the project size and the type of equipment the contractor will employ. However, a recent opportunistic sand project occurred at San Clemente on June 13 through 16, 2005 when 5,000 cubic yards of material were delivered from the Santa Ana River to North Beach. That project required two front end loaders to carry sand from the drop point to the placement zone, and one bulldozer to sculpt the final grades. The loaders have buckets that hold 7 cy of sand, thus to move 5,000 cy of sand the total number of trips for loaders was 714. This number is equal to 357 trips each for two loaders for three days, or 119 trips per loader per day, or 12 trips per hour, or 1 trip every 5 minutes on average. For a maximum sand movement operation at South Oceanside, loader trips will probably increase by 50 percent for a loader trip every 3.5 minutes on average.

Alternatively, Seal Beach received 30,000 cy of sand from the Santa Ana River in 1995. The contractor used one front end loader, two scrapers, and one bulldozer to spread the sand over two weeks. The scrapers each held 30 cy, so 1,000 total trips were required on the beach over 10 working days, or 100 trips per day. This equates to 50 trips per day for each scraper over a 10 hour period, or 5 trips per hour, or one every 12 minutes. Scrapers are larger and cause more vibration and noise than front end loaders.

As stated in the Draft MND under Section XI “Noise” in the Environmental Checklist, the City does not have a construction noise limit and the construction hours are prohibited from 6:00 pm to 7:00 am weekdays, during all weekends, and all federal holidays. These restrictions are based on Grading Ordinance Section 515 and the City Engineer may permit operations outside of these limits if not detrimental to health, safety or welfare.
Noise will be temporary and of short-duration and therefore not considered significant. The project requires mufflers, tuned engines, no idling for extended periods of time. As stated in the MND, when this equipment is close to a residence, the short term noise level may exceed 75 dBA, and at this level, could result in speech interference for residents outside the rear of their homes. Because the equipment moves close to a residence, and then further away, the noise levels will vary, and the average hourly noise level of 75 dBA, which is the standard used to identify a significant impact, would not be anticipated to be exceeded.

**Comment 3n**

As noted in Section 10 of the MND, a traffic control plan would be required by the City. A traffic control plan for the contractor of each operation is required for approval by the City that will specify all aspects of safe transport of material considering queuing, coordination of deliveries using flagmen, radio communications between drivers and a traffic coordinator, etc. This plan is intended to preclude impacts to traffic/circulation. The text has been clarified in the Final MND to expand upon how the traffic control plan and haul route permit would address operational rules.

**Comment 3o**

Table 4 in the Final MND has been updated with traffic volume from June 2004 and the LOS determination has been revised per Table C-2 of the City’s Circulation Element. As noted, the 2004 traffic data does not include a number of trips for the segment west of Coast Highway, so the 1995 data is provided. The traffic impact analysis has been clarified to reflect the more current data. There are no new significant impacts.

**Comment 3p**

The City would finalize a public outreach element of the project to incorporate a method to report problems. As suggested, one
component would be a telephone number for complaints, comments, and questions. That contact information would be posted prominently at the site. Input from that log of complaints, comments, and questions would be used to improve project operations throughout the project life. Section 8 of the MND has been revised to reflect this change.

**Comment 3q**

I-5 is a Congestion Management Program (CMP) roadway. The CMP was first adopted on November 22, 1991, and is intended to link directly, land use, transportation and air quality through Level of Service performance. Local agencies are required by statute to conform to the CMP.

The CMP requires an Enhanced CEQA Review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. The SCouP project is expected to generate a maximum of 179 ADT and 22 peak hour trips, thus, a CMP review would not be required by these criteria.

In 1993, the Institute of Transportation Engineers California Border Section and the San Diego Region Traffic Engineer’s Council established a set of guidelines to be used in the preparation of traffic impact studies that are subject to the Enhanced CEQA review process. These guidelines were updated in January 2003. This published document is titled *2002 Congestion Management Program Update*. The guidelines require that a project study area be established as follows:

- All streets and intersections on CMP arterials where the project will add 50 or more peak hour trips in either direction.
- Mainline freeway locations where the project will add 150 or more peak hour trips in either direction.

As stated above, peak hour trips would not exceed 22 in one direction. Therefore, no Enhanced CEQA review would be required.
Section XV “Transportation/Traffic” of the Environmental Checklist has been revised.

**Comment 3r**

The Sprinter rail line is currently under construction, from east to west, and will provide 22 miles of transit service generally along the Highway 78 corridor. There will be 13 stops between the Escondido Transit Center and the Oceanside Transit Center. The Coast Highway Station is proposed at the corner of Coast Highway and Godfrey Street which is one block south of Oceanside Boulevard. The Sprinter is scheduled to be open by December 2007 (per www.gonctd.com on October 18, 2005), but large-scale construction projects such as this are commonly delayed. Therefore, during the five year pilot project, the Sprinter will be operational but the exact timing is uncertain. Given that each beach nourishment activity must obtain a haul route permit with a traffic control plan, an operational process will be defined to minimize potential issues between truck traffic and transit activity. Also see response to Comment 3n.

**Comment 3s**

Section 10 of the MND discusses specific approvals from public agencies. All permit conditions will be satisfied. See Comment 3a for further discussion.
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INTRODUCTION

This document is a Mitigated Negative Declaration (MND) prepared to address the potential environmental effects of placing up to 150,000 cubic yards per year (cy/year) of sand on a portion of the beach in the city of Oceanside over a 5-year permit period. This represents a pilot project site for a larger, regionwide opportunistic sand\(^1\) replenishment program for the northern San Diego region (Oceanside littoral cell), which in turn is meant to provide guidance for other regional programs within California. The pilot project site is located generally from Oceanside Boulevard to just north of Loma Alta Creek, a distance of approximately 1,700 feet or 0.3 mile. There may be scenarios where nearshore sand placement could occur based on the type of opportunistic material. Here, activity may occur generally between Forster Street and Kelly Street, a distance of nearly 4,000 feet. This is very near the location where approximately 420,000 cy of material was placed in summer 2001 as part of the San Diego Regional Beach Sand Project.

The quantity of material to be placed on the beach would be guided by the placement season (fall/winter versus spring/summer) and the characteristics of the opportunistic material. This document evaluates a maximum sand quantity of 150,000 cy of material assuming available material with 25 percent or less fine matter.\(^2\) If material is available with a greater percentage of fines (up to 45 percent), a maximum of 50,000 cy of the finer material could be placed per year, but no more than 150,000 cy could be placed in any calendar year. Because this site would receive opportunistic material from currently unknown sources, and because this is a pilot project, the program would be initiated with small-scale events (5,000 to 20,000 cy each year for the first 2 years) followed by monitoring. The monitoring of these smaller-scale projects will provide data to the City and the resource agencies to assess potential impacts and to modify the program if needed to ultimately increase project sizes (up to 150,000 cy/year), while maintaining environmental sensitivity.

This document considers the potential environmental effects of placing the sand on the beach under the California Environmental Quality Act (CEQA). CEQA requires that the potential environmental effects of a program be evaluated prior to implementation. The document also provides information that may be utilized by the U.S. Army Corps of Engineers (USACE), or other federal agencies, to support their evaluation of the project under the National Environmental Policy Act (NEPA).

\(^1\) Opportunistic beach fill is material that becomes available as a surplus from construction projects and is therefore available at no or relatively low cost compared to costs of material used primarily for beach enhancement or nourishment. Examples of opportunistic beach fill are the by-products of excavation for upland development, transportation projects, wetland restoration, flood control projects, and harbor and channel dredging.

\(^2\) Fine material is defined as silt and clay particles small enough to fit through a number 200 sieve.
ENVIRONMENTAL CHECKLIST

1. **Project title:**
   
   Sand Compatibility and Opportunistic Use Program (SCOUP) Pilot Project Site, City of Oceanside

2. **Lead agency name and address:**
   
   City of Oceanside Planning Department  
   300 N. Coast Highway  
   Oceanside, CA 92054-2885

3. **Contact person and phone number:**
   
   Jerry Hittleman, City of Oceanside  
   (760) 435-3535 (phone)  
   (760) 754-2958 (fax)

4. **Project location:**
   
   The city of Oceanside is located approximately 35 miles north of San Diego along the Pacific Coast and consists of 3.5 miles of public beaches (Figure 1). The Oceanside pilot project site footprint for optimum sand sources would generally be the stretch between Oceanside Boulevard and the Loma Alta Creek mouth. There could be other beach nourishment designs for less than optimum material and they could have a footprint generally between Forster Street and Kelly Street. There is an existing concrete ramp at the terminus of Oceanside Boulevard that provides vehicular access to the beach and has been used in the past to deliver beach sand. The stockpile site is located at El Corazon, east of El Camino Real on Oceanside Boulevard. The locations of all of these project features are illustrated in Figure 2. Figures 3 and 4 provide more detail about the project site relative to the possible beach fill design options. As shown, the beach berm placement of material would occur in the footprint defined by Oceanside Boulevard and Loma Alta Creek (Figure 3). If less than optimum material is placed in the nearshore, then placement may stretch over 4,000 feet between Forster Street and Kelly Street (Figure 4).

5. **Project sponsor’s name and address:**
   
   City of Oceanside  
   300 N. Coast Highway  
   Oceanside, CA 92054-2885  
   (760) 435-5106 (phone)

6. **General plan designation:**
   
   Open Space

7. **Zoning:**
   
   Open Space
Figure 2
Proposed Project Features
Figure 3
Site Plan for Potential Beach Fill - Option 1

Legend
20:1 Horizontal: Vertical Slope
Slope Symbol

Note:
All Dimensions And Elevations
In Feet

Existing
Profile 05-09.30
(Refer To Beach Profiles) (Figure 5)

Existing
Sewer Outfall

To Depth
Of 105"
Figure 4
Site Plan for Potential Beach Fill - Option 2

Legend

Maximum Nourishment and Working Area (Option 2)

Note:
All Dimensions and Elevations Shown Are in Feet Unless Otherwise Noted.

Source: Moffatt & Nichol, Engineers 2005
8. **Description of project:**

**General**

Beach nourishment provides erosion control, recreational benefits, and habitat enhancement. The purpose of the project is to capitalize on opportunities to obtain beach-quality sand from construction, development, or dredging projects in the region when it becomes available. Approval of the CEQA document and subsequent receipt of permits would allow quick and efficient placement of material as it becomes available in the next 5 years. This efficiency makes opportunistic material a viable sand source. The project would be implemented as a pilot study site in south Oceanside. It would be monitored over time so that it may be modified, with agency consent, to maintain minimal environmental impacts while maximizing nourishment of the littoral zone.

**Background**

The San Diego Association of Governments (SANDAG) currently supports the California Department of Boating and Waterways and the California Sediment Management Workgroup (CSMW) in development of the California Coastal Sediment Management Master Plan (Sediment Master Plan). The goals of the Sediment Master Plan and related studies is to develop a process that helps to manage sand on a regional or littoral cell basis. The current intent is to establish a process whereby opportunistic material with less-than-optimum sand can be evaluated for compatibility and placed on a predetermined beach receiver site under a 5-year program. Appropriate environmental clearance and permits would be prepared in advance so that when materials become available, there is minimal delay in placement. Similar programs have been, or are being, established elsewhere in California. One is in the city of San Clemente and another along the south-central coast (Santa Barbara and Ventura counties). A Final MND for the San Clemente Beach Replenishment Program was approved by the City of San Clemente in December 2002 and an MND was certified by the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) joint powers agency for the Santa Barbara/Ventura county project in 2001. Additionally, the USACE Los Angeles District issued a Public Notice in November 2004 regarding the issuance of a Regional General Permit (RGP) for streamlining beach nourishment activities in Los Angeles. These documents have been referenced in the preparation of the MND for this project.

SANDAG and the CSMW have contracted with Moffatt and Nichol (M&N) to prepare a Sand Compatibility and Opportunistic Use Program (SCOUP) for the San Diego region that may then be modified for statewide implementation. SCOUP is being implemented in six steps as follows:

1. Establishing a process for use of optimum and less-than-optimum sand-size material;

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3 Information about the CSMW and Sediment Master Plan can be found at [http://dbw.ca.gov/csmw/sedimentmasterplan.htm](http://dbw.ca.gov/csmw/sedimentmasterplan.htm).
4 A littoral cell is defined as a reach of shoreline in which all sediment transport processes are related. In theory, it has zero alongshore sediment flow past its updrift and downdrift boundaries. It may contain several sand sources and sinks (Kamphuis 2000).
5 Optimum beach fill material is material that is compatible with the dry beach portion of the beach profile. The fines fraction of the grain size of this material can be within 10 percent of that of the existing dry beach sediments, which typically range from 0 percent to 5 percent fines. Therefore, optimum beach fill material may contain up to 15 percent fines.
2. Establishing a method to characterize beach and source sand for compatibility;
3. Identifying economically feasible source areas;
4. Identifying appropriate receiver sites and, if appropriate, storage sites;
5. Identifying appropriate placement techniques; and

Steps 1 through 3 have been completed and are documented in the Sand Compatibility and Opportunistic Use Program Plan or SCOUP Plan (M&N 2005). The SCOUP Plan also identifies Oceanside as an appropriate pilot project site for steps 4 through 6 and provides technical information regarding the receiver site, a storage location, and placement techniques. Accordingly, this MND is based on the information in the SCOUP Plan (step 6). Permitting is not included in this program; however, permits must be obtained prior to implementation and the City of Oceanside is pursuing the permits associated with this receiver site.

SANDAG previously implemented the Regional Beach Sand Project (RBSP) in spring and summer of 2001. That project placed over 2 million cy of clean beach-quality sand on 12 beach receiver sites from Oceanside to Imperial Beach. Sand was dredged from five offshore borrow sites. The dredged material was piped onshore and earthmoving equipment was used to spread the sand on the beach. While the dredged material varied by borrow site, all was good-quality beach sand with typically about 10 percent fines, and up to 15 percent fines in some pockets.

The potential environmental effects of the RBSP were evaluated in the Final Environmental Impact Report/Environmental Assessment (EIR/EA) for the San Diego Regional Beach Sand Project (SANDAG and U.S. Department of the Navy 2000). The EIR/EA concluded that the project would not have any significant effects on the environment, but SANDAG was committed to both a short-term (construction) and long-term (5-year) monitoring program to verify that conclusion, as well as to provide additional data regarding actual beach nourishment sand transport compared to coastal engineering models. Monitoring was performed during construction for turbidity, spawning grunion, and underwater archaeology resources and no adverse construction impacts were identified. Post-construction monitoring of lagoons and offshore biological resources (kelp, rocky intertidal habitat, and subtidal habitat) continues through 2005. Annual reports are available at www.sandag.org/environment. To date, monitoring has confirmed no adverse impacts and has provided extensive information about marine resources and sand transport.

Additional monitoring at specific locations was sponsored by individual jurisdictions. The City of Encinitas sponsored biological monitoring at six locations: three that received sand as part of the RBSP and three that did not. The monitoring occurred for 3 years after sand placement. Overall, monitoring found an improvement in biological resource use of beach habitat at receiver sites (SAIC 2005).

The proposed pilot study site is identical to the South Oceanside site evaluated in the RBSP EIR/EA and the recipient of over 400,000 cy of material in 2001. Key differences are the source(s) of the sand, the sand characteristics, and the method of transport. The SCOUP Plan

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6 Less-than-optimum beach fill material is material that is not compatible with the dry beach, but is compatible with material within the nearshore portion of the receiver site. The fines fraction should be within 10 percent of that of the existing nearshore sediments that exist along a profile. Typically, the percent fines of the nearshore portion of a beach profile in California can range from 5 percent to 35 percent fines. Therefore, less-than-optimum beach fill material may contain between 15 percent and 45 percent fines.
also proposes a monitoring program for the Oceanside pilot study site, which is described in more detail in this text.

This location has also received sand in other years. In 1982, just over 920,000 cy was placed and in the mid-1990s an additional 2,000 cy were placed as part of the City’s Trash for Sand program (City of Oceanside 1996).

Sand Quantities and Qualities

The project consists of placing up to a maximum total of 150,000 cy/yr of sand on the Oceanside pilot site. However, the project would start with relatively small-scale projects of 5,000 to 20,000 cy for each of the first 2 years, followed by monitoring. The monitoring program would provide data to the City and resource agencies to confirm no significant impacts or modify the project as needed. The El Corazon stockpile site is for temporary storage of suitable beach sand if the rate of sand supply to Oceanside’s beaches exceeds the permitted beach placement rate according to the proposed program, or if some opportunistic sand quantity is too small to be cost effective for delivery. That small quantity may be stored and combined with other opportunistic sources.

The annual maximum quantity is linked to the percentage of fine-grained particles (or fines) in the opportunistic material. The ultimate 150,000 cy/yr is based on a maximum proportion of fines of 25 percent, with the remaining 75 percent being sand. This material would be placed on the beach out to the water line or the seaward limit based on conditions at the time of construction. The ultimate program also allows for placement of an annual maximum of 50,000 cy of less-than-optimal material (fines up to 45 percent). That material would only be placed below the mean high tide line to allow the fines to be winnowed away and deposited offshore, leaving the sand behind on the beach. Use of material with up to 45 percent fines is considered appropriate because the fraction of fines that exists in beach sediments at depths of -30 mean lower low water (MLLW), where fines would eventually settle, is between 30 and 35 percent fines. The USACE recommends placing material with not more than 10 percent fines greater than what exists at the placement site, so 40 to 45 percent fines would be reasonable at this offshore depth.

If both optimum and less-than-optimum material is placed, the total annual quantity still may not exceed 150,000 cy overall. In the first 2 years, when the maximum quantities would be lowest, no more than one-third of the material could be less than optimum, or no more than 1,650 to 6,600 cy.

The SCOUP Plan defines a very specific process for evaluating opportunistic sources to determine if they are appropriate for beach nourishment. Oceanside would require sampling of the material and would analyze it prior to placing it on the beach. Any sample not meeting these predetermined City standards would be rejected. The sediment characterization and comparison protocols are provided in Chapter 5 of the SCOUP Plan. Criteria for determining suitable beach sand include that the material:

- Cannot be suspected of containing hazardous chemicals based on EPA Tier I assessment;
- Must be free of trash and debris based on visual inspection;
- Must reasonably match the color of natural beach sand after exposure to the marine environment;
• Must be less than 10 percent manufactured sand;
• Must be a minimum of 55 percent sand, optimally 75 percent sand or greater; and
• Must not form a hardpan after placement.

Although sand color is not an engineering or environmental factor, it must be considered for aesthetic reasons and public perception. In July 1996, darker-colored, excavated material was placed over white sand at Ponto Beach, Carlsbad, California. The material was placed above the reach of the tides and was not initially exposed to reworking by waves. While above the reach of the tides, it formed a soil-colored (red) hardpan and was unsightly and uncomfortable to local beach users. In April 1997, earthmoving equipment pushed the material into the water and the fines dispersed leaving the beach-colored sand behind. If the City were to find acceptable beach material that is significantly darker-colored than the existing beach sand at the pilot site, it would be placed within reach of the tides and waves. This placement design is appropriate for both less-than-optimum and optimum sand sources.

The rate of sand placement on the beach is also proposed to replicate nature as closely as possible (Table 1). Natural sediment delivery to the coast occurs during the wet season (fall and winter); therefore, as much as 100 percent of the beach fill volume (150,000 cy/yr with less than 25 percent fines) is proposed to occur in the fall and winter seasons (September through March). Coastal watersheds naturally yield sediment from rain runoff in the wet season and the coastal zone is acclimated to this seasonal turbidity pattern. No more than one-third of sand material (50,000 cy/yr with less than 25 percent fines) would be placed on the beach in spring and summer months (April through September). This season has the highest beach usage for recreation but is also the most active construction season. Restricting all placement to avoid summer months could result in substantial missed opportunities and operational inefficiencies (more stockpiling and less direct delivery to the beach). All of the less-than-optimum sand would have to be placed in the fall/winter seasons due to the anticipated turbidity plume to be generated.

Table 1

<table>
<thead>
<tr>
<th>Percent Fines</th>
<th>Percent Fines</th>
<th>Time Period</th>
<th>Maximum Quantities (cy) per Season</th>
<th>Maximum Annual Quantity (cy) in Calendar Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25%</td>
<td>Per Week</td>
<td>Fall/Winter (Sept 21 – Mar 21)</td>
<td>15,000</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td>Per Year</td>
<td>Spring/Summer (Mar 22 – Sept 20)</td>
<td>8,333</td>
<td></td>
</tr>
<tr>
<td>Between 26%</td>
<td>Per Week</td>
<td>Fall/Winter (Sept 21 – Mar 21)</td>
<td>150,000</td>
<td>150,000 cumulative</td>
</tr>
<tr>
<td>and 45%</td>
<td>Per Year</td>
<td>Spring/Summer (Mar 22 – Sept 20)</td>
<td>50,000</td>
<td></td>
</tr>
</tbody>
</table>

Note: The cumulative total of all sand, regardless of percent fines, is 150,000 cy per year.

Sand Delivery Methods and Stockpiling

Sand would most likely be delivered by truck from upland areas. Trucks were used to deliver sand to this same beach location in 1982 and 1998. It is assumed that the material would be generated locally by construction projects. Rather than being trucked to upland disposal sites, it would be trucked immediately to the receiver site or trucked to the stockpile location at El Corazon for later delivery. There is an existing concrete ramp at the terminus of Oceanside Boulevard that has been used previously for truck deliveries.
For this project, it is assumed trucks would travel west on Oceanside Boulevard, enter the beach at the ramp, and deposit their load for disbursement by earthmoving equipment (Figure 5).

![Photo. © K. Adelman 2002 California Coastal Records Project](image)

**Figure 5. Truck Access to the Oceanside Pilot Site via Oceanside Boulevard**

There are several possible scenarios for trucks to exit the beach and return to the stockpile location or construction site, fill with another load, and return to the pilot site. Figure 2 shows the proposed haul routes that could be utilized for this pilot program; the contractor would be allowed to select and coordinate one of these haul routes with City staff. Empty trucks could possibly turn around on the beach and return up the Oceanside Boulevard ramp. Alternatively, they could dump their load and then continue south on the sand to exit the beach at one of two existing city easements currently used for city maintenance and lifeguard vehicles. One is located at the sewer outfall line 1,500 feet north of Loma Alta Creek and the other immediately adjacent to the south side of Loma Alta Creek at Buccaneer Beach (Figure 2). The sewer outfall easement north of Loma Alta Creek may only be utilized if there is sufficient sand cover, per the judgment of the Beaches & Harbor Department, to ensure no damage to the buried outfall. Trucks would then follow Pacific Street either north to Oceanside Boulevard or south to Cassidy Street, north to Coast Highway, then Vista Street to I-5. Trucks would be restricted on Cassidy Street east of Coast Highway.

Hauling would be allowed between 8:00 a.m. and 4:00 p.m. a maximum of 6 days a week (Monday through Saturday) in fall/winter and 5 days a week (Monday through Friday) in the spring/summer months. The number of truck trips generated by a maximum 1-week placement of sand in either winter or summer seasons is provided in Table 2.
Table 2
Proposed Number of Truck Trips and Frequency\(^1\)

<table>
<thead>
<tr>
<th>Season</th>
<th>Max. volume sand placed weekly (per Table 1)</th>
<th>Maximum No. weeks construction</th>
<th>Maximum weekly truck trips</th>
<th>Maximum daily truck trips</th>
<th>Maximum hourly truck trips</th>
<th>Average time between trips (minutes)(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall/Winter</td>
<td>15,000</td>
<td>10</td>
<td>1,071</td>
<td>179</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Spring/Summer</td>
<td>8,333</td>
<td>6</td>
<td>595</td>
<td>99</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^1\) Assumes a twin trailer belly-dump truck holding 14 cy, an 8-hour workday (8:00 a.m. to 4:00 p.m.), and no work on holidays or holiday weekends of Memorial Day or Labor Day. In fall/winter, trucks would operate 6 days per week. In spring/summer, trucks would operate 5 days per week.

\(^2\) Average time based on a circular delivery route with delivery via Oceanside Boulevard and return via an alternate route. If the return trip is via Oceanside Boulevard, then the average time between trips would be approximately 1.5 minutes because both full and empty trucks would be on the same route.

The El Corazon stockpile location would be up to 5 acres within the 450-acre El Corazon master plan area. El Corazon is a former silica (sand) mining operation donated to the city in 1994. Mining activities had been ongoing for approximately 60 years and a majority of the site has been excavated or disturbed. Reclamation was initiated in 1996, consistent with the State Mining and Reclamation Act. While large portions remain unutilized, there is a green waste/compost recycling facility on-site that utilizes approximately 35 acres.

Planning for this large parcel is currently ongoing. A Vision Plan was prepared in June 1997 that identified opportunities and constraints (Cotton/Beland/Associates 1997). Most recently a Planning Committee was formed to identify preferred land uses and prepare a master plan. The El Corazon Master Plan was accepted by City Council on August 10, 2005. A 15-acre area was identified in the master plan for green waste and the sand stockpiling location would be part of this area. The proposed master plan green waste area would be located south of the existing green waste use area, and relocation is phased to occur between 2006 and 2008. The SCOUP stockpile would be sited within the green waste area in either location, but physically separated from green waste in its own designated portion of the site.

Trucks headed for the beach from the stockpile site would follow Oceanside Boulevard to the existing beach ramp. To minimize truck congestion at the beach site, trucks would be queued at the stockpile location.

In addition, the City would finalize a public outreach element of the project to incorporate a method to report problems. One component would be a telephone number for complaints, comments, and questions. This contact information would be posted prominently at the site. Input from that log of complaints, comments, and questions would be used to improve project operations throughout the project life.

Concept Design Envelope

The two beach fill designs for the Oceanside pilot project include (1) beach berm for optimum sands (less than 15 percent fines content), (2) placement below the mean high tide line for less-than-optimum sands (15 to 45 percent). Figure 6 shows the cross-section views for these two options and site plans are illustrated in Figures 3 and 4. Sand placement would occur between Oceanside Boulevard and the mouth of Loma Alta Creek for Option 1 (Figure 3). Option 2 could
Figure 6
Cross-Sections of Beach Berm and Below MHT Sand Placement
utilize that footprint or extend further north and south to Forster Street and Kelly Street, respectively, depending on the quantity of sand (Figure 4).

Assuming deposition of 150,000 cy, the beach berm placement (Option 1, shown in Figures 3 and 6), the ultimate placement footprint is proposed to be within a surface layer with the finished surface elevation of +12 feet MLLW with a width of within 120 feet and a length of no more than 1,700 feet. It is unlikely that such a quantity would be placed in a single event so this footprint represents a worst-case “envelope” where sand may be placed. From the seaward edge of the berm, it would generally slope towards the ocean at approximately 20:1 (horizontal:vertical). Dimensions may vary depending on conditions at the time of construction, including time of year, quantity, and beach fill design.

The maximum dimensions for placement below the mean high tide line (Option 2, shown in Figures 4 and 6) would be a 3- to 4-foot-high mound placed near the +1 foot MLLW topographic contour or lower, depending on conditions at the time of placement. It would likely extend along the length of the project site (4,100 feet), and would have to be placed in increments if the quantity to be placed exceeded the rate of daily reworking by waves. The stockpile site may be needed for staging material to enable slower delivery and placement rates if the quantities are moderate (more than 20,000 cy) and this placement option is required due to grain size.

Monitoring Program

A monitoring program is part of the SCOUP pilot project site in Oceanside and would be implemented as project conditions as part of any future nourishment activity. Full details are provided in Chapter 7 of the SCOUP Plan and summarized below. Generally, the monitoring program would involve grunion, turbidity, beach profiles and surfing conditions. The timing of monitoring relative to the project phase is summarized in Table 3.

Table 3
Overview of Monitoring Program

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Timing/Duration</th>
<th>Type of Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-project Baseline</td>
<td>1 month prior</td>
<td>Beach profiles</td>
</tr>
<tr>
<td></td>
<td>1/2 month prior, 3 times per week over 14 days</td>
<td>Surf conditions</td>
</tr>
<tr>
<td></td>
<td>Predicted grunion run closest to project initiation (maximum 2 weeks prior)</td>
<td>Grunion (if appropriate season)</td>
</tr>
<tr>
<td>During Construction</td>
<td>Daily during construction</td>
<td>Turbidity</td>
</tr>
<tr>
<td></td>
<td>As dictated by tides and lunar cycle, approximately every 2 weeks during spawning season</td>
<td>Grunion (if appropriate season)</td>
</tr>
<tr>
<td>Post-Construction</td>
<td>Immediately after completion</td>
<td>Beach profile</td>
</tr>
<tr>
<td></td>
<td>1 month after, 3 times per week over 30 days</td>
<td>Surf conditions</td>
</tr>
<tr>
<td>Post-Project</td>
<td>Over 1 year following construction; surveys at 6 months after; and 1 year after</td>
<td>Beach profile</td>
</tr>
</tbody>
</table>
Grunion Monitoring

The grunion spawning season is from March 1 to August 30 and grunion spawn during middle-of-the-night spring high tides. The eggs incubate in the sand and hatch in approximately 2 weeks when the next spring high tide occurs. Because the Oceanside pilot site is a sandy beach, it provides suitable grunion spawning habitat. While grunion are not listed as threatened or endangered, efforts are recommended to minimize impacts to this managed fish species.

The monitoring program would involve monitoring the beach if sand replenishment were to occur during the spawning season. The California Department of Fish and Game (CDFG) provides grunion run predictions for a 2-hour window during the appropriate high tide period. A monitor must be present at the beach site during the predicted grunion run immediately prior to construction starting (2 weeks or less prior).

If no run occurred at that site, construction would proceed with no additional protection measures. If grunion were present, the spawning area would mapped. The monitor would coordinate with the CDFG. If the event was substantial, on the order of thousands of fish, then avoidance measures would be taken. These could include placing sand only above the spring high tide line until the eggs hatched, or in the nearshore, or avoiding that mapped spawning area. If the event were not substantial, beach nourishment may proceed based on direction from the CDFG and NOAA Fisheries. If the sand replenishment event were to occur over more than 2 weeks, consecutive grunion monitoring would occur to capture subsequent runs.

It should be noted that as part of the monitoring for the RBSP, grunion monitoring occurred on 10 occasions between April and August 2001 and confirmed that the CDFG predictions were 100 percent accurate in terms of timing, although grunion did not spawn at every beach with suitable habitat (EDAW 2002). Further, in two receiver sites substantial grunion events occurred and the beach nourishment footprints were modified. During the mid-May run at the Mission Beach site, between 3,000 and 4,000 grunion were observed and the footprint shifted 950 feet to the south. During the late-May run at the Leucadia site, an estimated 45,000 individuals were sighted and the footprint moved approximately 1,000 feet to the south. In other receiver sites (North Carlsbad, Batiquitos, and Oceanside) grunion were identified in the order of less than 10 to just over 400 fish. Based upon consultation with CDFG staff, these events were not considered substantial and the footprint was not modified. While details of the specific grunion monitoring program at this Oceanside pilot site will be defined via the permitting process, it appears safe to assume monitoring no more than one-half hour prior to and following the CDFG-predicted runs would capture the event.

Turbidity

Conditions in the area are typically clear, with storms resulting in turbidity. The project would result in turbidity in the water, but the condition would dissipate after construction was complete. Construction monitoring of water quality (i.e., potential turbidity impacts) would occur consistent with the Regional Water Quality Control Board (RWQCB) 401 Certification. Turbidity would be monitored by an observer from a high vantage point (likely lifeguard tower) during each day of construction. The observer would map and photograph the extent of turbidity, and note environmental conditions such as wind, weather, rain events, wave activity, etc. Because material under Options 1 and 2 would be dry and not in a slurry mixture, turbidity would only occur via natural wave interaction. No devices to reduce turbidity would be necessary. In addition, all
proposed sand sources would be clean, beach-quality sand material and beneficial for the environment and the public. As part of the SCOUP process, any potential material would be tested to verify that the material meets the criteria in Chapter 5 of the SCOUP plan. Testing would consider chemical composition, trash, color, and percent sand.

Beach Profiles

Beach profiles would be monitored over time to track sand gain or loss at the Oceanside pilot site. A licensed surveyor would perform the beach profiles consistent with the direction in the SCOUP Plan. Generally, the process would involve establishing two transects, one within the fill and one downcoast, and recording the beach and seabed elevations from the back of the beach out to the depth of closure.7 There are existing transect locations along the entire San Diego region currently being monitored by SANDAG as part of the regional shoreline monitoring program. The intent of this monitoring program is to utilize one existing beach profile (0S-0930) so that there is a long-term record in advance of any opportunistic beach nourishment activities. One new profile would be added specific to this project, likely at the foot of Oceanside Boulevard. The beach profiles would be provided to all permit agencies.

Surf Conditions

Placement of sand either on the beach or in the nearshore is likely to alter the beach profile and could affect surfing conditions. Sand deposition could cause waves to close-out over a long period of time (months) rather than peak, or result in a perpetual shorebreak at the beach rather than a nearshore bar for waves to break over. To determine any substantial change to surfing conditions a monitoring program would be instituted. Beginning 14 days prior to construction, surfing conditions at the site would be recorded by lifeguards between the hours of 8:00 a.m. and 9:00 a.m. at least three times per week. Observation forms would be completed to record date, wave height and direction, tide, wind, water temperature and clarity, number of surfers in the water, and qualitative observations of wave characteristics. Short interviews would be undertaken with local surfers at least weekly to obtain local perspective on the surf conditions. The same monitoring would occur for 30 days after construction was complete. This program would be of particular importance in the first few years of the pilot study to help determine how the various placement options and material types would be reflected in the nearshore environment.

Project Design Features

In addition to the monitoring program specified above that would document beach and offshore conditions before, during, and after project construction, the following design features would be implemented to minimize adverse effects to the general public:

- Truck operation shall be limited to the hours of 8:00 a.m. to 4:00 p.m., Monday through Saturday (fall/winter) and Monday through Friday (spring/summer) with no activity during holidays.

7 Depth of closure is the maximum depth of cross-shore sand movement. This depth represents the seaward end of the beach profile that essentially remains unchanged over the long term. Sand that moves beyond the depth of closure in a seaward direction is typically lost to the littoral cell. Such depth is typically approximately -30 feet MLLW in southern California and -40 feet MLLW or deeper in northern California.
• A flagman shall keep pedestrians a safe distance from the truck, notify beach users of the presence of the truck, and ensure that a clear and safe path is maintained. This system will be codified the traffic control plan that will be required by the City of Oceanside (Section 10).

• Public streets used for hauling the material from El Corazon to the pilot site shall be cleaned via street-sweeper every third day of truck delivery to the pilot site. If sand is trucked directly to the site from another location, streets west of I-5 used for haul routes shall be cleaned via street-sweeper every third day of truck delivery.

• Trucks shall use only the haul routes designated in this MND.

• If Option 3 is used, a Notice to Mariners would be issued to notify ocean users of the discharge hose and hose head.

• A Spill Prevention, Containment and Countermeasures Plan shall be prepared that specifies fueling procedures, equipment maintenance procedures, and containment and cleanup measures to be followed in the event of a spill. This Spill Prevention, Containment and Countermeasures Plan, at a minimum, shall include:
  – Use and refueling of equipment as necessary.
  – Handling and storage of construction and maintenance fluids (oils, antifreeze, fuels). Fluids shall be stored in closed containers (no open buckets or pans) and disposed of promptly and properly away from permeable areas to prevent contamination of the site.
  – Immediate control, containment, and cleanup of fluids released because of spills, equipment failure (broken hose, punctured tank), or refueling, per federal and state regulations. All contaminated materials should be disposed of promptly and properly to prevent contamination of the site. To reduce the potential for spills on the beach during refueling, refueling of portable equipment shall occur within a contained area. Where that is not possible, barriers shall be placed around the site where the fuel nozzle enters the fuel tank. The barriers shall be such that spills shall be contained and easily cleaned up. Someone shall be present to monitor refueling activities to ensure that spillage from overfilling, nozzle removal, or other action does not occur.

These design features would be implemented as project conditions as part of any future nourishment activity.

9. Surrounding land uses and setting: (Briefly describe the project’s surroundings.)

The pilot project site is a sandy beach exposed to the Pacific Ocean. It is lined with multi-story oceanfront condominiums and apartments (Figure 5). The back of the beach is protected by large riprap boulders that act to soften the effect of winter storms on existing structures. There are no structures at the mouth of the Loma Alta Creek except the Pacific Street bridge spanning the creek. East of Pacific Street is Buccaneer Park, a grassy park with parking, restrooms, and play equipment.

The project haul route would travel through highly urbanized areas of Oceanside along Oceanside Boulevard. This haul route along Oceanside Boulevard is characterized by industrial and commercial uses between the stockpile location at the El Corazon green waste area and I-5. From there to the west, this road is bounded by a mixture of residential and commercial uses, with
primarily residential uses between the beach and Coast Highway. The paved streets would not be modified and would remain in their existing condition. The alternative exit routes from the pilot site include the option of two unpaved city easements bounded by residences and Buccaneer Beach. The haul trucks would follow Pacific Street either north to Oceanside Boulevard or south to Cassidy Street, north to Coast Highway, then Vista Street to I-5. This area is almost exclusively residential in nature. The trucks would be restricted to Cassidy Street east of Coast Highway.

10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)

Implementation of the SCOUP project at the Oceanside pilot study site will require approval and permits from a variety of local, state, and federal agencies as described below.

U.S. Army Corps of Engineers – Sections 10 and 404 Permit

The proposed program involves placing sand on a beach receiver site. Section 10 of the River and Harbors Act and Section 404 of the Clean Water Act require permits from the USACE for transporting and placing fill material into waters of the U.S.

Regional Water Quality Control Board – Section 401C Certification

The California RWQCB reviews projects that include any discharge into navigable waters. Any project in California that proposes placing fill materials into waters of the U.S. requires a Section 401C Certification from the RWQCB. Since the program proposes to place the material on the beach below the mean high tide line, a certification is needed from the RWQCB. That certification was also address water quality standards that must be maintained, specifically regarding turbidity, and possibly others.

California Coastal Commission – Coastal Development Permit

The proposed program is located within the Coastal Zone under the jurisdiction of the California Coastal Commission (CCC). The Coastal Act requires each local jurisdiction along the coast to prepare and submit for state certification a Local Coastal Program (LCP) for that portion of its area located within the specified Coastal Zone. The LCP consists of two parts—(1) the Land Use Plan, which contains goals and regulatory policies and (2) a set of Implementing Ordinances. Because the CCC has certified Oceanside’s LCP, the City has local authority to issue coastal development permits (CDPs). However, the CCC retains permitting authority over “sovereign lands” and for submerged lands that are typically seaward of the mean high tide line. The location of the mean high tide line varies substantially by season and due to prior beach replenishment actions.

Oceanside has a history of harbor dredging and beach nourishment. As noted in the RBSP EIR/EA, mapping from 1960 and 1972 identified a more landward mean high tide line, typically at the base of riprap protection. The California State Lands Commission (CSLC) will provide final direction to the CCC and Oceanside regarding the boundary, but because the project is both seaward and landward of the mean high tide line, coastal development permits will be necessary from the CCC and the City. Typically, the CCC review focuses on issues such as beach access,
recreational opportunities, and visual resources. The CCC has the authority to require design modifications or mitigation measures.

City of Oceanside – Approval of MND, Local CDP, Authorization for Use of State Lands

The City Planning Commission must approve the Final MND and issue a regular coastal permit. A haul route permit, beach access permit, and traffic control plan would be required prior to implementation.

The CSLC has jurisdiction over all ungranted tidelands and submerged lands, pursuant to Section 6301 of the Public Resources Code. This jurisdiction extends generally to areas located seaward of the ordinary high water mark. Typically, any beach nourishment project extending below the ordinary high water mark would necessitate a lease agreement with the CSLC. However, Oceanside has previously been granted sovereign land by the CSLC. The City may issue an authorization for its own use. No separate authorization from the CSLC would be necessary.
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- Aesthetics
- Biological Resources
- Hazards & Hazardous Materials
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Agricultural Resources
- Cultural Resources
- Hydrology/Water Quality
- Noise
- Recreation
- Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature ______________________  Date of Final ______________

Jerry Hittleman

Signature ______________________  Date of Draft ______________

Jerry Hittleman

Printed Name
EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review;
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis; and
   c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.

9. The analysis of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significant.
I. AESTHETICS - Would the project:

a. Have a substantial adverse effect on a scenic vista? ☒ ☐ ☐ ☐ ☒

No Impact. Views to the Pacific Ocean are protected by the City’s Local Coastal Plan. However, the proposed beach replenishment project would place sand on existing beaches or offshore below the water, which would have a beneficial aesthetic effect as the existing eroded beaches gain sand cover. The stockpile location is located in a degraded previously mined area, which is currently used for storage of green waste. Therefore, no impacts on scenic resources within a scenic vista would occur.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☐ ☒

No Impact. Neither the proposed beach replenishment or stockpile sites are located along or near a designated state scenic highway (Caltrans 2004). Therefore, no impacts on scenic resources within a state scenic highway would occur.

c. Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☐ ☐ ☒

No Impact. No development is proposed; therefore, the proposed beach replenishment project would not degrade the existing visual character or quality of the area. A beneficial aesthetic effect would occur as the existing eroded beaches gain sand cover. Therefore, no impacts on the existing visual character or quality of the site and its surroundings would occur.

d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? ☒ ☐ ☐ ☒

No Impact. The proposed beach replenishment project involves placing sand on the beach at the Oceanside site and does not propose any new development. It would not result in the exposure of people to permanent new sources of light or glare. All construction equipment would operate during normal weekday working hours so no nighttime construction lighting would be installed.

II. AGRICULTURAL RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural and farmland. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ☒ ☐ ☐ ☒
No Impact. The proposed pilot project site is located on the beach or in the nearshore, which are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The haul routes would utilize existing paved roadways through urban areas. The stockpile site would be located on a former silica (sand) mining operation site in the green waste use area. Therefore, no conversion of farmland to non-agricultural uses would occur.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. Neither the beach project site nor the stockpile location is zoned for agriculture use nor under a Williamson Act contract.

c. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use?

No Impact. Neither the beach project site nor the stockpile location is used for farmland. Beach nourishment would not be associated with agriculture conversion.

III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed beach replenishment project is placement of sand on the beach at the Oceanside pilot site. The project haul route utilizes existing paved roadways traversing through a highly urbanized area. Temporary impacts would occur during the implementation of the proposed beach replenishment project, but no significant source of stationary or mobile air pollutants would occur. Therefore, there would be no conflict or obstruction with applicable air quality plans.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant With Mitigation Incorporated. Material transport and earthmoving activities associated with construction of the beach fill would result in some air emissions. These emissions would be characteristic of a temporary earthmoving operation with a short hauling distance. The beach working environment is characterized by wet sand, which has minimal transport and generally does not disperse far distance. There are no applicable CEQA emission standards in the San Diego Air Basin, so no standards would be exceeded. To minimize potential affects to adjacent residences, the City would require the following measures to be implemented:

- Maintaining equipment in tune, per manufacturer’s specifications;
- Utilizing catalytic converters on any gasoline-powered equipment;
- Retarding engine timing by 2 degrees;
• Installing high-pressure fuel injectors;
• Using reformulated, low-emissions diesel fuel;
• Substituting gasoline-powered for diesel-powered equipment where feasible;
• Minimizing equipment idling times by restricting truck delivery rates as specified in the project description to reduce truck queues; and
• Curtailing construction during periods of high ambient pollutant concentrations (e.g., Stage I smog alerts).

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

No Impact. The proposed beach replenishment project would not result in a discernible long-term net increase of any criteria pollutant. Material transport and earthmoving activities associated with construction of the beach fills and truck haul trips may cause emissions that would temporarily exceed standards but would not result in a cumulative considerable net increase of criteria pollutants.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. It is likely that some children, the elderly, and those suffering from respiratory problems may reside in the vicinity of the Oceanside pilot site or the stockpile site within El Corazon. During construction, their exposure to contaminants in the air may be slightly greater in these locations than at other locations within the area. Under Options 1 and 2, construction equipment would be used at the pilot site to provide and distribute the sand. It is assumed that a wheeled bulldozer or loader would be used for sand placement with occasional support from a forklift. Although the proposed project primarily involves the conveyance of sand and associated disturbance activities, the sand would be quite moist and the potential for dust generation would be very low. Activities on dry sand would be limited to mobilization at each site and crew access, which would both be of relatively short duration. As discussed in Item III(b), the City commits to particular construction measures to minimize the affects to adjacent residences. These impacts are not considered significant because of the short-term nature of the implementation activity and the relatively low incremental increase in emissions.

e. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. The proposed project is placement of sand on the beach or in the nearshore. The haul route utilizes existing paved roadways traversing through a highly urbanized area. No odor-producing production or industrial activities would occur. Operation of trucks and construction equipment during construction of each beach fill may cause air emissions that generate standard odors associated with these emissions. Although some odors associated with the
combustion of various fuels may result from equipment operation, these odors tend to dissipate rapidly in the atmosphere, would exist temporarily, and are not considered significant.

**IV. BIOLOGICAL RESOURCES** - Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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<th>Issues &amp; Supporting Information Sources</th>
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**Less Than Significant Impact.**

The El Corazon stockpile location is currently used for green waste storage and has historically been mined. No candidate species have been located at that specific location, although the western and northern portions of El Corazon, adjacent to El Camino Real and Mesa Drive respectively, have remnant pools and support native vegetation. Planning documents indicate least Bell’s vireo (*Vireo bellii pusillus*) and California gnatcatcher (*Polilptila californica californica*) have been found in those areas (Cotton/Beland/Associates 1997). Future land use plans identify these areas as Habitat Conservation Areas. The stockpile location would not conflict with these conservation areas, nor the sensitive species using the vegetation in those areas.

As noted in the RBSP EIR/EA and the USACE in their Public Notice for a Beach Nourishment RGP, the southern California coastal environment is known habitat for three key species identified as threatened or endangered under the Endangered Species Act: the California least tern (*Sterna antillarum browni*), the California brown pelican (*Pelecanus occidentalis californianus*) and the western snowy plover (*Charadrius alexandrinus nivosus*). The information summarized below is taken from the Biological Assessment for the RBSP (KEA Environmental 2000) and the resultant Biological Opinion (USFWS 2000).

California brown pelicans are common along the coast throughout the year, especially within 12 miles of shore but regularly out to 100 miles. They nest in colonies on the Channel Islands and on the Coronado Islands. They feed by diving into the water for fish within three feet of the surface, or surface feeding while swimming. Least terns also forage for fish, typically in areas with water less than 60 feet in depth. They nest colonially on beaches. They prefer beaches that are undisturbed, sparsely vegetated, flat areas with loose, sandy substrate. Few beach nesting areas remain and they can now be found in varied habitats ranging from mudflats to airports. Snowy plovers forage on invertebrates in the wet sand and amongst the surf-cast kelp in the inter-tidal zone; in the hot dry sand above the high tide; on salt pans; and along the edges of salt marshes and salt ponds. Snowy plovers have a tendency to nest very near and within least tern colonies.

Along the San Diego coast, least tern and snowy plover nests tend to be located at lagoon and river mouths, but terns forage in the water while plovers forage on the land. The two nesting colonies nearest to the proposed pilot project site are the Santa Margarita River Estuary colony (well over 4 miles north of the site) and the Batiquitos Lagoon colony (well over 7 miles south of the site). During nesting season, foraging typically occurs in an area roughly 2 miles from the colony. Further, snowy plovers tend to avoid foraging in areas of high human activity.
The proposed pilot project at Oceanside would consist of temporary placement of fill at this beach location which would result in short term increases in turbidity in the project vicinity. Turbidity would be expected to return to baseline very soon after discharge activities. Given the distances between the nesting colonies and the proposed site, there would be no significant impact to foraging opportunities for terns or pelicans during the nesting season. Further, the USACE Public Notice states that temporary turbidity increases would not effect prey populations supporting these species. The Oceanside pilot project site is routinely maintained by earth-moving equipment with regular lifeguard patrols in vehicles and supports high recreational usage. There is not likely to be an adverse effect to the plover at this location because it is not likely to be used for foraging by the plover.

There is also an endangered fish species, the tidewater goby (*Eucyclogobius newberryi*) that occurs in tidal streams associated with coastal wetlands in California. Loma Alta Creek discharges into the Pacific Ocean at the southern end of the beach berm pilot project site. This creek is highly disturbed by adjacent human activity and past construction, and the creek mouth is manipulated seasonally by the City. Prior surveys for the goby have been negative (Hittleman 2005) and the proposed project would not have any effect to this species because it is not present.

b. Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant. As noted in IV(a), the El Corazon vision plan identifies Habitat Conservation Areas on the west and northern sides of the parcel. The proposed stockpile would not be within these identified conservation areas.

As disclosed in the RBSP EIR/EA, the intertidal habitat of the proposed pilot project site is predominantly sand. Dense cobble is limited to a few localized areas at the very southern end of the site. One high relief reef, about six feet wide, occurred approximately 250 feet offshore north of Buccaneer beach; no surfgrass (*Phyllospadix* spp.) was observed on this reef during the beach survey. Riprap revetment occurs along the back beach of the entire site. In localized areas where the rocks are splashed by high tide, green alga, acorn barnacles, limpets, and gray littorine snails have been observed. Shorebirds were abundant. Nearshore waters are also predominantly sand with some localized scattered rock. Surveys in 2000 found low relief (zero to three feet) substrate vegetated with opportunistic coralline algal turf. Localized, sparse, small sea fans occur on higher relief rocks. The south boundary of the pilot project site is well over 2,000 feet from the nearest vegetated nearshore reef. No kelp bed had surface canopy in 1999 and the closest kelp bed in 1997 was nearly two miles to the south. The nearest surfgrass bed is over 1.5 miles to the south.

As stated in the RBSP EIR/EA, important sensitive habitat includes high and low relief vegetated reefs with key indicator species such as giant and feather boa kelp, large sea fans, sea palms, and surfgrass. Given that the proposed project site is not characterized by these key indicator species (except for small localized sea fans), and the nearest kelp and surfgrass indicators are over 1.5 miles distant, there would be no substantial, adverse impact to these sensitive natural communities.
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c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, and other means? | ☐ ☐ ☐ ☒ |  

**No Impact.** The proposed project is placement of sand on the beach and possibly in the nearshore at the Oceanside pilot site. The haul route utilizes existing paved roadways traversing a highly urbanized area. The pilot site is a sandy beach and the stockpile site is designated for green waste. No federally protected wetlands exist within the project area; therefore, no impacts would occur from the project.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**Less Than Significant Impact.** The proposed project is placement of sand on the beach or in the nearshore at the Oceanside pilot site. The project haul route utilizes existing paved roadways traversing through a highly urbanized area. Most sedentary or slow-moving marine animals within the footprint area would be killed from burial and construction. However, direct impacts would not be significant due to the rapid recolonization of the habitat and the absence of sensitive species (SANDAG 2000).

California grunion spawn on sandy beaches in the San Diego region between early March and late August during middle-of-the-night spring high tides. Their eggs incubate in the sand and hatch in approximately 2 weeks when the next spring high tide occurs. Grunion have the potential to be affected by beach replenishment if eggs are buried by fresh material, thus preventing the eggs from hatching. The Oceanside pilot project site provides suitable spawning habitat for grunion. While grunion are not listed as threatened or endangered, a monitoring program has been designed to minimize impacts to this managed fish species. The monitoring program is discussed in the project description (Section 8) of the MND. This monitoring program would ensure significant impacts are avoided.

Regionally, the California spiny lobster (*Panulirus interruptus*) is the most important commercial species in terms of value and one of the top species hunted by recreational divers. As noted in the RBSP EIR/EA, lobster is found primarily between Point Conception and Magdalena Bay, Mexico. The most important commercial lobster fishery area is fish block 860, La Jolla to Point Loma, where 85 percent of the lobster fish catch is generated. This compares to Oceanside fish blocks 801/822 that account for approximately 8 percent of the fish catch.

Adult lobsters are found in rocky areas from the intertidal zone to at least 240 feet. Local fisherman note that there is a marked movement of adults between inshore and offshore areas. Juvenile lobsters usually spend their first one to two years in nearshore surfgrass and eelgrass beds. Adults are found in rocky habitats, though they move in search of food.
As documented in the RBSP EIR/EA, juvenile rock lobster (*Jasus edwardsii*) appear capable of tolerating high turbidity and suspended sediments. The two lobster species are different and similar tolerance testing has not been undertaken for the California lobster.

As noted in the USACE’s Public Notice for the beach nourishment RGP, beach fill projects could have indirect impacts to lobster if surfgrass or hard bottom habitat is impacted. The Oceanside pilot project site would not have significant impact to surfgrass or important hard bottom habitat and there would be no indirect impact to lobsters.

e. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No Impact. The proposed project would not conflict with any local policies or ordinances protecting biological resources because there are no applicable ordinances at the beach or stockpile site.

f. **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The proposed project would not conflict with provisions of an adopted Multiple Habitat Conservation Program or other approved local, regional, or state habitat conservation plan because the proposed project is not within any adopted conservation plan.

V. CULTURAL RESOURCES - Would the project:

a. **Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?**

No Impact. There are no known historical resources at the beach pilot project or stockpile sites. Therefore, no adverse change in the significance of a historical resource would occur.

b. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

No Impact. There are no known archaeological resources at the proposed pilot project and stockpile sites. The beach environment is continually evolving with natural sand onshore-offshore processes, which are not conducive to preserving intact archaeological sites. Stockpiling would occur in an area already used for storage of green waste and would not involve subsurface excavation. Any excavation at the source would be addressed by applicable CEQA evaluation at that location; therefore, no adverse change in the significance of an archaeological resource would occur.

c. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**
No Impact. There are no known paleontological resources or unique geologic features in the area of the proposed pilot project and stockpile sites, and the project would not result in subsurface excavation that may impact buried resources. Therefore, a paleontological resource or site or unique geologic feature would not be directly or indirectly destroyed.

d. Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. There are no known human remains at the pilot project and stockpile sites and, given the constantly shifting nature of the beach, human remains are not a possibility. There would not be a subsurface excavation at the stockpile location. Therefore, human remains, including those interred outside of formal cemeteries would not be disturbed.

VI. GEOLOGY AND SOILS  - Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. According to the Alquist-Priolo Earthquake Fault Zoning Map, the proposed beach replenishment project is not located near a known fault, and Oceanside is not listed as a city potentially affected by the earthquake fault zones (Department of Conservation 1997). The nearest known active fault is the northern extension of the Rose Canyon fault located approximately 8 miles to the west (offshore). Therefore, there would be no substantial adverse effects due to a fault rupture. The proposed project is placement of sand on the beach and temporary storage of material at El Corazon. There are no known active or potentially active faults within these areas. The proposed project would not result in the exposure of people or property to fault ruptures because no faults exist and no development is proposed.

   ii) Strong seismic ground shaking?

Less Than Significant Impact. The proposed project would not result in, or expose people to, seismic ground shaking beyond the conditions that currently exist throughout the region. This exposure is the general exposure that all persons in southern California experience because of the high seismic activity level of the region. The proposed project would replenish the Oceanside beach and would not create a substantially increased exposure to seismic activity because no development is proposed.

   iii) Seismic-related ground failure, including liquefaction?

Oceanside SCOUP MND 0408095 Final_SCOU,MND.doc 11/7/2005
Less Than Significant Impact. No development is proposed. Potential liquefaction is primarily limited to valley bottoms and shoreline areas. Exposure of people to seismic ground failure, including liquefaction, may occur at the project site but would not increase beyond existing conditions because the project would only add sand to an existing beach, not new structures.

iv) Landslides?

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No Impact. The proposed project would not be located in potential landslide areas and does not propose any development; therefore, people or buildings would not be exposed to landslides.

b. Result in substantial soil erosion or the loss of topsoil?

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No Impact. The proposed project is intended to help remedy existing erosion at the Oceanside beach. Seasonal cross-shore movement would transport the fill material offshore in the winter and back onto the beach in the summer. In addition, the longshore transport changes direction seasonally, moving the sand north in the summer and south in the winter. Seasonal loss of the beach would occur from the natural littoral process. The project would result in minor changes to topography and ground surface relief features at the beach and stockpile site, but in an insignificant and potentially beneficial manner.

c. Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

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No Impact. The proposed project and stockpile sites are not located on a geologic unit or soil that is unstable. The sites are located within a potential liquefaction area, but the proposed project would not change this existing condition nor construct new buildings that would house more people. No other type of unstable soil condition exists or would be created by the project.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

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No Impact. The proposed Oceanside pilot project site is a sandy beach with no soil cover. Expansive soils are not documented to exist at beach fill sites, nor would they be created by the project. Therefore, the proposed project would not create risk to human life or property due to expansive soils.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

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No Impact. The proposed project would not include any septic tanks or alternative waste disposal systems. Therefore, the proposed project would not have any impacts due to the use of septic systems or alternative wastewater disposal systems.
VII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. No hazardous substances would be transported to the sites, from the sites, used on the sites, or disposed of on the sites. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact. No hazardous materials would be used in construction except conventional types of fuels to power equipment and trucks. Containment for potential leaks and spills from construction equipment are addressed as a project design feature with the preparation of a Spill Prevention, Containment and Countermeasures Plan as detailed in the project description (Section 8) of the MND. Therefore, no component of the proposed project would contribute to an existing hazard or create a new hazard.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are four existing schools located within 0.40 kilometer (0.25 mile) of the proposed pilot study site and possible haul routes. Ocean Shores High School is located at 3131 Oceanside Blvd. at the southeast corner of Oceanside Boulevard and El Camino Real, south of the El Corazon stockpile site. Garrison Elementary is located at 333 Garrison Drive north of Oceanside Boulevard and east of El Camino Real and the El Corazon stockpile site. Ditmar Elementary is located at 1125 S. Ditmar Street just north of Oceanside Boulevard and east of S. Coast Highway. In addition, South Oceanside Elementary is located near the alternate return route at 1806 S. Horne Street. However, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, except for conventional types of fuels to power equipment and trucks. Therefore, the project would have no potential effect on any nearby school related to hazardous material exposure.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed pilot project and stockpile sites are not located on a hazardous materials site and, therefore, would not create a significant hazard to the public or the environment.
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** The proposed project is not located within 2 miles of an airport nor in an airport land use plan. Implementation would not result in a safety hazard for people residing or working in the project area.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** The proposed project is not located within 2 miles of a private airstrip and, therefore, would not result in a safety hazard for people residing or working in the project area.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**No Impact.** Material transport as part of the proposed project would follow designated haul routes capable of conveying the traffic (Figure 2), while maintaining access for emergency response and evacuation. Activity would occur in the beach or nearshore where adequate circulation and access is provided to address emergency response. Therefore, project implementation would not interfere with an emergency response plan or emergency evacuation plan.

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

**No Impact.** Neither the beach site nor the stockpile location is in wildland fire areas.

**VIII. HYDROLOGY AND WATER QUALITY** - Would the project:

a. Violate any water quality standards or waste discharge requirements?

**Potentially Significant With Mitigation Incorporated.** By definition, all proposed sand sources would be clean, beach-quality sand material and beneficial for the environment and public. As part of the SCOUP process, any potential material would be tested to verify that the material meets the criteria in Chapter 5 of the SCOUP plan. Testing would consider chemical composition, trash, color, and percent sand.

As described in Section 8 of this MND, turbidity would be monitored by an observer from a high vantage point (likely lifeguard tower) during each day of construction. The observer would map and photograph the extent of turbidity and note environmental conditions such as wind, weather,
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<td>rain events, wave activity, etc. Because material under Options 1 and 2 would be dry and not in a slurry mixture, turbidity would only occur via natural wave interaction. No devices to reduce turbidity are anticipated to be necessary. This will be confirmed via the monitoring program.</td>
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<td>b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
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<td><strong>No Impact.</strong> The proposed project would not require any use of groundwater or interfere with groundwater recharge in any way.</td>
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<td>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
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<td><strong>No Impact.</strong> The purpose of the project is to place sand on the Oceanside pilot site, which would help reduce existing erosion problems and may minimize future erosion. In addition, USACE has identified beach replenishment as one alternative to mitigate the current beach erosion condition in the City of Oceanside General Plan (City of Oceanside 2002).</td>
<td></td>
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<tr>
<td>d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>✗</td>
</tr>
<tr>
<td><strong>No Impact.</strong> The proposed project would not modify a stream or increase the amount of impervious surface. The mouth of Loma Alta Creek is currently managed by City staff and it is opened to the ocean in winter and closed in summer. The project would not change this activity. Drainage at the pilot site may improve as the beach is widened to reduce coastal flooding from high tide events.</td>
<td></td>
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<tr>
<td>e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>✗</td>
</tr>
<tr>
<td><strong>No Impact.</strong> The proposed project would place sand on the pilot site and would not alter the direction, quantity, or quality of stormwater runoff.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>f. Otherwise substantially degrade water quality?</td>
<td>□</td>
<td>□</td>
<td>✗</td>
<td>□</td>
</tr>
<tr>
<td><strong>Less Than Significant Impact.</strong> There is the potential for any activity at the beach to result in turbidity. As discussed in Section 8 of the MND and item VIII(a), turbidity would be monitored.</td>
<td></td>
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</tbody>
</table>
The intent of monitoring is to collect data to refine project design, including comparison of turbidity plumes associated with different sand materials and different placement techniques. If turbidity plumes are extensive or fail to dissipate, then the project would be modified to reduce turbidity to acceptable levels. Modification could include having longer delay between delivery of sand loads or modification of the discharge design. This potential impact would be avoided through the monitoring program.

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project would not involve housing.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The proposed project would not involve structures.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The proposed project would not result in changes to existing drainage patterns at the beach fill sites. The project haul route utilizes existing paved roadways traversing through a highly urbanized area. No development is proposed. The project may offer added protection from the 100-year flood hazard area since the project would raise and widen the existing beaches. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death from flooding.

j. Inundation by seiche, tsunami, or mudflow?

No Impact. Implementation of the proposed project would not result in the increased exposure of people or property to seiche, tsunami, or mudflow. All coastal locations are potentially exposed to tsunamis and the project would not change this existing condition. It may offer greater protection for oceanfront residences if the beach is wider. No lakes or bays exist for a creation of a seiche condition and the project would not affect this situation.

IX. LAND USE AND PLANNING - Would the project:

a. Physically divide an established community?

No Impact. Existing oceanfront residences are located adjacent to the pilot site. All of these homes would receive direct or indirect benefit from increased beach width. No physical barriers would be constructed. The project would neither disrupt nor divide any established community.
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The stockpile site at El Corazon is designated as for green waste. The project is consistent with applicable land use designations and zone ordinance.

The Oceanside pilot project site is designated as a City-owned public beach and the proposed beach replenishment project is consistent with this designation. The project would add a maximum of 150,000 cy/yr of sand to the beach. No change of land use on the subject property or on adjoining properties is anticipated as a result of the proposed beach replenishment project. In addition, USACE has identified beach replenishment as one alternative to mitigate the current beach erosion condition (Oceanside General Plan 2002). The project is consistent with Coastal Act requirements to place suitable excess fill on the beach.

c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?

No Impact. The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan because neither the project beach fill nor stockpile locations are located within any of these conservation areas.

X. MINERAL RESOURCES - Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed project would make use of a valuable resource (e.g., beach quality sand) that may otherwise be lost forever in a landfill. Once placed in the beach system, this resource would be part of the natural littoral system and would benefit all the residents of the Oceanside littoral cell.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. Mineral resource recovery sites have not been identified within the pilot project site. This area is not delineated on the City’s General Plan, Land Use Element as a locally important mineral resource recovery site.

XI. NOISE - Would the project result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan
or noise ordinance, or applicable standards of other agencies?

**No Impact.** The City of Oceanside’s applicable noise standards relative to the proposed project site are provided in the RBSP EIR/EA. As noted, the City does not have a construction noise limit and construction hours are prohibited from 6:00 p.m. to 7:00 a.m. weekdays, during all weekends, and all federal holidays. These restrictions are based on Grading Ordinance Section 515 and the City Engineer may permit operations outside of these limits if not detrimental to health, safety or welfare. Other jurisdictions addressed in the RBSP EIR/EA had a maximum construction noise limit of 75 dBA.8

During truck deliveries and sand placement, the principal noise at the adjacent beachfront homes would be construction equipment. When working closest to the homes, construction noise would be anticipated to occasionally exceed 75 dBA, but maximum hourly noise levels would be expected to be on the order of 65 dBA. The peak construction noise would be a diesel engine under load, sounding the backup alarm near a residence. While the ambient noise levels are in the mid 60s dBA, the difference in character from the ambient surf noises would be noticeable. As the work would move away from any individual receptor, the noise level would decrease and at a distance of 200 feet, a decrease of 10 to 12 dBA would be anticipated. Thus, at any individual residence the hourly noise level would not exceed the 75 dBA guide used by other jurisdictions and the construction noise would vary in loudness as the material is spread up and down the beach. The impact would be less than significant.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

**Less Than Significant Impact.** The proposed beach replenishment project may result in a temporary increase in groundborne vibration and noise levels during construction, but this effect would not be noticeable. There have been no public complaints regarding vibration in any prior beach replenishment activities at this location (Hittleman 2005).

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

**No Impact.** The proposed project would not result in construction of a permanent noise generating facility. By definition, the activity would involve trucks hauling fill material and spreading that material during a relatively short construction window. Therefore, the project would not cause a permanent increase in ambient noise levels in the project vicinity above existing levels.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

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8 Noise levels are measured and expressed in decibels (dB). Noise levels weighted to the A noise scale to filter out frequencies not audible to the human ear are written dBA.
Potentially Significant With Mitigation Incorporated. The proposed project pilot site was characterized in the EIR/EA as having sensitive noise receptors (single and multi-family residences) east of the beach and behind existing riprap slopes with setbacks on the order of 5 to 10 feet. The east sides of these residences face Pacific Street. South of Morse Street, the homes on the east side of Pacific Street are elevated 20 feet above homes on the west, thus providing potential views and noise corridors to the beach. The North County Transit District railroad tracks, which carry over 40 trains per day, are located approximately 800 feet east of the pilot project site. Noise measurements taken in 1999 indicated a level between 62 and 66 dBA on the pilot project site. The dominant noise existing noise source is the surf, but traffic from Pacific Street and trains also add to the ambient condition.

The stockpile location is north of El Camino Real in an industrial and disposal area. The area all along Oceanside Boulevard is commercial in nature. The nearest residences are located on the slopes south of Loma Alta Creek or west of El Camino Real and their existing ambient noise includes the trucking and delivery vehicles that currently traverse this road. They would not experience a substantial increase in ambient noise levels due to this project.

As described in XI(a), noise generated at the beach pilot project site would increase ambient noise levels during implementation. While it would not exceed standards, there are measures to be implemented that can minimize the increase; specifically:

- All project-related equipment shall utilize properly working mufflers;
- The engines shall be equipped with shrouds; and
- All related equipment shall be in proper working order and kept in a proper state of tune to reduce backfires.

With mitigation incorporated, the proposed project would have no significant long-term impacts upon the environment.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed beach replenishment project is not located within an airport land use plan or within two miles of a public airport. Therefore, people residing or working in the project area would not be exposed to excessive noise levels associated with air traffic.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed beach replenishment project is not located within the vicinity of a private airstrip. Therefore, people residing or working in the project area would not be exposed to excessive noise levels associated with air traffic.
XII. POPULATION AND HOUSING - Would the project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project is placement of sand on the beach and possible temporary storage at El Corazon. The project haul route utilizes existing paved roadways traversing through a highly urbanized area. No development is proposed. Therefore, the project would not induce substantial population growth either directly or indirectly.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. Although there are residential homes adjacent to the Oceanside pilot site, the proposed project would merely replenish the adjacent beach. The project would not displace any housing necessitating the construction of replacement housing elsewhere.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would merely replenish eroded beaches and would not include permanently displacing any people. However, during construction the pilot site would have to be temporarily closed to beach patrons. There are several miles of suitable beach north and south of the pilot site, so this would not be a significant impact.

XIII. PUBLIC SERVICES

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

No Impact. No development is proposed; therefore, the project would not impact public services. Approval of the proposed beach replenishment project would have no effect upon or result in the need for new or altered fire-protection service.

Police protection?

No Impact. No development is proposed; therefore, the proposed project would not impact public services. Approval of the proposed beach replenishment project would have no effect upon or result in the need for new or altered police protection services.
No Impact. No development is proposed; therefore, the proposed project would not impact public services. No new school facilities would be required if the proposed beach replenishment project is approved, because no increase in school-age children would occur.

No Impact. No development is proposed; therefore, the proposed project would not impact public services. Approval of the proposed beach replenishment project would have no effect upon or result in the need for additional park area.

No Impact. The proposed project would not place a substantial demand on other public services. The City is already committed to active beach management via kelp and trash removal and other grooming. This enhanced beach would fall within the normal beach maintenance.

XIV. RECREATION

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The proposed project would not cause an increase in the use of existing neighborhood and regional parks, as it is not a development project. During construction of the project, the site would be closed, creating a temporary minor adverse impact on the availability of existing recreational beach opportunities during the construction phase. Temporary closures of the beach working area would occur during construction, but several miles of other City beaches would be available for public use. The pilot site is currently used for various recreational activities including fishing, swimming, diving, surfing, and sunbathing. Once the pilot site has been replenished, recreational activities would resume and be enhanced as the recreational beach area at the site would increase, providing an improved recreation opportunity.

Surfing occurs throughout the beaches within the city of Oceanside. Surfable wave peaks occur throughout all of the project area. The site is rideable under all swell directions and tide conditions. It provides relatively high-quality surfing locations with waves that vary in quality each day. Wave quality can range from excellent to poor depending on conditions. Surfing could potentially be impacted by:

1. Modification of existing sand bars and reefs by sand placement and deposition;
2. Access being denied during construction; and
3. Poor water quality caused either by turbidity generated during and after construction of the beach fill, or contaminants being released into the surfzone by the fill material.
Each potential impact is addressed below.

1. Modification of Existing Sand Bars and Reefs by Sand Placement and Deposition

The project could add a relatively large sand “slug” to the system over a short time frame thereby changing bottom conditions at the sites. This impact could be adverse and significant if sand deposition caused waves to close out over a long period of time (months) rather than peak, or resulted in a perpetual shorebreak at the beach rather than a nearshore bar for waves to break over. Due to the expected low material quantity of individual projects, it would likely not create a long-term close-out or shorebreak condition. It may, however, cause such conditions over a temporary short-term period while the sand is naturally redistributed over the bottom.

The project may also result in potentially beneficial impacts to surfing by contributing sand to the nearshore that would be deposited in bars throughout Oceanside. More sand in the system provides material for enhanced sand bar formation and may result in larger or longer-lasting bars, and improved surfing conditions. Informal observations of SANDAG RBSP showed surfing conditions improved at each sand placement site after construction because of sand bar formation.

To determine any substantial change to surfing conditions, a monitoring program would be instituted as described in Section 8 of this MND and Chapter 5 of the SCOUP plan. Monitoring would occur before and after construction was complete. This program would be of particular importance in the first few years of the pilot study to help determine how the various placement options and material types are reflected in the nearshore environment and how that affects wave quality for surfing. Impacts would be less than significant and possibly beneficial.

2. Access Being Denied during Construction

Public access to the construction sites would be denied during construction, but this restriction would be short term and temporary, with access being restored at completion of the project. Also, surfers would be able to access surfing sites by moving around the construction area and entering the water from either end. The water may not be closed by the City during construction, but the City has the discretion of closing off the site to surfing if the safety of surfers could be affected during sand placement. Impacts would be less than significant.

3. Poor Water Quality Caused Either by Turbidity Generated during and after Construction of the Beach Fill, or Contaminants Being Released into the surfzone by the Fill Material

By definition, the fill material would be clean and suitable. The proposed project would generate turbidity, but it is anticipated to be short term in duration and relatively localized. Surfers have many other options for surfing in similar wave conditions up and down the coast where project turbidity would not be noticeable. The impact would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
Less Than Significant Impact. The proposed project would not include new development or require construction or expansion of existing recreational facilities and, therefore, would not have an adverse physical effect on the environment. It would increase the beach area, which may lead to beneficial effects and increased recreational usage of the pilot site.

XV. TRANSPORTATION/TRAFFIC - Would the project:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Less Than Significant Impact. The proposed project would result in a temporary increase in vehicular movement when material is hauled to the site. Existing traffic volume for segments along Oceanside Boulevard are summarized in Table 4.

<table>
<thead>
<tr>
<th>Oceanside Boulevard Street Segment</th>
<th>Current Class</th>
<th>Current LOS</th>
<th>Existing (vehicles/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific St./Coast Hwy. (Hill St.)</td>
<td>Collector</td>
<td>A</td>
<td>5,300</td>
</tr>
<tr>
<td>Coast Hwy. (Hill St.)/I-5</td>
<td>4-lane Major</td>
<td>A</td>
<td>20,300</td>
</tr>
<tr>
<td>I-5/Crouch St.</td>
<td>4-lane Major</td>
<td>B</td>
<td>26,100</td>
</tr>
<tr>
<td>Crouch St./Foussat St.</td>
<td>4-lane Major</td>
<td>B</td>
<td>29,000</td>
</tr>
<tr>
<td>Foussat St./El Camino Real</td>
<td>4-lane Major</td>
<td>A</td>
<td>26,750</td>
</tr>
<tr>
<td>El Camino Real/Rancho del Oro Dr.</td>
<td>6-lane Major</td>
<td>B</td>
<td>28,790</td>
</tr>
</tbody>
</table>

Source: City of Oceanside, June 2004 and Table C-2, Oceanside Circulation Element. Note: Traffic volumes are 2004 except for segment between Pacific St./Coast Highway, which is 1995.

As shown, all segments operate at acceptable levels of service (LOS). With the proposed project, truck traffic would be generated to deliver material from the point of origin or the stockpile location. In the worst-case scenario, all 150,000 cy would be conveyed from El Corazon to the pilot study site. As disclosed in Section 8 of the MND, this would result in a maximum of 179 delivery truck trips per day over an 8-hour day for up to 10 weeks. Vehicles would follow designated truck routes to the pilot study site and flagmen would direct traffic as appropriate. The designated haul route and required traffic control for each project would be determined and approved by the City Engineer to minimize traffic impacts and may depend on the equipment proposed. Figure 2 illustrates the possible transport routes. If the Oceanside Boulevard route is used for both delivery and return trips, then that road segment would have an additional 358 trips. If the return trips are spread among the alternate haul routes, then only 179 delivery trips would occur on Oceanside Boulevard west of El Camino Real.

Daily truck traffic would not be substantial enough to decrease the LOS on streets west of El Camino Real. The small segment east of El Camino Real would only be utilized when material is stockpiled. The short-term, temporary nature of construction activities would result in less than significant impacts. Further, the City may use the first 2 years of lesser quantity placement to
evaluate the effect of material transport (5,000 to 20,000 cy per year) on the selected haul routes. If the transport results in undesirable traffic conditions, the City may choose to redesign the project to reduce the same quantity at any single event, or increase the time between placement events.

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

**No Impact.** SANDAG prepares the Congestion Management Program (CMP) for the San Diego Region. I-5 is a CMP roadway; however, Oceanside Boulevard is not designated as a managed arterial in the most recent 2002 CMP update (SANDAG 2003). The CMP requires an Enhanced CEQA review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. The proposed project is expected to generate a maximum of 179 ADT and 22 peak hour trips. Therefore, a CMP review would not be required.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

**No Impact.** The proposed beach replenishment project would not include changes to air traffic and is not located in an area that would affect or be affected by air traffic. Therefore, it would not result in a change of air-traffic patterns or levels, or a change in location that results in substantial safety risks.

d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**Less Than Significant Impact.** Vehicle transport of sand to the Oceanside pilot project location may increase hazards along haul routes and at the beach site itself during construction due to conflict between people and trucks. Figure 2 illustrates the proposed truck haul routes. The City would require the contractor to implement a traffic control plan with a system of signs and flagmen to prevent accidents while construction vehicles access and egress from the stockpile site and at the pilot site. As disclosed in Section VII(c), there are four schools within the vicinity of the haul route. The traffic control plan would also consider the additional safety measures at these key locations (e.g., extra control at school crossings) to reduce potential hazards. Traffic control would reduce impacts to transportation and circulation to less than significant.

e. Result in inadequate emergency access?

**No Impact.** The proposed project would not block emergency access to the beach or access to nearby uses. Adequate emergency access and access to surrounding areas would continue to be provided on public streets with the implementation of the project. A traffic control plan would be required for access to and from construction sites.

f. Result in inadequate parking capacity?
No Impact. The proposed project would not eliminate any parking. All hauling vehicles would be through-vehicles and would not be parked for long periods of time. Trucks used for sand grooming would be City-owned vehicles currently used for beach maintenance. They would be parked in City lots.

g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. Implementation of the proposed project would not conflict with adopted policies supporting alternative transportation. Existing pedestrian trails, bicycle routes, bus access, and other similar features would not be affected by the proposed project.

XVI. UTILITIES AND SERVICE SYSTEMS - Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. No development is proposed; therefore, the proposed project would not impact utilities and service systems or exceed wastewater treatment requirements.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. No development is proposed; therefore, the proposed project would not impact utilities and service systems. No new demands for local or regional water or wastewater treatment would be created if the proposed project is approved. A buried sanitary sewer outfall located just north of Loma Alta Creek would not be displaced by the proposed beach replenishment project. The sand would serve as additional cover to protect the pipeline. The project would not involve the need for additional treatment or distribution systems, which could cause environmental impacts.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. No development is proposed; therefore, the proposed project would not impact utilities and service systems. The proposed project would not necessitate new storm water drainage improvements. Sand placement around and near storm drain outlets would allow for proper drainage. The project would not involve the need for additional storm drainage.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. No development is proposed; therefore, the proposed project would not impact utilities and service systems.
**No Impact.** No development is proposed; therefore, the proposed project would not impact utilities and service systems. No new demands on local or regional water supplies would be created if the proposed project is approved. The project would not require the need for new local or regional water supplies. Relatively small quantities of water may be needed at the sites for dust suppression, but the quantity would be incrementally small compared to use citywide or regionwide.

e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

**No Impact.** No development is proposed; therefore, the proposed project would not impact utilities and service systems. No new or increased demands for wastewater treatment would be created if the proposed project is approved. The project would not involve the need for increasing the capacity of wastewater treatment facilities.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

**No Impact.** No development is proposed; therefore, the proposed project would not impact utilities and service systems. The project would not involve the need for solid waste disposal. The project could have a beneficial effect to landfill capacity if material otherwise disposed of in a landfill were able to be used for beach nourishment.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

**No Impact.** No development is proposed; therefore, the proposed project would not impact utilities and service systems. The project would not involve the need for solid waste disposal and, therefore, does not alter the compliance with federal, state, and local statues and regulations related to solid waste.

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE**

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?
Potentially Significant With Mitigation Incorporated. As discussed in Item IV(a), most sedentary or slow-moving marine animals within the footprint area would be killed from burial and construction. However, direct impacts would not be significant due to the rapid recolonization of the habitat and the absence of sensitive species. As discussed in Item IV(a), although grunion are not listed as threatened or endangered, a monitoring program is designed to minimize impacts to this managed fish species with monitoring of the beach if sand replenishment were to occur during the spawning season. This potential impact would be reduced to less than significant through the monitoring program.

The project would not substantially impact habitat, populations, or range of plant or animal species. The project would not eliminate important examples of California history or prehistory because sensitive cultural resources are not present in the area of impact as discussed under Cultural Resources.

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact. A wide variety of projects are proposed in the Oceanside littoral cell coastal area and a list of past, present, and reasonably foreseeable projects is provided in Table 5. No significant, unmitigable environmental impacts have occurred from the past beach replenishment projects. In the last large project (RBSP), over 2 million cy were placed over several months. This pilot study would not exceed 150,000 cy each year, and substantially less in the first 2 years. Potentially significant impacts from implementation of the proposed pilot project at Oceanside would be mitigated to below a level of significance by mitigation measures and monitoring programs. None of the potential impacts identified would result in cumulatively significant impacts. Cumulative impacts associated with the proposed beach replenishment project would be less than significant.

c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. No significant adverse effects are anticipated to occur to human beings, either directly or indirectly, if the proposed beach replenishment project is approved and implemented. Potentially beneficial impacts could occur to humans (e.g., recreation) and the environment (e.g., more sand habitat for shore birds) from this project.
Table 5  
List of Cumulative Projects in Oceanside Littoral Cell

<table>
<thead>
<tr>
<th>Project</th>
<th>Jurisdiction</th>
<th>Description</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceanside Harbor Maintenance Dredging</td>
<td>Oceanside</td>
<td>Oceanside Harbor is dredged annually by the USACE to maintain sufficient depth for boat traffic. Dredged material is typically disposed of by placing it on Oceanside beaches south of Tyson Street. The average amount of material placed on the beach is 175,000 cy. The most recent activity (Spring 2005) placed an estimated 260,000 cubic yards.</td>
<td>Annually in the spring</td>
</tr>
<tr>
<td>Oceanside Beach Hotel Project</td>
<td>Oceanside</td>
<td>This proposed project is anticipated to be submitted for approval and must complete the CEQA process. This replaces the Manchester Resort Project. Preliminary plans for the project include approximately 300 hotel rooms and 70 timeshare condos on two city blocks south of the Oceanside Pier. Some retail uses may also be developed.</td>
<td>Not yet scheduled</td>
</tr>
<tr>
<td>Buena Vista Lagoon Weir Replacement Project</td>
<td>Oceanside</td>
<td>The City of Oceanside has proposed to replace the existing weir at the mouth of the Buena Vista Lagoon located at the border of the cities of Oceanside and Carlsbad. The project would replace the existing 50 foot long weir with an 80- by 10-foot weir. The new weir design would decrease beach erosion downstream and increase flows through the mouth of the lagoon during storm events while maintaining the freshwater characteristic of the lagoon.</td>
<td>Sept. 2006</td>
</tr>
<tr>
<td>The Bandstand Sewer Lift Station Replacement</td>
<td>Oceanside</td>
<td>The proposed project would relocate the existing sewer lift station near the Oceanside Pier south to Tyson Park. The project would involve lift station construction, as well as extensive construction along the Strand for pipe installation.</td>
<td>Not yet scheduled</td>
</tr>
<tr>
<td>La Paz County Sand-for-Trash Pilot Program</td>
<td>Oceanside</td>
<td>This project involved an exchange of San Diego trash for Arizona sand. Solid waste was shipped to Arizona and the sand displaced was used to replenish San Diego regional beaches. Approximately 1,000 cy of sand were placed on the beach at the foot of Oceanside Boulevard. This project has been discontinued and no additional phases are planned.</td>
<td>March 1997</td>
</tr>
<tr>
<td>Pacific Street Bridge Widening</td>
<td>Oceanside</td>
<td>The approved project involved widening the opening under the Pacific Street Bridge at Loma Alta Creek to allow improved movement of water both from the creek and tidal flushing.</td>
<td>2000</td>
</tr>
<tr>
<td>Agua Hedionda Lagoon Maintenance Dredging</td>
<td>Carlsbad</td>
<td>This lagoon has undergone maintenance dredging since 1955 and in that period, over 5.9 million cy may have been removed. This dredged material has been placed on adjacent beaches in Carlsbad. In 1998, over 59,000 cy were dredged from the middle basin, and over 214,000 cy were dredged from the inner basin. In 1999, an estimated 155,000 cy were dredged from the outer basin.</td>
<td>Annual dredging, permit expires in 2001</td>
</tr>
<tr>
<td>Bristol Cove Dredging Project</td>
<td>Carlsbad</td>
<td>Dredging of 20,000 cy of silt from the Bristol Cove boat channel at the intersection of Park Drive and Cover Drive to restore it to its original -9 MSL elevation. Although this dredged material was not directly placed on Carlsbad beaches, it was placed in a future borrow pit within the outer basin of the Agua Hedionda lagoon which displaced sand for placement onto nearby Carlsbad beaches.</td>
<td>May 1998</td>
</tr>
<tr>
<td>Opportunistic Beach Fill Program</td>
<td>Carlsbad</td>
<td>The City of Carlsbad proposes to implement a program to provide CEQA clearance and permitting for opportunistic beach material. The proposed program involves up to 150,000 cy per year of material with maximum 25 percent fines. A source with 70,000 cy has been identified, but the CEQA document has not yet been released for public review.</td>
<td>Anticipate placement of 70,000 cy in 12 to 18 months (2006 to 2007)</td>
</tr>
<tr>
<td>Project</td>
<td>Jurisdiction</td>
<td>Description</td>
<td>Timing</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Batiquitos Lagoon Enhancement Project</td>
<td>Carlsbad</td>
<td>A phased project to restore Batiquitos Lagoon was initiated in 1995, which has resulted in the dredging of 1.8 million cy of sediment from the lagoon. Dredged material was used as beach nourishment material for Carlsbad, both south of Agua Hedionda Lagoon and north of Batiquitos Lagoon. Approximately 1.6 million cy of sand were placed on Encinas Beach (near proposed South Carlsbad receiver sites) and 200,000 cy were placed adjacent to the lagoon inlet (proposed Batiquitos receiver site). Continued dredging and placement is planned to maintain the lagoon, and may need to be conducted annually. Dredging and placement in May 1999 yielded 10,000 cy; half of which were placed on Carlsbad beaches and the other half of which were placed in least tern nesting areas in the lagoon. Dredging in February 2000 placed an estimated 50,000 to 70,000 cy at Encinitas/South Ponto Beach. Another dredge event occurred in the 2003/2004 season. Anticipated maintenance dredging may result in 50,000 cy available in 2006.</td>
<td>Possibly yearly or every other year</td>
</tr>
<tr>
<td>Carlsbad Boulevard/Descanso Lot Subdivision</td>
<td>Carlsbad</td>
<td>As a by-product of a condominium construction project, 20,000 cy of sand were placed at Ponto Beach.</td>
<td>July 1996</td>
</tr>
<tr>
<td>Moonlight Beach</td>
<td>Encinitas</td>
<td>The city sponsors yearly beach replenishment to place approximately 1,000 cy of sediment on Moonlight Beach. The sand is purchased and trucked to the site. For example, 1,327 cy of imported sand was placed in Spring 1999.</td>
<td>Possibly annually, prior to Memorial Day</td>
</tr>
<tr>
<td>San Elijo Lagoon Mouth Opening</td>
<td>Encinitas</td>
<td>This project dredges the mouth of the San Elijo Lagoon to maintain the opening and places the cobble and sand material south of the mouth on Cardiff Beach. Dredging occurs on an as-needed basis. An average of 6,000 cy has been placed on the beach annually. Dredging in May 1999 resulted in the placement of approximately 10,000 to 15,000 cy of sand. In 1999, the mouth was opened three times.</td>
<td>At a minimum, annually in the spring</td>
</tr>
<tr>
<td>Encinitas/Solana Beach Shoreline Protection Feasibility Study and EIS/EIR</td>
<td>Encinitas and Solana Beach</td>
<td>Feasibility study to evaluate methods of shoreline protection. The preferred alternative is approximately 1 million cy of beach nourishment material, combined with erodible concrete to fill notches at the base of cliffs.</td>
<td>EIS/EIR available in mid to late August 2005. Implementation in 2008.</td>
</tr>
<tr>
<td>Lomas Santa Fe Drive Grade Separation</td>
<td>Solana Beach</td>
<td>As a by-product of a roadway project, 51,000 cy of material were placed at Fletcher Cove and 3,000 cy was placed at Tide Beach Park.</td>
<td>1999</td>
</tr>
<tr>
<td>Fletcher Cove Master Plan</td>
<td>Solana Beach</td>
<td>Redevelopment of Fletcher Cove Beach Park and surrounding business district including construction of a parking garage, new lifeguard station, additional open space, pedestrian paths, and other upgrades. Being constructed in 5 phases, the first phase (restroom) was built in 2005. Others still in conceptual phase.</td>
<td>Phase 1 - 2005. Other phases at least 2010</td>
</tr>
<tr>
<td>Cedros Crossing Mixed Use Project</td>
<td>Solana Beach</td>
<td>Proposed mixed use development at the Solana Beach train station. Consists of approximately 140 residences and 70,000 cubic feet of commercial use. Both CEQA and NEPA are in process. Estimated opportunistic beach material of 100,000 cy.</td>
<td>Unknown, possibly 2007 to 2010</td>
</tr>
<tr>
<td>Project</td>
<td>Jurisdiction</td>
<td>Description</td>
<td>Timing</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>San Elijo Lagoon Restoration Project</td>
<td>Encinitas</td>
<td>Conceptual plans to restore the lagoon via major infrastructure changes (e.g., elevate railroad tracks and Coast Highway 101 as well as remove fill at I-5 bridge) plus dredging. Establish lagoon as a mitigation bank for I-5 widening and other major infrastructure projects with impacts to coastal wetlands.</td>
<td>CEQA/NEPA document anticipated in 2007. Implementation time not known.</td>
</tr>
<tr>
<td>Encinitas Resort Hotel</td>
<td>Encinitas</td>
<td>Development of a 125+ room hotel on bluffs west of Coast Highway 101, south of Batiquitos Lagoon. Possibly 45,000 cy of beach nourishment material available. MND approved, permits in process.</td>
<td>Fall 2006.</td>
</tr>
<tr>
<td>Various Opportunistic Beach Nourishment Pilot Project Sites within San Diego Region</td>
<td>Encinitas, Solana Beach, Coronado</td>
<td>If the SCOUP plan process is successful, than other jurisdictions may decide to proceed with less-than-optimum opportunistic programs in their jurisdictions. Potential for up to 150,000 cy per year at each site, two of which are located in North County.</td>
<td>Anticipated program in late 2007.</td>
</tr>
<tr>
<td>Regional Beach Sand Project</td>
<td>Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, San Diego, Imperial Beach</td>
<td>Dredged over 2 million cy of beach-quality material from 5 offshore borrow sites and replenished 12 receiver sites. Implemented 5-year monitoring program.</td>
<td>Spring/Summer 2001</td>
</tr>
<tr>
<td>U.S. Navy Homeporting Project</td>
<td>Oceanside, Del Mar and San Diego</td>
<td>As part of a project to dredge the North Island berthing area and the main navigation channel into San Diego Harbor, up to 5.5 million cy were permitted for beach nourishment at 11 receiver sites in the San Diego region. The project was discontinued in 1997 when munitions were found in the dredged material. Before termination, Oceanside received 102,000 cy of sand that was placed onshore. Approximately 170,000 cy were placed in the nearshore zone off Del Mar and 12,000 cy were placed in the nearshore off Mission Beach.</td>
<td>Ended October 1997</td>
</tr>
</tbody>
</table>
XVIII. MITIGATION MEASURES

Section 8 of the MND provides a description of the monitoring program to be implemented to prevent adverse impacts to the biological resources (grunion), water quality (turbidity), and recreation (surf conditions). That monitoring program also requires beach profiles to track sand movement before and after nourishment new events. Additionally, design features are listed in Section 8 to address truck operations and other operational procedure to avoid impacts (e.g., traffic control plan). This section summarizes the monitoring programs and mitigation measures for the project.

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Activity</th>
<th>Responsible Party</th>
<th>Timing</th>
<th>Reporting?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality</strong></td>
<td>Maintaining equipment in tune, per manufacturer's specifications; Utilizing catalytic converters on any gasoline-powered equipment; Retarding engine timing by 2 degrees; Installing high-pressure fuel injectors; Using reformulated, low-emissions diesel fuel; Substituting gasoline-powered for diesel-powered equipment where feasible; Minimizing equipment idling times by restricting truck delivery rates as specified in the project description to reduce truck queues; and Curtailing construction during periods of high ambient pollutant concentrations (e.g., Stage I smog alerts).</td>
<td>Contractor</td>
<td>During construction</td>
<td>No</td>
</tr>
<tr>
<td><strong>Noise</strong></td>
<td>The project shall adhere to applicable City noise standards. Mitigation measures include the following: All project-related equipment shall utilize properly working mufflers; The engines shall be equipped with shrouds; and All related equipment shall be in proper working order and kept in a proper state of tune to reduce backfires.</td>
<td>Contractor</td>
<td>During construction</td>
<td>No</td>
</tr>
</tbody>
</table>

**Monitoring Actions/Project Conditions**

<table>
<thead>
<tr>
<th>Monitoring Actions/Project Conditions</th>
<th>City of Oceanside</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Beach Profiles Monitoring</td>
<td>Pre-project baseline, 1 month prior</td>
<td>Post-construction, immediately after completion</td>
<td>Pre-project baseline, ½ month prior and 3 times per week over 14 days</td>
<td>Pre-project baseline, predicted grunion run closest to project initiation (maximum 2 weeks prior)</td>
</tr>
<tr>
<td>Surf Conditions Monitoring</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Grunion Monitoring (if appropriate season)</td>
<td>During construction, as dictated by the ties and lunar cycle, approximately every 2 weeks during spawning season</td>
<td>During construction, daily during construction</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Turbidity Monitoring</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
XIX. REFERENCES

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