

DRAFT
**MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY/
ENVIRONMENTAL CHECKLIST FOR
THE CITY OF DEL MAR
SAND COMPATIBILITY AND OPPORTUNISTIC USE PROGRAM**



Prepared for:



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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
BMP	best management practice
BOZ	Beach Overlay Zone
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFC	Coastal Frontiers Corporation
City	City of Del Mar
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalents
CSMW	California Sediment Management Workgroup
cy	cubic yard
dBA	A-weighted decibels
diesel PM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EA	Environmental Assessment
ESA	Environmental Science Associates
FHWA	Federal Highway Administration
GHG	Greenhouse gas
km	kilometer
LCP	Local Coastal Program
L _{eq}	equivalent sound level over a given time period
L _{max}	maximum noise level
LOSSAN	Los Angeles-San Diego-San Luis Obispo rail line
M&N	Moffatt & Nichol
MHTL	mean high tide line
MLLW	mean lower low water
MND	Mitigated Negative Declaration
MSCP	Multiple Species Conservation Program
MT	metric ton
NOAA	National Oceanographic and Atmospheric Administration
NO _x	nitrogen oxide
O ₃	ozone
PM _{2.5}	particulate matter 2.5 micrometers or less
PM ₁₀	particulate matter 10 micrometers or less
PNR	Public Notification Report
PP	Public Parkland
RAQS	Regional Air Quality Strategy
RBSP	Regional Beach Sand Project
RWQCB	Regional Water Quality Control Board
SAIC	Science Applications International Corporation
SB	Senate Bill
SANDAG	San Diego Association of Governments

SAP	Sampling and Analysis Plan
SAPR	Sampling and Analysis Plan and Report
SCE	Southern California Edison
SCOUP	Sand Compatibility and Opportunistic Use Program
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SELRP	San Elijo Lagoon Restoration Project
SLC	State Lands Commission
SMAQMD	Sacramento Air Quality Management District
SMCA	State Marine Conservation Area
SMP	Sediment Management Plan
SO _x	sulfur oxide
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled
VOC	volatile organic compounds

SECTION 1: INTRODUCTION

The City of Del Mar (City) is a beach city in San Diego County, California (Figure 1-1). Del Mar is Spanish for “of the sea” or “by the sea,” which reflects the City’s location on the coast of the Pacific Ocean. Del Mar’s climate is considered Mediterranean-subtropical with warm, dry summers and mild, humid winters. The City has a total area of 1.8 square miles and a small population of approximately 4,200 people, yet accommodates millions of visitors annually due to a wide variety of free and low cost commercial and recreational activities that are made available to the public at the City’s beaches, parks, trails, open space viewpoints, public facilities, and the Del Mar Fairgrounds.

Beaches in north San Diego County have been narrowing over the last 60 to 80 years due to reductions in natural sand supply from upcoast and upstream. Natural sand supplies from the coast to the north, from local rivers and streams, and from local bluffs have declined over time due to urbanization. Features such as the Camp Pendleton Del Mar Boat Basin and City of Oceanside Harbor interrupt coastal sand delivery from the north. Dams on the San Dieguito and San Luis Rey Rivers have impounded sand upstream, and seawall protection for the railroad on the south bluff have reduced sand yield from bluffs. Therefore, the City is attempting to restore the sediment supply to its coast by direct sand placement through the implementation of a Sand Compatibility and Opportunistic Use Program (SCOUP; proposed project). Opportunistic sand used could include upland sources (e.g., residential or commercial development) or aquatic sources (e.g., detention basins, river inlet sediment accumulation). An example of this action is the removal of sand from the mouth of the San Dieguito River for beach nourishment as part of this project, as that river was the major historic sand source for the City and is now substantially reduced in capability to supply sediment. The San Dieguito River is the most likely sand source for beach nourishment in Del Mar.

1.1 PROJECT BACKGROUND

The City’s North Beach, a beach-level neighborhood, is located in the northwesterly portion of the City and is vulnerable to coastal flooding and riverine flooding. The City is also vulnerable to sea level rise as identified in a Coastal Hazards, Vulnerability and Risk Assessment (ESA 2016) and Addendum (ESA 2018a) and Del Mar Adaptation Plan (ESA 2018b). As such, a City of Del Mar Sediment Management Plan (SMP) was prepared (ESA 2018c) that considers use of soft solutions to reduce vulnerability to flooding along the coast. One recommendation from the City of Del Mar SMP is to implement a SCOUP that enables implementation of beach nourishment projects through permitting. The SCOUP is currently a special project that was prioritized and funded by the Del Mar City Council for Fiscal Year 2019-2020 and Fiscal Year 2020-2021, with the primary objective of putting sand on the beach. Del Mar’s SCOUP is the proposed project evaluated in this Mitigated Negative Declaration (MND).

Beach nourishment provides ecological restoration and beach habitat enhancement, as well as recreational benefits, shore protection, flood protection, and erosion control. In Del Mar, beach nourishment is also important to preserve and protect public beach access. The proposed Del Mar SCOUP outlines a plan to capitalize on opportunities to obtain beach-quality sand from construction, development, maintenance, or dredging projects in the region for placement as beach nourishment within the City. The SCOUP presents a streamlined program of sand placement at specified locations in the City to allow quick and efficient placement of material as it becomes available. By outlining a programmatic approach, efficiencies can be achieved that make opportunistic material a viable sand source for shoreline protection within the City. The program identifies a maximum envelope within which sand may be placed as it becomes available through the implementation of individual projects, usually of relatively small volume. The envelope would extend from the Del Mar bluffs in the north (north of the San Dieguito River inlet) to Powerhouse

Park (north of 15th Street towards the center of Del Mar's shoreline). The shoreline south of Powerhouse Park is avoided for consistency with past nourishment activities, and precautionary avoidance of nearshore environmental resources, such as surfgrass, kelp canopy, and understory algae (AMEC 2002). Nourishment sites would be monitored over time so that the program may be modified, with agency consent, for maximum environmental sensitivity while also maximizing nourishment of the beach and littoral zone.

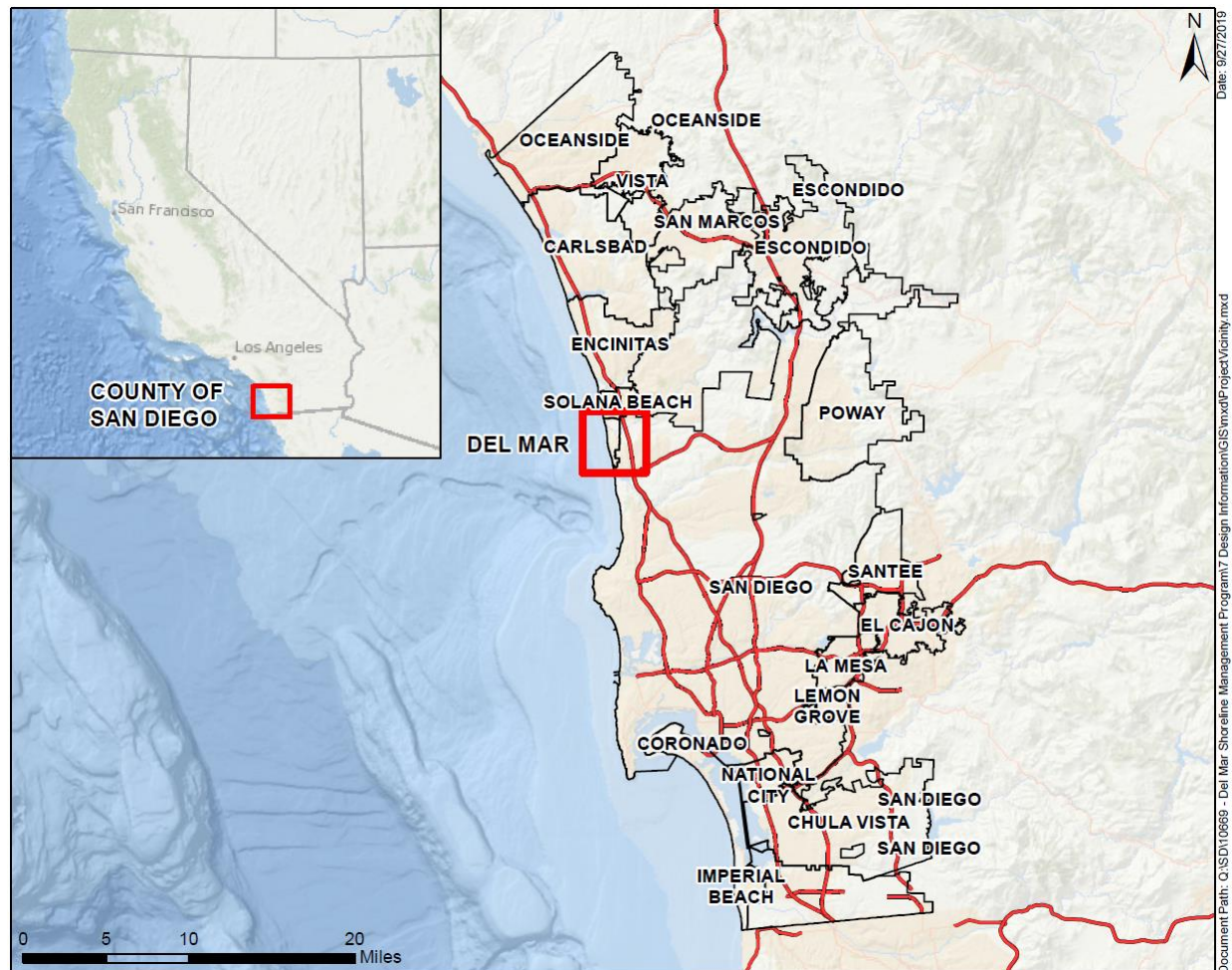


Figure 1-1. Project Vicinity

1.2 GENERAL CITY CONDITIONS

The entire western boundary of the City is on the oceanfront, containing a nearly continuous sand beach with the San Dieguito River mouth to the north and Los Peñasquitos lagoon to the south. The shoreline is bordered by the Pacific Ocean to the west and developed beach and blufftop areas to the east (Figure 1-2). The over 2.5-mile-long beach is mostly walkable from end to end, with the exception of the San Dieguito River mouth, especially in the summer when beach widths tend to be naturally wider. The northern beach area, known as North Beach, from 15th Street north to the San Dieguito River mouth, sits at a relatively low elevation. North of 17th Street is characterized by existing beach-level, oceanfront homes that are developed at a higher elevation than the adjacent homes and public roads to the east (Ocean Front, Coast

Boulevard, and Camino Del Mar). From west to east, this area slopes gently down to a low elevation point at Camino Del Mar, then increases in elevation moving eastward and upwards towards the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail line. The southern portion of Del Mar is located at a relatively high elevation, atop oceanfront bluffs, as is the area north of the San Dieguito River mouth, which is known as the North Bluffs.

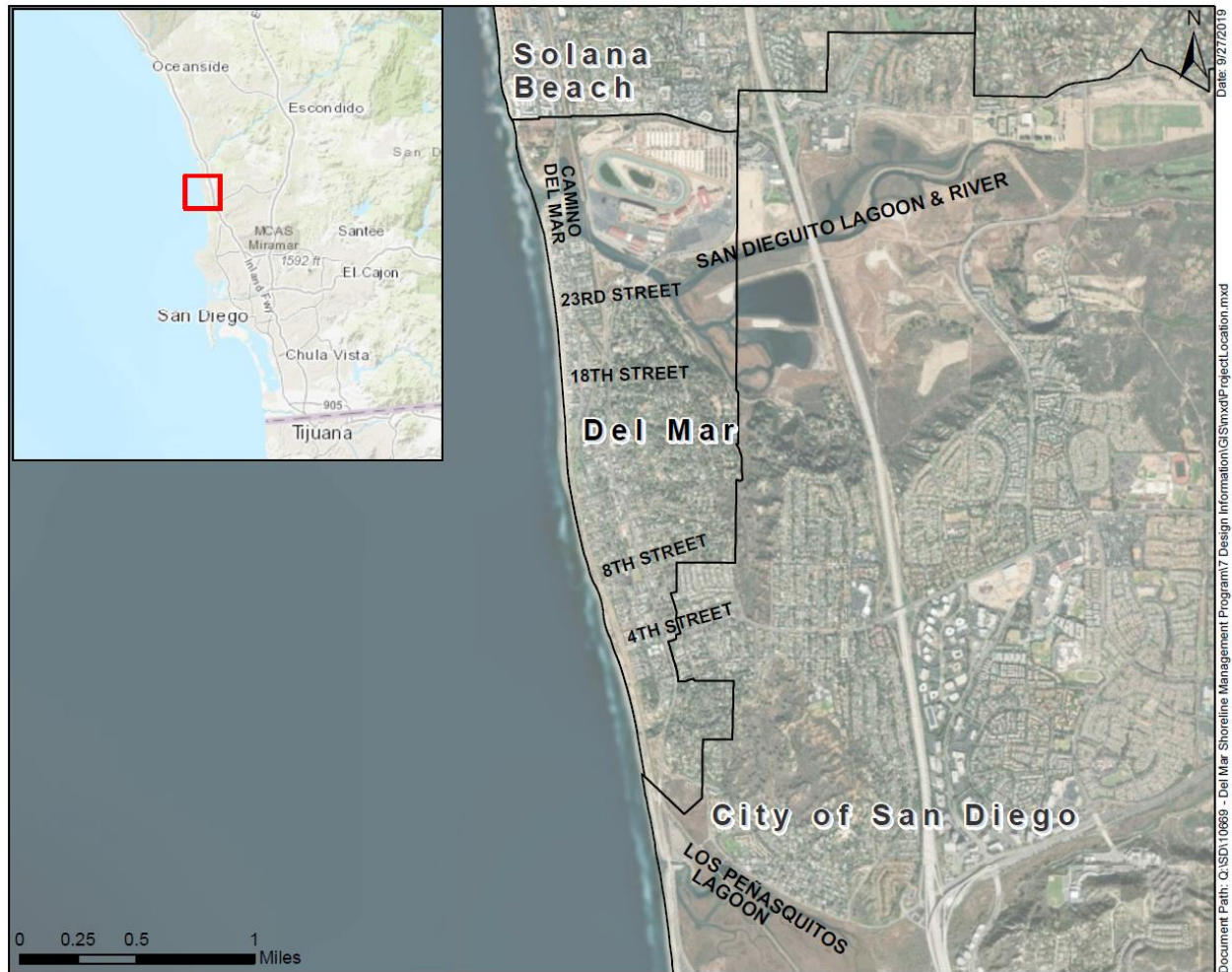


Figure 1-2. City Area

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SECTION 2: PROJECT OBJECTIVES

The City of Del Mar recently completed a Coastal Hazards, Vulnerability and Risk Assessment (ESA 2016) and Addendum (ESA 2018a), Adaptation Plan (ESA 2018b), and SMP (ESA 2018c), which all indicated the need for shoreline adaptation to help minimize the risk of flooding and beach and bluff erosion. The City responded by initiating creation of a SCOUP to provide ecological restoration, offset predicted levels of erosion and sea level rise, and reduce the impacts of flooding during storm events. The project objectives are to follow the City's adopted SMP by establishing a SCOUP that is consistent with that local SMP as well as state and regional models for SCOUP programs and sediment management projects.

2.1 CONSISTENCY WITH THE REGIONAL SCOUP MODEL

The City's proposed SCOUP will be consistent with the statewide Sand Compatibility and Opportunistic Use Program Plan (M&N 2006) and regional San Diego Coastal Sediment Management Master Plan (M&N 2009¹), developed by the San Diego Association of Governments (SANDAG) to manage sand on a regional or littoral cell basis.² This regional program established a process whereby opportunistic material (with both optimum and less-than-optimum sands) can be evaluated for compatibility and placed on a predetermined beach nourishment site under a programmatic approach for sediment management. Appropriate environmental clearance and program-level permits can be prepared and issued in advance so that when materials become available, there is minimal delay in placement. Several San Diego County coastal jurisdictions, including Oceanside, Encinitas, Solana Beach, Coronado, and Imperial Beach, have established local SCOUPs following the guidelines of the regional SCOUP (M&N 2006).

Within the 2006 statewide SCOUP, SANDAG and the California Sediment Management Workgroup (CSMW) sponsored and managed preparation of a pilot project in Oceanside, California. The pilot established a sequence of events for use of opportunistic source material in six steps:

1. Establish a process for use of optimum³ and less-than-optimum⁴ sand-size material;
2. Establish a method to characterize beach and source sand for compatibility;
3. Identify economically feasible source areas;
4. Identify appropriate nourishment sites and, if appropriate, storage sites;
5. Identify appropriate placement techniques; and
6. Complete California Environmental Quality Act (CEQA)/National Environmental Policy Act compliance and permit approvals for the project.

¹ Information about the CSMW and regional Sediment Master Plan can be found at <http://dbw.ca.gov/csmw/sedimentmasterplan.htm>.

² A littoral cell is defined as a reach of shoreline in which 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 (Patsch et. al, 2006).

³ Optimum beach fill material is material that is compatible with the dry sand beach. The silt and clay content can be within 10 percent of that of the existing dry beach sand, which ranges from 0 percent to 5 percent. Therefore, optimum beach fill material may in some cases contain up to 15 percent fines.

⁴ Less-than-optimum beach fill material is material not compatible with the dry beach, but compatible with lower underwater areas. The fines fraction should be within 10 percent of existing wet sediment. Typically, the percent fines of wet sediment 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 in some cases.

2.2 REGIONAL NOURISHMENT PROJECTS

In addition to smaller-scale SCoup nourishment projects, SANDAG previously implemented the larger-scale Regional Beach Sand Project I and II (RBSP I and RBSP II) in 2001, and 2012, respectively. RBSP I placed over 2 million cubic yards (cy) of clean beach-quality sand on 12 beach nourishment sites from Oceanside to Imperial Beach, including one within the City of Del Mar. RBSP II placed 1.5 million cy of sand on area beaches, but the City of Del Mar did not participate. Sand was dredged from five offshore borrow sites (Coastal Frontiers Corporation or CFC 2013), including one offshore dredge site in Del Mar. The dredged material was piped onshore and earthmoving equipment was used to spread the sand on beaches in participating jurisdictions. While the dredged material varied by borrow site, material placed was good-quality beach sand with typically about 10 percent fines.

The potential environmental effects of RBSP I were evaluated in the Final Environmental Impact Report/Environmental Assessment (EIR/EA) for the San Diego Regional Beach Sand Project State Clearinghouse (SCH) #1999041104 (SANDAG and U.S. Department of the Navy 2000). The EIR/EA concluded that the project would not have significant effects on the environment. SANDAG performed both a short-term (construction) and long-term (5-year) monitoring program to verify that conclusion. SANDAG also collected additional data regarding actual beach nourishment sand transport compared to coastal engineering models.

Monitoring for the regional projects was performed during construction for turbidity, spawning grunion (*Leuresthes tenuis*), and underwater archaeological resources. No adverse construction impacts to these resources were identified. Post-construction monitoring of lagoons and off-shore biological resources (kelp, rocky intertidal habitat, and subtidal habitat) continued through 2006. Annual monitoring reports (available at www.sandag.org/shoreline) concluded that no permanent significant adverse impacts occurred. Overall, no long-term impacts were associated with RBSP I or II; however, there were some short-term impacts associated with sedimentation of nearshore habitat that were considered temporary and within the range that would occur naturally (AMEC 2005). Additionally, this monitoring provided extensive information about marine resources and sand transport in the region.

Supplementary monitoring at specific locations was sponsored by individual jurisdictions. As an example, the City of Encinitas sponsored biological monitoring at six locations: three that received sand as part of RBSP I 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 nourishment sites, including marine invertebrates, shorebirds and gulls, and grunion (SAIC 2006).

2.3 LOCAL APPROACH

The City of Del Mar's proposed SCoup was initiated following recommendations of the City of Del Mar SMP to pursue beach nourishment in the near term, in part through establishment of a SCoup (ESA 2018c). The City's SMP recommends that approximately 190,000 to 380,000 cy of beach quality sand be placed on the Del Mar beach per decade based on current conditions and anticipation of up to one foot of sea level rise. The City SCoup follows the SMP and regional SCoup model described in Section 2.1, and utilizes lessons learned from the regional RBSP efforts described in Section 2.2. In consideration of the location of sensitive biological resources along Del Mar's shoreline, the proposed Del Mar SCoup beach nourishment site would place relatively small volumes within a larger maximum sand placement envelope based on the City of Del Mar RBSP I footprint. The proposed Del Mar SCoup would extend the location for potential sand placement farther northward to coincide with the boundary of the Southern California Edison (SCE) maintenance dredging placement site. Following the observation of no permanent significant adverse impacts from RBSP I, the City expects to achieve the same results or better.

The following discussion provides more specific details about the proposed SCoup sand placement, sand qualities and quantities, and haul routes; and the plan for public outreach and monitoring.

SECTION 3: PROJECT LOCATION

The entire western boundary of the City of Del Mar is located along the oceanfront and includes an extensive sandy beach that runs north-south. The Del Mar SCOUP would apply to the segment of the beach located north of 15th Street up to the northern-most city boundary. The proposed SCOUP consists of placing opportunistic sand within a boundary referred to as the “placement envelope” which extends from just north of the ocean inlet to the San Dieguito River southward to Powerhouse Park, excluding the open water portion of the San Dieguito River mouth (Figure 3-1). The majority of the placement envelope is in the same location where Del Mar received 183,000 cy of material in RBSP I. The additional northerly sand placement area aligns with the approved footprint for SCE’s required mitigation project (San Dieguito River inlet maintenance and sand replenishment). This required mitigation has been performed approximately every two years by SCE, since 2009, pursuant to their existing Coastal Development Permit. The southern boundary for the proposed placement envelope is set at Powerhouse Park to avoid impacts to known nearshore environmental resources offshore of southern Del Mar. In accordance with the SCOUP, the typical opportunistic beach fill project would occupy a small footprint within the maximum overall sand placement envelope identified.



Figure 3-1. Northern and Southern Limits of Placement Envelope

SECTION 4: PROPOSED PROJECT CHARACTERISTICS

Section 4.1 provides project details for the proposed Del Mar SCoup regarding (1) sand quantities and qualities, (2) beach fill design, and (3) sand placement. Section 4.2 provides a description of the monitoring program commitments to be implemented. During the approximate 5-year period, monitoring results would be used to further refine and optimize the program as appropriate.

4.1 SAND QUANTITIES AND QUALITIES

Evaluating opportunistic sand sources to determine if they are appropriate for beach nourishment is a process based upon sediment characterization and comparison protocols. Sand material is anticipated to be from local or nearby contributions, such as from upland construction, development, or dredging/excavation projects (e.g., wetland restoration, or river inlet/detention basin maintenance). Placement of excavated beach quality sand material at the specified beach location is proposed to nourish the littoral cell. The most likely sand source is dredged material from the San Dieguito River. Other sources include relatively small construction projects, which may produce 2,000 to 4,000 cy of sand, and could include larger projects producing 50,000 cy or more of sand; however, larger development projects with high grading quantities are rare within the City.

The City would require sampling and analysis of the material under a Sampling and Analysis Plan (SAP) & Report (SAPR) to be approved by the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), and Regional Water Quality Control Board (RWQCB) prior to placement on the beach. Chemical and grain size testing would be required of the sources. Samples not meeting predetermined resource agency standards would be rejected or the City could utilize selective grading techniques to avoid specific areas of poor-quality material. Criteria for determining suitable beach sand includes material that:

- Should be consistent with the gradation of existing sand within the beach profile and slightly coarser if possible, as characterized by the gradation envelope;
- Cannot be suspected of containing hazardous chemicals based on EPA Tier I or II 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 75 percent sand, optimally 80 percent sand or greater and with a percent sand content within 10 percent of the grain size envelope of the beach profile; and
- Must not form a hardpan after placement.

The rate of sand placement on the beach would typically replicate nature as closely as possible. Historically, natural sediment delivery to the coast typically occurred during the wet season (fall and winter) through unobstructed stream channels (i.e., before Lake Hodges dam construction; ESA 2018c); therefore, the majority of beach fill placement is proposed to occur in the fall and winter seasons—September through May, or Labor Day to Memorial Day. Coastal watersheds naturally yield sediment from storm runoff in the wet season and the coastal zone is acclimated to this seasonal turbidity pattern. A provision to allow a one-time/year limited placement during the summer of up to 5,000 cy over a one week period in a single isolated location is being included in case the need is present and an opportunity arises that would otherwise be lost without such accommodation.

The proposed SCOUP has defined parameters for nourishment activities that take into account physical conditions specific to Del Mar, as summarized in Table 4-1.

Table 4-1
Summary of Opportunistic Beach Nourishment Parameters

Design Characteristics	Nourishment Envelope
Method of Placement Allowed	
Nourishment Site Length (approximate)	5,750 feet or less
Beach Berm	Yes
Surf Zone (i.e., Nearshore)	Yes
Maximum Quantities Allowed Given % Fines	
Maximum Volume*	180,000 cubic yards (cy)/5 years ²
0 – 10% Fines	180,000 cy/5 years ²
11 – 25% Fines, Nearshore placement only	Up to 50,000 cy/year
Timing and Duration for Placement	
Monday – Friday, no holidays	7:30 am to dusk (Typical construction hours)

*Maximum volume based on modeling and analysis of the 2001 RBSP I for no-impact (SANDAG and U.S. Navy 2000)

Following the RBSP I total placed sediment volume, up to a maximum total of 180,000 cy/5 years of sand is proposed to be placed within the proposed envelope for material with up to 10 percent fines (with monitoring requirements). Following the Oceanside pilot SCOUP precedent for fine sands, an allowance for up to 50,000 cy/year of sand with 11 to 25 percent fines would be included in case there is a need and the opportunity arises.

4.2 BEACH FILL DESIGN

The proposed SCOUP placement envelope along Del Mar’s beach is shown in Figure 4-1. The proposed envelope extends 5,750 feet; however, individual opportunistic placement projects would take place in smaller footprints within the proposed overall SCOUP envelope. Although beach nourishment is not proposed south of Powerhouse Park, the typical direction of nearshore ocean currents would tend to gradually spread beach fill material towards the south. Sand could be placed north of the San Dieguito River mouth in summer and south of the river mouth in winter to reduce return of sand to the river, capitalizing on seasonal wave conditions (Patsch and Griggs 2006). The beach fill design for the City of Del Mar project includes two different nourishment approaches: beach berm and surf zone placement concepts, depicted in Figure 4-2. These concepts represent a placement of approximately 20,000 cy for each scenario. More information on both proposed example project designs is presented below:

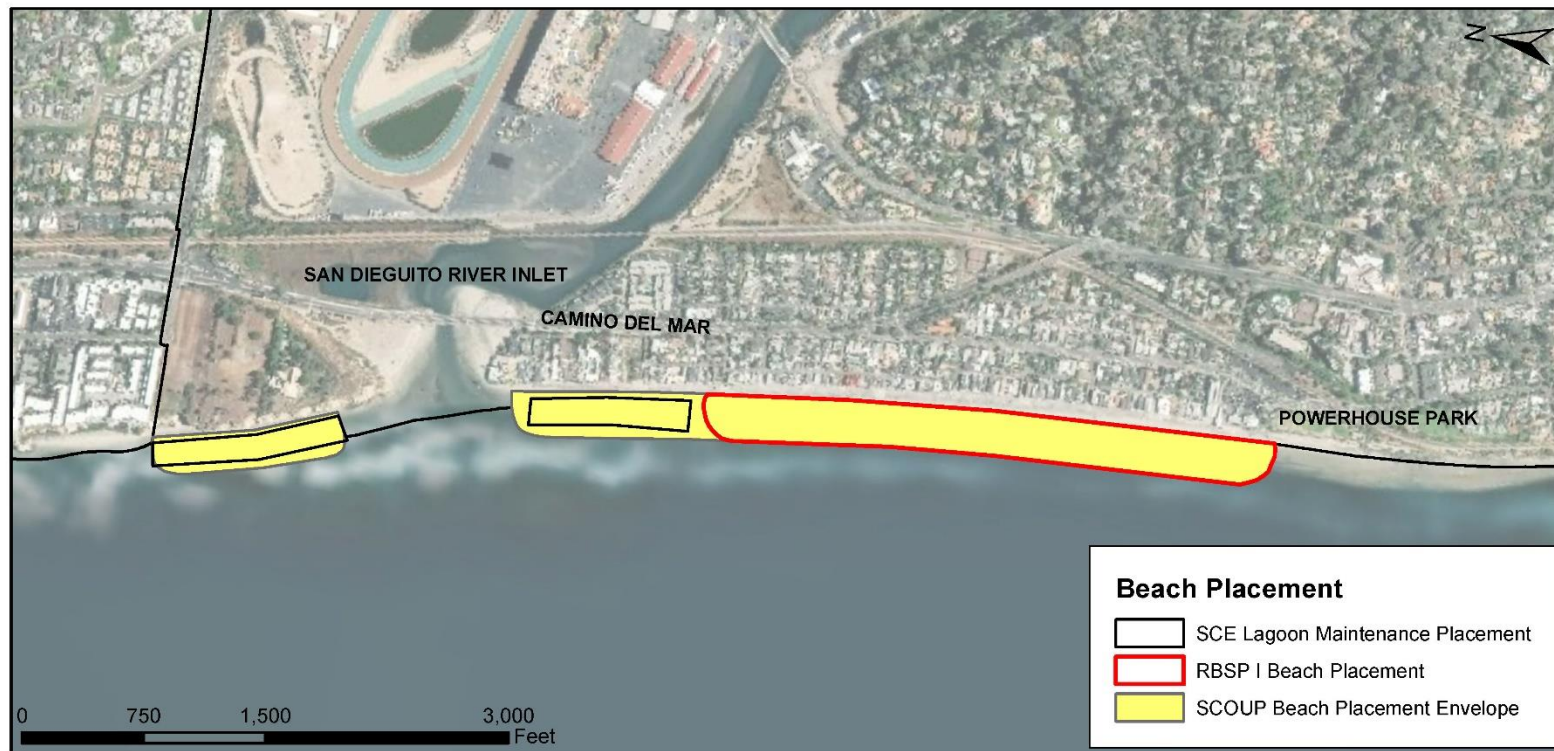


Figure 4-1. Beach Placement Envelope

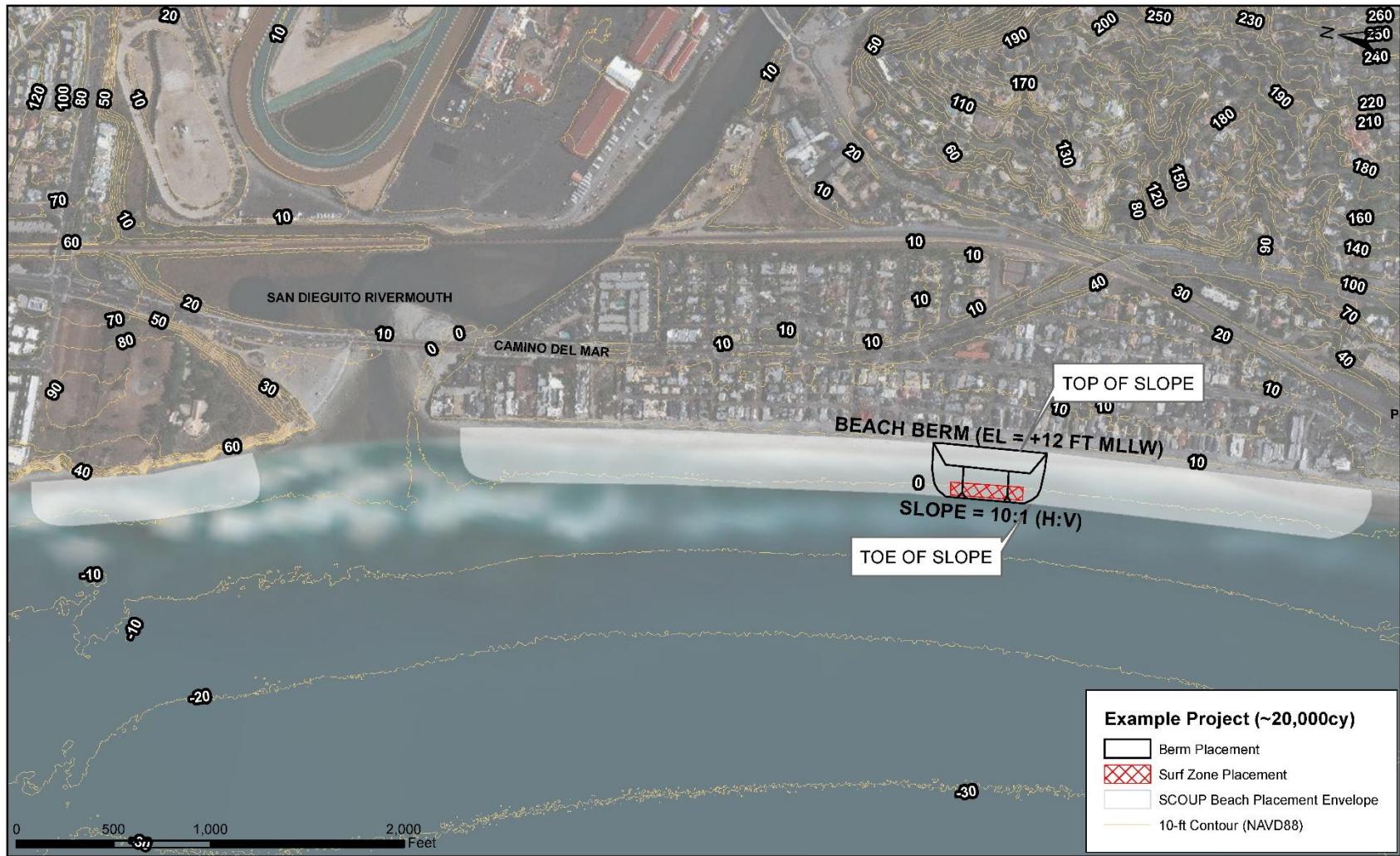


Figure 4-2. Example Project Design – Plan View

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- **Berm Placement** – Under this approach, a beach berm would be constructed by placing sand as a layer over the existing beach through trucking or dredge pipeline placement. The berm would be a level surface extending a certain distance from the back of the beach towards the ocean, then sloping gradually into the water. The elevation, width, length, and slope of the berm would vary for each sand placement opportunity, depending upon the quantity of material to be placed and its qualities, as well as the condition of the beach at the time of sand placement. This option is ideal for good quality material with good color and a smaller total volume.
 - **Surf Zone (i.e., Nearshore) Placement** – With this approach, sand may be placed below the mean high tide line (MHTL) on to the low tide beach just above the surf zone. This is a preferred option if the material does not visually match the existing beach sand. Sand would typically be delivered to the beach and carried by loaders to the water's edge at low tide. The material would be placed as far seaward as possible in a long, linear placement envelope parallel to the coast so that it would be reworked by waves during the following rising tide. Gaps between piles may be created to increase the rate of dispersal. Sand may be placed incrementally if the quantity to be placed exceeds the rate of daily reworking by waves. With this approach, visually different material would be winnowed out of the beach fill naturally by waves and currents and carried offshore. Surf zone placement would likely be the strategy used most often for sand placement of opportunistic material given that land-based material may have a higher fines content than the existing beach. Dimensions may vary depending on conditions at the time of construction, including time of year, quantity, and specific beach fill design.

The conceptual cross-sectional views for both placement options at the beach in Del Mar are illustrated in Appendix A and described below:

- The beach berm placement is generally proposed to have a finished surface elevation of +12 feet mean lower low water (MLLW) and be created as a 100-foot-wide berm that slopes very gently seaward. The seaward incline of the berm would slope towards the ocean at approximately 10:1 (horizontal:vertical).
- Surf zone placement maximum dimensions for below the MHTL would generally be a 3- to 4-foot-high mound or series of mounds placed near the +1 foot MLLW topographic contour or lower, depending on tide conditions at the time of nourishment. The intent would be to place the material as far seaward as possible during low tide to allow the incoming tide to redistribute material throughout the nearshore.

4.3 SAND PLACEMENT

The following discussion includes descriptions of the sand placement, including potential haul routes, pipeline options, and operation times.

4.3.1 Source Material

Opportunistic beach nourishment sources are varied, as described in the City of Del Mar SMP (Section 5.2 of ESA 2018c) and may include the following:

- **San Dieguito River Mouth** – Currently, SCE performs semi-annual maintenance dredging of the San Dieguito River mouth, removing approximately 16,000 cy of material per project and placing this at Del Mar beaches. However, greater volumes of sediment continue to accumulate in the area of Camino Del Mar and the railroad crossing, providing opportunity to be utilized further as a beach nourishment source (ESA 2018c).

-
- Upland Development – Local and nearby regional development projects often produce excess excavation material suitable for beach nourishment. Past projects by nearby cities have often resulted from development projects taking place in the geologic formation named Torrey Sandstone, a beach quality deposit that is prevalent in Del Mar and throughout northern San Diego County.
 - Wetland Restoration – Wetland restoration often involves the dredging of beach quality sand, creating an excess of material with a need for disposal. For example, the nearby San Elijo Lagoon Restoration Project produced approximately 456,000 cy of material that was used for beach nourishment within the City of Encinitas and City of Solana Beach (CFC 2019). Wetland restoration within the San Dieguito River watershed and/or Los Penasquitos Lagoon may provide similar opportunities for beneficial reuse of material for the City of Del Mar. It should be noted however, that the ongoing San Dieguito Lagoon W-19 Restoration Project in the San Dieguito River watershed is anticipated to excavate approximately 1.2 million cy of material, which has been found unsuitable for beach nourishment.
 - Sedimentation Basin Maintenance – Upland sources of accumulated material are potential sediment sources, such as historic sediment transports from the San Dieguito River, which are now contained from distributing material naturally downstream. Example sources are the estimated 4 million cy of sediment accumulated behind Lake Hodges dam and 400,000 cy accumulated behind the Sutherland Reservoir dam (Slagel and Griggs 2006).

Sediment gradation analysis identifies the composition of material, identifying the percent silt, clay, sand, and gravel. Sediment qualities for beach nourishment are regulated by the USACE, USEPA, and RWQCB, to ensure that nourishment material does not drastically alter the existing beach conditions. The source material must be tested, analyzed, and classified prior to construction (referred to as sediment characterization) by collecting a certain number of samples and sample depths depending upon the location and volume of the material to be repurposed. This material must also be analyzed for chemistry. Source site characterization would be regulated through the SAP and SAPR process with resource agencies.

4.3.2 Haul Routes

Sand could be delivered either by truck or pipeline, depending on the material source. Trucks would drive material from the excavation location within the City and nearby areas to the beach for nourishment. Trucks would generally use local roads to access the beach and may also drive along the beach to specific nourishment sites as necessary. This method would be the most likely method utilized for land-based beach placement. During placement of beach sand, the City would coordinate the proposed haul routes with other projects that may impact identified haul routes. Beach access points include Dog Beach north of the San Dieguito River mouth, the beach inlet route from within the river mouth, and residential roadways that provide lifeguard and emergency vehicle beach access to the beach (Figure).

Depending on sand volumes or placement approach, temporary staging of equipment or contractor facilities may be required as part of nourishment activities. Staging would be located in the vicinity of placement and would be limited to disturbed/developed areas or along the beach. For example, one potential equipment staging area could be located at North Beach near the San Dieguito River mouth. Material may also be temporarily stockpiled if necessary, including on the north side of the inlet against the base of the North Bluff and south of the river inlet east and west of the Camino Del Mar bridge, or for short durations at disturbed/developed City-owned parcels (e.g., public work yard).



Figure 4-3. Anticipated Haul Routes and Access Points

4.3.3 Pipeline

Potential beach material could also be conveyed to the nourishment site by pipeline. This method would typically be utilized for moving material from hydraulic dredging operations during events such as wetland restoration or river channel dredging. A dredge pipeline (potentially up to 36 inches in diameter) may be required to reach the nourishment site. One booster pump may be required for each mile separating the sediment source site from the nourishment site. Booster pumps may include noise protection housing, or similar, to minimize noise. Material would typically be placed as a slurry. To facilitate deposition of sediment out of the slurry, earthmoving equipment would be used to build training dikes on the beach, allowing suspended sediment to settle on the beach, as was performed in Del Mar during RBSP I. Training dikes would be longitudinal sand berms that direct slurry along and parallel to the beach at a shallow slope, slowing slurry flow to the point where suspended sediment can fall out and accumulate as a beach berm while water runs off into the ocean.

4.3.4 Operations

Sand volumes available for nourishment at any given time may range from greater than 500 cy to the maximum placement of 180,000 cy/5 years, and delivery may occur by truck using a variety of haul routes and access points along the placement envelope as discussed above. Table 4-2 summarizes the number of truck trips for sediment received from a representative large single nourishment event, which is assumed to be an example project with a total of 20,000 cy. Table 4-3 identifies the number of truck trips that could be required for sand delivery assuming maximum sand quantities over the course of the program (5 years). These values are based upon a truck capacity of 14 cy and the values assume trucking 8 hours per day.

Table 4-2
Proposed Typical Number of Truck Trips and Frequency for an Example Project (20,000 cy)

Nourishment Site & Quantity (cy)	Duration (weeks)	Number of Trucks (14 cy per truck)	Monthly Trips	Weekly Trips	Daily Trips	Hourly Trips	Time Interval (minutes)
Del Mar (20,000)	4	1,429	1,429	332	66	8	8

Note: The duration is estimated assuming 5,000 cy can be placed at a site within 5 working days and defines a working day as 8 hours.

Table 4-3
Proposed 5-Year Maximum Number of Truck Trips and Frequency for the Program

Nourishment Site & Maximum Quantity (cy)	Project Duration (weeks)	Number of Trucks (14 cy per truck)	Monthly Trips	Weekly Trips	Daily Trips	Hourly Trips	Time Interval (minutes)
Del Mar (180,000)	36	12,857	1,115	262	53	6.5	5

Note: The duration is estimated assuming 5,000 cy can be placed at a site within 5 working days and defines a working day as 8 hours.

4.4 PUBLIC OUTREACH

The City will develop a public outreach plan to help inform the public and identify resources available for the public to ask questions, provide comments, or report problems relating to the project. The City's outreach strategy is envisioned to include a dedicated web page with project-related information and contact information. Public outreach will also include an informational mailer to proactively notify the community about the project. Project contact information will be posted prominently at the site and on the City's web page. A log of project-related issues and responses will be maintained and used as a reference to improve project operations throughout the project life.

SECTION 5: PROPOSED MONITORING PLAN

Implementation of the SCOUP requires coordination with a number of federal and state resource and regulatory agencies, which may include the following:

- **Federal:** USACE, USEPA, U.S. Fish and Wildlife Service (USFWS), and National Oceanographic and Atmospheric Administration (NOAA)
- **State:** RWQCB, California Coastal Commission (CCC), California Department of Fish and Wildlife (CDFW), and State Lands Commission (SLC).

The City proposes the following generalized monitoring plan relative to the project phase (pre-construction, construction, and post-construction) summarized in Table 5-1. Monitoring elements would be dictated by project-specific features such as schedule and/or placement method.

Monitoring is expected to address the following physical and biological categories:

- **Physical Monitoring**
 - Beach profiles – A cross-section through the beach perpendicular to the beach slope; it may include a dune face or seawall, extend across the beach, and run seaward into the nearshore zone. Details are provided in Section 5.1.
 - Surf Monitoring – Qualitative monitoring of surf conditions in proximity of placement of large volumes of sand (more than 20,000 cy). Details are provided in Section 5.2.
- **Biological Monitoring**
 - Turbidity – The measure of suspended solid particles in water, which can affect water clarity. Details are provided in Section 5.3.
 - Grunion – California grunion is a sardine-sized fish species present only on the California and Baja California coastline, known to spawn exclusively on sandy beaches and is identified by CDFW as a species of concern. Details are provided in Section 5.4 and this monitoring effort is required in mitigation measure BIO-1 (Section 8.4).
- **Trash and Debris** – Trash and debris may be present in nourishment source material. Details are provided in Section 5.5.

**Table 5-1
Overview of Monitoring**

Monitoring Metric	Pre-Construction	During Construction	Post-Construction
Beach Profiles	Between 1 year and 30 days prior to project.	Not applicable (N/A)	Immediately following construction, and again within 6 months or during semi-annual regional beach sand monitoring activity.
Surf Conditions	Qualitative surf condition information gathered by City lifeguards.	Weekly during sand placement of more than 20,000 cy.	Up to 2 weeks after sand placement during large placement events.
Turbidity	N/A	Daily during placement from a high vantage point on land (e.g., North Bluffs and Powerhouse Park).	N/A
Grunion (required by mitigation measure BIO-1)	If habitat is suitable and project is scheduled between March and August, then 2 to 3 weeks prior to construction before and/or during predicted grunion run closest to project initiation.	If construction is scheduled between March and August, then every 2 weeks during spawning season. Monitoring is dictated by tides and lunar cycle.	N/A
Trash/Debris Removal	N/A	For land-based sand sources, spotter on-site daily to observe excavation and/or placement of material to manage trash/debris prevention and removal.	N/A

5.1 BEACH PROFILES

Del Mar beaches follow seasonal trends of steep, narrow winter beaches and gentle, wide summer beaches. Longshore sediment transport tends towards the south, eventually carrying beach sand out of Del Mar and into the La Jolla Canyon (Patsch and Griggs 2006). The CCC typically requires beach profile monitoring for beach nourishment projects since they can help identify such patterns of sand transport and consequent beach performance after nourishment. The proposed monitoring follows from profile monitoring permitted within the Cities of Encinitas, Solana Beach, Coronado, and Imperial Beach for city-specific Opportunistic Beach Fill Programs (EDAW 2008).

Beach profile monitoring surveys would be conducted prior to and after construction of each nourishment project to quantify sand accretion or loss along the beach, nearshore, and immediately downcoast. Surveys would occur 1 year to 30 days prior to the project, immediately following construction, and again within 6 months or during semi-annual regional beach sand monitoring activity.

Profiles are currently being monitored regionally as part of SANDAG's ongoing Regional Beach Sand Monitoring Program, including two locations within the City of Del Mar. These two sites, DM-0580 and DM-0590, help define beach conditions in the area of 23rd Street and the San Dieguito River mouth, respectively. Two inactive beach profiles, DM-0560 and SD-0565, were historically measured in the southern region of Del Mar at Powerhouse Park and 8th Street, respectively (Figure . Depending upon the sand volume, timing, and placement location of individual opportunistic beach nourishment projects, the

active and ongoing beach profile monitoring locations may provide sufficient data to support permit conditions. Additional profiles will be added within the proposed nourishment envelope to document sand placement at the beach over time. These can be short “wading profiles” (out to only 10 feet of water) rather than typical full-length beach profiles (out to 40 feet of water).

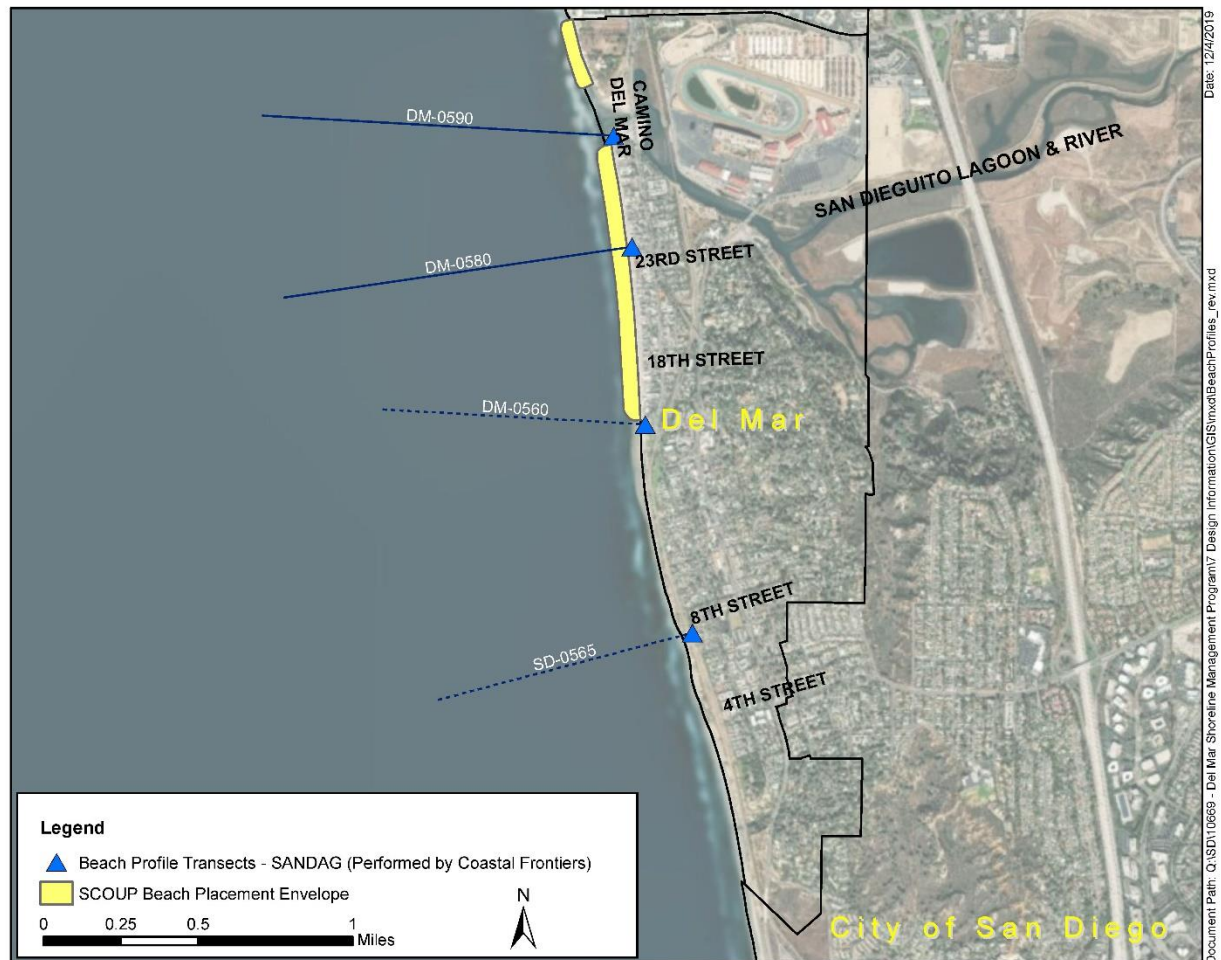


Figure 5-1. Del Mar Beach Profiles (Solid = Active; Dashed = Inactive)

5.2 SURF CONDITIONS

Surf conditions within coastal communities depend on nearshore sand bar profiles, and substantial changes to those profiles can affect recreational surf quality. Small placement volumes would not add sufficient additional sand to the system to result in visible changes to nearshore profiles after completion, but larger volumes may temporarily change profiles in a way that could affect surf conditions. Surf condition monitoring data would be collected through collaboration with the City’s Community Services Department. City lifeguards currently collect daily qualitative information regarding surf conditions along the proposed placement envelope, including tides, surf size, interval, swell direction, and crowd estimates. This information would serve as a baseline for monitoring during and after placement volumes of more than 20,000 cy, which could potentially affect nearshore profiles. Monitoring would be continued during placement, as well as up to 2 weeks after placement has been completed for these larger events.

5.3 TURBIDITY

Turbidity is reduced clarity of water due to suspended solids and can be caused by the interaction of ocean tides, currents, and waves with sand on the beach. While the surf zone is typically turbid during times of energetic waves, nourishment material, particularly material with a higher proportion of finer sediments, can be more easily suspended in the water column and reduce clarity for longer periods of time. Turbidity monitoring is typically a standard RWQCB 401 water quality certification requirement for placement of material in open water. Monitoring is intended to identify excessive turbidity in areas with typically clear water, which can indicate potential negative effects on nearshore marine habitat and species within those areas.

Turbidity would result from surf zone placement and may also result from berm placement on the beach in areas that the ocean reaches at high tide. The extent and duration of turbidity would relate to sediment grain size characteristics (corresponding to particle settling rates) and placement volume but would dissipate with distance and time after placement. As noted above, turbidity also naturally occurs during energetic wave conditions, high tides, storms, or times of high runoff or river flow, rip currents, and/or plankton blooms. Anticipated requirements for monitoring of water quality (i.e., potential turbidity impacts) would vary depending on project volume, construction timing and duration, proximity to sensitive resources, and schedule considerations but would be focused on identifying the extent to which turbidity due to the project exceeds that occurring naturally in the nourishment area. Turbidity plumes dissipate rapidly depending on waves, currents, and tidal action. For example, project activities involving small volume placements or larger-grained material would produce only short-term (on the order of a few days) turbidity that may or may not exceed naturally occurring conditions. Larger-volume placements or nourishment with finer material could result in elevated turbidity over a longer period of time compared to natural conditions.

Turbidity plumes would be monitored daily during surf zone or berm construction by an observer from a high vantage point on land (e.g., bluff-top, park, or lifeguard headquarters location). The observer would map and photograph the extent of turbidity in excess of naturally occurring turbidity and note the extent of the plume. In addition, environmental conditions would be noted such as wind, weather, rain events, wave activity, lagoon runoff, rip currents, and plankton blooms, etc.

5.4 GRUNION

California grunion is a fish identified by CDFW as a species of interest. While the species represents a recreational fishery and can be collected during part of the year, they are a CDFW managed fish species and collection cannot occur during a closed season from April through May. The grunion spawning season generally extends from March through August, although spawning may sometimes occur in February and September. While beach nourishment generally enhances conditions for grunion since they need a sandy beach to successfully spawn, monitoring during the spawning season or portions of the spawning season will be required during nourishment activities to minimize impacts to actively spawning individuals. 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.

As required by mitigation measure BIO-1 (Section 8.4), grunion monitoring would be conducted if berm or surf zone placement is scheduled between March and August. Monitoring would include a pre-construction survey to determine potential suitability for grunion spawning. If the habitat is judged unsuitable for grunion spawning, construction could proceed without the need for additional monitoring. Should the construction dates overlap an anticipated grunion run (based on CDFW calendar) at a placement site with suitable habitat, grunion monitoring within the specific proposed placement footprint

would be conducted. If grunion occur within the project area, their location would be mapped and number present would be estimated. An appropriate protective measure (e.g., avoid mapped grunion area, redirect sand placement above the spring high tide line) would be implemented and the monitor would communicate monitoring results and action taken to the resource agencies in accordance with pre-coordination decisions.

5.5 TRASH/DEBRIS REMOVAL

Should source material be land based, such as excavation spoils from inland development, unwanted trash and debris can be inadvertently placed at the beach. Although not typically required by resource agencies, the City is proposing a precautionary debris management program to ensure that the land-based source sand is of similar quality to that on the existing beach:

- A spotter will be located at the excavation site to view material prior to loading into trucks.
- A beach monitor will be present at the nourishment site to collect potential trash or debris coming from the excavation or dredge site.
- A qualified inspector will visually observe the excavation site to determine the suitability of beach material and concurrence with the Public Notification Report (PNR) prior to hauling to the beach.
- Trash and debris collected will be hauled to the dump or other approved disposal site.

5.6 REGULATORY REQUIREMENTS AND STANDARD CONSTRUCTION PROCEDURES

Throughout construction, regulatory requirements and standard construction procedures would be implemented by the contractor. Regulatory or code requirements represent conditions the project would need to comply with to be implemented legally. Standard construction procedures have also been established to maintain public and contractor safety and enforce equipment operational requirements during project construction. Table 5-2 summarizes these regulatory requirements and standard construction procedures. In addition, the monitoring program described throughout Section 5 would document beach and offshore conditions before, during, and after project construction.

Table 5-2
Regulatory Requirements and Standard Construction Procedures

<i>Regulatory Requirements</i>
Prepare project Storm Water Pollution Prevention Plan (SWPPP) and implement best management practices (BMPs) and monitoring requirements identified in SWPPP (e.g., dust control measures).
Prior to beach nourishment activity, an Encroachment Permit will be required of the contractor to identify and coordinate details relating to traffic control and construction access on the beach. The traffic control plan must identify the haul route, a point of contact during construction, the project schedule and hours of operation, and assignments for flaggers to ensure that a clear and safe path is maintained for beach users, pedestrians, and emergency access vehicles.
Ensure construction contractors minimize idling times by shutting equipment off when not in use or reducing maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations).
As required by Health and Safety Code, Division 20, Chapter 6.95, Article 2, Section 25500–25520, storage, handling, transport, emission, and disposal of hazardous materials associated with construction activities would be in full compliance with local, state, and federal regulations.
<i>Standard Construction Procedures</i>
Remove sources of impounded water resulting from construction equipment (if necessary) and confirm compliance with construction specifications regarding no ponding.
Restrict access to the extent feasible to active construction areas and staging yards to maintain public safety.
Secure heavy equipment and vehicles during off working hours to minimize public safety hazards.
Require heavy equipment operators to be trained in appropriate responses to accidental fires.
Provide fire suppression equipment on board vehicles and at the worksite.
Provide emergency communication equipment for site personnel.
Maintain equipment and vehicle engines in good condition and properly tuned per manufacturers' specifications.
Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers.
House exposed engines on dredging equipment to the greatest extent possible.

SECTION 6: PURPOSE OF THIS MITIGATED NEGATIVE DECLARATION

This MND has been prepared in accordance with CEQA Guidelines Sections 15070 to 15075. The purpose of this MND is to evaluate the potential impacts that could occur as a result of the proposed project. Opportunistic use of beach-suitable sand excavated by other approved projects is one potential source of material that would allow for implementation of the proposed project. Requirements for excavation at the source for those projects would be addressed by applicable CEQA evaluation at that location and for that project; therefore, this MND does not address potential impacts associated with material extraction from opportunistic sources. This MND addresses impacts associated with placement of that material within those types of beach nourishment envelope proposed as part of the SCoup, as well as extraction of material from maintenance activities, such as detention/sedimentation basins, dams, or the San Dieguito River inlet channel. Based on the scope and size of the proposed project, the City determined that an MND was the appropriate environmental documentation to be prepared in compliance with CEQA.

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SECTION 7: PROPOSED FINDING

The Initial Study prepared for the proposed project found that the proposed project would not result in significant impacts in the following areas: aesthetics, agriculture and forestry resources, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, transportation, tribal cultural resources, utilities and service systems, and wildfire.

Impacts that were shown to have a less than significant impact with mitigation were biological resources, hydrology and water quality, public services, and recreation. Measures to avoid or mitigate the effects would be incorporated into the proposed project to reduce the impacts to below a level of significance. These measures are identified below in Section 8 (Initial Study/Environmental Checklist and Assessment) and listed in the mitigation monitoring and reporting program (MMRP) in Section 9 and Table 9-1.

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SECTION 8: INITIAL STUDY/ENVIRONMENTAL CHECKLIST AND ASSESSMENT

1. Project Title: The City of Del Mar Sand Compatibility and Opportunistic Use Program
2. Lead Agency Name and Address: City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014
3. Contact Person and Phone Number: Amanda Lee, Principal Planner
(858) 755-9313
4. Project Location: The City of Del Mar oceanfront is characterized by a sandy beach from approximately 15th Street to the northern City boundary. The Del Mar SCOUP consists of placing opportunistic sand within a boundary referred to as the “placement envelope” extending from just north of the San Dieguito River mouth to Powerhouse Park, excluding the San Dieguito River mouth (Figure 4-1). The majority of this site is the same location that received 183,000 cy of material in RBSP I. The typical opportunistic beach fill project would occupy a small footprint within the maximum envelope. The proposed placement envelope southern boundary is set at Powerhouse Park to avoid impacts to known nearshore environmental resources offshore of southern Del Mar.
5. Project Sponsor’s Name and Address: City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014
6. General Plan Land Use Designation: Open Space
7. Zoning: Public Parkland, Low Density – Beach, and Floodway
8. Description of Project: As stated above, the proposed project would involve implementation of beach nourishment projects within a designated envelope along the City’s northern beach.
9. Surrounding Land Uses and Setting: The Pacific Ocean marks the western boundary of the proposed project while the east is characterized by existing residential homes and blufftop areas. San Dieguito Lagoon and Del Mar Racetrack are located northeast of the placement envelope. To the north, the City is bordered by Solana Beach consisting of mostly residential and some commercial areas. Los Peñasquitos Lagoon and Torrey Pines State Reserve border the City’s southern limits.

ENVIRONMENTAL FACTORS EVALUATED:

- | | |
|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use and Planning | |

EVALUATION OF ENVIRONMENTAL IMPACTS:

This section presents a discussion of potential impacts that could result from implementation of the proposed project.

8.1 AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Impact Analysis

Would the project:

a) *Have a substantial adverse effect on a scenic vista?*

Views to the Pacific Ocean located directly west of the proposed project site would not be affected by beach nourishment activities. The adopted City of Del Mar Local Coastal Program (LCP) and Community Plan protects views and scenic resources along the beach (City of Del Mar 1993; 2001a; 1976). The proposed project would place sand on existing beaches or within the nearshore, which would have a beneficial aesthetic effect as eroded beaches would gain sand cover. Proposed beach profiles would be similar to the underlying, existing beach areas and sand placed within the beach nourishment envelope would not block views for surrounding areas. Placement of sand using the surf zone approach may place sand with gaps in between piles to increase the rate of dispersal. This technique, along with incrementally placing sand to not exceed the rate of daily reworking by waves, has been incorporated into the project design to facilitate the reworking of sand into the littoral system similar to natural sediment transport. Gaps between piles would not impair visual resources, would be placed as far seaward as possible, and, as facilitated by the design, would rework material onto the beach faster. Opportunistic beach sand is expected to be similar to the color of the existing beach sand and natural sediment sources within the region. If contrast is observed between placed and existing beach material, natural processes such as wave action, sun exposure, and seasonal mixing would minimize perceived differences.

Construction equipment used for loading, hauling, depositing, and spreading sand evenly throughout the placement envelope, including equipment used to transport material from off-shore sources, would be used in short durations and construction would not occur at night. Impacts to visual resources during construction are considered temporary and short term. The

pipeline would not significantly obstruct views of the beach and would temporarily allow the transport of sand to the placement envelope. Transportation from upland sources already occurs; however, opportunistic sand is taken to landfills or a construction site, rather than the beach as is outlined by the proposed project. Hauling of sand from the San Dieguito River inlet would be focused within the Beach Inlet Route and already occurs with SCE's maintenance dredging. Sand transport from inland sedimentation basins or dams would be completed with hauling trucks on heavily trafficked roads and would not impair visual resources.

Material placed north and south of the inlet would not obstruct views to the beach and would serve as temporary storage before being transported and spread out within the placement envelope. Two City-owned parcels located adjacent to the railroad berm may temporarily store sand. Stockpiling material for beach replenishment in these locations would be similar to current uses at these disturbed parcels and material would not obstruct views to the beach. For these reasons, 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?*

The proposed beach fill site, haul route, and sediment sources, including upland and the San Dieguito River inlet, are not located along or near a designated state scenic highway (Caltrans 2017). Therefore, no impacts on scenic resources within a state scenic highway would occur.

c) *Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?*

Development is not proposed; therefore, the proposed beach replenishment project would not degrade the existing visual character or quality of the area, including public views of the site and its surroundings. Eroded beaches would gain sand cover as a result of the proposed project, enhancing the aesthetic character of the beach. During beach replenishment activities, visual resources may be interrupted by the use of construction equipment along the beach. However, this would be temporary and short term. Similar maintenance activities at the San Dieguito River inlet are already ongoing. Proposed beach replenishment would occur generally through the fall and winter months, approximately September through May or Labor Day to Memorial Day, but may take place during summer months. Construction activities associated with beach replenishment would be temporary and focused on only segments of the beach. Additionally, beach goers have the option of using beaches south of Powerhouse Park if nourishment activities are ongoing. For these reasons, impacts on the existing visual character or quality of public views would be less than significant.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The proposed beach replenishment project involves placing sand on the beach fill sites and does not propose new development. It would not result in the exposure of people to permanent new sources of light or glare. Construction equipment would operate from 7:00 a.m. until dusk (typical construction hours) and nighttime construction lighting would not be installed. A new source of substantial light or glare that would adversely affect day or nighttime views in the area would not be introduced and no impact would occur.

8.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section (4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Impact Analysis

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 Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The proposed beach fill sites are located on the beach or in the nearshore, which are not mapped or designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The haul routes and stockpile locations would utilize existing paved roadways and parcels within residential areas. Areas such as potential detention basins and the San Dieguito River inlet are inherently within the aquatic environment and are not considered mapped agricultural resources. Therefore, no conversion of farmland to non-agricultural uses would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The proposed beach placement envelope, haul route, and stockpile area are not zoned for agriculture use nor do they conflict with the Williamson Act contract.

-
- c) ***Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section (4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

The proposed project site is zoned as Public Parkland, Low Density – Beach, and Floodway by the City (City of Del Mar 2001b). Haul routes and stockpile locations lie within a residential/urban area and are currently built out roads, are existing disturbed parcels, or are adjacent to San Dieguito Lagoon. There is no forest land or timberland at the proposed project site and no impacts would occur.

- d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

There is no forest land located on the proposed project site, haul routes, or stockpile areas. Beach nourishment would occur at the City's beaches and no forest land would be lost with the construction of the proposed project. Therefore, no impact would occur.

- e) ***Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

As stated previously, there is no farmland or forest land located at the proposed project site. Beach nourishment would not be associated with conversion of farmland or forest land. Therefore, no impact would occur.

8.3 AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) 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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors affecting a substantial number of people?			X	

Impact Analysis

Would the project:

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

The proposed beach replenishment project is placement of sand on Del Mar beaches. The project haul routes utilize existing paved roadways traversing through a highly urbanized area. Temporary impacts would occur during implementation of the proposed project and would occur in short intervals, but no significant or permanent source of stationary or mobile air pollutants would occur. The use of construction equipment in the San Diego Air Pollution Control District (SDAPCD) Regional Air Quality Strategy (RAQS; SDAPCD 2016) is estimated for the region on an annual basis, and due to the minor construction activities and short duration of construction, the proposed project would not increase the assumptions for off-road equipment use as outlined in the RAQS. In addition, the proposed project would not result in an increase in haul truck trips in the region. After construction, the proposed project would not increase population, employment, or vehicle trips. Therefore, implementation of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan and this impact would be less than significant.

b) *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?*

Construction activities for the proposed project would generate temporary emissions of volatile organic compounds (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter equal to or less than 10 micrometers in diameter (PM₁₀), and particulate matter equal to or less than 2.5 micrometers in diameter PM_{2.5}. VOC, NO_x, and CO emissions are associated primarily with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive dust emissions (PM₁₀ and PM_{2.5}) are associated primarily with ground disturbance and fill removal and vary as a function of parameters such as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by

construction vehicles. Of note, ozone (O₃) is formed by the reaction of VOC and NO_x, which are combustion emissions from gas and diesel engines.

Construction-related emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 assuming active construction takes place in a one-year time period. Construction of the proposed project is anticipated to begin in 2021. The proposed project would be constructed using equipment such as a dredge, trucks, booster pump, and grading equipment. In general, construction for the proposed project would be short-term, temporary occurrences as placement would occur when sediment sources are made available. Placement events would fluctuate over the course of the 5-year program depending on the availability of beach-quality sediment and emissions would differ based on the frequency and volumes of placement events. Thus, emission estimates presented in Table 8.3-1 represent a conservative analysis for a maximum placement volume for the proposed program as a whole. The analysis assumed the proposed program would not introduce new haul truck trips since this is an existing activity as transportation already occurs with opportunistic sand transported to landfills or an alternate disposal site. In addition, the proposed program primarily involves the conveyance of sand and associated placement activities and the potential for dust generation would be low. Source material taken from areas like the San Dieguito River mouth and wetland restoration projects would be quite moist, inhibiting it from generating fugitive dust during placement. As described in standard construction procedures (Table 5-2), material sourced from upland locations would be covered during hauling to minimize fugitive dust. Activities on dry sand would be limited to mobilization at each site and crew access, which would both be relatively short in duration.

Table 8.3-1
Unmitigated Daily Construction Emissions

Maximum Daily Emissions	VOC (lbs/day)	NO_x (lbs/day)	CO (lbs/day)	SO_x (lbs/day)	PM₁₀ (lbs/day)¹	PM_{2.5} (lbs/day)
2021	3.60	36.53	21.90	0.05	17.16	8.71
Threshold of Significance¹	75	250	550	250	100	55
<i>Significant Impact?</i>	No	No	No	No	No	No

Notes:

¹ The SDAPCD does not provide quantitative thresholds for determining the significance of construction or mobile source-related impacts. However, the district does specify Air Quality Impact Analysis trigger levels for new or modified stationary sources (APCpagD Rules 20.2 and 20.3). Although these trigger levels do not generally apply to mobile sources or general land development projects, for comparative purposes these levels may be used to evaluate the increased emissions that would be discharged to the San Diego Air Basin from proposed land development projects (County of San Diego 2019).

VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = suspended particulate matter; PM_{2.5} = fine particulate matter; lbs/day = pounds per day
Source: Estimated by AECOM in 2019

As shown in Table 8.3-1, maximum daily construction emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} would not exceed the recommended screening level thresholds. Emissions would be characteristic of a temporary earthmoving operation with a short hauling distance and would not result in a discernible long-term net increase of criteria pollutants even with maximum placement volumes during a given year. In addition, fugitive dust emissions would be further minimized

with implementation of standard construction procedures (i.e., covering material during hauling). Therefore, this impact would be less than significant.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

It is likely that sensitive receptors, including some children, the elderly, and those suffering from respiratory problems, may reside in the vicinity of the proposed project or may utilize the beach during placement activities. As shown in Table 8.3-1, delivery of materials and construction of beach nourishment would result in emissions of criteria air pollutants, but at levels that would not exceed the SDAPCD screening level thresholds. The screening level thresholds were designed to assist the region in attaining the applicable state and federal ambient air quality standards, which were established using health-based criteria. As such, the construction-related criteria air pollutant emissions associated with the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

In addition to criteria air pollutants, construction of the proposed project would generate toxic air contaminant (TAC) emissions, specifically diesel particulate matter (diesel PM), associated with heavy-duty construction equipment and haul truck operations. However, the duration of construction activities for the proposed project would occur intermittently and daily construction would not occur as a constant plume of emissions from the proposed project site. In addition, haul trucks would not operate in the immediate vicinity of sensitive receptors for an extended period of time. Based on the anticipated construction schedule and the highly dispersive nature of diesel PM emissions, construction of the proposed project would not expose sensitive receptors to substantial TAC concentrations. Further, operational activities are not anticipated with implementation of the proposed project and recreational land uses are not typically substantial sources of TACs. As such, the construction-related criteria air pollutant emissions associated with the proposed project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

d) *Result in other emissions (such as those leading to odors affecting a substantial number of people?*

Potential construction-related sources of odors include diesel construction equipment types that emit exhaust. Operation of trucks and construction equipment during sand placement may cause air emissions that generate standard odors associated with these emissions. However, because of the amount and types of equipment, the temporary nature of these emissions, and the highly diffusive properties of diesel exhaust, nearby residents and those using the beach for recreation would not be affected by diesel exhaust odors associated with construction of the proposed project. No odor-producing production would occur as a result of sand placement (beach or nearshore placement) or hauling material on existing paved roadways to the beach. As a result, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, this impact would be less than significant.

8.4 BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Impact Analysis

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 Wildlife or U.S. Fish and Wildlife Service?*

The endangered California least tern and western snowy plover have the potential to occur on sandy beaches in the San Diego region during their breeding season. California least tern forage on fish in ocean water outside the surf zone, while plover forage on invertebrates within beach sand. If present, sand placement on Del Mar beaches could affect the ability of terns to forage if turbidity occurs that substantially exceeds naturally occurring levels. Placement activities on the

beach could also have the potential to affect the ability of plover in the area to forage and/or nest on the beach depending on the proximity of activities to established nests. Construction activities associated with the proposed SCOUP would be localized and intermittent throughout the year, affecting only a portion of the beach at any given time. Monitoring during placement would ensure turbidity does not substantially exceed naturally occurring levels. In addition, the proposed nourishment envelope includes heavily used beaches that are relatively narrow and backed by sea walls in the southern part of the placement envelope, providing little area for foraging and no suitable nesting/roosting habitat. The northern portion of the site is very dynamic, with uses such as dog play areas and volleyball courts in the north adjacent to the San Dieguito River inlet.

Based on a recent evaluation of the area for the San Dieguito Lagoon W-19 Restoration Project, the USFWS did not anticipate nesting by the federally endangered California least tern [*Sternula antillarum browni* (Sterna a. b.); tern] and federally threatened western snowy plover (Pacific Coast population DPS) [*Charadrius nivosus* (*C. alexandrinus* n.); plover] within the northern portion of the placement envelope. With the ongoing human/dog disturbance, roosting by these birds is also considered unlikely, further minimizing the potential for impacts to occur to these species (USFWS 2019a).

Proposed extraction sites such as existing sedimentation/detention basins or the San Dieguito River inlet channel do not contain suitable habitat for sensitive species based on recent surveys for California gnatcatcher, Belding's savannah sparrow, and light-footed Ridgway's rail.

Based on the lack of suitable habitat and recent nesting, as well as continued high activity levels on the beach, no substantial adverse effect on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS is anticipated to occur, and impacts would be less than significant.

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

The nourishment envelope consists of sandy or cobble beach, and may extend into the intertidal area. The envelope was constrained at the southern limit by the presence of sensitive nearshore habitat, which includes kelp canopy, understory algae, and surfgrass. The project design has incorporated these limits as well as a maximum volume of 180,000 cy based on previous projects that were designed to have no significant long-term impacts to nearshore resources. Extraction locations such as the San Dieguito River and existing sedimentation/detention basins do not contain sensitive natural communities. The project would not result in a substantial adverse effect on riparian habitat or other sensitive natural communities, and impacts would be less than significant.

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The proposed SCOUP would place sand on existing beach areas to nourish the littoral cell within the City of Del Mar. Extraction points would include existing sedimentation/detention basins, which do not include protected wetlands. The San Dieguito River inlet channel may also be a project sand source, within the existing maintenance footprint approved for SCE. This area is a very dynamic sandy bottom channel that consists of recently deposited sediments and is identified as an approved maintenance area for the river. It may represent protected wetlands under the state

and is protected under Section 10 of the Rivers and Harbors Act of 1899. Removal of sediment from the San Dieguito River mouth would be localized and temporary and would be limited to the area of active sediment deposition already approved for maintenance; therefore, removal would not have a substantial adverse effect on protected wetlands and impacts would be less than significant.

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?***

The proposed project involves placing sand on the beach and/or in the nearshore, primarily utilizing haul routes on existing paved roadways. Most sedentary or slow-moving marine animals within the proposed placement area may be impacted from construction activities. However, direct impacts would not be significant due to the rapid recolonization of the habitat and the absence of sensitive species (SANDAG and U.S. Navy 2000). In addition, several studies have reported invertebrate recovery rates of approximately 1 year or less after the impact of sand placement from beach nourishment (Parr et. al. 1978; Navqui and Pullen 1982; NRC 1995; Burlas et. al. 2001). The proposed project would place sand outside of the spring-summer invertebrate recruitment season if feasible. Sand throughout the beach profile would meet a set of standards predetermined prior to placement, helping to ensure that beach sand grain size is consistent with pre-project natural sand grain sizes for maintaining suitable habitat for intertidal fauna, California grunion, and shorebirds.

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 (City of Encinitas et. al. 2008). Beach nourishment could potentially impact grunion spawning or survival of eggs and larvae if eggs are buried by fresh material, thus preventing the eggs from hatching.

Post-nourishment studies from nearby beaches have shown sand placement with similar grain size and silt/clay content to native beaches were suitable for biological resource development and habitat functions for invertebrates and birds and resulted in potentially suitable habitat for California grunion two to four years after sand placement (MEC 2000; SANDAG and U.S. Navy 2000).

Therefore, due to grunion use of sandy beaches for spawning within the proposed placement envelope, the proposed project could interfere with the movement of 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, and impacts would be potentially significant. However, with implementation of mitigation measure BIO-1 impacts to grunion would be mitigated to a less than significant level.

Mitigation Measure BIO-1:

Grunion monitoring shall be conducted by a biological monitor if berm or surf zone placement is scheduled between March and August. Monitoring shall include a pre-construction survey to determine potential suitability for grunion spawning. Suitable spawning habitat includes a sandy beach with a minimum sand depth of 5 inches above cobble or other hard substrate cover, and sufficient beach width to remain partially dry until eggs have hatched approximately 10 days after spawning. The habitat suitability survey shall be scheduled 2 to 3 weeks prior to the scheduled placement activity. If the habitat is judged unsuitable for grunion spawning, construction could proceed without the

need for additional monitoring. If construction would span more than one predicted grunion run period, habitat suitability surveys may be required prior to each predicted grunion run since suitability may vary seasonally (e.g., habitat may become more suitable between spring and summer due to natural sand accretion). Predicted grunion run periods will be based on the grunion calendar produced by the CDFW.

Should the construction dates overlap an anticipated grunion run at a placement site with suitable habitat, grunion monitoring within the specific proposed placement footprint shall be conducted by a qualified monitor during the predicted grunion run prior to construction and/or for each predicted grunion run spanned by the construction period. If no grunion are observed, no further action shall be necessary and sand placement could occur according to plan. If grunion occur within the project area, their location will be mapped and number present will be estimated (e.g., by Walker Scale). An appropriate protective measure (e.g., avoid mapped grunion area, redirect sand placement above the spring high tide line) shall be implemented and the monitor shall communicate monitoring results and action taken to the resource agencies in accordance with pre-coordination decisions.

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

The San Dieguito Lagoon State Marine Conservation Area (SMCA) is approximately 0.8 mile up the San Dieguito River from the ocean inlet, off the main channel. No activities would occur within the SMCA, and the proposed project would not conflict with this regulation. Proposed sand extraction from the river channel may occur as close as approximately 600 feet north of the SMCA boundary. Best management practices (BMPs) to minimize turbidity during sand removal would be implemented per the proposed project SWPPP as outlined in Table 5-2. The City's LCP Implementing Ordinances is an applicable, adopted plan governing land uses and biological resources within the coastal zone, along with the City's Community Plan and Land Use Plan (City of Del Mar 2001a; 1976; 1993). The proposed project is located specifically in the LCP's Beach Overlay Zone (BOZ) (Chapter 30.50) and Lagoon Overlay Zone (Chapter 30.53). The proposed project would not conflict with allowable uses outlined in the adopted plans and is compatible with sand replenishment initiatives. Guidelines and recommendations from the City's SMP and Adaptation Plan would also be adhered to (ESA 2018c; 2018b). The proposed project would be in conformance with City's Municipal Code, specifically Chapter 8.12 which details allowable and prohibited uses within San Dieguito River and aims to protect the biodiversity of the aquatic and upland environments surrounding the lagoon and river mouth. No conflicts with local policies or ordinances protecting biological resources are anticipated and impacts would be less than significant.

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

The City of Del Mar is listed as a jurisdictional entity within the boundaries of the County's Final Multiple Species Conservation Program (MSCP), MSCP Plan in San Diego County (County of San Diego 1998). The City is in the process of developing an MSCP Subarea Plan and as such, is not subject to the County's MSCP. However, it should be noted that the proposed project would not conflict with land use guidelines outlined in the County's MSCP Plan and, as mentioned previously, sensitive resources have not been documented within the proposed project site. If the City completes and adopts an MSCP Subarea Plan prior to obtaining permits for the SCOUP, compliance with the MSCP Subarea Plan guidelines on avoidance, mitigation, and species-specific coverage would be required. However, because the City has not yet adopted a MSCP Subarea Plan, it cannot conflict with the proposed project. Therefore, no impact would occur.

8.5 CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
c) Disturb any human remains, including those interred outside of formal cemeteries?				X

Impact Analysis

Would the project:

- a) ***Cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?***

The proposed SCOUNP would involve nourishment of Del Mar beaches with sand that becomes available opportunistically through already approved development projects, or that is extracted from existing sedimentation/detention basins or the existing main channel of the San Dieguito River within approved dredging areas. There are no known historic resources within these locations or within the proposed beach nourishment limits. Therefore, no substantial adverse change would occur in the significance of a historical resource, and there would be no impact.

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

Material placed on the beach as part of the SCOUNP would be made available by other approved projects that would be subject to site-specific requirements for cultural resources. Sand excavated from the San Dieguito River or sedimentation/detention basins would consist of recently deposited alluvial or littoral material and be confined to sediments above buried stable surfaces (layers of alluvial and colluvial deposits that would not contain intact cultural resources), where there would be little potential to encounter such resources. The beach environment is continually evolving with natural sand onshore-offshore processes, which are not conducive to preserving intact archaeological sites, and no known archaeological resources currently exist on the beach within the nourishment envelope. Therefore, no substantial adverse change would occur in the significance of an archaeological resource and there would be no impact.

- c) ***Disturb any human remains, including those interred outside of formal cemeteries?***

There are no known human remains within the proposed nourishment limits; due to the constant movement of sand on the beach, there is a low potential to encounter human remains. Additionally, material excavated from detention/sedimentation basins and/or the San Dieguito River would be confined to recent alluvial/littoral deposits unlikely to contain human remains. Therefore, human remains, including those interred outside of formal cemeteries, would not be disturbed, and no impact would occur.

8.6 ENERGY

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Impact Analysis

Would the project:

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The proposed project would result in the consumptive use of energy required to operate machinery during construction, which may include the use of dredges, trucks, pumping equipment, and grading equipment. However, construction activities would be short in duration and would require minimal construction equipment in short, periodic intervals. Equipment and vehicle engines would be maintained in good condition and idling time would be minimized to avoid inefficient use of energy resources, as described in the standard construction procedures (Table 5-2). Once completed, the proposed project would not generate additional daily vehicle trips, necessitate an increased need for ongoing energy use, or require other energy-consuming activities. It is not anticipated the proposed project would require operational use of energy. Neither construction nor operation of the proposed project would result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, no impact would occur.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The proposed project involves placing sand along Del Mar beaches and would not conflict with plans for renewable energy. Standard construction procedures have been incorporated into the proposed project that promote energy efficiency and decrease overall energy consumption, as described in Section 5.6. Further, energy use during construction would be temporary in nature and operational energy use is not anticipated with the proposed project. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and no impacts would occur.

8.7 GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Directly or indirectly cause 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 known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Impact Analysis

Would the project:

- a) *Directly or indirectly cause 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 known fault? Refer to Division of Mines and Geology Special Publication 42.*

The proposed project is located within seismically active Southern California, an area where several faults and fault zones are considered active by the California Division of

Mines and Geology. The project site is not listed in an Alquist-Priolo Earthquake Fault Zone (California Geological Survey 2015). The closest faults to the proposed project are the Rose Canyon Fault, which is located offshore approximately 4 miles west of the project site and the Coronado Bank Fault, which is an active zone of deformation located offshore approximately 15 miles from the project site (California Department of Conservation 2010). The proposed project would involve beach nourishment along Del Mar beaches, and it is not anticipated that visitation to the beach would substantially increase with implementation of the proposed project. While the proximity of the active faults suggests the potential for moderate to severe ground shaking to exist during a major earthquake, the proposed project would not result in the exposure of people or property to fault ruptures because no development is proposed. Extraction of material from sources like the San Dieguito Lagoon river channel or sedimentation basins would be limited to removal of unconsolidated recent sedimentation and would not expose people or property to earthquakes. Therefore, no substantial adverse effects due to a fault rupture would occur and there would be no impact.

ii) *Strong seismic ground shaking?*

The proposed project would not result in, or expose people to, seismic ground shaking beyond the conditions that currently exist throughout the region and as suggested by the proximity of active faults. The proposed project would replenish beach sand and would not substantially increase exposure to seismic activity because no development is proposed. Material extracted from the San Dieguito Lagoon river channel and sedimentation basins is limited to unconsolidated recent deposits and would not affect exposure to seismic ground shaking. The undeveloped nature of the beach minimizes the potential risk of people or structures due to seismic hazards and the impact would be less than significant.

iii) *Seismic-related ground failure, including liquefaction?*

Seismic activity associated with the Rose Canyon Fault or other nearby faults may lead to liquefaction. These conditions exist currently, and the placement of additional material onshore or extraction of material from aquatic sources (e.g., river channel, sedimentation basins) in the proposed locations would not affect these processes. Exposure of people to seismic ground failure, including liquefaction, may occur at the project site but would not increase beyond existing conditions since the proposed project would only add sand to an existing beach and not new structures. Therefore, impacts would be less than significant.

iv) *Landslides?*

The placement of sand at the beach would not cause geologic hazards as a result of ground instability and would supplement existing beach material that already exists in this location. As stated previously, the proposed project does not propose development and extraction of unconsolidated recent sediment would not affect geologic processes; therefore, people or buildings would not be exposed to landslides beyond the conditions that currently exist at the beach and no impact would occur.

b) *Result in substantial soil erosion or loss of topsoil?*

Sand placement may minimize the potential for geologic hazards as it would protect against the undercutting or erosion of cliffs (e.g., placement area north of the San Dieguito River inlet) or

other areas subject to wave-induced erosion, thus reducing slope instability and landslide potential. The proposed project would supplement existing beach material and would not cause erosion at the placement site. Removal of sediment from aquatic sources (i.e., river channel, sedimentation basin) would result in minor changes to bathymetry to supplement the beach and would potentially benefit tidal circulation in San Dieguito Lagoon. Del Mar is located within the Oceanside Littoral Cell where sand movement occurs onshore and offshore, as well as alongshore, depending on seasonal and annual variations in wave direction and energy. Material placed at the proposed placement site would eventually be moved as part of the littoral cell process but would not increase or accelerate this natural sand transport process. Removal of sand from aquatic sources for placement on the beach does not represent a net loss of sediment within the littoral system, and natural processes would transport this material seasonally as mentioned above. No substantial erosion is anticipated, and impacts would remain less than significant.

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

The topography of the beach proposed for sand placement is dynamic, but generally characterized by sand overlying Marine Beach Deposits (Qmb) (Kennedy and Tan 2008). The proposed placement site or extraction from aquatic areas (i.e., river inlet channel, sedimentation basin) is not located on a geologic unit or soil that is unstable. While the proposed placement site and sediment extraction areas are located within a potential liquefaction area, the proposed project and removal of unconsolidated recent sedimentation would not change the existing conditions of this site. No structures would be built on top of material placed along the beach and material would disperse over time in the dynamic beach setting. In some instances, sand placement on the beach could help improve the geologic stability of coastal bluffs at the back of the beach north of the San Dieguito River inlet by temporarily providing a buffer against the wave action that can undercut the exposed bluffs. Thus, the project would not create geologic conditions or build structures or other features that would risk or put people at risk of geologic instability. Impacts related to hazards as a result of geologic instability would be less than significant.

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

The proposed placement site is a sandy beach with no soil cover and expansive soils are not documented within the placement envelope or aquatic sediment sources, 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, and there would be no impact.

- 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?***

The proposed project does not include construction of a septic tank or alternative waste water disposal system. There would be no impact.

- f) ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Paleontological resources or features are unlikely to be encountered at the proposed site. Material dredged from the San Dieguito River mouth and/or sedimentation basins is composed of recent alluvial sediments and is considered to have low resource potential. Placement of material on the

beach would not require disturbance of underlying formations, and the beach is generally a dynamic environment unlikely to contain undiscovered paleontological resources. Therefore, construction of the proposed project is not likely to directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature and the impact would be less than significant.

8.8 GREENHOUSE GAS EMISSIONS

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?			X	

Impact Analysis

Would the project:

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The City has not adopted a specific greenhouse gas (GHG) threshold to analyze projects under CEQA. Therefore, to establish additional context in which to consider the proposed project's GHG emissions, this analysis utilizes the threshold developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD) of an annual threshold of 1,100 metric tons (MT) carbon dioxide equivalents (CO₂e) for the construction phase of projects. The SMAQMD recognizes that, although there is no known level of emissions that determines if a single project would substantially impact overall GHG emission levels in the atmosphere, a threshold must be set to trigger a review and assessment of the need to mitigate project GHG emissions. The threshold set by the SMAQMD was developed considering the Assembly Bill (AB) 32 and Senate Bill (SB) 32 statewide GHG reduction goals. It is not the intent of the City to adopt this threshold as a mass emissions limit for this or other projects, but rather to provide this additional information to put the proposed project-generated GHG emissions in the appropriate statewide context.

Earthmoving/off-road equipment, materials transport (e.g., hauling or pipeline delivery), and worker commutes during construction of the proposed project would result in exhaust-related GHG emissions. Construction-related GHG emissions were estimated using the same methodology discussed earlier in Section 8.3. It is worth noting that construction emissions would be sporadic throughout the course of the year, as sand placement would occur when sediment sources periodically become available. Placement volumes would fluctuate each year depending on the availability of beach-quality sediment, and emissions would be lower for years with less placement activities. Based on a maximum placement scenario, the total GHG emissions associated with off-road equipment and worker commutes would be approximately 381 MT CO₂e per year. The analysis assumed the proposed project would not increase hauling trips (and related GHG emissions) beyond what is currently done to transport sand away from upland sources since the material transported to the beach would otherwise be taken to a landfill or other disposal site. The proposed project is not anticipated to substantially increase visitor attendance and no operational emissions are associated with the proposed project. The total CO₂e emissions

associated with the maximum quantity of sand placement would not exceed the SMAQMD threshold of 1,100 MT CO₂e.

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Additionally, exhaust emissions from the construction equipment fleet are expected to decrease over time as stricter standards take effect and advancements are made in engine technology, retrofits, and turnover in the equipment fleet; thus, sand placement activities are anticipated to result in lower levels of emissions as sand placement occurs in later years. The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts related to GHG emissions would be less than significant.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?*

The City has adopted a Climate Action Plan (CAP) for the purpose of reducing GHG emissions and mitigating the impacts of global climate change. The CAP aims to reduce GHG emissions 15 percent by 2020 and 50 percent by 2035 (City of Del Mar 2016). The City CAP includes reduction measures and strategies in the following community sectors: energy and buildings, water and waste, and transportation. Consistent with Measure W7 (Construction & Demolition Recycling Standards), which calls for reducing construction waste consigned to landfills, the proposed project would utilize materials that would otherwise be taken to a landfill or other disposal site. Thus, the proposed project would not conflict with the City CAP. Further, GHG emissions associated with the proposed project would be limited to the sand placement activities as the proposed project is not anticipated to substantially increase visitor attendance or generate operational emissions.

As discussed above, the proposed project would not generate GHG emissions that would have a significant impact on the environment. It is assumed that requirements or policies formulated under the mandate of AB 32 and SB 32 that would be applicable to the project, either directly or indirectly, would be implemented consistent with statewide policies and laws. Therefore, based on the quantitative emission estimates and because the proposed project would not conflict with applicable plans, policies, or regulations for the purpose of reducing GHG emissions, this impact would be less than significant.

8.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
e) Result in a safety hazard or excessive noise for people residing or working in the project area, for projects 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?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Impact Analysis

Would the project:

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

The proposed project would use standard construction equipment that requires hazardous materials for fueling and maintenance such as diesel fuels, lubricants, solvents, and other typical construction-related materials. As required by law (Health and Safety Code, Division 20, Chapter 6.95, Article 2, Section 25500-25520) and described in the standard construction procedures in Table 5-2, storage, handling, transport, emission, and disposal of hazardous materials associated with construction activities would be in full compliance with local, state, and federal regulations, which provide requirements to ensure proper and appropriate actions specific to minimizing hazardous materials risk. Thus, potential risk associated with the transport, use, or disposal of

hazardous materials or location near a hazardous material site would be minimized through adherence with regulatory requirements, and impacts would be less than significant.

- 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?***

Use of hazardous materials would be limited to standard materials associated with normal construction equipment and operations and transport, use, or disposal of hazardous material would be in compliance with local, state, and federal regulations as discussed above. Equipment fuel and substances would be used on-site during construction and maintenance activities, but not in excessive quantities that would create a significant hazard to the public or environment. Standard construction procedures would be implemented to ensure that no spills or leaks occur during the construction of the proposed project in accordance with applicable regulatory requirements.

As detailed in Section 4.1, the project would require sampling and analysis of the material under a SAP and SAPR approved by the USACE, USEPA, and RWQCB prior to placement on the beach. Chemical testing would be required of material sources and samples that do not meet predetermined resource agency standards would be rejected. Criteria for determining suitable beach sand includes material that cannot be suspected of containing hazardous chemicals based on EPA Tier I or II assessment. Thus, sediment with the potential for containing hazardous materials would not be used. This would minimize the potential for public exposure to hazardous materials contained within the sediment for beach nourishment and a less than significant impact would result.

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

The proposed sand placement envelope is not located within 0.25 mile of a school. Additionally, sand placement or sediment extraction operations would not create hazardous conditions or a hazard to the public through use of hazardous materials or substances or create hazardous waste as detailed in responses 8.9(a) and (b). The construction of the proposed project would be short term and would only involve the routine use of construction materials such as fuel for construction equipment. Therefore, no impacts would occur.

- 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?***

The SCOUP area is not listed as a hazardous materials site on State of California Hazardous Waste and Substances lists compiled pursuant to Government Code Section 65962.5, and no known sites are located in the immediate vicinity of the project area (DTSC 2019a; 2019b). Therefore, no impact would occur.

- e) *Result in a safety hazard or excessive noise for people residing or working in the project area, for projects 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?***

The proposed project is not located within an airport land use plan or within 2 miles of a public airport. The proposed project is not of the nature to cause a safety hazard related to aircraft

operations as there are no tall elements, reflective materials, or other project features that could create hazardous conditions or affect existing flight patterns. There would be no impact.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Dependent on the material source, construction of the proposed project would require haul trips to transport material to the beach placement site. As detailed in Section 4.3.4, it is anticipated that approximately eight truck trips would occur within an hour. This would not create substantial traffic during construction or interfere with an adopted emergency response plan or emergency evacuation plan. Construction equipment activities, storage and laydown areas, and worker parking would not occur on local roadways or block streets. Additionally, as part of standard construction procedures, a traffic control plan would be prepared that must identify the haul route, a point of contact during construction, the project schedule and hours of operation, and assignments for flaggers to ensure that a clear and safe path is maintained for emergency access vehicles and evacuation (Table 5-2). Thus, the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

The majority of sand placement activities would occur on the beach in damp, rocky, and sandy conditions. These areas, by nature, are not susceptible to hazards related to wildland fires. Surrounding land uses include developed commercial and residential properties with minimal expanses of vegetation that could ignite and spread. Material extraction may occur in locations more susceptible to fire hazards if they were to occur within wildland interface areas. While fire hazard risks associated with construction equipment are not anticipated, multiple standard construction procedures would be implemented by the contractor to minimize fire risks. Specifically, construction equipment used in restoration and maintenance activities would have fire suppression equipment on board or at the worksite and heavy equipment operators would be trained in appropriate responses to accidental fires, and emergency communication equipment would also be available to site personnel (Table 5-2). In addition, the proposed project would not introduce new or permanent structures that would create new fire hazards. Thus, a less than significant impact related to wildland fires would result.

8.10 HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site?			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
iii) 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?			X	
d) Risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		X		

Impact Analysis

Would the project:

- a) ***Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

Material being placed at the beach would be subject to testing to confirm suitability and ensure no contamination by pollutants prior to nourishment. During sand placement and spreading activities, gasoline, diesel fuel, lubricating oil, and grease could potentially leak from vehicles and construction equipment onto the beach or into material extraction areas.

At the beach and in areas of active flow (e.g., near sedimentation/detention basins or the main channel of the San Dieguito River), natural water turbidity is not uncommon as waves and water velocities pick up material from the bottom and keep it in suspension. The extent of turbidity that occurs naturally depends on a number of variables, including wave size and direction, storm flows, and material grain size (e.g., with finer material remaining in suspension longer). As noted

above, BMPs would be implemented at extraction locations such as detention basins and the San Dieguito River channel to minimize additional turbidity associated with excavation/dredging. Nearshore areas adjacent to nourishment sites may result in a temporary increase in turbidity during and after active sand placement, particularly in the surf zone, but this would dissipate over time as the material is distributed and would not be atypical of natural turbidity in the surf zone. Turbidity monitoring during sand nourishment would be conducted as noted in Section 5.3 to confirm violations of water quality standards do not occur.

Construction of the proposed project would not increase the amount of impervious surfaces at the project site. BMPs and regulatory requirements would minimize the potential for pollutant discharges into the ocean during placement of material. As stated in Section 5.6, the project would be subject to regulatory requirements (e.g. SWPPP) and consistency with these measures would minimize the potential impacts to water quality or waste discharge requirements that could result from sand extraction or placement associated with the proposed project implementation. However, increased turbidity may occur temporarily during and after nourishment activities if material were placed as a slurry. Increased turbidity during sand placement could result in a temporary violation of water quality standards or cause water to be substantially degraded and result in a significant water quality impact. However, with implementation of mitigation measure HYDRO-1, impacts to water quality caused by increased turbidity during material placement would be mitigated to a less than significant level.

Mitigation Measure HYDRO-1:

Should material be placed as a slurry, training dikes shall be constructed along the beach as needed to facilitate sediment deposition.

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Construction and operational activities associated with the proposed project would not change the pervious condition of the beach or extraction locations; therefore, groundwater supplies would not be affected and there would be no impact.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

i) *result in substantial erosion or siltation on- or off-site?*

As noted above, turbidity may occur during sand extraction from sedimentation/detention basins or the main channel of the San Dieguito River. Turbidity is anticipated to be visible but would not result in substantial siltation. Waves would redistribute sand placed as part of nourishment activities, which would not be considered erosion or siltation, but would result in a change in the shape and width of Del Mar beaches. Sand extraction proposed as part of the proposed project would maintain drainage for the watershed and river, and would not result in substantial alteration of the existing drainage pattern. Additionally, standard construction procedures identified in Table 5-2 would further minimize erosion or sedimentation impacts. The proposed project would have a less than significant effect on the existing drainage patterns, and substantial erosion or siltation on- or off-site is not anticipated to occur.

ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

The proposed project would not increase impervious surfaces or the amount of surface flow at the beach or potential sediment extraction sites. Sediment removal from detention/sedimentation basins or the main channel of the San Dieguito River may return runoff rates to those originally designed, but would not expand the original design configuration or increase the size of water conveyance channels in a manner that would result in flooding on- or off-site. Impacts would be less than significant.

iii) *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?*

As outlined in Table 5-2, regulatory requirements and standard construction procedures would minimize the potential for sources of polluted runoff. The proposed project would not increase runoff water or exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. There would be a less than significant impact.

d) *Risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones?*

The proposed project would be located along the coastline, and could extend up San Dieguito River, both identified as flood and/or tsunami hazard zones. The proposed project would provide sand nourishment along City beaches as well as removal of sand accumulation in the river. Project inundation would not risk release of pollutants in these zones and no impacts are expected to occur. Sampling and analysis of the placement material would occur under the federal SAP/SAPR process that requires testing and evaluation of material prior to its use as beach fill. This process includes inspection of the material and confirmation that it is absent of contamination prior to construction. Therefore, contaminants would not be able to enter the site through satisfaction of this process.

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

As noted above, construction of the proposed project would adhere to regulatory requirements, as well as standard construction procedures outlined in Table 5-2, which would minimize water quality impacts. Implementation of the proposed project would not substantially impact existing drainage patterns and would not contribute pollutants or sediments into existing waterways/beaches. The proposed project would not drain groundwater resources nor would it prohibit groundwater recharge. However, the temporary increase in turbidity that could result from material placement could potentially conflict with or obstruct implementation of a water quality control plan and result in a significant impact. This potentially significant temporary impact would be mitigated to less than significant through the use of training dikes as required by mitigation measure HYDRO-1 (outlined under Hydrology and Water Quality Threshold a).

8.11 LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Impact Analysis

Would the project:

a) *Physically divide an established community?*

The proposed project would be located along various stretches of the continuous beach along the Del Mar coastline. Placement of sand on the beach may cause a potential temporary disruption to beach use at that specific location but would not divide the established community.

The over 2.5-mile-long placement envelope is mostly walkable from end to end, with the exception of the San Dieguito River mouth. The addition of sand at locations within the placement envelope would serve to enhance the beach areas and provide continued connectivity of the beach along the local coastline, maintaining the value and character of the City's beaches.

b) *Cause significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Various planning documents, policies, and regulations apply to the proposed SCOUP project site and action. Some policies and plans specifically address the placement of sand on the beaches and the maintenance of public beach access. Beaches in Del Mar are zoned as Public Parkland with allowed uses, including public parks, beaches, playgrounds, and ecological preserves (City of Del Mar 2001b). The proposed SCOUP placement envelope is a public beach and proposed beach replenishment actions are consistent with this designation. No change of land use on the subject property or on adjoining properties would occur as a result of the SCOUP.

Del Mar's LCP (City of Del Mar 1993) guides development and protects coastal resources within the Coastal Zone. LCPs must be consistent with the California Coastal Act as enforced by the CCC. Section 30233(b) of the California Coastal Act specifies that dredge spoils suitable for beach nourishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems. The placement of material on the beaches would require the temporary restriction of public access to the immediate beach area receiving material but would not conflict with public access policies outlined in Article 2 and Article 6 (Section 20252) of the California Coastal Act as access to surrounding beach areas would be maintained. The proposed SCOUP project would require compliance with the Coastal Act and the City's certified LCP, which includes the City's BOZ regulations, which are established in City's certified LCP Implementing Ordinances (City of Del Mar 2001a). The proposed project would also be subject to regulation from the Beach Preservation Initiative (Measure D), adopted as part of the City's voter initiative in 1988 to regulate the use of the

Del Mar beach area and to establish the City's rules for regulating items like seawall permits, emergency protective structures, and removal of encroachments (City of Del Mar 2018). BPI implementing code regulations were incorporated in Chapter 30.50 of the Del Mar Municipal Code, which is part of the City's LCP. Since its inception, the BPI has established a Shoreline Protection (zone) seaward of a designated north/south Shoreline Protection Area line (SPA line), processed permit applications/agreements, executed abatement of existing non-complying structures, and regulated land use within the overlay zone (City of Del Mar 1996). Request for permit approval of shoreline protection within the City is appealable to the CCC. Necessary CCC coordination and permit requirements would occur as part of project approval.

On October 1, 2018, the Del Mar City Council adopted the Adaptation Plan (ESA 2016) and supporting technical documents. A Local Coastal Program Amendment is currently being prepared but has not yet been approved by the CCC. The Del Mar Adaptation Plan is consistent with and follows the steps outlined in the CCC's Sea Level Rise Policy Guidance document. The Adaptation Plan identifies beach nourishment as the highest priority, near-term adaptation strategy to address projected local flooding and erosion. As stated in the Adaptation Plan, the City's favored approach is to pursue a combination of beach nourishment, sand retention/management, and flood management projects to maintain the existing high-quality public beach and public access in Del Mar as the primary means of addressing sea-level rise. Within the Adaptation Plan, the City determined that one of the best strategies for achieving the long-term goals included proactive implementation of programs, including sand replenishment and management, to maintain a publicly usable beach that would also serve as a protective buffer for abutting private and public property, while enhancing maximum public access. The Adaptation Plan states a strategy for beach coastal (ocean) flooding and beach erosion adaptation is to pursue beach nourishment, river channel dredging, and sand retention adaptation strategies accordingly per the City of Del Mar SMP (ESA 2018c).

The City of Del Mar SMP was developed to study the preservation of Del Mar beaches as a companion document to the Community Plan, Adaptation Plan, and LCP. Section 5 of the SMP is devoted to beach nourishment including sand placement and retention strategies (short and long term) and sand sources.

The City of Del Mar Community Plan (City of Del Mar 1976) also notes the decrease of sediment supply to the City beaches and the need to maintain public access to the beaches. The Goals, Objectives, and Policies of the Environmental Management section of the Community Plan requires the placement of beach quality sand when it is available from the dredging of San Dieguito Lagoon.

The SCoup project is consistent with the above listed plans, policies, and regulations. The placement of sand on Del Mar beaches from the various proposed sources is consistent with and implements the beach nourishment and adaptation directives of the City. No conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would occur.

8.12 MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?				X
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?				X

Impact Analysis

Would the project:

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

No mineral resource that would be valuable to the region and the residents of California would be lost as a result of the SCOUP. The addition of material within the placement envelope or extraction of the material from source locations would not preclude future extraction of mineral resources from the sites. The proposed project would not affect the availability of known mineral resources that would be of value to the region and/or residents of the state. Therefore, the proposed project would have no impact.

- 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?***

The Community Plan does not identify locally important mineral resource recovery sites. The proposed project would not result in the loss of availability of a locally important mineral resource recovery site as implementation of the SCOUP would not preclude future mining of mineral resources from the potential extraction sites or sand placement areas. Therefore, the proposed project would have no impact.

8.13 NOISE

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) Expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or 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?				X

Impact Analysis

Would the project:

- a) ***Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

The City of Del Mar's noise ordinance limits construction noise to 7 a.m. to 7 p.m. Monday through Friday and 7 a.m. to 9 p.m. on Saturday. It limits construction noise levels to an hourly average sound level not to exceed 75 A-weighted decibels (dBA) on property zoned or used for residential purposes (City of Del Mar 1997). Construction of the SCoup project would occur within the allowed daytime construction noise hours of 7 a.m. to 7 p.m.

The majority of the eastern edge of the placement envelope is lined with single-family beachfront homes that are at or near the same elevation as the placement site. Ambient noise levels at beachfront properties tend to be influenced by surf noise and typically range from 63–69 dBA equivalent sound level over a given time period (L_{eq}) (SANDAG and U.S. Navy 2000). At times, SCoup construction activities may occur within 50 feet of the residential properties. Construction equipment would be used to deliver and distribute sand from 7:00 a.m. until dusk (typical construction/working hours). The dominant noise sources would be from the diesel engines used to power the various pieces of equipment, such as bulldozers, loaders, and booster pumps as needed. Diesel engine noise levels for construction equipment are typically 85–90 dBA at 50 feet from the engine when under a heavy load. Noise levels from the engines are less when the equipment is moving from one location to another without working, or when the equipment is idling. A typical duty cycle for a piece of construction equipment includes three phases: working, moving, and idling. Therefore, the average noise levels from construction equipment over a period of time would be less than 85–90 dBA. As described in the EIR/EA noise analysis for RBSP I, when working at a beach location closest to homes, construction noise levels at the

property lines would be anticipated to occasionally exceed 75 dBA during a peak construction noise event, such as a diesel engine under load and sounding the backup alarm close by a residence. However, because of working cycles and constant change of location, maximum hourly average noise levels would be expected on the order of 65 dBA L_{eq} . As the work moves away from individual receptors, the noise level would decrease, and at a distance of 200 feet, a decrease of 10–12 dBA would be anticipated. At that distance, maximum construction noise levels would be 65 dBA or less, and average noise levels on the order of 55 dBA L_{eq} . (SANDAG and U.S. Navy 2000).

As described, temporary construction noise related to sand placement on the beach sites would be on the order of an hourly average of 65 dBA L_{eq} and, thus, would not exceed the hourly average limit of 75 dBA at nearby residential receptors. Additionally, standard construction procedures (Table 5-2) that would further minimize noise generation from construction equipment, including appropriate mufflers and housing of exposed engines are included in the proposed project. Once material has been placed, noise generation would cease. Therefore, the placement of sand on beach sites would not cause an increase in ambient noise levels in excess of established standards and a less than significant noise impact would result.

Similarly, dredge equipment may be used for material extraction in locations near residential receptors, such as near the mouth of the San Dieguito River. Noise generated by dredge equipment can vary dependent on the type of engine (diesel or electric), size, housing of the engine, etc. For purposes of this evaluation, data on dredging noise levels is taken from noise measurements of dredges working on the nearby San Elijo Lagoon Restoration Project (AECOM 2019). Both a large and small diesel dredge were measured at a distance of approximately 50 feet from the front, back, and sides of the dredge. The large dredge had a housed engine and the engine on the smaller dredge was exposed. The highest range of noise from the large dredge was 58–61 dBA L_{eq} and 66–74 dBA L_{eq} for the smaller dredge (AECOM 2019). Use of a diesel dredge represents the worst-case noise scenario as electric dredges are quieter. At the location proposed for potential river inlet dredging (near the area of Camino Del Mar and the railroad crossing) there are some homes that line the banks of the river channel that could be within 50 feet of the dredge equipment if it were immediately adjacent to the river bank. Because dredge operations are anticipated to be below 75 dBA L_{eq} at a distance of 50 feet based on the recent noise measurements from a variety of dredge sizes and engine enclosures, the construction noise level limit of 75 dBA L_{eq} for the City of Del Mar would not be violated during dredging activities. Additionally, the dredge operations would move and not be in one location for extended periods of time. Also, standard construction procedures (Table 5-2) direct the contractor to house exposed engines on dredging equipment to the greatest extent possible, which would further aid in the reduction of noise generation.

The increase in traffic volume on area roadways due to haul trips as shown in Tables 4-2 and 4-3 to the beach placement sites would not cause substantial noise increases in the ambient noise environment and would not exceed the 1-hour 75 dBA L_{eq} threshold of the City of Del Mar. The additional daily volume of up to 67 dump truck round trips (approximately eight trips per hour) would result in small percentage increase for the roadway segments. Additionally, if assessed as a dump truck passing by a receiver at an average occurrence frequency of up to 8 trips per hour, with the dump truck exhibiting 76.5 dBA maximum noise level (L_{max}) at a distance of 50 feet (FHWA 2006) and taking less than 1 minute to complete the pass-by, the estimated hourly noise level would be less than 75 dBA L_{eq} at a distance of 50 feet for an average of up to 8 trips per hour. Thus, construction-related traffic would not be substantial and would not result in a significant increase in noise levels along adjacent roadways or in exceedance of applicable noise standards.

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

Construction of the proposed project would be temporary, as stated in response 8.13(a). Standard above-ground construction equipment would be used and would not include activities such as pile-driving or blasting, which typically generate high levels of groundborne vibrations and noise. Once complete, the proposed project would not generate groundborne vibration or noise levels. Therefore, impacts would be less than significant.

c) *Expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or 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?*

The proposed project is not located within an airport land use plan or in proximity to a public or private airport. No element of the proposed project would create new or altered conditions that would expose people to excessive airport-related noise. Therefore, no impact would occur.

8.14 POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Impact Analysis

Would the project:

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

The proposed project involves the placement of beach quality sand on local Del Mar beaches from a potential variety of sources and is not considered growth inducing. The placement of material on the beach areas would enhance the existing beach opportunities and would not influence the local population in the surrounding community. The proposed project does not include the construction of new homes or businesses, the extension of roads, or infrastructure. Therefore, no impact would occur.

- b) ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

The proposed project would involve activities at material exaction sites and at the proposed sand placement envelope located along Del Mar's public beaches. No people or housing would be displaced as a result of the proposed project. No replacement housing would be required. Therefore, no impact would occur.

8.15 PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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:				
a) Fire protection?				X
b) Police protection?				X
c) Schools?				X
d) Parks?			X	
e) Other public services?		X		

Impact Analysis

Would the project:

a) Fire protection?

The placement of sand on the damp beach environment would not create a substantial fire risk during construction. Construction activities, including material extraction at the various proposed locations, would follow standard construction procedures (Table 5-2) to minimize potential for fire ignition during construction activities. Thus, construction of the proposed project would not create a need for increased fire protection services or facilities. The project would not construct amenities that could involve human occupancy and would not add to the risk or need for fire protection services. No additional fire protection would be required with the implementation of the proposed project, and service ratios and response times would not be affected. Therefore, no additional fire protection facilities or expansion of existing facilities would need to be constructed and there would be no impact.

b) Police protection?

The typical construction activities associated with implementation of the proposed project are not of the nature to necessitate police services. No additional police protection would be required with the implementation of the proposed project, and service ratios and response times would not be affected. Therefore, no additional police protection facilities or expansion of existing facilities would need to be constructed and there would be no impact.

c) Schools?

The proposed project involves extraction of material and placement on local beaches. The proposed project would not be growth inducing and would not cause an increase in student enrollment or create a need for additional school services. Therefore, no school facilities would need to be constructed as a result of the proposed project. There would be no impact.

d) Parks?

The proposed project would place sand on local beaches, which are designated as Public Parkland by the City (City of Del Mar 2001b) and are used as recreational opportunities to enjoy the beach and ocean. Placement of sand on the beaches could result in generally increased usable recreational area by covering over rocky areas or exposed cobbles. Disruption of beach use would occur only for the short time period of sand placement and only in the specific location of construction activities. Temporary disruption and closure of the beach area in the immediate vicinity of sand placement activities would not preclude use of nearby beach areas and similar beach recreation opportunities would continue to be available. The proposed project is not considered growth inducing and would not affect the use of other parks in the area. Therefore, the proposed project would not result in the need for new park facilities. Potential impacts would be short term and less than significant.

e) Other public services?

Recreational safety on local beaches is provided by the City of Del Mar Community Services Department. Lifeguard services would remain during construction, but services could be significantly interrupted by the placement of material on the beach. Temporary interference with lifeguard services could occur due to obstruction of clear lines-of-sight and result in a significant impact. However, implementation of mitigation measure PUBLIC SERVICES-1 would minimize potential temporary interruptions to lifeguard services and reduce the impact to less than significant.

Mitigation Measure PUBLIC SERVICES-1:

To avoid interference with lifeguard services, the following actions shall be implemented during construction activities:

- Place sand to avoid blocking line-of-sight at lifeguard towers. Sight lines from the viewing platforms of the lifeguard towers will be maintained and there will be no interference with views for the lifeguards.
- Temporarily relocate mobile lifeguard towers, if necessary.

8.16 RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) 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?		X		
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Impact Analysis

Would the project:

- a) *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?*

The beach areas within the placement envelope are generally used for common beach recreation activities, such as sunbathing, walking/jogging, water and sand play, and swimming, among others. Beach conditions can vary from sandy to exposed cobbles and rocky terrain. Sand placement would require temporary beach closures in the immediate vicinity of the construction activities, haul routes, and staging areas for safety purposes. The temporary closure of beach areas during sand placement could result in a substantial temporary loss of recreational opportunities and result in a significant impact. However, implementation of mitigation measure RECREATION-1 would maintain safe public access to beach recreation in locations surrounding the active construction area and reduce the impact to less than significant.

Mitigation Measure RECREATION-1:

To avoid substantial loss of beach recreation opportunities and to maintain safe public access to the beach surrounding the active construction area, the following shall be implemented during construction activities:

- Should a pipeline be used for sand placement, bury the pipeline as needed at intervals to facilitate public beach and water access.
- Maintain access to beaches adjacent to placement sites not under active construction.
- Maintain horizontal and vertical access on either side of the active sand placement area as long as public safety is not compromised.

The potential increased use of nearby beach areas during temporary beach closures during sand placement would not be of the magnitude to cause physical deterioration of the recreational beach

opportunities. Additionally, beach recreation would be enhanced with the sand placement by providing larger expanses of sandy beach area.

Surfing is a popular recreation activity in the coastal waters off of Del Mar beaches and surfing occurs throughout the SCOUP placement envelope. Surfing in the area is affected by local bathymetry, offshore sand bars, and other coastal influences that can determine how a wave may form and break at a certain location. The surf quality can vary and be influenced by factors such as the conditions of waves, tides, and wind. Because surfing conditions are partially dependent on localized sand movement and sandbar development, the placement of sand on local beaches could affect the surf as wave energy naturally transports the sand from the beach and into the nearshore environment. Thus, materials placement of substantial quantities could affect surfing through modification of existing sandbars and reefs by sand placement and deposition or by wave backwash generated during and after beach fill is completed. However, the anticipated volume of fill material to be placed at any one time or location is not of the magnitude to substantially change the surf conditions in a manner that would cause surfing opportunities to be lost. Del Mar has typically maintained a sandy beach break, which in the long term would tend to benefit from the addition of sand to the area. Minor effects would be temporary as long-term conditions would be maintained as the sand continues to disperse more broadly in the littoral cell. Additionally, temporary beach restrictions during active construction would not preclude surfing in the area. Thus, the placement of sand within the beach placement envelope would not cause substantial loss of a local surfing opportunity. Monitoring would be conducted during and after placement of volumes of more than 20,000 cy as part of this project to confirm surfing conditions do not substantially deteriorate, as described in Section 5.2.

A primary concern specifically associated with placement of material on a beach is ensuring public safety during construction. Recreational safety on local beaches is provided by the City of Del Mar Lifeguard Department. Scarps (or escarpments) develop naturally along sandy beaches and vary in height due to substantial changes in the beach profile (i.e., drastic change in elevation). Scarp height is a function of the breaking wave height and the elevation of the existing beach berm. Large scarps may result in safety hazards due to substantial changes in the beach profile and result in a potentially significant temporary impact. However, implementation of mitigation measure RECREATION-2 would provide for enhanced public safety at locations of material placement on the beach through public notification and knocking down the dangerous scarp features and would reduce the impact to less than significant.

Mitigation Measure RECREATION-2:

To avoid recreational safety issues at the material placement locations along the beach, the following will be implemented during construction activities:

- Post signs advising the public of the presence of steep sand slopes (e.g., scarps) should they develop on beaches where sand is being placed.
- Knock down/modify dangerous scarps that may form after material placement as part of ongoing regular beach maintenance performed by the City.

As discussed in 8.11, the placement of material on the beaches would require the temporary restriction of public access to the immediate beach area receiving material, but would not conflict with California Coastal Act public access policies outlined in Article 2 and Article 6 (Section 20252), or recreation policies outlined in Article 3 as access to surrounding beach areas would be

maintained. Disruption to public access to the beach and water would be minimized by implementation of mitigation measure RECREATION-1 (outlined under Recreation Threshold a), which provides for safe public access to beach areas around the construction area and access across the beach by burying the pipeline used to place the material slurry at intervals so recreationalists can easily cross it. Once completed, the affected beach area would be reopened to the public and have an increased sand volume for recreational beach enjoyment.

The SCOUP is not growth inducing and would not result in the increased use of existing recreational facilities, nor would it result in an increased population that would use local recreation facilities. Physical deterioration of the facility would not occur as a result of the proposed project and there would be a less than significant impact.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The SCOUP would not involve new development or require construction or expansion of existing recreational facilities. The placement of sand on the beach would potentially increase the usable beach area for recreation such as sunbathing, walking, picnicking, and other typical beach uses. This would be a beneficial recreational effect. The potential for potential for adverse physical effects from the SCOUP are analyzed per each topic area in this Initial Study.

8.17 TRANSPORTATION

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Impact Analysis

Would the project:

a) ***Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

The proposed project involves placement of sand along the beach. Nourishment activities would require delivery of construction equipment and the commuting of work crews to the placement site. Construction vehicles would be driven to and may be kept on-site or at staging areas for the duration of beach replenishment activities. Personnel working at the placement site would park in public parking or staging areas. The small increases in traffic volumes during implementation of the proposed project would be localized and temporary, and would not create long-term impacts to existing traffic and circulation patterns or conflict with a program, plan, ordinance or policy addressing transit, roadway, bicycle, or pedestrian facilities. Additionally, the contractor would be required to develop a traffic control and construction access plan to address traffic and circulation needs during construction as discussed in Table 5-2.

The most severe traffic and parking congestion would continue to occur on warm summer weekends and holidays, as most routes serve commercial, motel or camping, and residential uses as well as the beaches. Beach nourishment may induce additional use that would marginally increase the congestion but would not be discernable above existing conditions. Traffic and parking congestion at beaches are an accepted occurrence, and it is not common practice to design infrastructure to accommodate these peak loads. Additionally, sand would be placed in relatively limited quantities throughout the year and noticeable increases in sand would be minimal. The long-term impact of the proposed beach sand replenishment on traffic and parking would not be significant and would not conflict with policies addressing transit, roadway, bicycle, and pedestrian facilities. Subsequent to the completion of replenishment, some changes in traffic could occur as the nourished beach may become more attractive to both residents and tourists, and it is expected that traffic could temporarily increase accordingly. Some of the increase would come from new users, and some would come from users of adjacent, currently sandy, but less convenient beaches. In the latter case, there would be some decrease in traffic at the adjacent

beaches. The increase in use is likely to be less pronounced compared to rockier beaches, if they were to undergo beach nourishment, and increases in traffic and parking congestion are anticipated to be minimal.

Small increases in traffic volumes during replenishment would be temporary; and long-term impacts to existing traffic and circulation patterns would not be substantial. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, and impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The total vehicle miles traveled (VMT) in the City of Del Mar during 2013 was 179,146 miles/day (City of Del Mar 2016). As estimated in Table 4-3, a maximum of 53 daily trips would occur if the maximum quantity of 180,000 cy was placed on the beach within a single year. This represents approximately less than 1 percent of VMT to the beach for sediment delivery within the City and would not substantially increase VMT. Current disposal of sediment from upland sources uses heavily congested streets and trucks often travel to landfills located far from residential or commercial development sites (e.g., locations like Miramar Landfill southeast of Del Mar). Truck trips associated with delivery of material to the proposed placement site may minimize the distance traveled (i.e., miles in the VMT miles/day calculation) for sediment disposal, since Del Mar is a relatively central city as compared to landfills in San Diego County.

As stated above, the proposed project is not anticipated to substantially increase the number of trips to the project site. Beach goers can use public transit to arrive at the beach, including the North County Transit District Breeze and Coaster, and other rideshare options reducing VMT (City of Del Mar 2019). The City also has directives to increase multimodal use of streets for pedestrians, bikers, and public transit uses in conjunction with personal and commercial vehicle uses, as outlined in their Complete Streets Policy (City of Del Mar 2017). These initiatives over time may change the public's transportation mode to the beach, reducing personal vehicle uses and subsequently decreasing VMTs to public recreation areas such as the beach.

The project would not create a temporary or permanent substantial increase in VMT. Therefore, the project would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) and impacts would be less than significant.

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

Vehicle transport of sand to the proposed beach fill locations may temporarily increase hazards along haul routes and at the beach site itself during construction due to the proximity of people and equipment. As described in Table 5-2, the contractor would be required to identify and coordinate details relating to traffic control and construction access on the beach, including identification of the haul route and flagmen to prevent accidents while construction vehicles access and egress from the stockpile sites or pipeline discharge area. Implementation of mitigation measure RECREATION-1 would maintain safe public access to beach recreation in locations surrounding the active construction area by separating the public from equipment hazards during construction. Long-term hazards along the haul route and beach site are not expected, as placement would be short term and temporary. Implementation of traffic control and additional access requirements would minimize impacts and they would be less than significant.

d) *Result in inadequate emergency access?*

See response 8.9(f). The proposed project would not impede emergency access to the project site and the contractor would be required to develop a traffic control and construction access plan that addresses emergency access during construction as discussed in Table 5-2. Impacts to emergency access would be less than significant.

8.18 TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register for Historical resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k), or				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

Impact Analysis

Would the project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) ***Listed or eligible for listing in the California Register for Historical resources, or in a local register of historical resource as defined in Public Resources Code Section 5020.1 (k), or***

The SCOUP would place suitable material within the designated sand placement envelope that includes beach areas along the Del Mar coastline. The beach placement locations do not contain resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Extraction of sediment from aquatic areas, such as the San Dieguito River mouth, would be within areas of recent alluvial deposits and low resource potential. Additionally, evaluation of placement sites in the RBSP I EIR/EA did not identify the potential for impact to cultural resources and the majority of the proposed placement envelope is the same location that received 183,000 cy of material in RBSP I. There would be no impact.

- ii) ***A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision***

(c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The SCOUP would place material on top of existing beach locations that are dynamic and are continually evolving with tidal action and ocean processes. Thus, beach placement envelope and sediment basins are an environment where there is little potential to encounter significant resources. Additionally, the majority of placement locations have previously been both directly and indirectly nourished with sand as part of the RBSP I project, other regional nourishment efforts, and inlet maintenance from the San Dieguito River mouth. Therefore, impacts to tribal cultural resources would be less than significant.

8.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			X	
c) 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?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Impact Analysis

Would the project:

- a) ***Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

Construction activities would be short term and require the use of minimal utilities. Similarly, extraction of sand from aquatic sediment sources would require the use of minimal electricity and gas to operate equipment. The volume of water used during the temporary construction period would be typical of similar construction activities and would not require a demand for water that would necessitate new or expanded water facilities or infrastructure.

The proposed project would not construct features that would increase storm water runoff and therefore no new construction or relocation of storm water drainage facilities or expansion of existing facilities would be required. Similarly, the proposed project would not require the construction of new, or relocation of existing, wastewater treatment facilities. Operation of the proposed project would require energy, as described under Section 8.6; however, the temporary

use of energy for project implementation would not be of the magnitude to create the need for new or relocated electrical infrastructure. Additionally, construction and operation of the proposed project would not require the construction or relocation of natural gas, telecommunications facilities, or other utility infrastructure. The sandy and dynamic beachfront is not an area generally used for placement of utility infrastructure. Standard construction procedures include coordination with existing utility providers to avoid and/or minimize impacts to utilities. The potential impact would be less than significant.

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

As described above, water would be necessary for typical construction activities. The impacts to the local water supply would be minimal due to the short-term nature of construction and limited use of water. Once material is placed, the proposed project would not require additional water supplies or create a new ongoing demand for water. Therefore, existing water supplies are sufficient to meet temporary water requirements for SCOUP implementation and would not limit water supply for foreseeable future development. The impact would be less than significant.

c) *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?*

As stated in responses 8.19(a) and 8.19(b), construction activities would be short term and would use water necessary for typical construction activities. Once implemented, the proposed project would not generate wastewater or a need for wastewater treatment; therefore, no change would occur in wastewater generation that could affect available treatment capacities. There would be no impact.

d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Waste generated by the construction of SCOUP would be minimal as there would be no demolition or construction of facilities. Once implemented, the proposed project would not generate solid waste or a need for solid waste disposal. No impacts would occur.

e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

See response to 8.19(d). The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. There would be no impact.

8.20 WILDFIRE

Would the project:

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors that exacerbate wildfire risks?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X

Impact Analysis

Would the project:

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Similar to the discussion provided under response 8.9(f), construction of the proposed project would require haul trips to transport material to the beach placement site. As detailed in Section 4.3.3, it is anticipated that approximately eight truck trips would occur within an hour, which would not create substantial traffic during construction or interfere with an adopted emergency response plan or emergency evacuation plan. Construction equipment activities, and storage and laydown areas would not occur on local roadways or block streets. Additionally, as part of standard construction procedures, a traffic control plan would be prepared that must identify the haul route, a point of contact during construction, the project schedule and hours of operation, and assignments for flaggers to ensure that a clear and safe path is maintained for emergency access vehicles (Table 5-2). Thus, the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

b) *Expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors that exacerbate wildfire risks?*

Wildland fire safety concerns generally exist in locations with the presence of relatively large expanses of native and exotic vegetation in proximity to residences and other developed areas. Sand placement on the beach or material extraction from locations such as existing sedimentation basins or the river inlet would not create a highly susceptible risk for fire ignition due to the damp sandy conditions with minimal flammable vegetation or material.

Fire hazard risks associated with the use of construction equipment are not anticipated. However, as a standard construction procedure (Table 5-2) construction equipment would have fire

suppression equipment on board or at the worksite and heavy equipment operators would be trained in appropriate responses to accidental fires. These standard construction procedures would provide for quick response to accidental fires during construction activities as fires could be quickly extinguished and dealt with expediently before spreading, and provide for quick emergency service notification for help if an accidental fire were to occur and require additional assistance to be extinguished. Therefore, the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

- c) ***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

The proposed project would consist of material extraction from the river or existing sedimentation facilities and placement on local beaches. The proposed project would not require the installation or maintenance of roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or impact the environment. There would be no impact.

8.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially 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, substantially 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?			X	
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).			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Impact Analysis

- a) *Does the project have the potential to substantially 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, substantially 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?*

As demonstrated in Sections 8.1 through 8.20 above and with the implementation of the required mitigation measures, the proposed project does not have the potential to substantially degrade the quality of the environment. The SCOUP would not reduce the habitat of a fish or wildlife population, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal as the proposed project would not cause significant impacts to species or their habitats as detailed in Section 8.4. The constantly evolving beach setting and material extraction sites do not contain important examples of the major periods of California history or prehistory; therefore, the proposed project would not impact these resources. With implementation of the standard construction procedures and mitigation measures incorporated into the SCOUP, impacts associated with the proposed project would be less than significant, mitigated to less than significant, or cause no impact.

- 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).*

As stated previously, the proposed sand placement sites would be on public beaches within Del Mar that are bounded by the Pacific Ocean and existing residential homes. While projects in the immediate vicinity of the beach are limited because of the ocean and existing development, there are various recent projects or proposed projects, some of which also include sand placement on nearby beaches that have been considered in the cumulative analysis as listed below:

- San Dieguito Lagoon W-19 Restoration Project – Proposed restoration and establishment of wetlands within the W-19 portion of San Dieguito Lagoon with approximately 140 acres to supplement recent restoration efforts within the lagoon. Maintenance includes sediment removal from San Dieguito River inlet and sand from upland sources, with placement on local beaches within a portion of the SCOUP placement envelope.
- SCE San Dieguito Lagoon Restoration Project and Ongoing Maintenance – The San Dieguito Wetlands Restoration Project revitalized 150 acres of coastal wetlands, creating a fish nursery and a refuge for migratory water fowl and endangered species. The project restored tidal flows, natural habitat, and vegetation. Restoration was completed in 2011 with ongoing maintenance, including dredging in the San Dieguito River with beach placement within a portion of the SCOUP placement envelope.
- San Elijo Lagoon Restoration Project (SELRP) – Currently ongoing restoration of San Elijo Lagoon with improved ecological function. Restoration of the lagoon included placement of sand on local beaches in 2018.
- Los Penasquitos Lagoon Restoration Project – Currently in planning and environmental documentation phase. Consideration is being given to the use of material to create an offshore reef and/or a living shoreline through the creation of coastal dunes. Construction is currently proposed in 2023.
- 22nd Agricultural District Master Plan – Master Plan Updates for the Del Mar Fairgrounds that includes various actions such as replace existing exhibit buildings; pave east parking lot; new 60,000-square-foot health club; Solana gate improvement; and rooftop sports field. Revised Final EIR released in August 2017.

Cumulative environmental impacts to coastal processes can occur from excessive sedimentation at sensitive nearshore and offshore habitat areas, and at lagoon mouths. Sedimentation occurs naturally at these locations, but sedimentation significantly above natural processes may cause sufficient stress to habitat. Sedimentation from this program would be incrementally more than existing conditions and would not result in significant cumulative impacts. In addition, the sediment budget within the Oceanside littoral cell is currently in a deficit, estimated at nearly 55,000 cy per year, due to reductions in historical sand sources from rivers and bluff erosion (Patsch and Griggs 2006). The San Dieguito Lagoon is a flood dominant system where flood tidal velocities (velocities when the tide is rising) exceed ebb velocities (velocities when the tide is falling) and the result in net sediment deposition within the inlet (ESA 2018c). As such, this net sediment deposition results in a flood shoal within the mouth of the lagoon. Sand extracted from the San Dieguito River mouth would not be considered new sediment within the sediment budget and instead is sediment caught within a cycle of dredging (currently from SCE inlet maintenance) and deposition in the river mouth. Therefore, placement of this material on the beach would not be considered new sand within the littoral cell and would not cumulatively impact coastal resources. Furthermore, sporadic and gradual application of sediment placed, as proposed with the SCOUP, would result in dispersion that resembles natural processes, resulting in a lower degree of disturbance as compared to a quick pulse of a large quantity of sand.

As stated previously, construction of the proposed project would be located on public beach areas and construction would be limited in duration and would occur sporadically as sediment sources are made available. Estimates assume the maximum placement of 180,000 cy within a 5-year period, resulting in a total active placement duration of 36 weeks. A more typical project would be approximately 10 weeks in duration for smaller volumes. The limited nature of the construction time period would minimize potential for overlap with other cumulative projects. The location of the sand placement on the beach location also isolates and limits the potential for effects to combine with other cumulative projects elsewhere. As stated in Section 4.3.2, the City would coordinate the proposed haul routes with other projects that may impact identified haul routes to avoid traffic concerns with construction traffic from multiple projects at one time.

Further, the mitigation measures, standard construction procedures, and BMPs outlined in the analyses above would be implemented during the construction of the proposed project to avoid potential impacts and minimize potential for adding to cumulative effect in combination with other projects.

GHG emissions are considered a cumulative issue as emissions from one individual project are not substantial enough to independently affect global climate. As described in Section 8.8, the temporary emissions generated by the SCOUP would not conflict with policies and regulations aimed at reducing GHG emissions, such as AB 32 and SB 32 and the City's CAP. The relatively minor emissions associated with the temporary construction operations to implement the SCOUP would not be of the magnitude to influence global climate or considerably add to the cumulative condition.

Once sand placement is completed, the SCOUP would not cumulatively impact other issue areas discussed above as indicated by the findings of no impact, less than significant impact, or mitigated to less than significant throughout the MND analysis of various topic areas. Therefore, the proposed project would not have impacts that are cumulatively considerable.

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

As demonstrated in Sections 8.1 through 8.20, the proposed project would not have environmental effects that would have a substantial adverse effect on human beings. Impacts would be less than significant, or no impact would occur.

SECTION 9: MITIGATION MONITORING AND REPORTING PROGRAM

CEQA Section 21081.6 requires that an MMRP be adopted along with an MND to ensure that proposed mitigation measures are implemented. The MMRP must specify what the mitigation measure requires, the entity responsible for monitoring the program, and when in the process it should be implemented. Table 9-1 lists the mitigation measures identified in the analysis of this MND that would be required as part of the proposed project.

**Table 9-1
Mitigation Monitoring and Reporting Program**

Significant Impact	Mitigation Measure	Timing	Responsible Entity
Biological Resources			
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?	<p>BIO-1:</p> <p>Grunion monitoring shall be conducted by a biological monitor if berm or surf zone placement is scheduled between March and August. Monitoring shall include a pre-construction survey to determine potential suitability for grunion spawning. Suitable spawning habitat includes a sandy beach with a minimum sand depth of 5 inches above cobble or other hard substrate cover, and sufficient beach width to remain partially dry until eggs have hatched approximately 10 days after spawning. The habitat suitability survey shall be scheduled 2 to 3 weeks prior to the scheduled placement activity. If the habitat is judged unsuitable for grunion spawning, construction could proceed without the need for additional monitoring. If construction would span more than one predicted grunion run period, habitat suitability surveys may be required prior to each predicted grunion run since suitability may vary seasonally (e.g., habitat may become more suitable between spring and summer due to natural sand accretion). Predicted grunion run periods will be based on the grunion calendar produced by the CDFW.</p> <p>Should the construction dates overlap an anticipated grunion run at a placement site with suitable habitat, grunion monitoring within the specific proposed placement footprint shall be conducted by a qualified monitor during the predicted grunion run prior to construction and/or for each predicted grunion run spanned by the construction period. If no grunion are observed, no further action shall be necessary and sand placement could occur according to plan. If grunion occur within the project area, their location will be mapped and number present will be estimated (e.g., by Walker Scale). An appropriate protective measure (e.g., avoid mapped grunion area, redirect sand placement above the spring high tide line) shall be implemented and the monitor shall communicate monitoring results and action taken to the resource agencies in accordance with</p>	Prior to and during construction between March and August	City of Del Mar

Significant Impact	Mitigation Measure	Timing	Responsible Entity
	pre-coordination decisions.		
Hydrology and Water Quality			
<p>a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</p> <p>and</p> <p>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</p>	<p>HYDRO-1: Should material be placed as a slurry, training dikes shall be constructed along the beach as needed to facilitate sediment deposition.</p>	During construction	Construction Contractor
Public Services			
<p>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:</p> <p>e) Other public services</p>	<p>PUBLIC SERVICES-1: To avoid interference with lifeguard services, the following actions shall be implemented during construction activities:</p> <ul style="list-style-type: none"> Place sand to avoid blocking line-of-sight at lifeguard towers. Sight lines from the viewing platforms of the lifeguard towers will be maintained and there will be no interference with views for the lifeguards. Temporarily relocate mobile lifeguard towers, if necessary. 	During construction	Construction contractor in coordination with City of Del Mar Community Services Department

Significant Impact	Mitigation Measure	Timing	Responsible Entity
Recreation			
a) 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?	<p>RECREATION-1: To avoid substantial loss of beach recreation opportunities and to maintain safe public access to the beach surrounding the active construction area, the following shall be implemented during construction activities:</p> <ul style="list-style-type: none"> • Should a pipeline be used for sand placement, bury the pipeline as needed at intervals to facilitate public beach and water access. • Maintain access to beaches adjacent to placement sites not under active construction. • Maintain horizontal and vertical access on either side of the active sand placement area as long as public safety is not compromised. <p>RECREATION-2: To avoid recreational safety issues at the material placement locations along the beach, the following will be implemented during construction activities:</p> <ul style="list-style-type: none"> • Post signs advising the public of the presence of steep sand slopes (e.g., scarps) should they develop on beaches where sand is being placed. • Knock down/modify dangerous scarps that may form after material placement as part of ongoing regular beach maintenance performed by the City. 	During construction	Construction contractor

SECTION 10: DETERMINATION

As provided in the CEQA Guidelines Section 15070 (Title 14 - California Code of Regulations), an MND is to be prepared for a project subject to CEQA when an Initial Study (IS) has identified no substantial evidence that the project may have a significant effect on the environment. The City is the lead agency for preparation of this MND. Based on the findings of the IS/Environmental Checklist Form prepared for this project (Section 8.0 of this document), the City has determined that preparation of an MND is the appropriate method to present environmental review of the proposed project in compliance with CEQA and an Environmental Impact Report is not required.

Based on the environmental review provided in Sections 8.1 through 8.20, and the attached additional analysis, the City has concluded that with mitigation, the proposed project would not result in significant environmental impacts.

10.1 RESULTS OF PUBLIC REVIEW (TO BE COMPLETED WITH FINAL MITIGATED NEGATIVE DECLARATION)

- () No comments were received during the public input period.
- () Comments were received during the public input period, but they did not address the Draft Mitigated Negative Declaration findings or the accuracy or completeness of the Initial Study. No response is necessary. The letters are attached.
- () Comments addressing the findings of the Draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public input period.

10.2 ADOPTION STATEMENT

This Mitigated Negative Declaration was adopted and the above CEQA findings made by the City on [insert date upon adoption].

Amanda Lee
Principal Planner
City of Del Mar

Date

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SECTION 11: LIST OF PREPARERS

This MND was prepared by AECOM, 401 West A Street, Suite 1200, San Diego, CA 92101, with the assistance of staff from Moffatt & Nichol. The following professionals contributed to its preparation:

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Chris Webb – Supervisory Coastal Scientist

Conor Ofsthun – Coastal Scientist

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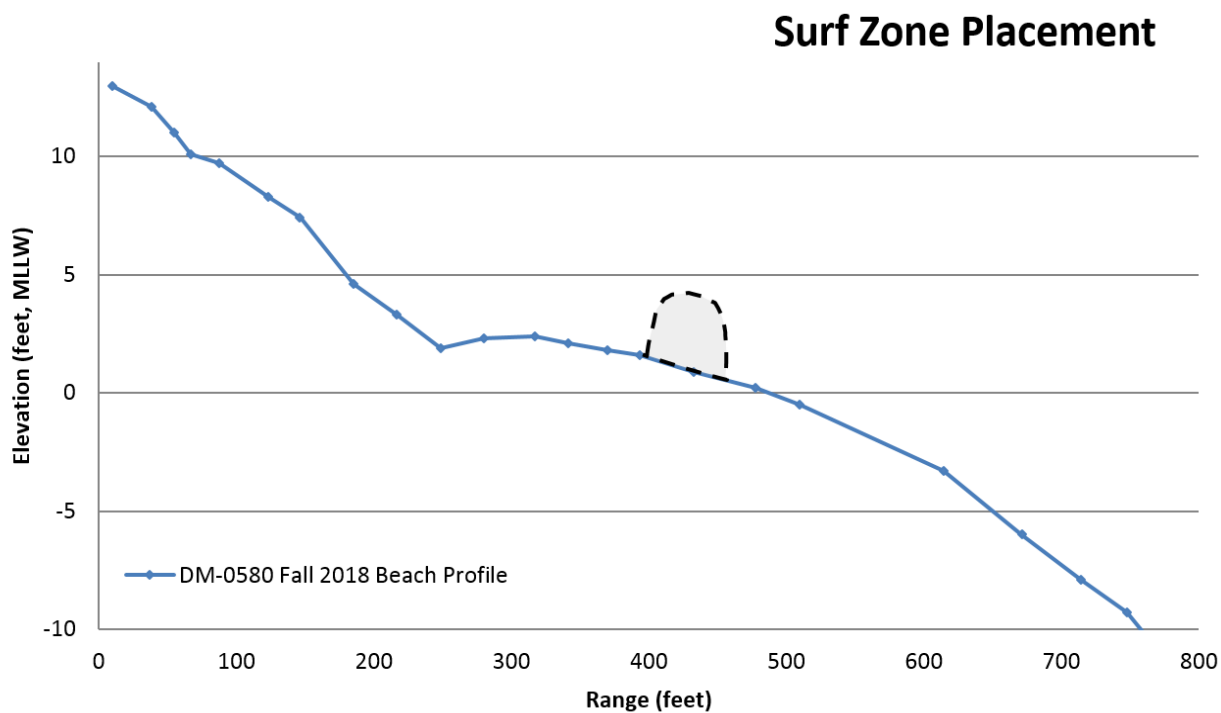
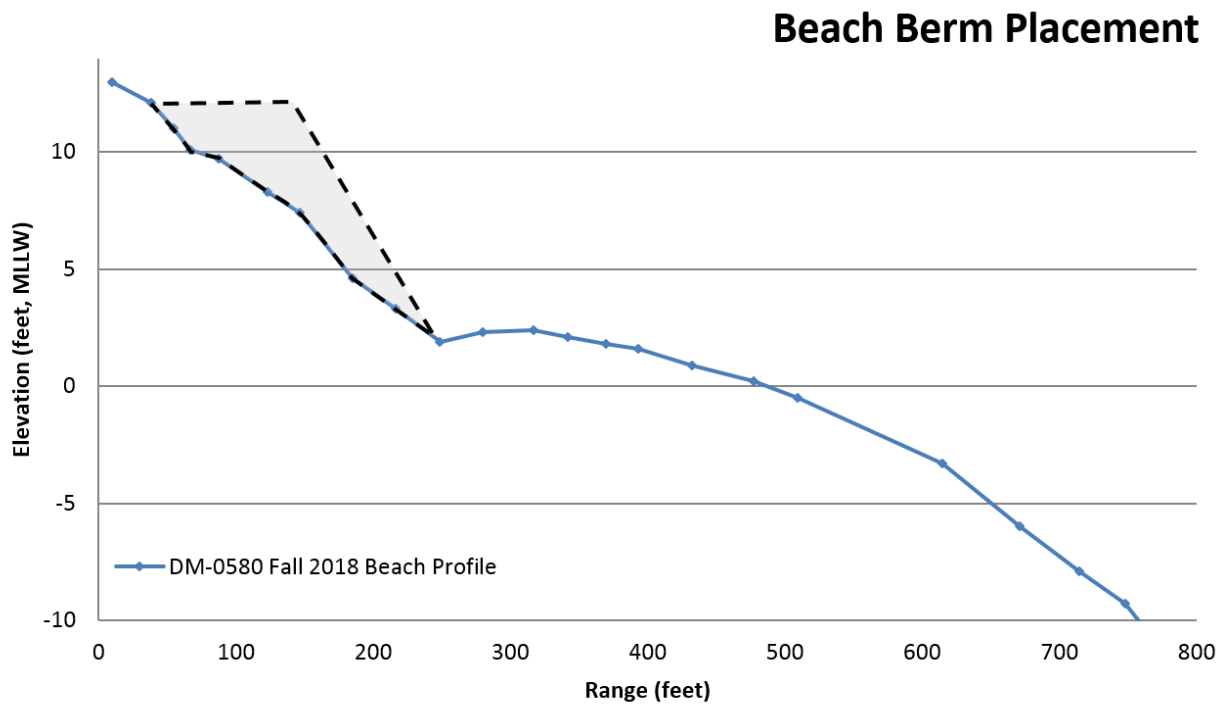
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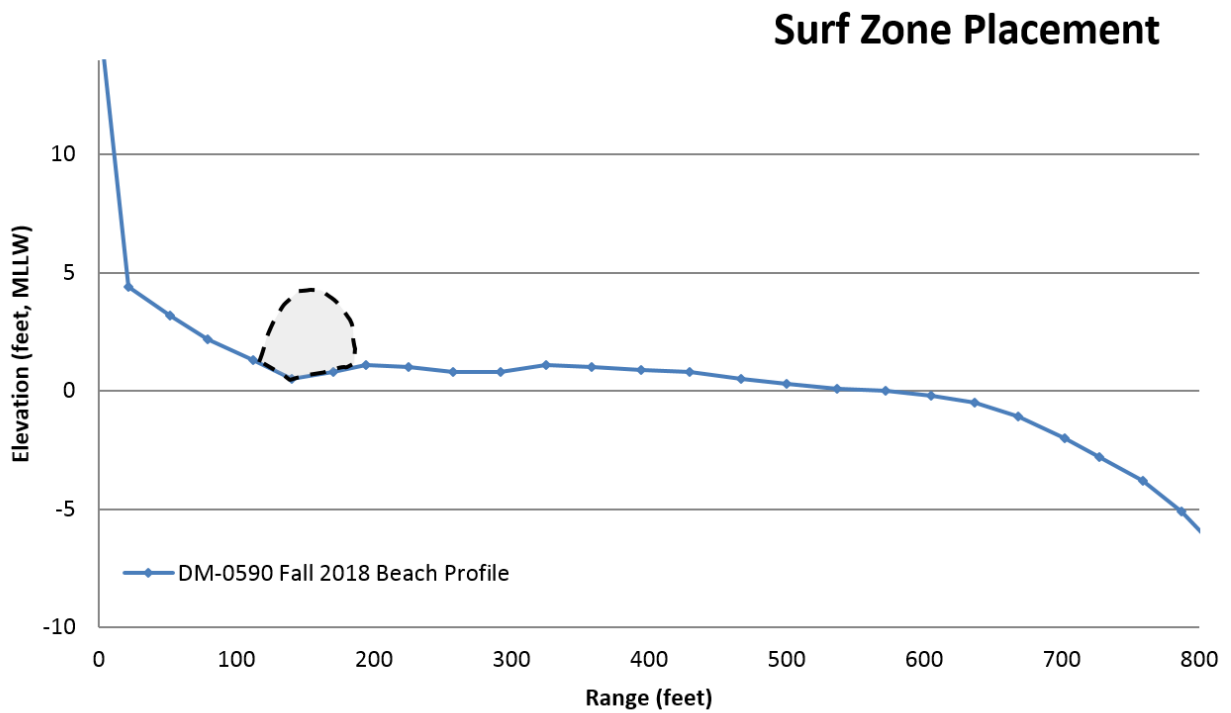
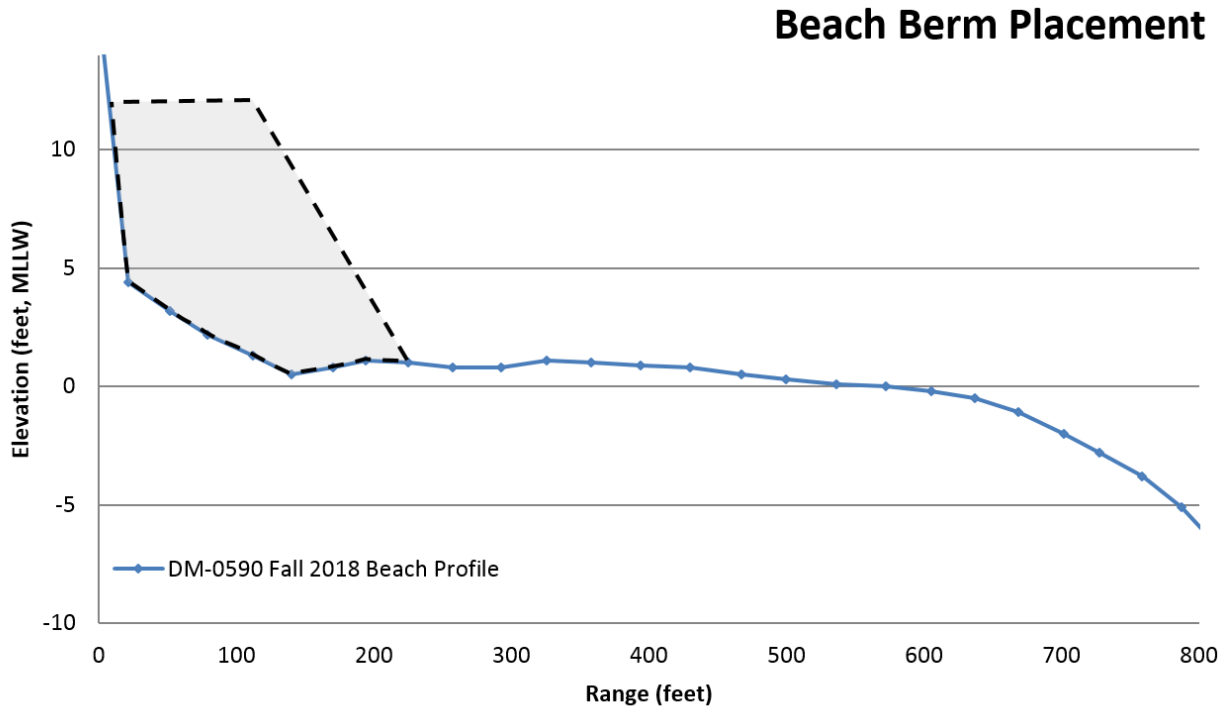
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APPENDIX A

Conceptual Typical Beach Fill Cross-Section



Conceptual Beach Fill Cross-Section – DM-0580



Conceptual Beach Fill Cross-Section – DM-0590