



*Los Angeles County Department of Beaches & Harbors
Sand Compatibility and Opportunistic Use Program*

**Draft Initial Study
& Mitigated Negative Declaration**

April 2025

Project Name:	Los Angeles County Department of Beaches and Harbors (LACDBH) Sand Compatibility and Opportunistic Use Program (SCOUP)
Project Locations:	Los Angeles County at five County-operated beaches in the Cities of Malibu, Los Angeles, Manhattan Beach, and Redondo Beach
Project Applicant:	Los Angeles County Department of Beaches and Harbors Emiko Innes, Planner 13837 Fiji Way Marina Del Rey, CA 90292 (424-526-7751)
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Public Review Period:	April 7, 2025 to May 7, 2025

This Draft Initial Study/Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). It is available for a 30-day public review period, as shown above.

Comments regarding this document should focus on the sufficiency of the document in identifying and analyzing the potential impacts on the environment that may result from the proposed project and the ways in which any significant effects are avoided or mitigated. All comments must be made in writing and addressed to Emiko Innes, Planner, Los Angeles County, Department of Beaches and Harbors, 13837 Fiji Way, Marina Del Rey, CA 90292. Comments may be sent by e-mail to: EInnes@bh.lacounty.gov. Comments must be received in the office no later than 4:00 P.M. on the last day of the public review period noted above.

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- Attachment A Figures
- Attachment B Mitigation Monitoring & Reporting Program (MMRP)
- Attachment C SCoup Project Description

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- Appendix A – Air Quality Technical Report
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- Appendix C – Cultural Resources Technical Report
- Appendix D – Greenhouse Gas Emissions Technical Report
- Appendix E – Noise Technical Report

Chapter 1. Introduction

CEQA Overview

The Los Angeles County Department of Beaches and Harbors (LACDBH) has prepared this Draft Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the potential environmental consequences associated with the proposed LACDBH Sand Compatibility and Opportunistic Use Program project (“project”). As part of the permitting process, the proposed project is required to undergo an environmental review pursuant to CEQA. One of the main objectives of CEQA is to disclose to the public and decision makers the potential environmental effects of proposed activities. CEQA requires that the lead agency prepare an Initial Study (IS) to determine whether an Environmental Impact Report (EIR), Negative Declaration (ND), or a Mitigated Negative Declaration (MND) is needed. Los Angeles County (LAC) is the lead agency for the proposed project under CEQA, and per State CEQA Guidelines Section 15070 has determined that an MND would be prepared. A description of the proposed project is found in Chapter 2 of this document.

Authority

The preparation of this IS/MND is governed by two principal sets of documents: CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). Specifically, the preparation of an IS and an MND is guided by the State CEQA Guidelines; Section 15063 describes the requirements for an IS, and Sections 15070–15073 describe the process and requirements for the preparation of an MND. Where appropriate and supportive of an understanding of the issues, reference will be made either to the CEQA statutes or State CEQA Guidelines. This IS/MND contains all of the contents required by CEQA, which includes a project description, a description of the environmental setting, potential environmental impacts, mitigation measures for any significant effects, consistency with plans and policies, and names of preparers.

Scope

This IS/MND evaluates the proposed project’s effects on the following resource topics:

- | | |
|-------------------------------------|--|
| 1. aesthetics | 12. mineral resources |
| 2. agriculture and forest resources | 13. noise |
| 3. air quality | 14. population and housing |
| 4. biological resources | 15. public services |
| 5. cultural resources | 16. recreation |
| 6. energy | 17. transportation |
| 7. greenhouse gas emissions | 18. tribal cultural resources |
| 8. geology and soils | 19. utilities and service systems |
| 9. hazards and hazardous materials | 20. wildfire |
| 10. hydrology and water quality | 21. mandatory findings of significance |
| 11. land use and planning | |

Chapter 2. Environmental Setting and Project Description

Project Overview

Throughout the State of California, the sandy beach functions as important natural protection for critical public infrastructure, existing structures, recreational space, and amenities, provides essential coastal habitat, and benefits the local economy. In addition, the beaches in Los Angeles County provide a respite from extreme heat for inland residents, many of whom live in historically marginalized communities; a need that is anticipated to increase as a result of changes to our climate.

In an effort to preserve and enhance this critical public resource, the Los Angeles County Department of Beaches and Harbors (LACDBH) has begun implementing a comprehensive coastal resilience strategy to reduce coastal erosion and prepare for future challenges associated with climate change. Beach nourishment, the addition of beach sand and other high-quality beach-compatible sediments to the coast, is a key component of this strategy.

Following recommendations provided in the County's Sea Level Rise Vulnerability Assessment (Noble Consultants, 2016) and Coastal Resilience Study (Moffatt & Nichol, 2023), as well as direction from the County Board of Supervisors (County of Los Angeles, 2023), LACDBH has developed a program to promote the beneficial reuse of opportunistically available beach quality sediment as beach nourishment. Similar programs, referred to as "sand compatibility and opportunistic use programs" or "SCOUP", have been implemented in Orange and San Diego Counties to take advantage of compatible sediments that may otherwise be landfilled or sold for industrial use in cement or concrete production.

The goal of the LACDBH SCOUP is to increase the resilience of vulnerable coastal areas by streamlining environmental review and regulatory approval for relatively small beach nourishment projects (typically up to 150,000 cubic yards per year, "cy/yr") that leverage opportunistically available sand sources, such as those generated from upland land development or redevelopment projects, harbor maintenance dredging projects, and flood control maintenance operations (California Division of Boating and Waterways, 2024).

The LACDBH SCOUP includes five receiver sites: Zuma Beach, Will Rogers State Beach, Dockweiler State Beach, Manhattan Beach, and Redondo Beach (shown in Attachment A, Figure 1). The sites were selected by LACDBH based on a variety of criteria that include present and future coastal erosion and flooding vulnerabilities, presence of existing resources, presence of critical public infrastructure and amenities, recreational and economic benefits, and avoidance of adverse effects on coastal resources. The term "receiver site" refers to the fact that each site will be receiving sand.

The sections that follow outline the proposed project footprints, describe the project approach, and identify potential sediment sources for each of the five receiver beaches.

Project Description

This section outlines the proposed project footprints and the range of compatible grain sizes for each receiver site. The information is intended to guide the implementation of individual SCOUP projects, the details of which will be formulated at the time of the project based on the quantity and quality of the source material and the condition of the shoreline.

In the discussion that follows, the "Representative Fill Area for Single Event" identifies the typical footprint for a single SCOUP project (using the Beach Berm placement strategy), while the "Maximum Fill Area for Multiple Events" denotes the area within which multiple SCOUP projects may be implemented over the course of the program (using any of the three proposed placement strategies). This larger area is included to

provide flexibility in the individual placement locations such that SCOUN projects can be implemented where they are needed most.

Figures referenced in this section are provided in Attachment A, and a summary of the key parameters for each receiver site is provided in Table 2-1.

Table 2-1 Key Parameters for LACDBH SCOUN Receiver Sites¹

Beach Receiver Site	Median Grain Size Range		Single SCOUN Event		Multiple SCOUN Events	
	Min (mm)	Max (mm)	Length (ft)	Area (acres)	Length (ft)	Area (acres)
Zuma Beach	0.12	0.53	2,100	17	7,200	162
Will Rogers SB	0.07	0.56	2,800	19	8,900	434
Dockweiler SB	0.10	0.37	2,400	17	5,400	261
Manhattan Beach	0.13	0.38	2,600	20	5,600	290
Redondo Beach	0.13	1.08	2,100	12	8,500	196

ZUMA BEACH RECEIVER SITE

The footprints for the Zuma Beach receiver site are shown in Attachment A, Figure 2. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. The sand stockpile location is on the northwest end of the beach where trucks can enter and exit from Pacific Coast Highway (PCH). Additional stockpile locations may be used based on the location of the project.

The Maximum Fill Area for Multiple Events includes most of Zuma Beach and extends offshore to the 30-ft isobath. Buffers are provided on the east and west ends to prevent excess sediment accumulation where Zuma Creek and Trancas Creek discharge. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cubic yards, “cy”). As noted above, the precise location for each SCOUN nourishment event will be based on the beach condition at the time of the project and the characteristics of the sediment source. The median grain size of surficial sediment samples obtained at Zuma Beach varies between 0.12 and 0.53 mm (Table 2-1).

WILL ROGERS STATE BEACH RECEIVER SITE

The footprints for the Will Rogers State Beach receiver site are shown in Attachment A, Figure 3. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. Trucks are expected to access the site from PCH at Temescal Canyon Road. A sand stockpile location and access to the beach have been identified east of the Lifeguard building on the east end of the State Beach.

The Maximum Fill Area for Multiple Events includes the portion of Will Rogers State Beach between the Bel Air Bay Club and Santa Monica Canyon and extends offshore to the 30-ft isobath. A buffer is provided on the east end to prevent excess sediment accumulation where Santa Monica Canyon discharges. The narrow area west of the Bel Air Bay Club was not included due to a lack of vehicular access.

The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy). The groin field is an ideal location to place opportunistically available sediment, as the existing sand retention structures will prolong the benefits afforded by the added sand. The

¹ Median grain sizes determined from surficial sediment samples obtained between elevations of +12 and -30 ft (MLLW) in Spring 2016 (Zuma Beach), Spring 2024 (Will Rogers, Dockweiler, Redondo), and Fall 2024 (Manhattan). Values for “Single SCOUN Event” developed based on the maximum annual nourishment volume placed using Beach Berm strategy. Multiple SCOUN Events developed based on area that may be utilized for Beach Berm, MHTL, and Nearshore SCOUN projects over multiple years.

median grain size of surficial sediment samples obtained at Will Rogers Beach varies between 0.07 and 0.56 mm (Table 2-1).

DOCKWEILER STATE BEACH RECEIVER SITE

The footprints, potential truck access points, and sand stockpile location for the Dockweiler State Beach receiver site are shown in Attachment A, Figure 4. The Maximum Fill Area for Multiple Events was selected to avoid US Fish and Wildlife Service (USFWS) Critical Habitat for Western Snowy Plover and is coincident with a receiver site used by the US Army Corps of Engineers (USACE) to accept sediment dredged from Marina del Rey. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy) and is centered on the parking lot.

Trucks are expected to access the site via Imperial Highway. A sand stockpile location and access to the beach have been identified on the north end of the parking lot. The median grain size of surficial sediment samples obtained at the site varies between 0.10 and 0.37 mm (Table 2-1).

MANHATTAN BEACH RECEIVER SITE

The footprints for the Manhattan Beach receiver site are shown in Attachment A, Figure 5. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. Trucks are expected to access the site from 36th Street and exit at 40th Street. Sand will be stockpiled in the parking lot between the entry and exit and transported to the beach using the access ramp south of the restroom.

The Maximum Fill Area for Multiple Events includes the north half of Manhattan Beach. This area is both updrift of and historically narrower than the southern end. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy) centered on the beach access point. The median grain size of surficial sediment samples obtained at the site varies between 0.13 and 0.38 mm.

REDONDO BEACH RECEIVER SITE

The footprints, potential truck access points, and sand stockpile location for the Redondo Beach receiver site are shown in Attachment A, Figure 6. Vehicular access to the beach and a sand stockpile location are provided via an access ramp to Torrance Beach located 1,300 ft south of Redondo Beach. No other viable truck access points are available.

The Maximum Fill Area for Multiple Events includes the entire Redondo Beach shoreline, whereas the Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy) located on the narrow portion of the beach north of the existing Topaz Groin. The median grain size of surficial sediment samples obtained at the site varies between 0.13 and 1.08 mm (Table 2-1).

Proposed Project Implementation Approach

This section outlines the SCoup approach, including placement strategies, timing, requirements for sediment quality and quantity, and potential transportation methods. A summary of the various requirements is provided in Table 2-2.

Table 2-2 Proposed Project Requirements for all SCoup sites

Fines Content	Maximum Volume	Sand Placement Strategies			Transportation Methods	
(%)	(cy/yr)	Berm	MHTL	Nearshore	Truck	Marine Vessel
Up to 15%	150,000	Yes	Yes	Yes	Yes	Yes
16 to 25%	50,000	No	Yes	Yes	Yes	Yes

BEACH SAND PLACEMENT STRATEGIES

Three placement strategies are included in the LACDBH SCoup. Each strategy is outlined in the *Final Sand Compatibility and Opportunistic Use Program Plan* (Moffatt & Nichol, 2006) adopted by the California Coastal Sediment Management Workgroup as part of their Coastal Sediment Management Master Plan:

Beach Berm:	Source material would be placed alongshore as an extension of the existing beach sand berm.
Mean High Tide Line:	Source material would be placed in a mound near the Mean High Tide Line (MHTL).
Nearshore:	Source material would be placed in the nearshore waters, landward of the depth of closure such that it remains in the active littoral cell. In the project area, it is assumed that the depth of closure is approximately 30 ft below Mean Lower Low Water (MLLW).

LACDBH anticipates that the Beach Berm method will be the primary method used in their SCoup. In general, placement on the beach in the form of a berm is recommended for high-quality source material with a fines content (percentage of material passing the #200 sieve) less than or equal to 15%. LACDBH proposes that Mean High Tide Line (MHTL), and Nearshore placements would be used when the fines content of the source material is between 16% and 25%. Example beach berm placement strategies are shown in the SCoup footprints in Attachment A, Figures 2 through 6.

BEACH CONSTRUCTION METHODS

Regardless of the method used to transport the material to the beach, it is expected that the equipment listed in Table 2-3 will be used for each SCoup Project. Approximately 10 construction personnel are expected to be on site during active sand placement events. Parking will be provided in the parking lots adjacent to the beach. Construction activities will be conducted during daylight hours on weekdays and potentially on weekends to expedite project completion.

As a standard construction procedure, construction equipment would have fire suppression equipment at the worksite. A fire extinguisher should be available in every 3,000 square feet of construction area, no more than 100 feet away from heavy equipment. Heavy equipment operators would attend a training session on appropriate responses to fire suppression during the pre-construction meeting.

Table 2-3 Expected Equipment per Site per Project²

Equipment ⁽²⁾	Dozer	Loader	Scraper	Sweeper
Number	2	2	2	1

² Scraper needed at Redondo Beach only. Table does not include trucks hauling material from source to site.

BEACH SAND PLACEMENT TIMING

Ideally, placement will occur in the fall and winter months to avoid disturbing beach users during the peak beach use season generally defined as Memorial Day to Labor Day each year. However, placement during the peak season may occur in those cases where an emergency need exists, and suitable sand sources are identified. To the extent possible, construction activities will be timed to avoid grunion runs and nesting of relevant avian species that exist at some SCOUN beaches.

BEACH SAND QUALITY AND PLACEMENT VOLUMES

The proposed maximum volume placed at any one SCOUN site in a given year is 150,000 cy for material with a fines content less than or equal to 15%, and 50,000 cy for material with a fines content between 16% and 25%. This is consistent with the recommendation provided in the *Final Sand Compatibility and Opportunistic Use Program Plan* (Moffatt & Nichol, 2006) adopted by the California Coastal Sediment Management Workgroup (CSMW).

Source material used as part of the LACDBH SCOUN will adhere to the following requirements:

- Source material placed using the Beach Berm strategy will have a fines content less than or equal to 15%. Source material with a fines content of up to 25% can be placed using the MHTL or Nearshore strategies.
- The source material will be substantially free of chemical and biological contamination.
- The distribution of grain sizes found at the source will be similar to those found at the receiver site.
- The color of the source material will reasonably match the color of the receiving beach after reworking by waves.
- The source material will generally be free of trash, debris, and large fragments of organic material (e.g., tree limbs, shrubs) that could cause health and safety issues, odors, or visual impacts to beach users. Rounded cobble in the source material may be acceptable if there is existing native cobble on the receiver beach.
- Source material that forms a hardpan can only be placed using the Nearshore strategy.
- Use of natural sand, rather than manufactured material, is recommended for beach nourishment projects based on the observation that the rounded particles are considered more comfortable to recreational users.

BEACH SAND TRANSPORTATION METHODS

Given the opportunistic nature of SCOUN, the method used to deliver source material to the receiver site will vary. Potential delivery methods include those traditionally used for beach nourishment (trucking and marine vessels), as well as less traditional methods (e.g., slurry line from the beach to the nearshore).

Vessels will be used to deliver sediments sourced from the marine environment. Two of the most common methods are (1) to pump the material onto the beach via a connected pipeline and (2) to dump the material into the nearshore zone (landward of the depth of closure) using a bottom-dump barge or scow.

Material from inland sources, such as development projects or flood control maintenance, can be delivered via truck and spread along the beach using traditional earthmoving equipment (e.g., dozers, loaders, scrapers). Ingress and egress points have been identified at each site, are shown in the figures provided in Attachment A and are described below.

Zuma Beach: Trucks enter from PCH at the north end of the parking lot closest to Trancas Creek or the main entrance to Zuma Beach and use the internal access road to reach the parking area nearest the target sand placement area. Material is stockpiled in the parking lot. Trucks exit at the nearest location. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Will Rogers State Beach: Trucks enter and exit at the intersection of PCH and Temescal Canyon Road and use the internal access road to reach the parking area nearest the target sand placement area. Material is stockpiled in the parking lot. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Dockweiler State Beach: Trucks enter and exit at the intersection of Imperial Highway and Vista Del Mar. Trucks use South Marine Avenue to reach the parking area nearest the target sand placement area. Material is stockpiled in the parking lot. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Manhattan Beach: Trucks enter at the intersection of N The Strand and 36th Street. Trucks proceed to the parking area and stockpile sand in the parking lot. Trucks exit at the intersection of N The Strand and 40th Street. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Redondo Beach: Trucks enter and exit at the intersection of Paseo De La Playa and Via Riviera. Trucks proceed to the access ramp, drive down the ramp to the beach, and stockpile sand on the concrete apron. Scrapers transport material to the target placement area. Dozers shape the material to match the construction template.

The number of truck trips will vary based on the quantity of material available for placement. Table 2-4 summarizes the maximum values based on the maximum volume of material that can be placed annually (150,000 cy) at each site. The assumed truck capacity, working period, and placement rate were derived from a similar project conducted in 2024 by the City of San Clemente (Meyerhoff, 2024).

Table 2-4 Proposed Maximum Number of Truck Trips per Year per Site³

Maximum Volume/Site	Truck Capacity	Number of Trucks	Placement Rate	Duration	Trips				Trip Interval
(cy/yr)	(cy/truck)	(trucks/yr)	(cy/day)	(days)	(monthly)	(weekly)	(daily)	(hourly)	(minutes/truck)
150,000	14	10,714	1,000	150	1,440	360	72	6	10

POTENTIAL SAND SOURCES

This section outlines potential SCOUN sand sources, including reservoirs and debris basins managed by the County of Los Angeles, dams, local watercourses (rivers, creeks, streams, and lagoons), harbor maintenance dredging, transportation projects, upland development and redevelopment projects, and landslides. While those within 20 miles of the receiver sites are considered most viable (Moffatt & Nichol, 2006), more distant sources have been included to expand potential SCOUN opportunities. The locations of the potential sand sources and haul routes to the five LACDBH receiver beaches are shown in Table 2-5 and Attachment A, Figure 7.

County-Owned Reservoirs and Debris Basins

Reservoirs and debris or retention basins trap material that may otherwise travel downstream and cause flooding. Infilling is sporadic and dependent on several factors, including the rate and timing of precipitation.

³ Rate of Placement based on 2024 San Clemente North Beach SCOUN Project (Meyerhoff, 2024). Working hours assumed to be 12 hours per day, 5 days per week.

Material that is impounded within these features is removed during maintenance events and typically is placed in a landfill, used as landfill cover, or repurposed as construction fill. If beach quality sediment within the reservoir can be identified and segregated, it can be used as beach nourishment.

Potentially viable beach sand sources from upland reservoirs and debris basins managed by the Los Angeles County Flood Control District (LACFCD) are listed in Table 2-5 along with the approximate minimum trucking distance between the sand source and each of the five SCOUP receiver sites. The maximum distance from source to receiver site is 80 miles. The average round trip distance is assumed to be 80 miles.

Table 2-5 Distance Between Reservoirs / Debris Basins and SCOUP Receiver Sites

Receiver Site	Maximum Distance (miles)									
	Reservoirs					Retention / Detention Basins				
	Pacoima	Big Tujunga	Devil's Gate	Cogswell	San Gabriel	Morris	Santa Anita	Cloud-croft	Sullivan	Nichols
Zuma Beach	48	61	54	80	67	65	59	17	24	33
Will Rogers SB	32	45	34	62	51	49	41	1	9	18
Dockweiler SB	32	45	34	60	48	45	42	13	12	13
Manhattan Beach	40	52	37	63	50	47	44	18	17	18
Redondo Beach	42	54	39	65	52	49	47	24	23	24

Note: Cloudcroft, Sullivan, and Nichols Debris Basins are relatively small and may not generate adequate volumes of sediment for beach nourishment (Zimmer, 2025).

Dams

LA County's largest inland source of beach quality sediment proximate to the coast is the Rindge Dam reservoir in Malibu (Noble Consultants and Larry Paul & Associates, 2017). The dam was constructed in the 1920s along Malibu Creek for water supply and flood control purposes. The dam effectively trapped sediments that would have travelled to the coast naturally, resulting in rapid filling of the reservoir with soil and debris. By the 1950s, the reservoir was almost filled with sediment and no longer functional for water storage or flood protection.

The *Malibu Creek Ecosystem Restoration Study* (USACE and CDPR, 2020) is investigating removal of the dam and restoration of natural sediment delivery to the shoreline. As part of the project, approximately 276,000 cy of beach quality sediment has been identified as suitable for beach nourishment. While this material is presently designated for either onshore or nearshore placement just east of Malibu Pier, there is a potential need for the project to identify alternative receiver sites.

Local Watercourses

Rivers, creeks, streams, and lagoons along the coast offer a potential source of opportunistic fill material when flood control and other maintenance activities generate beach quality sediments. Three sites near the SCOUP receiver beaches include Calleguas Creek, Trancas Creek and Lagoon, and Topanga Lagoon.

Harbor Maintenance Dredging

Small craft harbors generally create sand traps if located within a sediment transport pathway. These harbors require maintenance dredging at varying frequency depending on location and other factors, such as the overall sediment supply in the region. Small craft harbors within the Santa Monica Bay region include Marina del Rey Harbor and Redondo Beach – King Harbor. Dredged material from both harbors has been successfully placed on Dockweiler State Beach and at Redondo Beach in the recent past.

Transportation Projects

Major transportation projects such as roadways and bridges may generate surplus sediment from excavation activities. For example, replacement of the Trancas Creek Bridge at Zuma Beach resulted in a surplus sediment volume of approximately 20,000 cy, of which about 8,000 cy was suitable for use as beach nourishment.

Landslide Material

Landslide deposits are another potential source of sediment for SCoup. Landslides generally occur during the wet winter season along road or railroad cuts, and other over-steepened areas. When such events impact local infrastructure, such as PCH or the canyon roads in the Santa Monica Mountains, the material must be removed and may be suitable for beach placement. This beneficial reuse activity is also proposed for other locations in southern California, including San Clemente.

Upland Development & Redevelopment Projects

Development projects frequently generate beach quality sediments that can be used for beach nourishment. For example, development near the Santa Monica Bay Club in 2023 generated a small volume of high-quality beach compatible sediments (500 cy) that could have been beneficially reused for beach sand replenishment. However, in the absence of streamlined sampling, testing, and permitting protocols, the opportunity was lost.

EXISTING CONDITIONS AND SETTING AT THE PROPOSED SCoup PROJECT BEACHES

Descriptions of the key characteristics and public infrastructure at each receiver site are provided below. The descriptions are based, in part, on the *Beach Facilities Maps* prepared by LACDBH (County of Los Angeles, 2016).

Zuma Beach

Zuma Beach is located within the City of Malibu at the northern end of Santa Monica Bay (Attachment A, Figure 1). It is the widest and longest continuous beach in northern LA County and is comprised of 1.7 miles of beach frontage with 95 acres of public beach space (Attachment A, Figure 2).

Amenities at Zuma Beach include concession stands, restrooms, showers, picnic facilities, volleyball nets, beach wheelchairs, and approximately 2,000 public parking spaces (Moffatt & Nichol, 2023). This beach has become popular for both swimming and body surfing and continues to be a perennial favorite with residents and visitors alike.

In recent years, erosion along Zuma Beach has reduced the recreational area, exposed landward infrastructure to damage, and reduced sandy beach habitat. At-risk critical public infrastructure and existing structures at the site include coastal access points and roads, an entrance booth, twelve public parking lots, nine public restrooms with septic systems, water supply systems, two concession stands, a bike path, a LACDBH maintenance yard, a lifeguard Headquarters and lifeguard stations providing emergency response, and communications networks to support lifeguard services.

Will Rogers State Beach

Will Rogers State Beach is located within the Pacific Palisades community in the City of Los Angeles at the northern end of Santa Monica Bay (Attachment A, Figure 1). The beach is 2.9 miles long and has approximately 103 acres of public beach available for use. Amenities include concession stands, restrooms, showers, volleyball nets, picnic facilities, fire pits, and public parking. The site is popular for both surfing and fishing. The Marvin Braude Bike Trail begins near the western terminus of Temescal Canyon Road and continues south to Torrance County Beach. The highly popular Gladstones restaurant is located along this stretch of beach, as is the Bel Air Bay Club.

At-risk critical public infrastructure and existing structures at the site include coastal access points and roads, the Marvin Braude Bike Trail, six public parking lots, two concession stands, a beach entrance booth, five public restrooms, a LACDBH maintenance yard, water supply and dry utilities systems, a lifeguard Headquarters and lifeguard stations providing emergency response services, and communications networks to support lifeguard services.

The SCOUP site is located on the east end of the beach, east of the Bel Air Bay Club (Attachment A, Figure 3).

Dockweiler State Beach

Dockweiler State Beach is located within the central portion of Santa Monica Bay, in the Playa del Rey neighborhood, south of Marina del Rey (Attachment A, Figure 1). It is 3.8 miles long and has 254 acres of public beach area. Amenities at the site include concession stands, restrooms, showers, picnic facilities, fire rings, volleyball nets, a basketball court, a youth center, hang-gliding facilities, over 1,200 available parking spaces, and a Recreational Vehicle Park with 118 full hook-up spaces. The Marvin Braude Bike Trail, also known as the beach public path, is readily accessible and commonly used for walking, rollerblading, jogging, and bicycling. Groins at the north end of the beach provide fishing opportunities.

At-risk critical public infrastructure and existing structures include coastal access points and roads, the Marvin Braude Bike Trail, seven public parking lots, a parking entry office, Youth Center, hang-gliding office, three concession stands, nine public restrooms, water supply and dry utilities systems, a LACDBH maintenance yard, a lifeguard Headquarters and lifeguard stations providing emergency response, and communications networks to support lifeguard services.

The SCOUP site is on the southern end of the State Beach, at the western terminus of Imperial Highway (Attachment A, Figure 4).

Manhattan Beach

Manhattan Beach is located in the City of Manhattan Beach within the central portion of Santa Monica Bay (Attachment A, Figure 1). The beach is 2.0 miles long and has approximately 77 acres of public beach available for use. Hermosa City Beach is located immediately south. Amenities at the site include a concession stand, restrooms, showers, volleyball nets, public parking spaces, the Marvin Braude Bike Trail, and the Manhattan Beach Pier.

At-risk critical public infrastructure and existing structures include coastal access points and roads, two public parking lots, five public restrooms, water supply and dry utilities systems, the Marvin Braude Bike Path, LACDBH maintenance yard, lifeguard facilities including a training center and lifeguard stations providing emergency response, communications networks to support lifeguard services, and concession stands.

The SCOUP site is on the north end of the beach (Attachment A, Figure 5).

Redondo Beach

Redondo Beach is located toward the southern end of Santa Monica Bay, within the City of Redondo Beach (Attachment A, Figure 1). It is 1.6 miles long, has 51 acres of public beach area, and runs south from the Redondo Beach Pier to Torrance Beach. The SCOUP placement area is located between Topaz Groin and the pier (Attachment A, Figure 6). There is a parking structure at the pier as well as street parking. Amenities include showers, restrooms, and volleyball nets. The beach is well known as great for swimming, surfing, and windsurfing and the horseshoe-shaped pier is good for fishing and has many restaurants and shops.

At-risk critical public infrastructure and existing structures include coastal access points, seven public restrooms, water supply system, the Marvin Braude Bike Path, LACDBH maintenance yard, lifeguard building and tower providing emergency response, and communications networks to support lifeguard services.

Additional Approvals

Besides review under CEQA, the contractor of the proposed project may be required to obtain local City approvals and/or permits. These approvals require meeting certain Conditions of Approval prior to obtaining the required permits. In addition, all Conditions of Approval and mitigation measures in this document must be satisfactorily completed. Other public agency approvals are cited on page 3-1.

Tribal Consultation

LACDBH staff conducted notification with California Native American tribes traditionally and culturally affiliated with the project area per the requirements of CEQA Statute § 21080.3.2. Consultation was not requested pursuant to CEQA Statute § 21080.3.1. However, the mitigation measures in Sections 5 and 18. Cultural Resources and Tribal Cultural Resources are included to ensure the protection of any unknown resources.

Chapter 3. Initial Study Environmental Checklist

Project Information

Project Name:	Los Angeles County Department of Beaches and Harbors (LACDBH) Sand Compatibility and Opportunistic Use Program (SCOUP)
Project Locations:	Los Angeles County at Five Beaches in the Cities of Malibu, Los Angeles, Manhattan Beach, and Redondo Beach
Project Applicant:	Los Angeles County Department of Beaches and Harbors Emiko Innes, Planner 13837 Fiji Way Marina Del Rey, CA 90292 (424-526-7751)
Lead Agency:	County of Los Angeles 500 West Temple Street Los Angeles, CA 90012 (213-974-1411)
Description of Project:	See Chapter 2, Proposed Project Description.
Surrounding Land Uses and Setting:	See Chapter 2, Proposed Project Description.
Other Public Agency Approvals:	Coastal Development Permit from the California Coastal Commission (CCC), State Lands Lease from the California State Lands Commission (CSLC), Section 404 / 10 Permit from the U.S. Army Corps of Engineers (USACE), Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and Tribal Consultation under AB 52.

Environmental Factors Potentially Affected

Based upon the initial evaluation presented in the following IS, it is concluded that the proposed project would not result in significant adverse environmental impacts.

ENVIRONMENTAL DETERMINATION

On the basis of the initial evaluation of the attached Initial Study:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Emiko Innes, Planner

April 7, 2025

Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analyses Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significance

IMPACT TERMINOLOGY

The following terminology is used to describe the level of significance of impacts:

- A finding of *no impact* is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered *less than significant* if the analysis concludes that it would not cause substantial adverse change to the environment and requires no mitigation.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of environmental commitments that have been agreed to by the applicant.
- An impact is considered *potentially significant* if the analysis concludes that it could have a substantial adverse effect on the environment.

1. Aesthetics				
Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. No Impact.

All Beaches

Visual resources can be valued both objectively and subjectively based on their uniqueness, prominence, quality, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on the characteristics listed above, they are identified as containing significant scenic value. Within this understanding, a scenic vista can be defined as the public view of an area that is visually or aesthetically unique, such as a valley or a mountain range.

The proposed project would place sand on existing beaches, which would have a beneficial aesthetic effect. The replenished beach elevations would not block views of surrounding areas and would be compatible with surrounding beach area uses. Therefore, no impact to scenic vistas would occur.

b. No Impact.

All Beaches

The proposed project would not substantially damage scenic resources or historic buildings within a state scenic highway. Zuma Beach and Will Rogers State Beach are located adjacent to a portion of PCH that is listed as “eligible” to be an officially designated scenic highway (Caltrans, 2025). However, none of the nourishment activities would occur on or adjacent to a designated state scenic highway (Caltrans, 2025).

Therefore, project implementation would not substantially damage scenic resources within a state scenic highway, and no impact would occur.

c. No Impact.

All Beaches

The proposed project would not degrade the existing visual character or quality of the beach sites. A beneficial aesthetic effect would occur from replenishing the eroded beaches with new sand cover at each of the receiver sites. Therefore, no impact to the existing visual character would occur.

d. No Impact.

All Beaches

Implementation of the proposed project would not include the installation of any new lighting that could result in new sources of light or glare that could affect day or nighttime views of the beach sites. Therefore, the proposed project would not create a substantial source of light or glare, and no impact would occur.

2. Agriculture and Forest Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. - e. No Impact.

All Beaches

The proposed receiver sites are not currently used as farmland, and are not identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance on the most recent maps of the California Department of Conservation's Farmland Mapping and Monitoring Program. The receiver sites are located within urbanized areas that support beach recreation and are not located in areas designated as forest land or timberland, and are not currently in active agricultural use, or under a Williamson Act contract. As a result, the proposed project would not convert any farmland to non-agricultural use, or forest land to non-forest use, or conflict with existing agricultural, or timberland zoning or Williamson Act contracts. Therefore, implementation of the proposed project would not result in an impact to agricultural or forestry resources.

3. Air Quality				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the findings contained within the *Air Quality Technical Report (AQ Report)* (RCH Group, 2025a) prepared for the proposed project (see Appendix A).

Setting

The five receiver sites are within the Los Angeles County portion of the South Coast Air Basin (SCAB). The South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality in the SCAB. SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the SCAB.⁴ The emissions thresholds were established based on the attainment status of the SCAB with regard to air quality standards for specific criteria pollutants. Projects in the SCAB with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidance.⁵ These thresholds, which SCAQMD developed and that apply throughout the SCAB, apply as both project and cumulative thresholds. If a proposed project exceeds these standards, it is considered to have a project-specific and cumulative impact. SCAQMD significance thresholds for air quality impacts are shown in Table 3-1 below.

⁴ South Coast Air Quality Management District (SCAQMD), *South Coast AQMD Air Quality Significance Thresholds*, March 2023, <https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25>

⁵ South Coast Air Quality Management District (SCAQMD), *Air Quality Analysis Handbook*, <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>

Table 3-1 SCAQMD Mass Daily Significance Thresholds

Pollutant	Construction	Operation
Oxides of Nitrogen (NO _x)	100 lbs./day	55 lbs./day
Volatile Organic Compounds (VOC)	75 lbs./day	55 lbs./day
Coarse Particulate Matter (PM ₁₀)	150 lbs./day	150 lbs./day
Fine Particulate Matter (PM _{2.5})	55 lbs./day	55 lbs./day
Oxides of Sulfur (SO _x)	150 lbs./day	150 lbs./day
Carbon Monoxide (CO)	550 lbs./day	550 lbs./day
Lead	3 lbs./day	3 lbs./day

Source: SCAQMD, March 2023.

Discussion

a. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

The SCAQMD's 2022 Air Quality Management Plan (AQMP) is the regional blueprint for achieving air quality standards and healthful air, with the primary focus of attaining the 2015 8-hour ozone standard of 70 parts per billion (ppb). The 2022 AQMP represents a comprehensive analysis of emissions, meteorology, regional air quality modeling, regional growth projections, and the impact of control measures.

Projects that are consistent with existing general plan documents, which are used to develop air emissions budgets for the purpose of air quality planning and attainment demonstrations, would be consistent with the SCAQMD's air quality plans, including the 2022 AQMP and prior AQMPs, which contain strategies for the region to attain and maintain the ambient air quality standards. Provided a project proposes the same or less development as accounted for in the general plan document, and provided the project is in compliance with applicable Rules and Regulations adopted by the SCAQMD, the project would not conflict with or obstruct implementation of applicable air quality plans, including the 2022 AQMP.

Pursuant to the methodology provided in the SCAQMD Guidance, consistency with the 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. The proposed project's consistency review is presented as follows:

1. As demonstrated in Impact b) below, the proposed project would result in short-term construction emissions that would be less than the SCAQMD CEQA thresholds of significance with mitigation incorporated. Therefore, the proposed project would not increase the frequency or severity of an air quality standards violation or cause a new violation.
2. The proposed project would consist of temporary and intermittent beach nourishment activities at the five beach sites. The proposed project would not include development, nor would it be inconsistent with the General Plan land use designation and the zoning designation of the five beach sites.

Therefore, the proposed project would be consistent with the land use planning assumptions within the AQMP. Furthermore, as noted in this analysis, the proposed project would not exceed SCAQMD significance thresholds with mitigation incorporated and would be required to comply with applicable SCAQMD Rules and Regulations. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

b. Less Than Significant Impact with Mitigation Incorporated.**All Beaches***Construction-related Emissions*

Short-term construction air quality impacts related to the proposed project were evaluated using California Emissions Estimator Model (CalEEMod) Version 2022.1.⁶ Construction-related activities are temporary, finite sources of air emissions. Sources of project-related construction emissions would include:

- Exhaust from construction equipment and worker automobiles, fuel trucks, and sand-hauling trucks.
- Fugitive dust (PM₁₀ and PM_{2.5}) from sand moving activities and vehicle and equipment travel on paved and unpaved surfaces.

Table 3-2 provides a summary of the unmitigated emission estimates for construction of the proposed project, as calculated with the CalEEMod. Refer to the *AQ Report* for detailed model output files. Since beach nourishment activities would be opportunistic, it is unlikely that all five beach sites would have beach nourishment activities conducted simultaneously. However, for the purposes of this analysis, it was conservatively assumed that beach nourishment activities would occur simultaneously since there is no project condition prohibiting this from happening in the future if the project is approved. As shown in Table 3-2, construction emissions would be above the NO_x significance threshold if beach nourishment activities occur at all five beach sites simultaneously.

Table 3-2 Estimated Unmitigated Maximum Daily Construction Emissions

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
lbs./day						
Zuma	1.21	30.20	19.10	0.14	7.30	2.28
Will Rogers	1.21	30.20	19.10	0.14	7.30	2.28
Manhattan	1.21	30.20	19.10	0.14	7.30	2.28
Dockweiler	1.21	30.20	19.10	0.14	7.30	2.28
Redondo	2.41	40.60	26.30	0.17	9.83	2.90
Maximum Daily Emissions	7.25	161.4	102.70	0.73	39.03	12.02
Significance Criteria	75	100	550	150	150	55
Significant?	No	Yes	No	No	No	No

Source: RCH Group, 2025a

Table 3-3 displays construction emissions with the implementation of Mitigation Measure AQ-1, which requires Tier 4 Final engines for diesel construction equipment 25 horsepower or greater. As shown in Table 3-3, construction NO_x emissions would be greatly reduced through Mitigation Measure AQ-1, however the proposed project would still be above the NO_x significance threshold if beach nourishment activities occur at all five beach sites simultaneously. Table 3-4 displays construction emissions with the implementation of Mitigation Measure AQ-1 and restricts sand hauling to a 60-mile round trip (Mitigation Measure AQ-2). As shown in Table 3-4, construction NO_x emissions would be below the NO_x significance threshold. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated. If beach nourishment activities are only occurring at three sites simultaneously, no mitigation is required.

⁶ California Air Pollution Officers Association, California Emissions Estimator Model User Guide Version 2022.1, April 2022, <http://www.caleemod.com/>

Table 3-3 Estimated Mitigated Maximum Daily Construction Emissions (MM AQ-1)

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
lbs./day						
Zuma	0.44	23.70	19.10	0.14	6.87	1.90
Will Rogers	0.44	23.70	19.10	0.14	6.87	1.90
Manhattan	0.44	23.70	19.10	0.14	6.87	1.90
Dockweiler	0.44	23.70	19.10	0.14	6.87	1.90
Redondo	0.74	25.20	33.70	0.17	9.06	2.19
Maximum Daily Emissions	2.50	120.00	110.10	0.73	36.54	9.79
Significance Criteria	75	100	550	150	150	55
Significant?	No	Yes	No	No	No	No

Source: RCH Group, 2025a

Table 3-4 Estimated Mitigated Maximum Daily Construction Emissions (MM AQ-1 and AQ-2)

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
lbs./day						
Zuma	0.41	18.70	17.60	0.11	5.92	1.86
Will Rogers	0.41	18.70	17.60	0.11	5.92	1.86
Manhattan	0.41	18.70	17.60	0.11	5.92	1.86
Dockweiler	0.41	18.70	17.60	0.11	5.92	1.86
Redondo	0.71	20.20	32.10	0.14	7.68	1.76
Maximum Daily Emissions	2.35	95.00	102.50	0.58	31.36	9.20
Significance Criteria	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: RCH Group, 2025a

Mitigation Measure AQ-1: All diesel construction equipment 25 horsepower or greater shall meet Tier 4 Final emissions standards. Note, this shall only be required if beach nourishment activities are conducted simultaneously at four or more beach sites (beach nourishment operations can be conducted at up to three beaches simultaneously without mitigation). With the implementation of Tier 4, beach nourishment activities can be conducted simultaneously at four beach sites.

Mitigation Measure AQ-2: After implementation of Mitigation Measure AQ-1 (Tier 4 Engines), beach nourishment activities may be conducted simultaneously at all five beach sites if the average round trip sand haul truck length is 60 miles or less for the five beach sites.

Operation-related Emissions

Once construction at each beach site is complete, there would be no increase in operational emissions. Operations would not create a change in traffic patterns or beach usage that would result in increased emissions. Therefore, this impact would be less-than-significant.

c. Less Than Significant Impact.

All Beaches

Proposed project construction activities would result in the temporary emissions of Diesel Particulate Matter (DPM) from the use of diesel-powered on-site construction equipment and haul trucks. DPM is considered to be a Toxic Air Contaminant (TAC), with both carcinogenic and non-carcinogenic health effects. Typically, health risks are estimated based on a lifetime exposure period of 30 years. Because exhaust emissions associated with construction activities of the proposed project would be short-term in nature (approximately 5 months out of a given year), it is anticipated that exposure to construction related DPM would not result in an elevated health risk. All construction equipment and operation thereof would be regulated per the California Air Resources Board's (CARB) In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions associated with off-road diesel vehicles and equipment, including DPM. On-road haul trucks would be regulated per the State's Truck and Bus Regulation. Proposed project construction would also be required to comply with all applicable SCAQMD rules and regulations. Therefore, impacts to sensitive receptors would be less than significant.

d. Less Than Significant Impact.

All Beaches

During construction, diesel equipment operating at the site may generate some minor odors; however, due to the distance of sensitive receptors to the project sites and the temporary nature of construction, odors associated with project construction would not be significant. Therefore, odor impacts would be less than significant.

4. Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the findings contained within the Biological Resources Technical Report (*Bio Report*) (Rincon, 2025a) prepared for the proposed project (see Appendix B). The *Bio Report* includes a literature review as well as a field reconnaissance survey (to document existing site conditions and the potential presence of special-status biological resources, including federal- and state-listed plant and wildlife species, sensitive natural communities, jurisdictional waters and wetlands, habitat for nesting birds, and

wildlife migration areas) and is utilized in this section to evaluate the project's potential impacts to biological resources.

a. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

Special-Status Plant Species

A California Natural Diversity Database (CNDDB) data query determined there were 83 special-status plant species with the potential to occur on the proposed project sites. Of the 83 special-status plant species only 13 special-status plant species were determined to have a low potential to occur on one of the beach receiver sites, and two beach coreopsis (*Coreopsis maritima*) and red-sand verbena (*Abronia maritima*) were observed in the Manhattan Beach receiver site during reconnaissance surveys. (For the purpose of CEQA analysis, special-status plant species that are not state or federally listed and have a low potential to occur are not addressed further in this analysis).

The remaining special-status plant species are not expected to occur within the study area based on the absence of suitable habitat types and/or soils or the study area being located outside the known range for these species. Table 3-5 summarizes the special-status plant species with potential to occur at the beach receiver sites. The only species with a low potential that is further discussed is beach spectaclepod (*Dithyrea maritima*), which has a low potential to occur within Zuma Beach and Will Rogers State Beach.

Beach coreopsis (*Coreopsis maritima*) and red-sand verbena (*Abronia maritima*) are present at the Manhattan Beach receiver site, and there is suitable habitat for beach spectaclepod at the Zuma Beach and Will Rogers State Beach receiver sites, therefore there is potential to directly impact these special status species during proposed project activities if vegetated habitat is not avoided during all proposed activities. Moreover, indirect impacts to these special-status plant species could occur if construction work results in spills which could degrade these special-status plant species' habitat. As described below in Section 10, Hydrology and Water Quality, proposed project activities would be required to be carried out in compliance with the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction Stormwater General Permit), which would require preparation and implementation of a stormwater pollution prevention plan (SWPPP), which requires implementation of best management practices (BMP) to control stormwater runoff from construction work sites. These BMPs include, but are not limited to, good housekeeping BMPs to prevent spills, leaks, and off-site discharge of construction debris and waste. Implementation of the SWPPP and associated BMPs would reduce the potential for spills; however, given the proximity of proposed project activities to beach coreopsis and red-sand verbena at the Manhattan Beach receiver site and potential to encounter beach spectaclepod at the Zuma Beach and Will Rogers State Beach receiver sites, this impact is potentially significant, and mitigation is required.

Table 3-5 Special-Status Plant Species with Potential to Occur within the Beach Receiver Sites

Scientific Name	Common Name	Potential to Occur in Zuma Beach Receiver Site	Potential to Occur in Will Rogers State Beach Receiver Site	Potential to Occur in Dockweiler State Beach Receiver Site	Potential to Occur in Redondo Beach Receiver Site	Potential to Occur in Manhattan Beach Receiver Site
<i>Abronia maritima</i>	red sand verbena	Low Potential	Low Potential	Low Potential	–	Present
<i>Aphanisma blitoides</i>	aphanisma	–	–	–	Low Potential	–
<i>Calandrinia breweri</i>	Brewer's calandrinia	–	Low Potential	–	–	–
<i>Chaenactis glabriscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Low Potential	Low Potential	Low Potential	–	Low Potential
<i>Chenopodium littoreum</i>	coastal goosefoot	Low Potential	Low Potential	Low Potential	–	–
<i>Coreopsis maritima</i>	beach coreopsis	-	–	–	–	Present
<i>Dithyrea maritima</i>	beach spectaclepod	Low Potential	Low Potential	–	–	–
<i>Erysimum insulare</i>	island wallflower	–	Low Potential	–	–	–
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	–	Low Potential	–	–	–
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	Low Potential	Low Potential	–	–	–
<i>Mucronea californica</i>	California spinyflower	Low Potential	Low Potential	–	–	–
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	south coast branching phacelia	Low Potential	Low Potential	–	–	–
<i>Phacelia stellaris</i>	Brand's star phacelia	Low Potential	Low Potential	Low Potential	–	–
<i>Suaeda taxifolia</i>	woolly seablite	Low Potential	Low Potential	–	–	–

“–” indicates a species has no potential to occur at the corresponding beach receiver site

Source: Rincon, 2025a

Special-Status Wildlife Species

A CNDDDB data query determined there are 80 wildlife species with the potential to occur at the beach receiver sites. Based upon known ranges, habitat preferences, and species occurrence records, 10 species have a low potential to occur at the beach receiver sites, 2 species have a moderate potential to occur at the beach receiver sites, 2 species have a high potential to occur at the beach receiver sites, and 3 species are present at beach receiver sites. Special-status wildlife species that have a moderate or high potential to occur, or are present on site, are discussed in further detail below. Federally and State-listed species with a low potential to occur on-site are also discussed in further detail. For the purposes of CEQA analysis, special-status wildlife species that are not federally or state-listed or species that have no potential or a low potential to occur are not addressed further in this analysis. Table 3-6 summarizes the special-status wildlife species with potential to occur at the beach receiver sites.

El Segundo blue butterfly (*Euphilotes allynii*) has a low potential to occur at the Dockweiler State Beach, Redondo Beach, and Manhattan Beach receiver sites. Green sea turtle (*Chelonia mydas*), western snowy plover (*Charadrius nivosus nivosus*), California least tern (*Sternula antillarum browni*), gray whale (*Eschrichtius robustus*), and northern elephant seal (*Mirounga angustirostris*) each have a low potential to occur at all of the beach receiver sites. Globose dune beetle (*Coelus globosus*) has a moderate potential to occur at the Will Rogers State Beach and Manhattan Beach receiver sites. Harbor seal (*Phoca vitulina*) has a moderate potential to occur at each of the beach receiver sites. The California sea lion (*Zalophus californianus*) has a high potential to occur at each of the beach receiver sites. California grunion (*Leuresthes tenuis*) has a high potential to occur at the Zuma Beach, Will Rogers State Beach, and Manhattan Beach receiver sites and is present at the Dockweiler State Beach and Redondo Beach receiver sites. California brown pelican (*Pelecanus occidentalis californicus*) and common bottlenose dolphin (*Tursiops truncatus*) are present at each of the beach receiver sites. Potential impacts associated with the proposed project implementation are discussed in the following subsections.

Special-Status Invertebrates

Globose dune beetle (*Coelus globosus*) has a moderate potential to occur at the Will Rogers State Beach and Manhattan Beach receiver sites. The beach receiver sites are groomed where little or no native plants or vegetation is well established, discouraging the presence of globose dune beetle. Proposed project activities at the beach receiver sites would occur at frequently groomed areas or the nearshore waters where these species are not anticipated, minimizing the potential to impact these species. The Will Rogers State Beach and Manhattan Beach receiver sites contain elements of globose dune beetle habitat which proposed project activities could disturb if the proposed project does not avoid vegetated areas or areas exhibiting dune morphology. Given a lack of suitable habitat and implementation of buffers for globose dune beetle, the proposed project would have a less than significant impact on globose dune beetle.

El Segundo blue butterfly (*Euphilotes allynii*) has low potential to occur at the Dockweiler State Beach, Redondo Beach, and Manhattan Beach receiver sites. However, due to a lack of food sources and presence of unvegetated areas, El Segundo blue butterfly is not anticipated to occur at these receiver sites. Accordingly, potential impacts to El Segundo blue butterfly would be less than significant.

Table 3-6 Special-Status Wildlife Species with Potential to Occur within the Beach Receiver Sites

Scientific Name	Common Name	Potential to Occur in Zuma Beach Receiver Site	Potential to Occur in Will Rogers State Beach Receiver Site	Potential to Occur in Dockweiler State Beach Receiver Site	Potential to Occur in Redondo Beach Receiver Site	Potential to Occur in Manhattan Beach Receiver Site
Invertebrates						
<i>Bombus pensylvanicus</i>	American bumble bee	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
<i>Coelus globosus</i>	globose dune beetle	–	Moderate Potential	–	–	Moderate Potential
<i>Euphilotes allyni</i>	El Segundo blue butterfly	–	–	Low Potential	Low Potential	Low Potential
Fish						
<i>Leuresthes tenuis</i>	California grunion	High Potential	High Potential	Present	Present	High Potential
Reptiles						
<i>Anniella stebbinsi</i>	Southern California legless lizard	–	–	Low Potential	Low Potential	Low Potential
<i>Chelonia mydas</i>	green sea turtle	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
Birds						
<i>Accipiter cooperii</i>	Cooper's hawk	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
<i>Athene cunicularia</i>	burrowing owl	–	–	Low Potential	–	–
<i>Charadrius nivosus nivosus</i>	western snowy plover	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
<i>Pelecanus occidentalis californicus</i>	California brown pelican	Present	Present	Present	Present	Present
<i>Sternula antillarum browni</i>	California least tern	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential

Scientific Name	Common Name	Potential to Occur in Zuma Beach Receiver Site	Potential to Occur in Will Rogers State Beach Receiver Site	Potential to Occur in Dockweiler State Beach Receiver Site	Potential to Occur in Redondo Beach Receiver Site	Potential to Occur in Manhattan Beach Receiver Site
Marine Mammals						
<i>Eschrichrius robustus</i>	gray whale	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
<i>Mirounga angustirostris</i>	northern elephant seal	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
<i>Phoca vitulina</i>	harbor seal	Moderate Potential	Moderate Potential	Moderate Potential	Moderate Potential	Moderate Potential
<i>Tursiops truncatus</i>	common bottlenose dolphin	Present	Present	Present	Present	Present
<i>Zalophus californianus</i>	California sea lion	High Potential	High Potential	High Potential	High Potential	High Potential

“–” indicates a species has no potential to occur at the corresponding beach receiver site

Source: Appendix B

Special-Status Fish

The California grunion (*Leuresthes tenuis*) is present at the Dockweiler State Beach and Redondo Beach receiver sites, and has high potential to occur at the Zuma Beach, Will Rogers State Beach, and Manhattan Beach receiver sites. Immediately following high tides from mid-March through August, grunion may come ashore and lay eggs in the sand near the Mean High Tide Line. The eggs are incubated in the sand until the following series of high tide conditions, when the eggs hatch and are washed into the ocean. The proposed project proposes to add sand to the beach which would benefit spawning habitat for grunion. However, the beach receiver sites are located in areas overlapping the Mean High Tide Line; therefore, the proposed project has the potential to disturb incubating eggs if the proposed project activities occur during the spawning season. Accordingly, impacts to California Grunion are potentially significant, and mitigation is required.

Green Sea Turtle

The green sea turtle (*Chelonia mydas*) has a low potential to occur at each of the beach receiver sites. While it is unlikely individuals would be at the beach receiver sites permanently, there is potential for this species to forage or transit through the beach receiver sites in warm water years. The beach receiver sites include areas within the intertidal zone where sea turtles would not be expected. However, if green sea turtle is present during proposed project activities, construction activities could directly or indirectly affect this species through use of construction equipment or if a spill occurs. This impact would be potentially significant, and mitigation is required.

Special-Status Bird Species and Nesting Birds

Western snowy plover (*Charadrius nivosus nivosus*) has a low potential to occur at each of the beach receiver sites. Western snowy plover can be present in overwintering sites⁷ and the beach receiver areas may provide overwintering habitat for western snowy plover. These sites are frequently disturbed by public use and the species is likely accustomed to ambient disturbance. If western snowy plover is present during proposed project activities, potential direct impacts could include mortality or injury of individuals. Potential indirect impacts to the species may include increased noise and displacement of food; however, these indirect impacts to habitat are anticipated to be temporary and would not affect the long-term quality of overwintering, foraging, or nesting habitat. Due to the proposed project's potential to result in direct mortality to western snowy plover, this impact would be potentially significant, and mitigation is required.

California least tern (*Sternula antillarum browni*) has a low potential to occur at each of the beach receiver sites. California least tern is not known to nest at the beach receiver sites but could be found in nearshore waters foraging. If California least tern is present during proposed project activities, potential direct impacts could include mortality or injury of individuals. Potential indirect impacts to the species may include increased noise and displacement of food; however, the effects would be localized and temporary and would not extend beyond the normal foraging distance for the species. Due to the proposed project's potential to result in direct mortality to California least tern, this impact would be potentially significant, and mitigation is required.

California brown pelican (*Pelecanus occidentalis californicus*) is present at each of the beach receiver sites. Suitable nesting habitat is not present within beach receiver sites; however, if California brown pelican is present during proposed project activities, potential direct impacts could include mortality or injury of individuals. Potential indirect impacts to the species may include increased noise and displacement of food; however, the effects would be localized and temporary and would not extend beyond the normal foraging distance for the species. Furthermore, potential temporary impacts would cease following the completion of construction activities. Due to the proposed project's potential to result in direct mortality to California brown pelican, this impact would be potentially significant, and mitigation is required.

⁷ Overwintering sites refers to coastal areas where western snowy plover spend winter months.

In addition to special-status bird species, nesting birds may be present at the beach receiver sites. Construction activity around active nests could result in nest destruction or abandonment because of noise, vibrations, or human activity. Nest destruction or abandonment of active special-status species nests would have a potentially significant impact. Destruction or abandonment of native bird nests would violate the California Fish and Game Code (CFGF) and Migratory Bird Treaty Act (MBTA). These regulations make it unlawful to take, possess, or destroy birds of prey and migratory birds, and their nests and eggs. Impacts to nesting birds are potentially significant, and mitigation is required.

Special-Status Marine Mammals

Gray whale (*Eschrichrius robustus*) and northern elephant seal (*Mirounga angustirostris*) have a low potential to occur at each of the beach receiver sites. Harbor seal (*Phoca vitulina*) has a moderate potential to occur at each of the beach receiver sites. California sea lion (*Zalophus californianus*) has a high potential to occur at each of the beach receiver sites. Common bottlenose dolphin (*Tursiops truncatus*) is present at each of the beach receiver sites. Each of the beach receiver sites contains habitat that supports resident, foraging, and transiting members of these species. Proposed project activities would not have direct impacts on marine mammals given proposed project activities do not extend far enough into the ocean to result in species mortality. However, indirect impacts to marine mammals could occur due to the potential for the placement of sediment to alter or disturb foraging or haul-out habitat⁸ at the shore. This impact would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-1 through BIO-6 would reduce impacts to special-status species to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

Mitigation Measure BIO-1: Worker Environmental Awareness Program. Prior to initiation of proposed project activities (including staging and mobilization), all personnel associated with proposed project construction shall attend Worker Environmental Awareness Program training conducted by a qualified biologist, to aid workers in recognizing special-status terrestrial and marine species, native birds, and other biological resources that may occur in the proposed project area. The specifics of this program shall include identification of habitats of special-status species with potential to occur at the proposed project area (including mapped habitats at the beach receiver site), a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work areas. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the trainer indicating they have attended the Worker Environmental Awareness Program and understand the information presented to them. The signed form shall be provided to the Los Angeles County Department of Beaches and Harbors to verify the Worker Environmental Awareness Program occurred.

Mitigation Measure BIO-2: General Best Management Practices. The following Best Management Practices shall be implemented in the required Storm Water Pollution Prevention Plan for the proposed project prior to the start of beach nourishment activities. The Best Management Practices shall be followed by proposed project personnel to reduce the risk of spills and minimize the introduction of pollutants into coastal waters. The Storm Water Pollution Prevention Plan shall be reviewed by Los Angeles County Department of Beaches and Harbors to verify the measures below are included. One time per each beach nourishment event, a representative from the Los Angeles County Department of Beaches and Harbors will observe proposed project activities to verify the Best Management Practices are implemented. Best Management Practices shall include, but are not limited to the following:

⁸ Hauling out is a behavior associated with mammals such as seals temporarily leaving the water for reasons such as reproduction or rest. Haul-out habitat refers to the area outside of the water which the mammal will temporarily occupy.

- During beach nourishment activities, heavy equipment shall be operated in accordance with the standards listed within the Los Angeles County Department of Public Works Construction Site Best Management Practices Manual (2010).
- All equipment shall be properly maintained such that no leaks of oil, fuel, or residues would take place. Materials shall not be stored nor equipment fueled on the sand, as feasible, or equipment shall use secondary containment.
- Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials, including a designated fueling and vehicle maintenance area with appropriate protection to prevent any spillage of gasoline or related petroleum products or contact with runoff or tidal waters.
- All food-related trash shall be disposed of in closed containers and removed from the proposed project area each day during the construction period. Proposed project personnel shall not feed or otherwise attract wildlife to the proposed project area.
- All work shall take place during daylight hours. Lighting of the beach and water area shall be prohibited.
- Construction work or equipment operations below Mean Lower Low Water shall be minimized to the absolute extent feasible, and, where possible, limited to times when tidal waters have receded from the authorized work area.
- Any spillage of material will be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed.
- Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to ensure minimal impacts to the aquatic and marine environments.
- A 50-foot-long spill containment boom and absorbent pads shall be kept on-site and be deployed if there is a release of fluids into the water.

Mitigation Measure BIO-3: Grunion Surveys. The proposed project shall not place material or conduct any work on the beach below the Mean High Tide Line during the seasonally predicted grunion run period and egg incubation period of March 14 through August 31. If proposed project activities must occur during an expected grunion run, a grunion survey shall be conducted by a qualified biologist in accordance with the expected grunion runs provided by the California Department of Fish and Wildlife (CDFW). The grunion run surveys shall include three to four consecutive nights during the expected grunion run timeframe provided annually by CDFW, typically every two weeks during the new and full moon cycle. The surveys shall take place prior to work activities and areas where spawning grunion are observed shall be avoided or work in those areas shall not proceed until the next grunion run survey confirms that no spawning grunion are present. Proposed project activities shall proceed only in areas where no grunion spawning was observed or may proceed after a subsequent survey (typically two-week cycle) which determines no spawning occurred in the proposed project area.

Mitigation Measure BIO-4: Western Snowy Plover, California Least Tern, and Nesting Bird Monitoring. To avoid disturbance of nesting and special-status birds, including western snowy plover and California least tern, activities related to the project shall occur outside of the bird breeding season for protected birds (generally February 1 through September 15), as feasible.

If proposed project activities must occur during the breeding season, a pre-construction nesting bird survey completed within 72 hours of proposed project activities shall be conducted and full-time monitoring

conducted by a qualified biologist shall be conducted during all beach nourishment activities. At all times, a qualified biologist shall walk ahead of vehicle(s) and equipment to assure that western snowy plover and California least tern are out of harm's way before the vehicle(s) or equipment can proceed. If birds do not move out of vehicle traffic path, the biologist shall attempt to guide vehicle(s) on an alternate path to avoid grounding birds and walk ahead of vehicle(s) to ensure the path is cleared while maintaining a minimum 150-foot buffer.

If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside the site) shall be determined and demarcated by the biologist with bright orange fencing, flagging, or other means to mark the boundary. All proposed project personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No proposed project activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

Mitigation Measure BIO-5: Marine Mammal and Sea Turtle Avoidance. All proposed project personnel shall adhere to the guidelines set forth in the Marine Mammal Protection Act. If a stranded or hauled out marine mammal or sea turtle is observed, all proposed project equipment and personnel shall remain at least 100 yards (300 feet) away from whales and 50 yards (150 feet) from dolphins, porpoises, seals, sea lions and sea turtles. Equipment and foot traffic shall remain at least 150 feet from hauled-out seals and sea lions that could occur on the rocky jetties within the proposed project area. The Marine Mammal Care Center shall be notified if the animal appears sick or injured. If the animal is unable to leave on its own, the Marine Mammal Care Center shall be contacted to carry out rescue/relocation procedures. Work shall cease within the buffer area until the animal has been allowed to leave on its own or at the conclusion of rescue/relocation procedures.

Mitigation Measure BIO-6: Environmentally Sensitive Habitat Area (ESHA) Avoidance. Prior to the initiation of each beach nourishment event, ESHA (e.g., dune mat or areas that exhibit dune morphology) shall be clearly delineated by a qualified biologist in the field to prevent direct impacts outside the designated proposed project boundary. All sensitive species and sensitive species' habitats, including ESHA, located within 100 feet of proposed project activities shall be delineated with specific sensitive species labeling (e.g., signage stating, "No Entry – Environmentally Sensitive Habitat" attached to temporary fencing). In addition, a 50-foot-wide corridor around vegetated areas shall be implemented. No proposed project activities shall occur within these buffers. Since the proposed project is temporary, orange snow fencing would be sufficient for the duration of the proposed project. In areas that are separated by existing chain-link fencing, signage shall be secured to the existing fencing.

b. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

Sensitive Natural Communities

One sensitive vegetation community, dune mat, which is considered ESHA, occurs within the Manhattan Beach receiver site study area evaluated in the Biological Resources Assessment. Proposed project activities would not result in the direct removal of sensitive vegetation associated with the dune mat vegetation community since proposed project activities would not occur in vegetated areas. However, there is potential for the proposed project to indirectly deposit dust on plant leaves which may adversely affect plant productivity in the dune mat vegetation community. This impact would be potentially significant, and mitigation is required.

Designated Critical Habitat

The Zuma Beach and Dockweiler State Beach receiver sites contain designated critical habitat for western snowy plover. The Will Rogers State Beach, Dockweiler State Beach, Manhattan Beach, and Redondo Beach receiver sites contain proposed critical habitat for green sea turtle. Proposed project activities would not

permanently impact or adversely modify critical habitats such that long-term impacts to these habitats would occur. However, proposed project activities could result in temporary impacts to these habitats due to the introduction of sediment at the receiver sites. As described in Chapter 2, Environmental Setting and Project Description, the proposed maximum volume placed at any one SCoup site each year is 150,000 cy with a fines content⁹ of 15 percent or less and 50,000 cy for material with a fines content between 16 to 25 percent. This is consistent with the recommendation provided in the Final Sand Compatibility and Opportunistic Use Program Plan adopted by the California Coastal Sediment Management Workgroup and intended to reduce changes in water quality. In addition, as described in Chapter 2, Environmental Setting and Project Description, source material would be required to be substantially free of chemical and biological contamination, debris, and organic material. However, given the proximity of proposed project activities to the Pacific Ocean, the introduction of sediment could result in adverse temporary changes associated with water quality (e.g., turbidity, pH, dissolved oxygen). In addition, beach nourishment activities would result in temporary increased noise, temporary removal of foraging habitat, and other increased human activity. Temporary increased noise would be minimal compared to existing conditions and therefore would not substantially impact critical habitat. However, the temporary removal of foraging habitat and other increased human activity proximate to designated critical habitat for western snowy plover and green sea turtle would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-6 and BIO-7 would reduce impacts to sensitive natural communities and critical habitat to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

Mitigation Measure BIO-7: Water Quality Monitoring. A Water Quality Monitoring Plan shall be prepared to avoid and minimize potential adverse effects to water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels). The Water Quality Monitoring Plan shall establish water quality thresholds consistent with the State Water Resources Control Board Ocean Plan and include measures for water quality monitoring up current and down current of the proposed project area. During proposed project activities, if water quality thresholds established in the Ocean Plan are exceeded, a water quality monitor shall inform the project manager and be granted the authority to temporarily halt proposed project activities until monitoring indicates the constituent measurements are within the Ocean Plan thresholds.

c. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

The beach receiver sites include areas of the Santa Monica Bay/Pacific Ocean regulated by the United States Army Corps of Engineers, the State Water Resources Control Board (SWRCB) and Los Angeles Regional Water Quality Control Board (RWQCB), and the California Coastal Commission (CCC). The beach receiver sites are also proximate to several ephemeral drainage culvert outlets that discharge waters in the Santa Monica Bay/Pacific Ocean. The proposed project would not result in diversion, diking, or filling of the culverts and will not alter the existing flow of stormwater to waters in the Santa Monica Bay/Pacific Ocean. The proposed project could result in temporary direct impacts to the waters of the Santa Monica Bay/Pacific Ocean if deposited sediment would substantially alter turbidity, salinity, pH, light transmittance, total suspended solids, and other constituents during beach placement operations. As described in Chapter 2, Environmental Setting and Project Description, source material would be required to be substantially free of chemical and biological contamination, debris, and organic material. However, potential indirect impacts could occur if sediment or pollutants associated with stormwater runoff would enter the Santa Monica Bay/Pacific Ocean. This impact would be potentially significant, and mitigation is required.

⁹ Fines content refers to the proportion of soil particles that are smaller than 0.075 millimeters.

Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-7 would reduce impacts to jurisdictional waters to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

d. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

Wildlife movement corridors, or habitat linkages, are generally defined as connections between areas of suitable habitat that allow for physical and genetic exchange between otherwise isolated wildlife populations. A group of habitat linkages in an area can form a wildlife corridor network. The California Essential Habitat Connectivity Project, commissioned by the California Department of Transportation and CDFW, identifies “Natural Landscape Blocks” which support native biodiversity and the “Essential Connectivity Areas” which link them. The beach receiver sites are not located within an Essential Connectivity Area or Natural Landscape Block. Terrestrial wildlife movement is limited within the beach receiver sites due to proximity to developed areas and the presence of parking lots and roadways.

Marine portions of the beach receiver sites provide wildlife movement opportunities for marine species. The beach receiver sites are located within Essential Fish Habitat defined within the Pacific Fishery Management Council’s Groundfish Management Plan and the Pacific Fishery Management Council’s Coastal Pelagic Species Fishery Management Plan and provide areas for fish movement. In addition, a rock reef outside the Will Rogers State Beach receiver site is classified as a Habitat Area of Particular Concern and used for fish movement. Redondo Beach is a known giant sea bass (*Stereolepis gigas*) nursery site which is located between Redondo Pier and King Harbor.

Proposed project activities may temporarily alter Essential Fish Habitat at the beach receiver sites and/or Habitat Area of Particular Concern outside the Will Rogers State Beach receiver site or interfere with the movement of fish or marine wildlife species and could temporarily impede the use of marine wildlife nursery sites. Proposed project activities are not expected to have significant impacts on these habitats, populations or the fisheries that depend on them because of the temporary nature of proposed project activities. The area offshore of the receiver beaches are prone to natural sediment movement during storm and high surf events. The proposed project-derived sediment is not expected to transport beyond the depth of closure at wildlife nursery sites. The offshore portion of the beach receiver sites are composed of sand substrate and exposed to high surf and runoff which can temporarily alter water quality and movement. The proposed project may cause temporary impacts including changes to water quality (e.g., turbidity, pH, dissolved oxygen). This impact would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-7 would reduce impacts to fish and marine wildlife movement to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

e. Less Than Significant Impact with Mitigation Incorporated.

All Beaches

Several local policies protecting biological resources apply to the beach receiver sites. In partnership with coastal cities and counties, the CCC plans and regulates the use of land and water in the coastal zone through the Coastal Act. The Coastal Act requires that local governments develop Local Coastal Programs (LCP) to carry out policies of the California Coastal Act at the local level. The Marine Life Protection Act of 1999 directs the state to redesign California’s system of Marine Protected Areas to function as a network in order to: increase coherence and effectiveness in protecting the State’s marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance. The SWRCB created Areas of Special Biological Significance to help maintain natural water quality within some of the most pristine and biologically diverse sections of California’s coast. No pollutants are allowed to be discharged within these protected areas. The

State Parks system, which includes California State beaches managed by the California Department of Parks and Recreation, is governed by the California Public Resources Code which includes policies to protect sensitive habitats and water quality, fish, and wildlife resources.

The City of Malibu LCP applies to the Zuma Beach receiver site and includes policies that protect ESHA from disruption and permit only resource dependent uses within ESHA. Zuma Beach is also located within the Point Dume State Marine Conservation Area and Area of Special Biological Significance #24 (ASBS #24). The Will Rogers State Beach and Dockweiler State Beach receiver sites are located in unincorporated Los Angeles County and therefore subject to the CCC coastal permit procedures. The ice plant mats in Will Rogers State Beach are associated with indicators of dune habitat that constitute ESHA. The Manhattan Beach receiver site is in the jurisdiction of the City of Manhattan Beach LCP which requires avoidance of impacts to beach dune habitat. The Redondo Beach receiver site is in the jurisdiction of the City of Redondo Beach LCP that applies to the Redondo Beach receiver site and includes policies that protect ESHA from disruption and permit only resource dependent uses within ESHA.

Direct impacts to ESHA would be avoided at each of the beach receiver sites with implementation of Mitigation Measure BIO-6. Within a State Marine Conservation Area, take pursuant to beach nourishment and other sediment management activities is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by the CDFW (California Code of Regulations Title 14, Section 632). Additionally, the proposed project would not result in direct wastewater or pollutant discharges to ASBS #24. However, the proposed project has the potential to result in indirect impacts related to heavy equipment use on the beach which may temporarily reduce public use and introduce pollutants, increase turbidity, or result in other adverse changes in water quality. These potential impacts would conflict with the requirements of applicable LCPs, Point Dume State Marine Conservation Area, ASBS #24, and California Public Resources Code requirements applicable to State Parks. This impact would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-1 through BIO-7 would reduce impacts to policies protecting biological resources to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

f. No Impact.

All Beaches

The beach receiver sites are not located within the jurisdiction of an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project has no potential to conflict with these plans, and no impact would occur.

5. Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the findings contained within the *Cultural Resources Technical Report (Cultural Report)* (Rincon, 2025b) prepared for the proposed project (see Appendix C). The *Cultural Report* evaluates project impacts to historical and archaeological resources. The *Cultural Report* includes the results of a California Historical Resources Information System (CHRIS) records search through the South Central Coastal Information Center; a search of the Native American Heritage Commission's Sacred Lands File; Native American outreach; local historical group outreach; a review of historical maps and aerial imagery; background research, including a geoarchaeological review, and an in-depth review of archival, academic, and ethnographic information; pedestrian survey; and an archaeological sensitivity analysis.

Cultural resources impact (a) below will address built environment resources qualifying as historical resources under CEQA, (b) will address archaeological resources both qualifying as historical resource and unique archaeological resources under CEQA, and (c) will address human remains.

Discussion

a. No Impact.

All Beaches

Background

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is (1) a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources; and/or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]). Historical resources may include eligible built environment resources and archaeological resources from any time period.

Pursuant to CEQA Guidelines Section 15064.5(a)(3), a resource is considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines Section 15126.4(b)(3) specifies that public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. Preservation in place is the preferred manner of mitigating impacts to archaeological sites (CEQA Guidelines Section 15126.4(b)(3)(A)).

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a “unique archaeological resource” as identified in PRC Section 21083.2. If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; and/or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during implementation of a project.

Historical Resource Impacts

The CHRIS records search, background research, local historical group outreach, review of historical maps and aerial imagery, and pedestrian survey did not result in the identification of any built environment resources qualifying as historical resources within any of the five receiver sites (Rincon, 2025b). The CHRIS records search and local outreach within the City of Redondo Beach did, however, identify three resources, the Redondo Beach Public Library (P-19-177601) listed on the National Register of Historic Places (NRHP), Ainsworth Court Staircase (locally eligible but not registered), and Moreton Bay Fig Tree (listed in the City’s Historical Resources Register), all of which are located adjacent to the Redondo Beach receiver site. The Redondo Beach Public Library and Moreton Bay Fig Tree are considered historical resources under CEQA and the Ainsworth Couty Staircase could be considered a historical resource under CEQA. However, no direct impacts such as demolition, destruction, relocation, or alteration of these resources would occur as a result of the proposed project, nor would the placement of sand in the receiver site result in any indirect impacts to the surrounding setting of these resources. Therefore, the proposed project would not result in a substantial adverse change in the significance of a built environment resource qualifying as a historical resource under CEQA, and no impact would occur.

b. Less than Significant with Mitigation Incorporated.

All Beaches

The results of the CHRIS records search conducted in preparation of the Cultural Report (Rincon, 2025b) identified 74 previously recorded cultural resources within a 0.5-mile radius of the five receiver sites. None

of these 74 resources are located within any of the receiver sites. However, four of the 74 resources are located adjacent to the Dockweiler State Beach receiver site including a historic-period refuse scatter (P-19-004849) and three historic-period isolates (P-19-101425, P-19-101426, and P-19-101427), all located between 140 and 150 feet from the receiver site. None of the four resources appear to have been previously evaluated for listing in the CRHR and could qualify as historical resources or unique archaeological resources under CEQA. However, no direct impacts such as demolition, destruction, relocation, or alteration of these resources would occur as a result of the proposed project, nor would the placement of sand in the receiver site result in any indirect impacts to the surrounding setting of these resources. Therefore, the proposed project would not result in a substantial adverse change in the significance of any known archaeological resources qualifying as historical resources or unique archaeological resources under CEQA.

Geoarchaeological review was conducted to assess the archaeological sensitivity of the five receiver sites. Landforms in the receiver sites are underlain by Late Pleistocene- and Holocene-age alluvial formations contemporaneous with the documented period of indigenous human habitation of the area. However, the placement of sand will not involve excavation or other ground disturbances beyond those surficial in nature and impacts to any unknown buried archaeological resources is not anticipated. Therefore, the proposed project would not result in a substantial adverse change in the significance of any unknown archaeological resources qualifying as historical resources or unique archaeological resources under CEQA. Although unlikely, in the event archaeological resources are unexpectedly discovered during proposed project construction. Mitigation Measure CUL-1 would be implemented to reduce impacts to a less than significant level.

Mitigation Measure CUL-1: Unanticipated Discovery of Archaeological Resources. If the resource is determined by the Qualified Archaeologist to be indigenous in nature, a Native American representative shall also be consulted. If the Qualified Archaeologist determines the resource to be significant, avoidance and preservation in place shall be the preferred manner of mitigating impacts pursuant to 15126.4(b)(3)(A). If avoidance is determined to be infeasible, the Qualified Archaeologist shall prepare a data recovery and treatment plan tailored to the physical nature and characteristics of the resource. The data recovery plan shall identify data recovery excavation methods, research questions, measurable objectives, and data thresholds to reduce any potential significant impacts to the resource. The Los Angeles County Department of Beaches and Harbors (LACDBH) shall review and approve the treatment plan and archaeological testing, as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS.

Implementation of Mitigation Measure CUL-1 would reduce impacts to archaeological resources to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

c. Less than Significant Impact.

All Beaches

No human remains are known to be present within the receiver sites. However, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are discovered during ground-disturbing activities, the State of California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner must notify the NAHC, which would determine and notify a Most Likely Descendent (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the LACDBH shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, potential impacts to human remains would be less than significant.

6. Energy				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less Than Significant Impact.

All Beaches

Construction-Related Energy Impacts

Construction of the proposed project would require consumption of petroleum fuels (gasoline and diesel fuel) by construction workers travelling to and from the site, heavy trucks hauling of fuel and sand, and heavy equipment used for sand placement. Energy usage at each project site during construction would be temporary in nature. Using standard fuel conversion estimates¹⁰ and the CalEEMod results from the Air Quality and Greenhouse Gas Emissions Reports, Redondo Beach restoration activities were estimated to consume approximately 108,440 gallons of diesel fuel and 8,800 gallons of gasoline in a given year. Each of the other restoration activities at the other four beaches were estimated to consume approximately 92,900 gallons of diesel fuel and 8,800 gallons of gasoline in a given year. Off-road construction equipment would be regulated per the State's In-Use Off-Road Diesel Vehicle Regulation and on-road haul trucks would be regulated per the State's Truck and Bus Regulation. Energy usage during construction of the proposed project would only utilize the energy required, and would not be wasteful, inefficient, or unnecessary. Therefore, construction energy impacts would be less than significant.

Operations-Related Energy Impacts

Once construction at each beach site is complete, there would be no increase in operational energy use. Operations would not create a change in traffic patterns or beach usage that would result in increased energy use. Therefore, this impact would be less-than-significant.

b. Less Than Significant Impact.

All Beaches

There is no State or local plan for energy efficiency and renewable energy applicable to the proposed project. Fuels used by the proposed project would be subject to State regulations such as the Low Carbon Fuel Standard. Off-road construction equipment would be regulated per the State's In-Use Off-Road Diesel Vehicle Regulation and on-road haul trucks would be regulated per the State's Truck and Bus Regulation. Furthermore, the proposed project would not require new or expanded energy generation or infrastructure

¹⁰ United States Energy Information Administration, Carbon Dioxide Coefficients, February 2, 2016.
https://www.eia.gov/environment/emissions/co2_vol_mass.php

facilities. As a result, the proposed project would not have an adverse effect on State or local plans for renewable energy or energy efficiency, and impacts would be less than significant.

7. Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the findings contained within the *Greenhouse Gas Emissions Technical Report (GHG Report)* (RCH Group, 2025b) prepared for the proposed project (see Appendix D).

Discussion

a. Less than Significant Impact.

All Beaches

Background

“Global warming” and “global climate change” are the terms used to describe the increase in the average temperature of the earth’s near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

Natural processes and human actions have been identified as the causes of this warming. The International Panel on Climate Change (IPCC) concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning, and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the earth’s atmosphere are thought to be the main cause of human-induced climate change. GHGs naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. Some GHGs occur naturally and are necessary for keeping the earth’s surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), ozone, and water vapor.

CO₂ is primarily generated by fossil fuel combustion in stationary and mobile sources. CH₄ is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural

gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. CH₄ is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. N₂O is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production.

While the presence of the primary GHGs in the atmosphere are naturally occurring, CO₂, CH₄, and N₂O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in "carbon dioxide-equivalent" measures (CO₂e).

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts may include, but are not limited to, loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Regulatory Framework

The *GHG Report* (RCH Group, 2025b) identifies a number of State and local requirements, regulations, and standards regarding GHG emissions.

State of California

The following subsections highlight certain legislation, regulations and standards that have been adopted by the State of California to address global climate change issues.

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of the CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished by enforcing a statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. Under AB 32, CARB was required to adopt regulations to achieve reductions in GHG to meet the 1990 emissions cap by 2020.

Climate Change Scoping Plan

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHGs that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defines CARB climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The 2013 Update highlights California progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program.

On May 22, 2014, the First Update to the Climate Change Scoping Plan was approved by the Board, along with the finalized environmental documents. On November 30, 2017, the Second Update to the Climate Change Scoping Plan was approved by the CARB. On December 15, 2022, the CARB adopted its 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). Consistent with this statutory direction, the Final Scoping Plan, which was released on November 16, 2022, lays out how California can reduce anthropogenic GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. In the 2022 Scoping Plan, CARB acknowledges that meeting these new ambitious targets will require decarbonizing the electricity sector on a rapid — but technically feasible — timescale. Decarbonizing the electricity sector depends on both increasing energy efficiency and deploying renewable and zero carbon resources, including solar, wind, energy storage,

geothermal, biomass, and hydroelectric power on a massive scale and at an unprecedented pace. Overall, the 2022 Scoping Plan further strengthens the state's commitments to take bold actions to address the climate crisis. CARB states that the 2022 Scoping Plan represents the most aggressive approach to reach carbon neutrality in the world.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders "All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets." The Executive Order also states that "CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." In September of 2016, AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Senate Bill 32

On September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of 6 metric tons of CO₂e by 2030 and 2 metric tons of CO₂e by 2050. As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

Executive Order B-55-18

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

Low Carbon Fuel Standard

Under the Climate Change Scoping Plan, the CARB identified the low carbon fuel standard (LCFS) as one of the nine discrete early action measures to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

In 2018, the CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes. The program is based on the principle that each fuel has "life cycle" GHG emissions

and the life cycle assessment examines the GHG emissions associated with the production, transportation, and use of a given fuel. The life cycle assessment includes direct emissions associated with producing, transporting, and using the fuels, as well as significant indirect effects on GHG emissions, such as changes in land use for some biofuels. The carbon intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits. Credits and deficits are denominated in metric tons of GHG emissions. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets the LCFS carbon intensity standards, or benchmarks, for each annual compliance period. A deficit generator meets its compliance obligation by ensuring that the credits it earns or otherwise acquires from another party is equal to, or greater than, the deficits it has incurred.

Assembly Bill 1279

AB 1279 requires California to achieve “net zero greenhouse gas emissions” as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. It also requires that statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels. The bill directs CARB to ensure that its scoping plan identifies and recommends measures to achieve these policy goals.

Executive Order N-79-20

EO N-79-20 calls for the elimination of new internal combustion passenger vehicles by 2035. The transportation sector, including all passenger cars and light trucks, heavy-duty trucks, off-road vehicles, and the fuels needed to power them, is responsible for more than half of California’s GHG emissions. By setting a course to end sales of internal combustion passenger vehicles by 2035, EO N-79-20 establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers and therefore does not require Californians to give up the existing cars and trucks they already own.

California Phase 2 Standards Medium- and Heavy-Duty Engines and Vehicles

After the U.S. EPA enacted its Phase 2 Standards for medium- and heavy-duty engines, as discussed in the federal regulatory setting above, California enacted its own Phase 2 standards for GHG emissions that align closely with the federal Phase 2 standards except for minor differences. California’s Phase 2 standards were officially approved by CARB in February 2018, with the California Office of Administrative Law giving its final approval in February 2019. The California Phase 2 standards became effective April 1, 2019. Reductions in GHGs from California’s Phase 2 standards are recognized in CARB’s 2017 Scoping Plan.

GHG Significance Thresholds

Because the issue of global climate change is inherently a cumulative issue, the contribution of project-related GHG emissions to climate change is addressed as a cumulative impact.

CEQA Guidelines Section 15064 and Appendix G recommend that a lead agency consider a project’s consistency with relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions.

Some counties, cities, and air districts have developed guidance and thresholds for determining the significance of GHG emissions that occur within their jurisdiction. Los Angeles County is the CEQA lead agency for the proposed project and is, therefore, responsible for determining whether GHG emissions with the Project would have a cumulatively considerable contribution to climate change. LACDBH nor Los Angeles County have adopted thresholds or approaches for evaluating a project’s GHG emissions.

Considering the lack of established GHG emissions thresholds that would apply to the proposed project, CEQA allows lead agencies to identify thresholds of significance applicable to a project that are supported by substantial evidence. Substantial evidence is defined in the CEQA statute to mean “facts, reasonable assumptions predicated on facts, and expert opinion supported by facts” (14 CCR 15384[b]). Substantial evidence can be in the form of technical studies, agency staff reports or opinions, expert opinions supported

by facts, and prior CEQA assessments and planning documents. Therefore, to establish additional context in which to consider the order of magnitude of the proposed project's GHG emissions, this analysis accounts for the following considerations by other government agencies and associations about what levels of GHG emissions constitute a cumulatively considerable incremental contribution to climate change.

SCAQMD currently has one adopted GHG threshold of significance, which is 10,000 metric tons of CO₂e per year for the operation of industrial facilities. Other Air Districts in the state have also adopted the 10,000 metric tons of CO₂e per year threshold, such as Bay Area AQMD, Sacramento Metropolitan AQMD, and Placer County APCD. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 metric tons of CO₂e per year threshold in numerous CEQA documents where those air districts were the lead agency. Therefore, the 10,000 metric tons of CO₂e per year threshold is used in this analysis to determine the significance of the GHG emissions generated by the proposed project.

GHG Impacts

Construction Impacts

As discussed in the *GHG Report* (RCH Group, 2025b), construction GHG emissions include emissions from construction equipment, heavy trucks, and worker trips. Per guidance from the SCAQMD, construction emissions are often amortized over a 30-year period to account for the contribution of construction emissions over the lifetime of the project and then added to a project's operational emissions to account for the contribution of construction to GHG emissions for the project lifetime. However, because the proposed project would not increase operational GHG emissions, this analysis conservatively compares annual construction GHG emissions to the threshold of significance without amortization.

Since beach nourishment activities would be opportunistic, it is unlikely that all five beach sites would have beach nourishment activities conducted simultaneously. However, for the purposes of this analysis, it was conservatively assumed that beach nourishment activities would all occur simultaneously in a given year since there is no project condition prohibiting this from happening in the future if the proposed project is approved. Project GHG emissions estimates assume a construction year of 2026 modeled with CalEEMod as shown in Table 3-7.

Table 3-7 Estimated Construction GHG Emissions

Construction Phase	CO ₂ e Emissions metric tons
Zuma	1,022
Will Rogers	1,022
Manhattan	1,022
Dockweiler	1,022
Redondo	1,180
Total Project CO₂ Equivalent Emissions	5,268
Significance Threshold	10,000
Significant?	No

Source: RCH Group, 2025b

As shown in Table 3-7, proposed project GHG emissions would not exceed the significance threshold of 10,000 metric tons of CO₂e per year. Therefore, the proposed project would result in a less-than-significant impact.

Operational Impacts

Once construction at each beach site is complete, there would be no increase in operational GHG emissions. Operations would not create a change in traffic patterns or beach usage that would result in increased GHG emissions. Therefore, this impact would be less-than-significant.

b. Less than Significant Impact.

All Beaches

Construction would generate temporary GHG emissions to restore the beach sites. Construction activities would utilize fuels that are subject to the State's LCFS, which addresses the carbon intensity of fuels in the State and is a key GHG reduction measure in CARB's 2017 and 2022 Scoping Plans. Project construction would not conflict with CARB's 2017 and 2022 Scoping Plans. Since the project does not propose new development, no local GHG emissions regulations or standards apply, such as the County's 2045 Climate Action Plan. Furthermore, there are no measures from the 2045 Climate Action Plan that address short-term construction/rehabilitation projects such as beach nourishment. Therefore, the proposed project would result in a less-than-significant impact.

8. Geology and Soils				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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 a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a.i. No Impact.

All Beaches

According to the Alquist-Priolo Earthquake Fault Zoning Map, none of the proposed beach sites are located near a known fault. The nearest known active faults are listed below (California Department of Conservation, 2025):

- Malibu Coast Fault along Zuma Beach;
- Santa Monica Fault along Will Rogers Beach; and the
- Palos Verdes Fault just south of Redondo Beach.

Each fault crosses the coast near to the proposed sand placement sites. The proposed project is placement of sand on the beach. There are no known active or potentially active faults within these areas. The proposed project would not result in the exposure of people or property to fault ruptures because no development is proposed. Therefore, the proposed project would result in no impact.

a.ii. Less than Significant Impact.

All Beaches

The proposed project would not result in, or expose people to, seismic ground shaking beyond the conditions that currently exist throughout the region. This exposure is the general exposure that all persons in southern California experience because of the high seismic activity level of the region. The proposed project would replenish the beach sand at the beach fill sites and would not create a substantially increased exposure to seismic activity because no development is proposed. Therefore, the proposed project would result in a less-than-significant impact.

a.iii. Less than Significant Impact.

All Beaches

No development is proposed under the project. Potential liquefaction is primarily limited to valley bottoms, riverbeds, historic wetland areas, and shoreline areas. Exposure of people to seismic ground failure, including liquefaction, may occur at the project sites but would not increase beyond existing conditions because the project would only add sand to an existing beach, not new structures. Therefore, the proposed project would result in a less-than-significant impact.

a.iv. No Impact.

All Beaches

The proposed project would not be located in potential landslide areas and does not propose any development; therefore, people or buildings would not be exposed to landslides. Thus, the proposed project would result in no impact.

b. No Impact.

All Beaches

The proposed project is intended to help remedy existing erosion at the proposed beach fill sites. Seasonal cross-shore movement would transport the fill material offshore in the winter and back onto the beach in the summer. In addition, the longshore transport changes direction seasonally. In the littoral cell, longshore movement is generally northwest in the summer and southeast in the winter. Seasonal loss of the beach would occur from the natural littoral process. The project would result in minor changes to topography and

ground surface relief features at the beach fill sites identified, but in an insignificant and potentially beneficial manner. Therefore, the proposed project would result in no impact.

c. No Impact.

All Beaches

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

d. No Impact.

All Beaches

The proposed beach fill sites are sandy beaches with no soil cover. Expansive soils are not documented to exist at beach fill sites, nor would they be created by the project. Therefore, the proposed project would not create risk to human life or property due to expansive soils. Therefore, the proposed project would result in no impact.

e. No Impact.

All Beaches

The proposed project would not include any septic tanks or alternative waste disposal systems. Therefore, the proposed project would not have any impacts due to the use of septic systems or alternative wastewater disposal systems at the proposed beach fill sites.

f. Less than Significant Impact.

All Beaches

There are no known paleontological resources or unique geologic features within the receiver sites. The proposed project would not result in subsurface excavation that could impact buried resources. Therefore, the proposed project would result in a less-than-significant impact.

9. Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less than Significant Impact.

All Beaches

The proposed project would include the use of standard construction equipment that requires hazardous material for only equipment fueling, operation and maintenance (e.g., fuel and lubricants). Storage, handling, transport, emission, and disposal of these materials would be in full compliance with federal, state, and local regulations. Regarding opportunistic sand, potential source material would go through a comprehensive screening process and any material that is found to be contaminated would not be used for beach nourishment. Thus, the proposed project would result in a less than significant impact.

b. Less Than Significant Impact.

All Beaches

As previously mentioned, potential hazardous materials that may be used under the proposed project would be limited to fuels, lubricants, and other typical materials related to standard construction equipment operation and maintenance. Containment of potential hazards from construction equipment and vessels would be addressed with the preparation of and adherence to the required SWPPP and the implementation of best management practices (BMPs) provided by the LA County Department of Public Works Construction Site Best Practices Manual and Los Angeles Water Quality Control Board. Groundcover would be placed under construction equipment staged on unpaved surfaces to capture oil, fuel, or other hazardous materials that may seep or leak from the equipment. Opportunistic sand that would be used for the proposed project would have to meet minimum criteria that includes no detection of hazardous materials before placement at a stockpile site or receiver site. Therefore, no component of the proposed project would contribute to an existing hazard or create a new hazard. Thus, the proposed project would result in a less than significant impact.

c. Less Than Significant Impact.

Will Rogers Beach, Dockweiler Beach, and Redondo Beach

There are no schools located within 0.25 mile of the beach sites and the haul routes and the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, except for conventional types of fuels to power equipment and trucks. Containment of potential hazards would be addressed with the preparation of required SWPPP and related BMPs. Therefore, the proposed project would have no potential effect on any nearby school related to hazardous material exposure and would result in no impact.

Zuma Beach and Manhattan Beach

Although there are schools located within 0.25 mile of the beach sites (Malibu Middle School near Zuma Beach and Grand View Elementary School and Opal Robinson Elementary School near Manhattan Beach), the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, except for conventional types of fuels and lubricants to power and maintain equipment and trucks. Containment of potential hazards would be addressed with the preparation of the required SWPPP and related BMPs. Therefore, the proposed project would result in a less than significant impact.

d. Less Than Significant Impact.

Will Rogers Beach, Dockweiler Beach, and Redondo Beach

Receiver sites are not located on a hazardous materials site on the State of California Hazardous Waste and Substances list compiled pursuant to Government Code Section 65962.5 (EnviroStor Database, accessed

January 14, 2025), and no known sites would be located in the immediate vicinity of a proposed site under the project. Thus, the proposed project would result in no impact.

Zuma Beach and Manhattan Beach

There are sites included on the State of California Hazardous Waste and Substances list compiled pursuant to Government Code Section 65962.5 (Envirostor Database, accessed January 14, 2025) within 0.25 mile of the Zuma Beach and Manhattan Beach receiver site locations (see Table 3-8). The construction activities that would occur on these sites would be limited to the transport, placement, and movement of sand. No digging, excavating, or dredging would take place. Thus, the proximity of these sites to the hazardous materials sites listed below would not create a significant hazard to the public or environment. Therefore, the proposed project would result in a less than significant impact.

Table 3-8 Hazardous Waste Sites Near Receiver Sites

Receiver Site	Site Number	Site Type	Site Name	Status
Zuma Beach	19820092	School Cleanup	Malibu High School Project	Certified O&M - Land Use Restriction Only
Manhattan Beach	80000311	Military Evaluation	Manhattan BC Railway	Inactive – Needs Evaluation

Source: Envirostor Database, 2025

e. Less Than Significant Impact.

Zuma Beach, Manhattan Beach, Will Rogers Beach, and Redondo Beach

The receiver sites are not located within an airport land use plan or within 2 miles of a public airport or public use airport. The activities associated with the proposed project would not produce infrastructure that could cause aircraft-related safety hazards due to height, reflective materials, or other hazardous features. Thus, the proposed project would result in no impact.

Dockweiler Beach

Dockweiler Beach is located at the western perimeter of the 65 CNEL Contour of the Land Use Plan area for Los Angeles International Airport (LAX) (Los Angeles Department of Regional Planning, 2004). The activities associated with the proposed project would not produce infrastructure that could cause aircraft-related safety hazards due to height, reflective materials, or other hazardous features. However, construction activities would need to comply with Federal Aviation Administration (FAA) requirements, including filing FAA Form 7460-1, "Notice of Proposed Construction or Alteration" and attaching a red flag on top of the tallest construction equipment. The presence of trucks and construction with earthmoving equipment may increase noise in the area, but the noise would be consistent with standard construction activities and would also be short-term and temporary. Therefore, the proposed project would result in a less than significant impact.

f. No Impact.

All Beaches

Construction activities under the proposed project would require the transport of materials from source and stockpile sites to the beach receiver sites. It is anticipated that the maximum number of truck trips for any given site would be 6 trips per hour, which is likely higher than what would most likely take place given the amount of sand available at any given time at a specific location. This conservative estimate of truck traffic would not create substantial traffic during construction and therefore would not interfere with adopted emergency response plans or evacuation plans. Activities conducted under the proposed project would operate in accordance with traffic control and emergency protocols adopted by state, county, and local

governments, including the requirements from the LA County Department of Public Works (LACDPW, 2016). Thus, the proposed project would result in no impact.

g. Less than Significant Impact.

All Beaches

While fire hazard risks associated with construction equipment used for implementation of the proposed project are not anticipated, the risk is not zero. Most of the receiver site locations are damp, rocky, and sandy beaches that are less susceptible to fire risk. However, some sites are located adjacent to wildlands that may be more susceptible to wildfire in the event that the construction equipment does accidentally spark a fire. All proposed project activities would require compliance with federal, state, and local regulations and policies to minimize risk and spread of fires sparked by construction activities.

As a standard construction procedure, construction equipment would have fire suppression equipment at the worksite. A fire extinguisher should be available in every 3,000 square feet of construction area, no more than 100 feet away from heavy equipment. Heavy equipment operators would attend a training session on appropriate responses to fire suppression during the pre-construction meeting.

These requirements have been added as Project Design Features and are included in Attachment B. The proposed project would not introduce new structures that would create new fire hazards. Therefore, a less than significant impact related to wildfires would result.

10. Hydrology and Water Quality				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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; or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less than Significant with Mitigation Incorporated.

All Beaches

Proposed project activities at the beach receiver sites would occur, at a minimum across 12 acres for a single SCoup event, up to 434 acres for multiple SCoup events, as shown in Table 2-1, in Chapter 2. Proposed project activities could result in erosion due to earth-moving activities such as stockpiling and sand placement. Sand on beaches is subject to erosion from wind and waves. Placement of sand during proposed project activities has the potential to increase the potential for erosion at beach receiver sites. Proposed project equipment used during proposed project activities has the potential to introduce pollutants such as oil and fuel to sands in the event of a leak or a spill.

Proposed project activities would be required to be carried out in compliance with the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction Stormwater General Permit), adopted by the State Water Resources Control Board. The Construction Stormwater General Permit requires preparation and implementation of a stormwater pollution prevention plan (SWPPP), which requires implementation of best management practices (BMP) to control stormwater runoff from work sites. These BMPs include, but would not be limited to, erosion control BMPs and sediment control BMPs designed to minimize erosion and retain sediment on site and good housekeeping BMPs to prevent spills, leaks, and off-site discharge of debris and waste. In addition, local erosion control requirements would further minimize the potential for erosion and spills to affect water quality in the Pacific Ocean. For example, project personnel at the Zuma Beach receiver site would be prohibited to stockpile materials on the beach, must implement erosion control at the end of each workday, and must remove debris from the beach in accordance with Section 4.26 of the City of Malibu Municipal Code. Proposed project activities at the Will Rogers State Beach and Dockweiler State Beach receiver sites would also be required to adhere to these erosion control measures in accordance with Section 22.44.2180 of the Los Angeles County Code.

The required implementation of BMPs consistent with the Construction Stormwater General Permit and local regulations would effectively minimize the potential for on-site erosion; however, given the proximity of proposed project activities to the Pacific Ocean, spills from proposed project equipment could potentially enter the Pacific Ocean and adversely affect water quality. This impact would be potentially significant, and mitigation is required.

At the beach and in areas of active flow (e.g., near ephemeral drainage culvert outlets), natural water turbidity is common 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). However, the introduction of sediment at the receiver sites during sand placement activities could potentially result in temporary adverse effects to water quality of the Pacific Ocean associated with changes in turbidity, pH, and dissolved oxygen. As described in Chapter 2, Environmental Setting and Project Description, the proposed maximum volume placed at any one SCoup site each year is 150,000 cy with a fines content¹¹ of 15 percent or less and 50,000 cy for material with a fines content between 16 to 25 percent. This is consistent with the recommendation provided in the Final Sand Compatibility and Opportunistic Use Program Plan adopted by the California Coastal Sediment Management Workgroup and intended to reduce changes in water quality. In addition, as described in Chapter 2, Environmental Setting and Project Description, the source sand would be substantially free of chemical and biological contamination, trash, and organic material such as tree limbs, and would be subject to approval from USACE in accordance with the standards of the Inland Testing Manual (USACE 1998). However, given the proximity of proposed project activities to the Pacific Ocean, the

¹¹ Fines content refers to the proportion of soil particles that are smaller than 0.075 millimeters.

introduction of sediment could result in temporary adverse changes to the water quality of the Pacific Ocean. Therefore, this impact would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-2 and BIO-7 would reduce impacts water quality to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

b. No Impact.

All Beaches

The Zuma Beach receiver site does not overlie a groundwater basin. The Will Rogers State Beach receiver site overlies the Coastal Plain of Los Angeles – Santa Monica groundwater basin. The Dockweiler State Beach, Manhattan Beach, and Redondo Beach receiver sites overlie the Coastal Plain of Los Angeles – West Coast groundwater basin (California Department of Water Resources [DWR] 2025).

Proposed project activities would not add impervious surfaces to the beach receiver sites or include components with the potential to interfere with groundwater recharge. The proposed project does not require groundwater extraction and would not otherwise use groundwater for proposed project activities. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. No impact would occur.

c.i. Less than Significant Impact.

All Beaches

As described in (a.) above, project activities could result in the alteration of existing drainage patterns and erosion due to earth-moving activities such as stockpiling and sand placement. During sand placement activities, disturbed sand within the vicinity of the beach receiver sites would be susceptible to erosion from wind and waves, resulting in sediment transport from the beach receiver sites. However, project activities would be required to comply with the Construction Stormwater General Permit and local municipal code requirements which require preparation and implementation of a SWPPP and implementation of erosion control BMPs and sediment control BMPs designed to minimize erosion and retain sediment on site. Compliance with the Construction Stormwater General Permit, local erosion control requirements, as well as implementation of the required SWPPP and BMPs would minimize the potential for project activities to result in substantial erosion during sand placement activities. Once sand placement is complete, the beach receiver sites would be less susceptible to the effects of coastal erosion than under existing conditions. Therefore, the project would have a less than significant impact related to substantial erosion or siltation due to alterations in existing draining patterns.

c.ii. Less than Significant Impact.

All Beaches

The proposed project would not introduce impervious surfaces that would increase the rate of flooding on- or off-site. While proposed project activities may result in the alteration of existing drainage patterns at the beach receiver sites, these proposed project activities would ultimately result in increased coastal resiliency to reduce increases in coastal flooding. As described in Chapter 2, Environmental Setting and Project Description, the proposed project would source sediment for proposed project activities from various sources, including County-owned reservoirs and debris basins, Rindge Dam, local watercourses, harbor maintenance dredging, transportation projects, landslide material, and upland development and redevelopment projects. These sediment sources are independent of the project and the project does not involve ground disturbing activities at any of these sediment source sites and would not involve ground disturbances at the receiver sites. Accordingly, the proposed project would not alter the drainage patterns or add impervious surfaces to any of these sites where sediment is sourced. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner which would

substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. This impact would be less than significant.

c.iii. Less than Significant with Mitigation Incorporated.

All Beaches

As described in (a.) above, proposed project activities could result in the alteration of existing drainage patterns due to earth-moving activities. Similar to existing conditions, runoff from any alternations in drainage patterns would flow to the Pacific Ocean rather than to a stormwater drainage system. However, the use of proposed project activity equipment could result in spills that could potentially enter the Pacific Ocean and adversely affect water quality. In addition, sand placement activities at the beach receiver sites could result in temporary adverse changes to the water quality of the Pacific Ocean. Therefore, the proposed project could result in substantial additional sources of polluted runoff. This impact would be potentially significant, and mitigation is required.

Implementation of Mitigation Measures BIO-2 and BIO-7 would reduce the impacts of runoff to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

c.iv. Less than Significant Impact.

All Beaches

As described in (c.ii.) above, the proposed project would source sediment for proposed project activities from various sources. These sources are independent of the proposed project and the proposed project does not involve ground disturbing activities at any of these sites. Therefore, the proposed project would not result in impeded or redirected flood flows at source sites.

According to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the beach receiver sites are designated as Zone VE, meaning a coastal area with a one percent or greater chance of flooding and an additional hazard associated with storm waves (FEMA 2025). As described in (a.) above, proposed project activities could result in the alteration of existing drainage patterns due to earth-moving activities. However, the purpose of the proposed project is to achieve coastal resiliency at receiver sites deemed to be at-risk for coastal erosion and flooding vulnerabilities. With the proposed project, flood flows at the beach receiver sites would continue to travel to the Pacific Ocean, similar to existing conditions. Therefore, the proposed project would not result in substantial alteration of existing drainage patterns in a manner which would impede or redirect flood flows. This impact would be less than significant.

d. Less than Significant Impact.

All Beaches

Seiches are a related hazard that can occur when a sudden displacement event (i.e., earthquake) or very strong winds occur in an enclosed or semi-enclosed body of water, such as a lake or reservoir. There are no lakes or reservoirs proximate to the beach receiver sites and therefore the beach receiver sites are not subject to seiche. As described in (c.iv.) above, the beach receiver sites are located in Zone VE (FEMA 2025). In addition, the beach receiver sites are located in a tsunami hazard area as designated by the California Department of Conservation (California Department of Conservation 2025).

The purpose of the proposed project is to achieve coastal resiliency at sites deemed to be at-risk for coastal erosion and flooding vulnerabilities. The proposed project would ensure the potential for storm waves to flood coastal communities is minimized. In addition, as described in Chapter 2, Environmental Setting and Project Description, the source sand would be substantially free of chemical and biological contamination, trash, and organic material such as tree limbs, and would be subject to approval from USACE in accordance with the standards of the Inland Testing Manual (USACE 1998). In the event of a tsunami alert during sand

placement activities, proposed project personnel and equipment would be evacuated which would ensure pollutants would not be released into the Pacific Ocean. Once proposed project activities are completed, the proposed project would not introduce pollutants that could be released in the event of a flood event or tsunami.

Therefore, the proposed project would not risk the release of pollutants due to project inundation in a flood hazard or tsunami hazard zone. This impact would be less than significant.

e. Less than Significant with Mitigation Incorporated.

All Beaches

Sand placement activities would discharge to the Pacific Ocean, and therefore the Ocean Plan is the applicable water quality control plan for the beach receiver sites (State Water Resources Control Board 2019). This plan enforces statewide objectives within the Ocean Plan. As described in (a.) above, the use of proposed project equipment may result in spills that could potentially enter the Pacific Ocean and adversely affect water quality. In addition, sand placement activities may result in adverse changes to the water quality of the Pacific Ocean which would conflict with the objectives of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Therefore, proposed activities would be potentially significant, and mitigation is required. Implementation of Mitigation Measures BIO-2 and BIO-7 would reduce impacts to a less than significant level. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

As described in (b.) above, the Zuma Beach receiver site does not overlie a groundwater basin. The Will Rogers State Beach receiver site overlies the Coastal Plain of Los Angeles – Santa Monica groundwater basin. The Dockweiler State Beach, Manhattan Beach, and Redondo Beach receiver sites overlie the Coastal Plain of Los Angeles – West Coast groundwater basin (DWR 2025). DWR considers the Coastal Plain of Los Angeles – West Coast groundwater basin a very-low priority basin, meaning no sustainable groundwater management plan is required to manage groundwater in this basin. DWR considers the Coastal Plain of Los Angeles – Santa Monica groundwater basin to be a medium priority groundwater basin, and groundwater in this basin is managed by the Santa Monica Basin Groundwater Sustainability Agency through implementation of the Groundwater Sustainability Plan for the Santa Monica Groundwater Subbasin (DWR 2025; Santa Monica Basin Groundwater Sustainability Agency 2022). As described in (b.) above, proposed project activities would not add impervious surfaces to the beach receiver sites or include components with the potential to interfere with groundwater recharge. The proposed project does not require groundwater extraction and would not otherwise use groundwater for proposed project activities. Therefore, the proposed project has no potential to conflict with or obstruct implementation of the Groundwater Sustainability Plan for the Santa Monica Groundwater Subbasin. No impact would occur.

11. Land Use and Planning				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a - b. No Impact.

All Beaches

The proposed project sites are public beaches that would receive a direct positive benefit from the increased beach width from sand placement. The proposed project would not disrupt or divide the physical arrangement of any surrounding communities. The proposed project sites would continue to remain compatible with the surrounding beach uses. Implementation of the proposed project would be consistent with all applicable land use plans and regulations including those that govern Santa Monica Bay and the Pacific Ocean. Therefore, no impact would occur.

12. Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion**a - b. No Impact.****All Beaches**

The California Department of Conservation's Division of Mines and Geology does not identify the proposed project sites as areas with high potential for aggregate or mineral resources. As a result, implementation of the proposed project would not result in the loss of availability of a regionally or locally known mineral resource; therefore, no impacts would occur.

13. Noise				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generation of 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. 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, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the findings contained within the *Noise Technical Report (Noise Study)* (RCH Group, 2025c) prepared for the proposed project (see Appendix E).

Setting

Noise Descriptors

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound pressure level has become the most common descriptor used to characterize the “loudness” of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Decibels are measured using different scales, and it has been found that A-weighting of sound levels best reflects the human ear’s reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. All references to dB in this report will be A-weighted unless noted otherwise.

Several time-averaged scales represent noise environments and consequences of human activities. The most used noise descriptors are the equivalent A-weighted sound level over a given time period (Leq)¹²; average day-night 24-hour average sound level (Ldn)¹³ with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL)¹⁴, also a 24-hour average that includes both an evening and a nighttime sensitivity weighting.

¹² The Equivalent Sound Level (Leq) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.

¹³ Ldn is the day-night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

¹⁴ CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10-decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

Noise Attenuation

Stationary point sources of noise, including construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, would increase the attenuation that occurs by distance alone. Noise from large construction sites would have characteristics of both “point” and “line” sources, so attenuation would likely range between 4.5 and 7.5 dB per doubling of distance.

Regulatory Framework

The five beaches included in the proposed project are Zuma Beach (City of Malibu), Will Rogers State Beach (City of Los Angeles), Dockweiler State Beach (City of Los Angeles), Manhattan Beach (City of Manhattan Beach), and Redondo Beach (City of Redondo Beach).

City of Malibu General Plan Noise Element

The City of Malibu General Plan Noise Element aims to provide guidance for comprehensive local programs to control and abate excessive noise and to protect residents from adverse noise impacts. The element provides information on the existing and projected noise environment and includes goals, objectives, policies and implementation programs to ensure an acceptable noise environment. The element also identifies criteria to be used by decision makers in evaluating the noise implications of proposed projects (City of Malibu, 1993). The Noise Element states that the dominant noise source in Malibu is roadway traffic noise from Pacific Coast Highway.

City of Malibu Municipal Code

The City of Malibu’s Noise Ordinance (Chapter 8.24) controls unnecessary, excessive and annoying noise and vibration in Malibu. The following regulations are relevant to the proposed project:

Per Section 112.05, operating or causing the operation of any tools, equipment, impact devices, derricks or hoists used in construction, chilling, repair, alteration, demolition or earthwork, on weekdays between the hours of seven p.m. and seven a.m., before eight a.m. or after five p.m. on Saturday, or at any time on Sundays or holidays, is prohibited.

City of Los Angeles General Plan Noise Element

The City of Los Angeles General Plan Noise Element addresses noise mitigation regulations, strategies and programs and delineates federal, state, and city jurisdiction relative to rail, automotive, aircraft and nuisance noise (City of Los Angeles, 1999). Exhibit B, Los Angeles International Airport Noise Exposure Contour, shows that Dockweiler Beach is within the 65 dB, CNEL noise contour.

City of Los Angeles Municipal Code

The City of Los Angeles Municipal Code prohibits unnecessary, excessive and annoying noises from all sources. The following regulations are relevant to the proposed project:

Per Section 41.40(a), No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power driven drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivery of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

The City of Los Angeles Department of Building and Safety's (DBS) Website provides the current permitted construction and demolition hours¹⁵. The DBS states that in consideration to residents, all major construction/demolition must be performed within a span of permitted hours that are listed as follows:

- Monday – Friday: 7:00 a.m. to 9:00 p.m. (consistent with Section 41.40(a))
- Saturdays and National Holidays: 8:00 a.m. to 6:00 p.m.
- Sundays: No work permitted.

Per Section 112.05, between the hours of 7:00 a.m. and 10:00 p.m., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

- a. 75dB(A) for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;
- b. 75dB(A) for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;
- c. 65dB(A) for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors;

The noise limits for particular equipment listed above in (a), (b) and (c) shall be deemed to be superseded and replaced by noise limits for such equipment from and after their establishment by final regulations adopted by the Federal Environmental Protection Agency and published in the Federal Register.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.

City of Redondo Beach Municipal Code

The City of Redondo Beach Noise Ordinance (Chapter 24) provides the adopted hours of construction. The following regulations are relevant to the proposed project:

Per Section 4-24.503, all construction activity shall be prohibited, except between hours of 7:00 a.m. and 6:00 p.m. on Monday, Tuesday, Wednesday, Thursday, and Friday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday. No construction activity shall be permitted on Sunday, or the days on which the holidays designated as Memorial Day, the Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day are observed.

City of Manhattan Beach General Plan Noise Element

The City of Malibu General Plan Noise Element strives to substantially reduce noise and its impacts within the urban environment, with a focus on protecting residential neighborhoods, schools, and similar noise-sensitive uses (City of Manhattan Beach, 2003). The Noise Element states that in Manhattan Beach, vehicular traffic represents the primary noise source.

¹⁵ <https://www.ladbs.org/services/core-services/inspection/inspection-special-assistance/permitted-construction-demolition-hours>

City of Manhattan Beach Municipal Code

The City of Manhattan Beach Municipal Code provides the adopted hours of construction. The following regulations are relevant to the proposed project:

Per Section 9.44.030 (A), construction activity shall only occur between 7:30 a.m. and 6:00 p.m. on weekdays, and between 9:00 a.m. to 6:00 p.m. on Saturdays. (B) There shall be no construction on Sundays or on City-recognized holidays.

Environmental Setting

Baseline Noise Levels

As stated in the *Noise Study* (RCH Group, 2024), to quantify existing ambient noise levels, RCH Group conducted ten short-term (15-minute) noise measurements which included two measurements at each beach. Short-term measurements were made using a Larson Davis SoundTrack LxT Sound Level Meter calibrated before and after the measurements. The existing noise environment at each beach is mostly characterized by vehicle and aircraft noise, and people using the beach for recreation. Zuma beach noise levels ranged between 64 to 75 dB Leq, Will Rogers State Beach ranged between 66 to 79 dB Leq, Dockweiler Beach ranged between 65 to 74 dB Leq, Redondo Beach ranged between 61 to 68 dB Leq, and Manhattan Beach ranged between 57 to 63 dB Leq (RCH Group, 2024). See the *Noise Study* for more details including noise measurement location figures and short-term noise measurement data.

Sensitive Land Uses

Some land uses are considered more sensitive to ambient noise levels than others due to the amount of noise exposure, in terms of both duration and insulation from noise, and the types of activities typically involved. Residences, hospitals, schools, and nursing homes are generally more sensitive to noise than commercial and industrial land uses. This noise analysis considers noise-sensitive land uses as residences, motels, hotels, schools, churches, libraries, and hospitals. The nearest noise-sensitive receptors to each beach site are as follows:

- **Zuma Beach (City of Malibu):** Residences are located as close as approximately 260 feet north of the nearest beach fill areas. Malibu Methodist Nursery School & Infant Center is located approximately 800 feet north from the nearest beach fill area. Malibu High School is located approximately 1,340 feet north of the nearest beach fill area.
- **Will Rogers State Beach (City of Los Angeles):** Residences are located as close as approximately 360 feet north of the nearest beach fill area.
- **Dockweiler State Beach (City of Los Angeles):** There are no noise-sensitive receptors nearby (within 1,000 feet).
- **Redondo Beach (City of Redondo Beach):** Residences are located as close as approximately 115 feet east of the nearest beach fill area.
- **Manhattan Beach (City of Manhattan Beach):** Residences are located as close as approximately 100 feet east of the nearest beach fill area.

Discussion

a. Less Than Significant Impact

Construction Noise Impacts

Project construction activities are opportunistic and may be conducted year-round. For each beach site, it is assumed approximately 5 months of construction (Monday through Friday only) could occur in a given year.

Construction would consist of sediment being delivered to each respective beach site by truck, dumped into a pile, and then transported to the placement site by earthmoving equipment (i.e., bulldozers, loaders, and scrapers). The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, and the condition of the equipment. Table 3-9, provides the noise levels at 50, 100, 200 and 400 feet for expected construction equipment.

Table 3-9 Construction Equipment Noise Levels¹⁶

Construction Equipment	Lmax at 50 feet	Lmax at 100 feet	Lmax at 200 feet	Lmax at 400 feet
Dozer	82	76	70	64
Dump Truck	76	70	64	58
Loader	79	73	67	61
Scraper	84	78	72	66
Sweeper	82	76	70	64

Source: Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide, 2006.

Zuma Beach

Construction on Zuma Beach could occur as close as 260 feet away from the nearest residences. At this distance, construction equipment noise would attenuate to approximately 62-70 dB, Lmax when construction is occurring at beach fill areas that are closest to the nearest residences. However, the majority of construction at beach fill areas would occur at distances far greater than 260 feet away. Furthermore, Highway 1 is a major source of noise at Zuma Beach (constant traffic noise was 70-95 dB, Lmax during noise measurements, see *Noise Study*). This constant traffic noise from Highway 1 would mask any construction noise reaching the nearest residences and any minor increases in temporary construction noise would likely be imperceptible at the nearest residences. Construction would comply with the adopted hours of construction in Malibu (7:00 a.m. to 7:00 p.m. on weekdays or 8:00 a.m. to 5:00 p.m. on Saturdays). Therefore, construction noise at Zuma Beach in the City of Malibu would result in a less-than-significant impact.

Will Rogers State Beach

Construction occurring at Will Rogers State Beach is within the City of Los Angeles. There are several residences located as close as approximately 360 feet north of the nearest beach fill areas at Will Rogers State Beach. At this distance, construction equipment noise would attenuate to approximately 59-67 dB, Lmax when construction is occurring at beach fill areas that are closest to the nearest residences.

Per Section 112.05 of the City of Los Angeles Municipal Code, between the hours of 7:00 a.m. and 10:00 p.m., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

- 75dB(A) for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment.

Based on the current site plans, there are some beach fill areas at Will Rogers State beach that would be within 500 feet of a residential zone in the City. However, the majority of the beach fill areas would be located

¹⁶ An attenuation rate of 6.0 per doubling distance was used to convert the FHWA noise levels at 50 feet to the noise levels at 100, 200, and 400 feet.

farther away than 500 feet from a residential zone. As shown in Table 3-9, all of the proposed construction equipment would exceed 75 dB(A) at a distance of 50 feet¹⁷.

Per Section 112.05, these noise limitations shall not apply where compliance therewith is technically infeasible. Given the nature of the proposed project, the listed construction equipment is required for the restoration of the shoreline at Will Rogers State Beach and use of alternative equipment would not be feasible to perform the work required for shoreline restoration.

As discussed above, construction noise is estimated to attenuate to approximately 59-67 dB, Lmax at the nearest residences. Traffic noise from Highway 1 is a major source of noise nearby Will Rogers State Beach (constant traffic noise was 70-90 dB, Lmax during noise measurements, see *Noise Study*). This existing traffic noise would mask any construction noise reaching the nearest residences and any minor increases in temporary construction noise would likely be imperceptible at the nearest residences. In addition to the traffic noise masking construction noise, the majority of nearby residential neighborhoods are located atop hills and the intervening topography would significantly attenuate construction noise reaching these residential areas. Further, construction would comply with the permitted hours of construction in Los Angeles (7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on Saturdays and National Holidays). Therefore, construction noise at Will Rogers State Beach in the City of Los Angeles would result in a less-than-significant impact.

Manhattan Beach

Construction occurring on Manhattan Beach in the City of Manhattan Beach could occur as close as 100 feet from the nearest residences. At this distance, construction equipment noise would attenuate to approximately 70-78 dB, Lmax when construction is occurring at beach fill areas that are closest to the nearest residences. However, the majority of construction would occur at distances far greater than 100 feet. Construction would result in a temporary increase above current ambient noise (existing noise levels ranged from 57 to 63 dB Leq, see *Noise Study*). Construction would comply with the adopted hours of construction in the City of Manhattan Beach (7:30 a.m. to 6:00 p.m. on weekdays or 9:00 a.m. to 6:00 p.m. on Saturdays). Therefore, construction noise in the City of Manhattan Beach would result in a less-than-significant impact.

Dockweiler Beach

Construction occurring at Dockweiler Beach is within the City of Los Angeles. There are no nearby sensitive receptors to the work occurring at Dockweiler Beach. Construction would comply with the permitted hours of construction in Los Angeles (7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on Saturdays and National Holidays). Therefore, construction noise at Dockweiler Beach in the City of Los Angeles would result in a less-than-significant impact.

Redondo Beach

Construction occurring on Redondo Beach in the City of Redondo Beach could occur as close as 115 feet away from the nearest residences. At this distance, construction equipment noise would attenuate to approximately 69-77 dB, Lmax when construction is occurring at beach fill areas that are closest to the nearest residential neighborhoods. However, the majority of construction would occur at distances far greater than 115 feet from residences. Construction would result in a temporary increase above current ambient noise (existing noise levels ranged between 61 to 68 dB Leq, see *Noise Study*). Construction would comply with the adopted hours of construction in the City of Redondo Beach (7:00 a.m. to 6:00 p.m. on weekdays or 9:00 a.m. to 5:00 p.m. on Saturdays). Therefore, construction noise at Redondo Beach in the City of Redondo Beach would result in a less-than-significant impact.

¹⁷ These reference noise levels are listed in the FHWA's Roadway Construction Noise Model User's Guide and present the typical noise levels that can be expected for the listed equipment in Table 3-9. Currently, the specific model of each piece of equipment is unknown, however it is assumed that each piece of equipment would be properly maintained and in accordance with manufacturer's recommendations.

Operational Noise Impacts

All Beaches

Once construction at each beach site is complete, there would be no increase in permanent operational noise. Operations would not create a change in traffic patterns or beach usage that would result in a permanent, perceptible increase in noise levels at the nearest noise-sensitive receptors. Therefore, the proposed project would result in a less-than-significant impact.

b. Less Than Significant Impact.

All Beaches

Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. At the highest levels of vibration, damage to structures is primarily architectural and rarely results in any structural damage. A peak particle velocity (ppv) threshold of 0.5 inches per second or less is sufficient to avoid structural damage (Caltrans, 2013). Project construction would utilize the equipment listed in Table 3-9. This equipment does not produce significant sources of vibration. Vibrational effects from typical construction activities are only a concern within 25 feet of existing structures (Caltrans, 2002). Construction would not occur within 25 feet of an existing off-site structure. Therefore, the proposed project would result in a less-than-significant impact.

c. Less Than Significant Impact.

All Beaches

Aircraft noise from the Los Angeles International Airport (LAX) was the major source of noise at Dockweiler Beach (aircraft noise ranged from 78-89 dB, Lmax, see *Noise Study*). Although some beach sites are subject to existing aircraft noise within 2 miles of each site, implementation of the proposed project would not exacerbate existing airport noise that would expose people residing or working at the project sites to excessive noise levels. Therefore, the proposed project would result in a less-than-significant impact.

14. Population and Housing				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion**a - b. No Impact.****All Beaches**

The proposed project would consist of beach sand transportation and placement at each of the proposed project sites and would not result in development of new infrastructure (i.e., new homes or extension of roads). Thus, the proposed project would not induce population growth or displace people or housing. Therefore, no impacts would occur to population and housing.

15. Public Services				
Would the project	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. 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:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a.i. – a.v. No Impact.

All Beaches

The proposed project would not result in an increased demand for police or fire protection services that would affect response times or other performance objectives. The proposed project would not place any additional demand on schools or other public facilities or result in a need for new public facilities. The proposed project sites would result in a public benefit for people using the beaches for recreation purposes. Therefore, no impact on public services would occur.

16. Recreation				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. No Impact.

All Beaches

The proposed project would not cause an increase in the use of existing neighborhood and regional parks, as it is not a development project. During construction of the project, the active construction areas of the placement sites would be closed, creating a temporary minor adverse impact on the availability of existing recreational beach opportunities during the construction phase. Temporary closures of the beach working area would occur during construction, but several miles of other beaches would be available for public use. The receiver beaches are all currently used for various recreational activities including fishing, swimming, diving, surfing, and sunbathing. Once the receiver sites have been replenished, recreational activities would resume. The replenished beaches would have beneficial effects by creating additional beach area and maintaining recreational beach areas without causing physical deterioration of existing facilities.

b. No Impact.

The proposed project would not include new development or require construction or expansion of existing recreational facilities and, therefore, would not have an adverse physical effect on the environment. It would increase the beach area, which may lead to beneficial effects.

17. Transportation/Traffic				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. No Impact.

All Beaches

Nourishment activities conducted under the proposed project would include the transportation of sand from stockpile sites and source sites to receiver beach sites. Trucks and construction equipment used for placing sand on the beaches would use specified haul routes that are along existing heavily trafficked roadways and staging areas to store equipment when not in use. Small increases in traffic volumes during construction may occur near the project sites but would be temporary and short-term. All construction conducted under the purview of the proposed project would adhere to state and local plans, ordinances, and policies, including the development of a traffic control plan where necessary to address transit, bicycle, and pedestrian facilities. Therefore, the proposed project would result in no impact.

b. No Impact.

All Beaches

The maximum number truck trips for any receiver beach associated with the proposed project would be 10,714 per year, which equates to 72 per day (see Table 2-4). Thus, project generated average daily trips would not exceed 83 per day (72 dump trucks, one fuel truck, and 10 passenger cars for construction personnel), which is an overly conservative estimate. These trips would be short-term and temporary, occurring only when opportunistic sand that meets the Program criteria is available and until maximum fill quantities have been met.

The Vehicle Miles Traveled (VMT) analysis was conducted by first calculating the anticipated total VMT per day/per site (Table 3-10). Then the cumulative VMT for each Service Population region was calculated by multiplying the total VMT per day/per site with the number of SCoup locations in the service area (Table 3-11). The cumulative VMT was then divided by the service area population for the respective locations.

As shown in Table 3-11, the proposed project is well below the 31.1 VMT per SPAP threshold set by the LA County Department of Public Works (LA County Department of Public Works, 2020), with a VMT per SPAP of 0.019 for Zuma and Will Rogers Beach locations and 0.012 for Dockweiler, Manhattan, and Redondo Beaches. The proposed project would result in no impact and would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Table 3-10 VMT Per Day Per Site

Vehicle Type	Average Daily Vehicle Trips	Vehicle Trip Length	VMT
Passenger Vehicles	10	37	370
Heavy Duty Haul Trucks	72	80	5,760
Fuel Trucks	1	20.4	20.4
Total	83		6,150.4

Table 3-11 Project Total VMT per Service Planning Area Population¹⁸

Vehicle Type	VMT	Service Planning Area Population (SPAP)	VMT per SPAP
SPA 5 <ul style="list-style-type: none"> • Zuma Beach • Will Rogers Beach 	12,300.8	648,902	0.019
SPA 8 <ul style="list-style-type: none"> • Dockweiler Beach • Manhattan Beach • Redondo Beach 	18,451.2	1,513,402	0.012
LA County Threshold for VMT per Service Population (South County)¹⁹			31.1

c. No Impact.

All Beaches

The presence of trucks and construction equipment may result in a temporary increase in vehicles along haul routes and beaches during construction due to the proximity of people and equipment. As previously described, all contractors operating under the purview of the proposed project would be required to develop a traffic control plan that includes measures, such as the presence of flagmen on certain haul routes as needed to reduce the risk of safety conflicts between construction activities and the public. Because of the short-term, temporary nature of the construction and the required implementation of traffic control plans, the proposed project would result in no impact.

¹⁸ Los Angeles Service Planning Areas: Service Planning Areas (SPAs) for Los Angeles County, California. Accessed January 24, 2025, available at <https://www.laalmanac.com/health/he798.php>

¹⁹ Los Angeles County Public Works. 2020. Transportation Impact Analysis Guidelines. Available at <https://www.dpw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf>

d. Less than Significant Impact.

All Beaches

All activities conducted under the proposed project would be in compliance with state and local regulations, policies, plans, and ordinances regarding public emergency access. Contractors responsible for construction activities would be required to develop traffic control plans that include measures to identify and address emergency access during construction. Thus, the proposed project would result in a less than significant impact.

18. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, 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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on AB 52 consultation conducted by the County with California Native American Tribes identified by the Native American Heritage Commission (NAHC, August 14, 2024). AB 52 consultation documentation is included in a confidential Appendix on file with the Lead Agency.

Discussion**a.-b. No Impact.****All Beaches***Background*

California Assembly Bill 52 (AB 52) expanded CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Sections 21074(a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and are:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding tribal cultural resources. The consultation process must be completed before a CEQA document can be adopted or certified. Under AB 52, lead agencies are required to begin consultation with California Native American tribes that are “traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Tribal Cultural Impacts

The Native American Heritage Commission (NAHC) was contacted on August 2, 2024, to request a search of the Sacred Lands File (SLF) and a contact list of Native Americans culturally affiliated with the vicinity of the five proposed receiving sites. The NAHC replied on August 14, 2024, stating the results of the SLF search were positive for sacred lands that have been previously identified in the vicinity of the proposed receiving sites. The SLF record is maintained at a public land survey system Section level, meaning the positive result is respective of a general area covering approximately one-square mile (640 acres) and does not specify which of the five receiving sites were positive. Additionally, within the correspondence, the NAHC requested that the Gabrielino Tongva Indians of California Tribal Council be contacted for further information.

On August 15, 2024, Christina Conley, Tribal Cultural Resource Administrator of the Gabrielino Tongva Indians of California Tribal Council, sent an email to the LACDBH indicating that she had been informed by the NAHC that an SLF had been requested for a project that was subsequently positive. In her correspondence, Ms. Conley requested consultation.

The proposed project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process and requires the lead agency to provide notification of the project to any California Native American tribes who are traditionally or culturally affiliated with the geographic area of the project and who previously requested by the agency that they be notified. As the CEQA lead agency, the Los Angeles County Department of Beaches and Harbors (LACDBH) conducted AB 52 consultation in compliance with the requirements. The LACDBH sent AB 52 notification letters for the proposed receiving sites, including project information, an invitation to consult on the proposed project, an outline of the statutory AB 52 schedule requirements, contact information for the appropriate lead agency representative, and project location maps, via postal mailing on February 28, 2025, to the following Native American Tribes included on the LACDBH’s AB 52 Tribal Consultation List: the Gabrielino Tongva Indians of California Tribal Council, the Gabrielino/Tongva San Gabriel Band of Mission Indians, and the Gabrieleño Band of Mission Indians - Kizh Nation.

Follow-up emails were sent by LACDBH to each of the three Tribal groups on March 5, 2025 inquiring about whether the notification letters had been received. To this follow up, LACDBH received one response from the Gabrielino Tongva Indians of California Tribal Council. On March 18, 2025, Ms. Conley responded to the LACDBH via email acknowledging receipt of the notification letter. Within the same correspondence, Ms. Conley inquired about vehicular travel and whether existing/traditional access routes would be utilized. On March 20, 2025, the LACDBH followed up with Ms. Conley via email and provided project location maps that depicted the various access points within the proposed receiving sites. The LACDBH also relayed to Ms. Conley that the vehicles would only be operated within areas typically used by facility staff and would maintain a five-foot buffer from any existing standing structures or features within the proposed receiving sites. The correspondence between Ms. Conley from the Gabrielino Tongva Indians of California Tribal Council and the LACDBH between March 18, 2025, and March 20, 2025, did not result in the identification of tribal cultural resources within any of the proposed receiving sites.

The LACDBH did not receive requests for tribal consultation from any of the other notified tribes within their respective 30-day response periods. Native American tribes wishing to participate in AB 52 consultation are required to have responded by March 28, 2025; therefore, it is assumed the invitation to consult on the proposed project was declined by the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Gabrieleño Band of Mission Indians - Kizh Nation. The response received from the Gabrielino Tongva Indians of California Tribal Council is summarized below.

On April 2, 2025, a conclusion letter was emailed to each of the three notified tribal groups including the Gabrielino Tongva Indians of California Tribal Council, the Gabrielino/Tongva San Gabriel Band of Mission Indians, and the Gabrieleño Band of Mission Indians - Kizh Nation; no responses to that correspondence have been received.

Although the NAHC indicated a positive finding for sacred lands in the general vicinity of the proposed receiving sites, no particular information was provided by the NAHC concerning the nature of the resource nor were any potential tribal cultural resources identified as a result of AB 52 consultation efforts carried out by the LACDBH. One of the three tribal groups contacted requested additional information concerning access and the use of existing travel routes in the placement of sand which the County responded to with additional route information. No additional questions, concerns, or specific resource issues were raised as a result of consultations.

No tribal cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources, or those determined by the lead agency in its discretion and supported by substantial evidence to be significant, were identified as a result of LACDBH's consultation efforts. Therefore, the proposed project would not result in a substantial adverse change in the significance of a tribal cultural resource under CEQA, and no impact would occur.

19. Utilities and Service Systems				
Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion**a. – e. No Impact.****All Beaches**

The proposed project would not result in development that would require new or expanded utilities and service systems. Thus, no new or expanded facilities for water, wastewater, stormwater, electric power, natural gas, telecommunications would be needed. No new demands on local or regional water supplies would occur. Construction of the proposed project would generate a minimal amount of solid waste that would not be in excess of the capacity of local infrastructure at local landfills or conflict with federal, state, and local statutes related to solid waste. Thus, the proposed project would result in no impact to utilities and service systems.

20. Wildfire				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. – d. Less Than Significant Impact.

All Beaches

Several of the proposed project sites (i.e., Zuma Beach and Will Rogers State Beach) were affected by or in very close proximity to the recent Palisades Fire that occurred in January 2025. The Palisades fire began burning in Los Angeles County and grew to destroy large areas of Pacific Palisades, Topanga, and Malibu. Several areas that were affected by the Palisades Fire remain within active evacuation warning zones due to high mudslide and debris flow risk that are susceptible after heavy rains.

Zuma Beach and Will Rogers State Beach are in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs). The other beach sites are not in State Responsibility Areas (SRAs) or VHFHSZs. All activities conducted under the proposed project would comply with state and local regulations, policies, plans, and ordinances regarding public emergency access. Contractors responsible for construction activities would be required to develop traffic control plans that include measures to identify and address emergency access during construction in the event of a wildfire. Thus, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan.

The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel brakes, emergency water sources, power lines or other utilities). Placement of sand on the proposed project sites would not exacerbate any existing wildfire risks or contribute to an uncontrolled spread of wildfire. Furthermore, the proposed project would not expose people or structures to significant

risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

21. Mandatory Finding of Significance				
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less than Significant with Mitigation Incorporated.

With the incorporation of mitigation measures for air quality, biological resources, cultural resources, and tribal cultural resources, the proposed project would not have the potential to degrade the quality of the environment, reduce the habitat of any sensitive plant or animal species, or eliminate important examples of California history or prehistory.

Based on the potential for impacts to air quality, Mitigation Measures (AQ-1 and AQ-2) have been included to ensure impacts are mitigated to less than significant levels (RCH Group, 2025a). Based on the potential for impacts to biological resources, Mitigation Measures (BIO-1 through BIO-7) have been included to ensure impacts are mitigated to less than significant levels (Rincon, 2025a). Based on the potential for impacts to cultural resources, Mitigation Measure CUL-1 has been included to ensure impacts are mitigated to less than significant levels (Rincon, 2025b). Based on the potential for impacts to tribal cultural resources, Mitigation Measure TCR-1 has been included to ensure impacts are mitigated to less than significant levels (Rincon, 2025b).

b. Less than Significant Impact.

Implementation of the proposed project would not result in individually limited, but cumulatively considerable significant impacts. All resource topics associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less-than-significant impacts, or less than significant impacts with mitigation incorporated (i.e., Air Quality, Biological Resources, Cultural Resources and Tribal Cultural Resources). In addition, taken in sum with other projects in the area the scale of the proposed project is small, and impacts to any environmental resource or issue areas would not be cumulatively considerable. Therefore, impacts would be less than significant.

c. Less than Significant Impact.

The project would not consist of any uses or activities that would negatively affect any persons directly or indirectly. In addition, all resource topics associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less-than-significant impacts, or less than significant impacts with mitigation incorporated (i.e., Air Quality, Biological Resources, Cultural Resources and Tribal Cultural Resources). Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly.

Chapter 4. References and List of Preparers

References

Section 15150 of the State CEQA Guidelines permits an environmental document to incorporate, by reference, other documents that provide relevant data. The documents listed below are hereby incorporated by reference. The pertinent material is summarized throughout this Initial Study where that information is relevant to the analysis of impacts of the proposed project.

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Individuals and Organizations Consulted

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Attachment A Figures

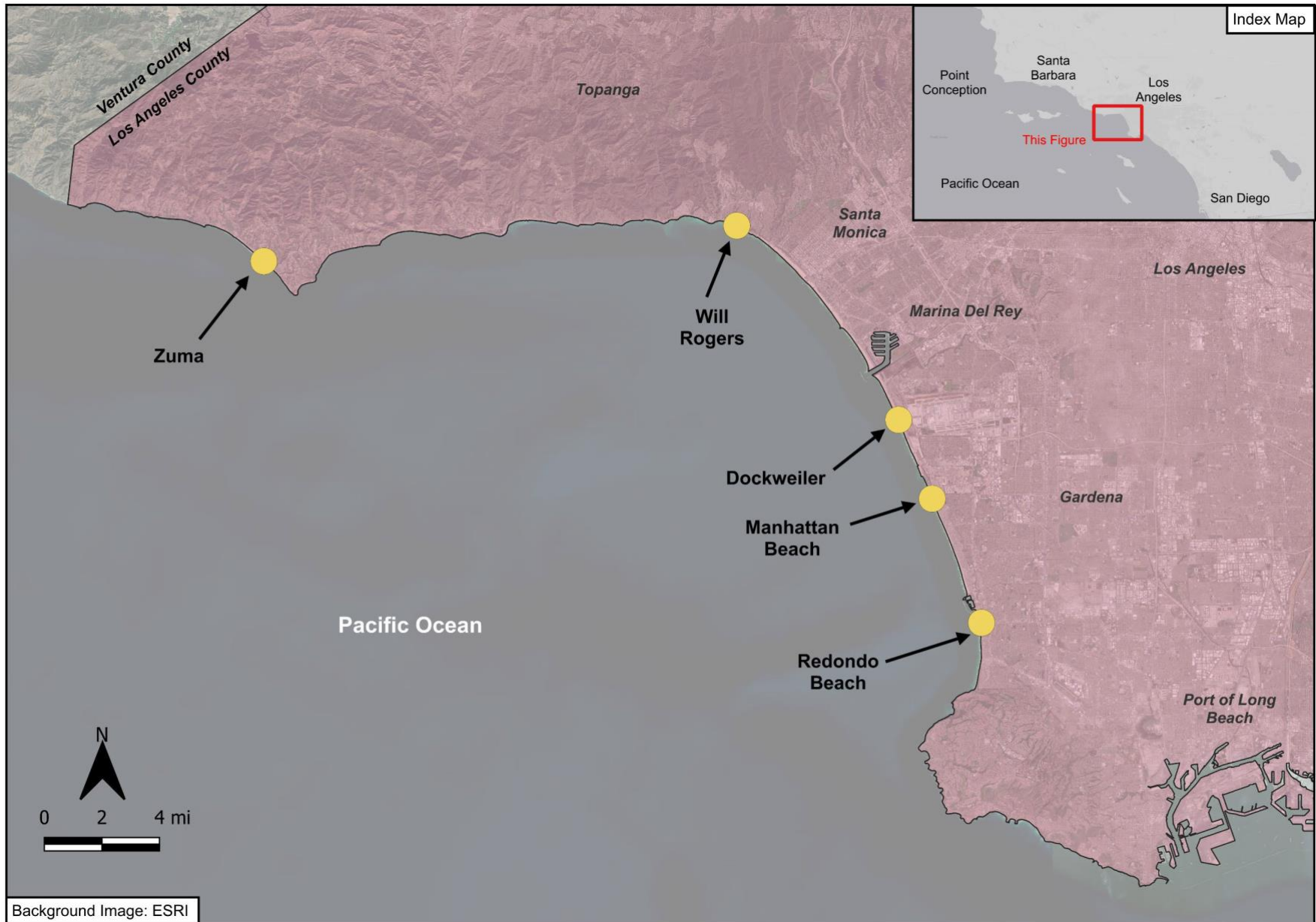


Figure 1 LA County Department of Beaches and Harbors SCoup Receiver Sites

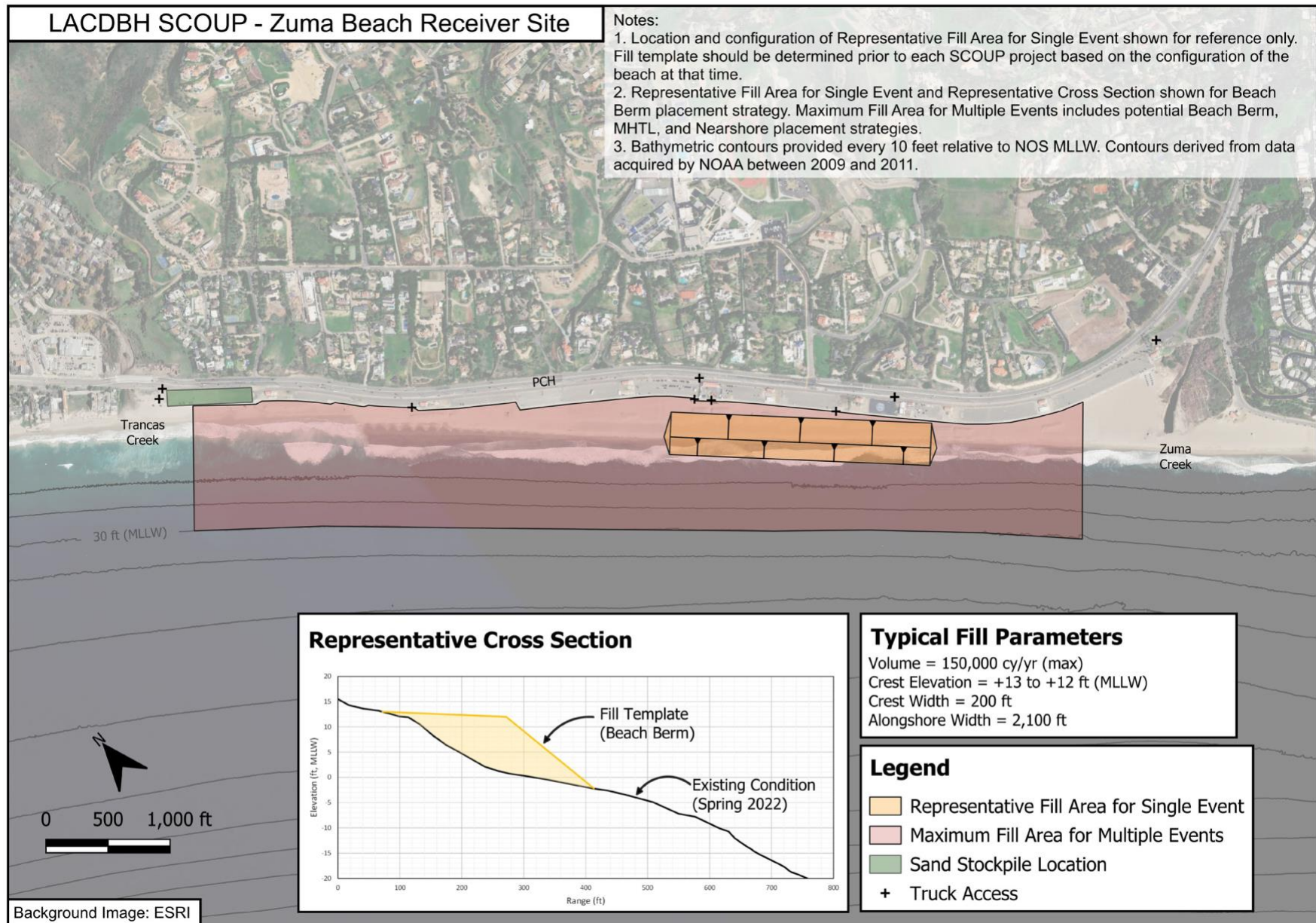


Figure 2 Zuma Beach SCoup Receiver Site in the City of Malibu

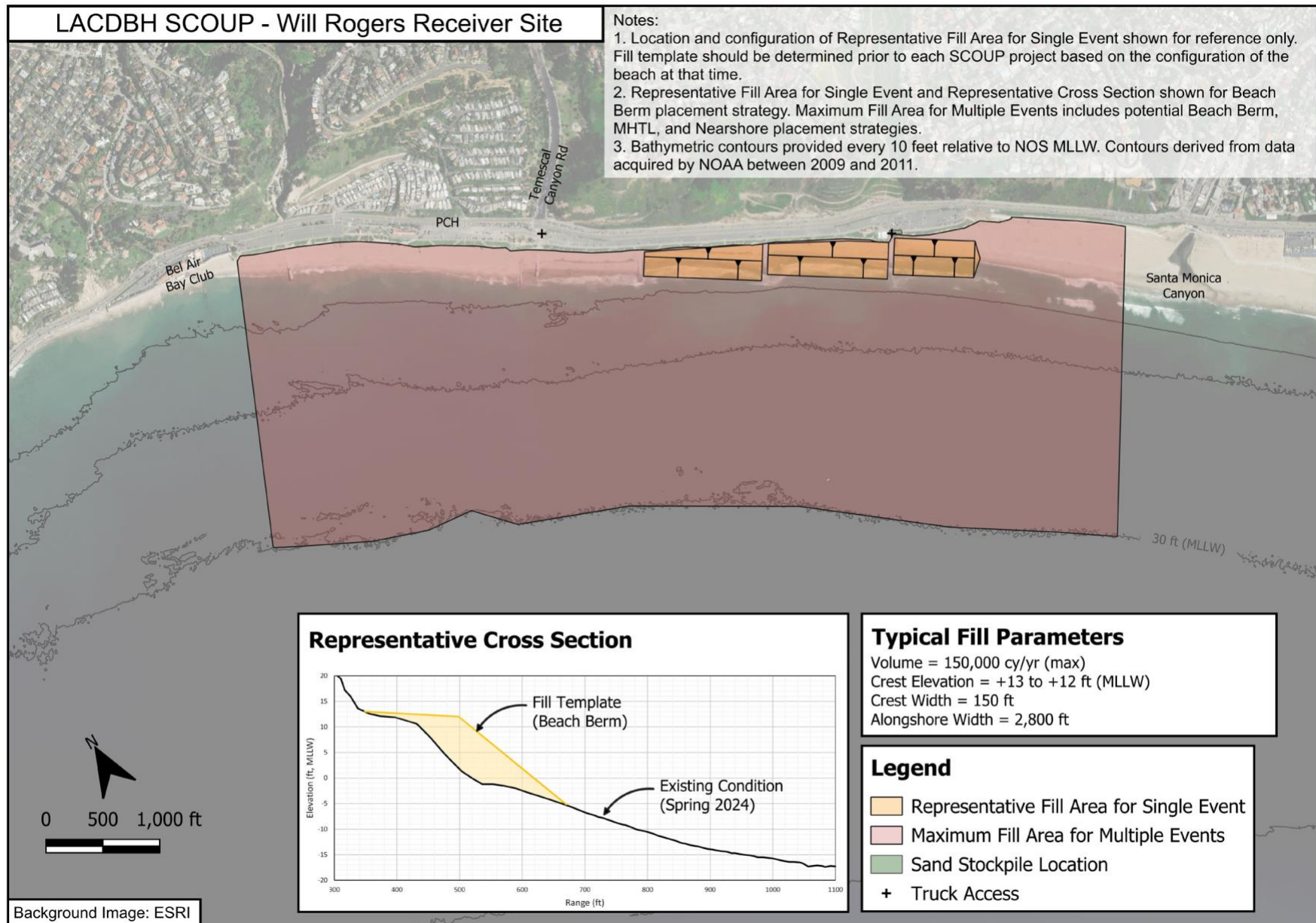


Figure 3 Will Rogers State Beach SCOUP Receiver Site in the City of Los Angeles

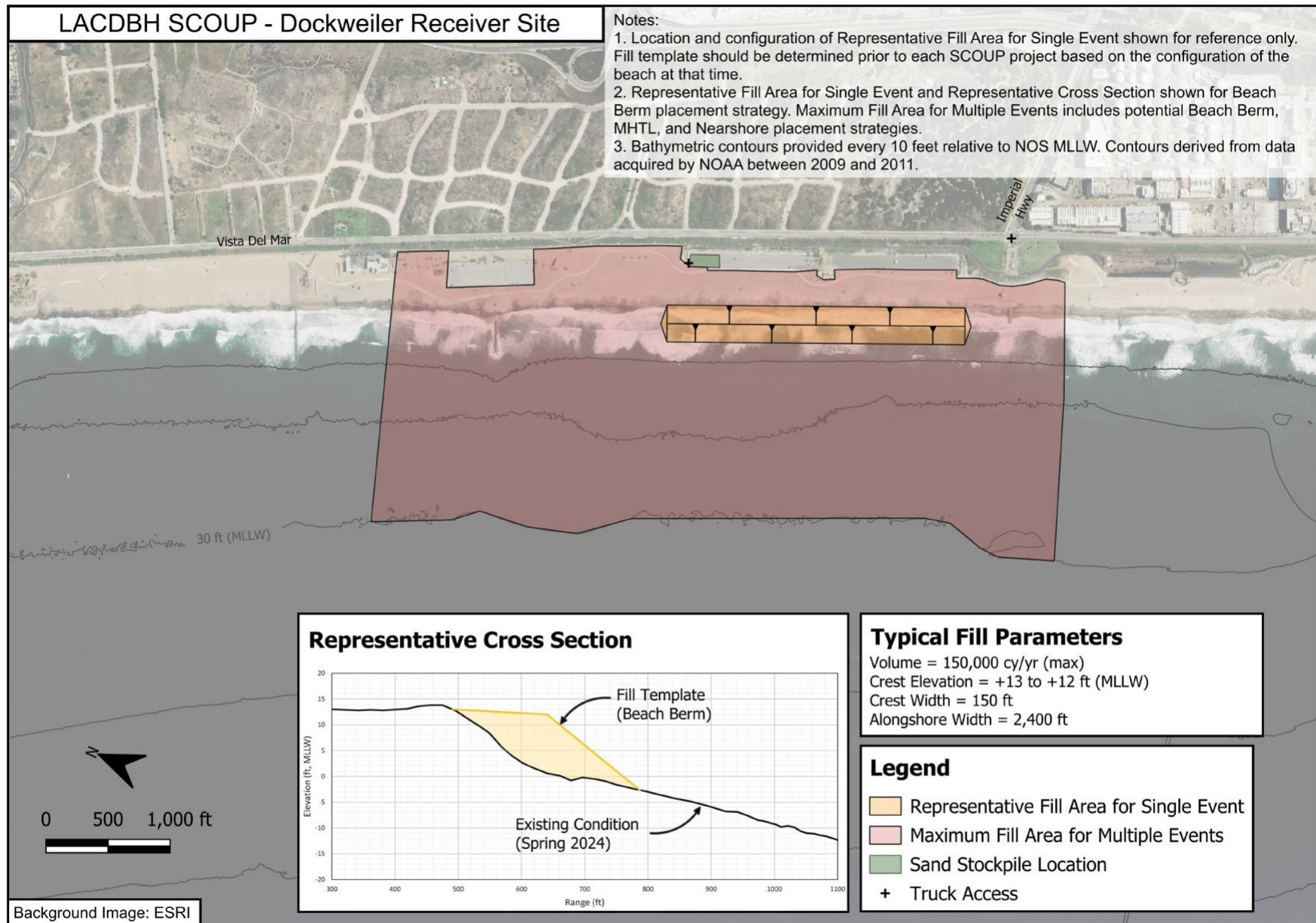


Figure 4 Dockweiler State Beach SCOUP Receiver Site in the City of Los Angeles

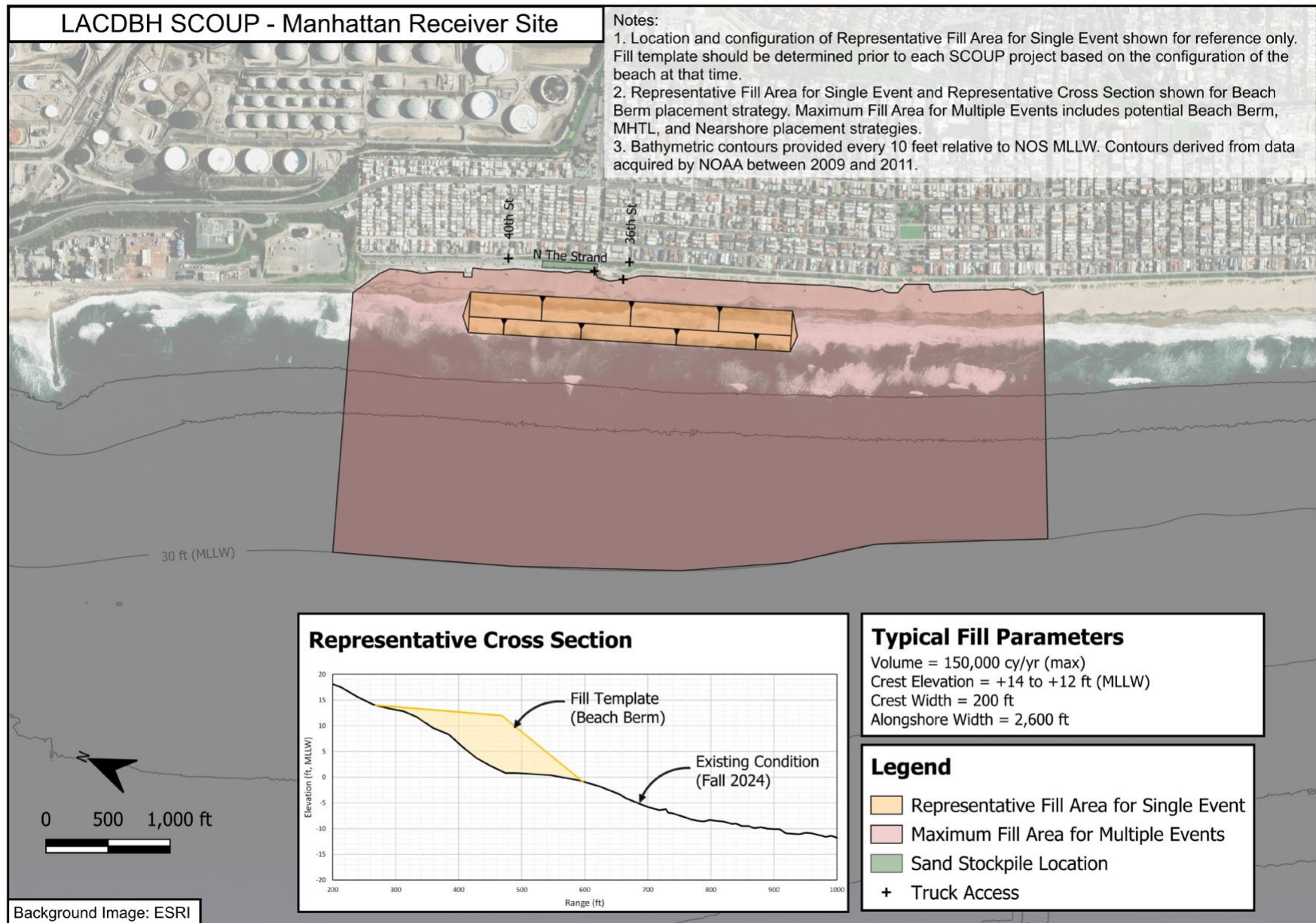


Figure 5 Manhattan Beach SCOUP Receiver Site in the City of Manhattan Beach

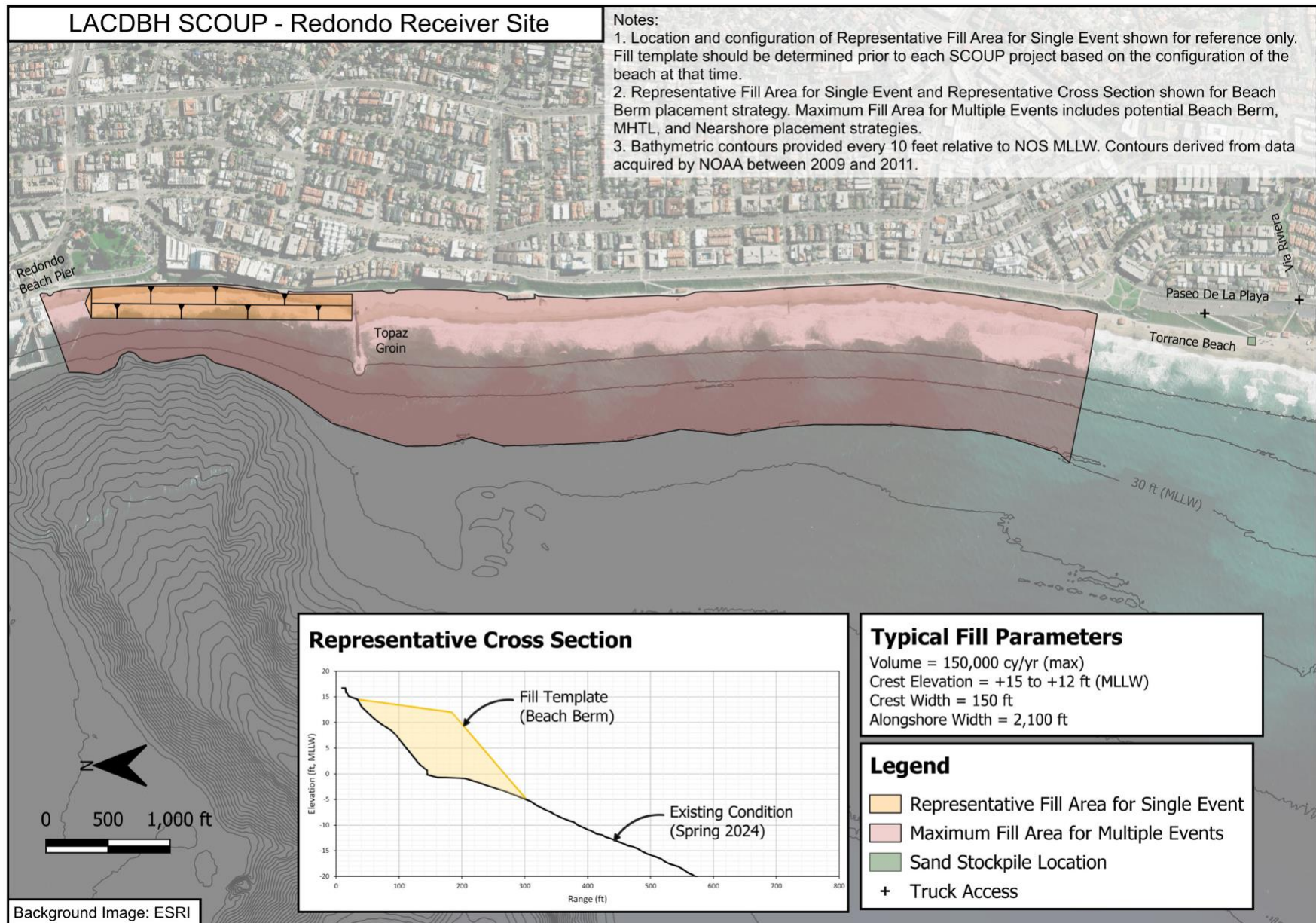


Figure 6 Redondo Beach SCoup Receiver Site in the City of Redondo Beach

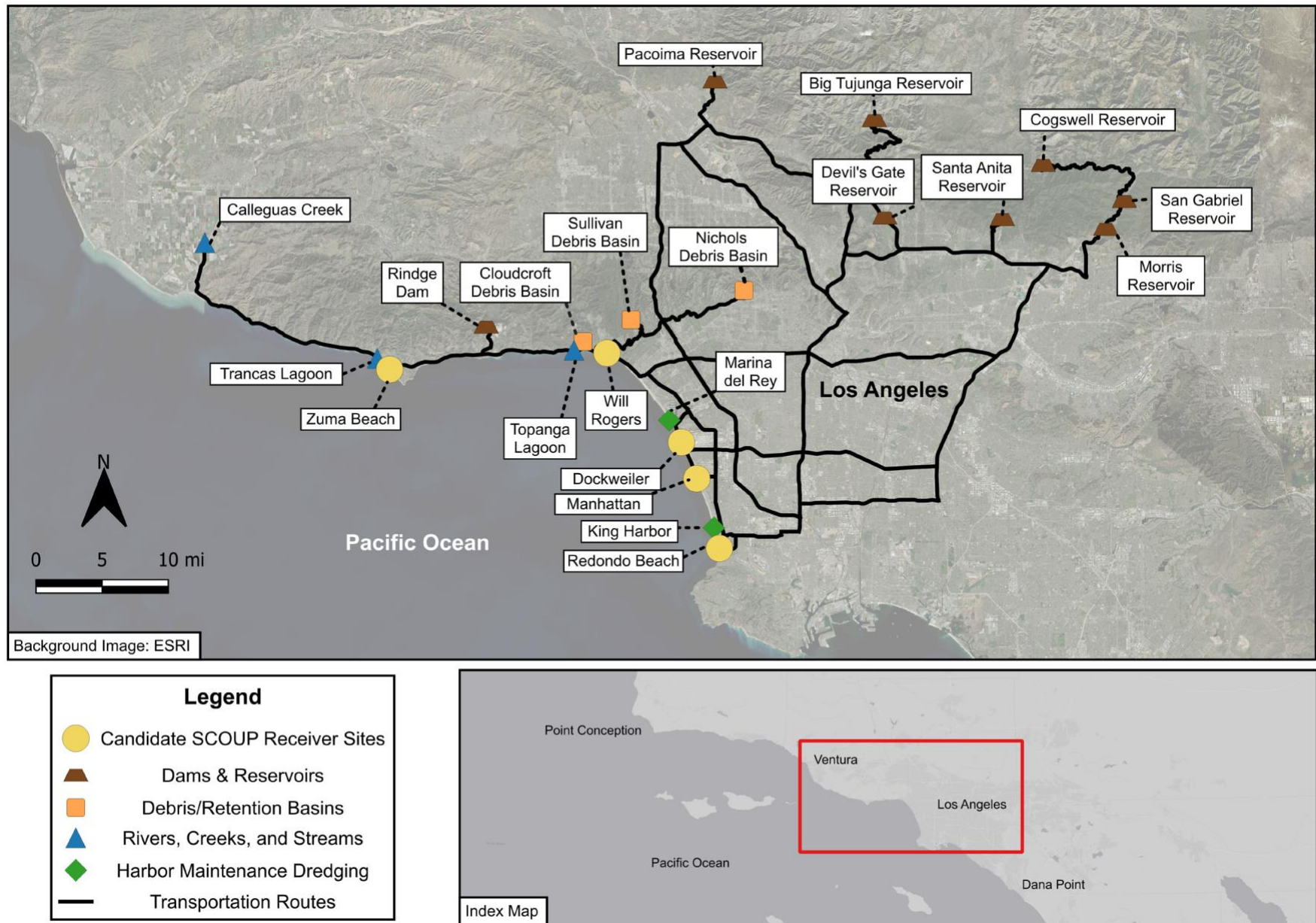


Figure 7 Regional Overview Map of Potential Sand Sources and SCoup Beach Receiver Sites

Attachment B Mitigation Monitoring & Reporting Program (MMRP)

County of Los Angeles Department of Beaches and Harbors
Mitigation Monitoring and Reporting Program
SCOUP Initial Study & Mitigated Negative Declaration
April 2025

Project Name:	Los Angeles County SCOUP
Description:	The LACDBH seeks approvals to place opportunistically available beach compatible sediments on five receiver beaches managed by LACDBH within Los Angeles County.
Locations:	Zuma Beach, Will Rogers Beach, Dockweiler Beach, Manhattan Beach and Redondo Beach

The following measures have been incorporated into the project as project design features or are to be implemented before or during construction in accordance with the project specifications thereby reducing all identified potentially impacts to less than significant levels.

Mitigation Measures		Staff Monitor	Timing of Compliance	Date of Compliance
AQ-1	All diesel construction equipment 25 horsepower or greater shall meet Tier 4 Final emissions standards. Note, this shall only be required if beach nourishment activities are conducted simultaneously at four or more beach sites (beach nourishment operations can be conducted at up to three beaches simultaneously without mitigation). With the implementation of Tier 4, beach nourishment activities can be conducted simultaneously at four beach sites.	Planner	Prior to beach nourishment activities (only if activities are conducted at four or more receiver sites simultaneously)	
AQ-2	After implementation of Mitigation Measure AQ-1 (Tier 4 Engines), beach nourishment activities may be conducted simultaneously at all five beach sites if the average round trip sand haul truck length is 60 miles or less for the five beach sites.	Planner	Prior to beach nourishment activities (only if activities are conducted at all five receiver sites simultaneously)	
BIO-1	Worker Environmental Awareness Program. Prior to initiation of proposed project activities (including staging and mobilization), all personnel associated with proposed project construction shall attend Worker Environmental Awareness Program training conducted by a qualified biologist, to aid workers in recognizing special-status terrestrial and marine species, native birds, and other biological resources that may occur in the proposed project area. The specifics of this program shall include identification of habitats of special-status species with potential to occur at the proposed project area (including mapped habitats at the beach receiver site), a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work areas. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the trainer indicating they have attended the Worker Environmental Awareness Program and understand the information presented to them. The signed form shall be provided to the Los Angeles County Department of Beaches and Harbors to verify the Worker Environmental Awareness Program occurred.	Planner	Prior beach nourishment activities (including staging and mobilization)	
BIO-2	General Best Management Practices. The following Best Management Practices shall be implemented in the required Storm Water Pollution Prevention Plan for the proposed project prior to the start of beach nourishment activities. The Best Management Practices shall be followed by proposed project personnel to reduce the risk of spills and minimize	Planner	Prior beach nourishment activities	

Mitigation Measures	Staff Monitor	Timing of Compliance	Date of Compliance
<p>the introduction of pollutants into coastal waters. The Storm Water Pollution Prevention Plan shall be reviewed by Los Angeles County Department of Beaches and Harbors to verify the measures below are included. One time per each beach nourishment event, a representative from the Los Angeles County Department of Beaches and Harbors will observe proposed project activities to verify the Best Management Practices are implemented. Best Management Practices shall include, but are not limited to the following:</p> <ul style="list-style-type: none"> • During beach nourishment activities, heavy equipment shall be operated in accordance with the standards listed within the Los Angeles County Department of Public Works Construction Site Best Management Practices Manual (2010). • All equipment shall be properly maintained such that no leaks of oil, fuel, or residues would take place. Materials shall not be stored nor equipment fueled on the sand, as feasible, or equipment shall use secondary containment. • Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials, including a designated fueling and vehicle maintenance area with appropriate protection to prevent any spillage of gasoline or related petroleum products or contact with runoff or tidal waters. • All food-related trash shall be disposed of in closed containers and removed from the proposed project area each day during the construction period. Proposed project personnel shall not feed or otherwise attract wildlife to the proposed project area. • All work shall take place during daylight hours. Lighting of the beach and water area shall be prohibited. • Construction work or equipment operations below Mean Lower Low Water shall be minimized to the absolute extent feasible, and, where possible, limited to times when tidal waters have receded from the authorized work area. • Any spillage of material will be stopped if it can be done safely. The contaminated area shall be cleaned, and any contaminated materials properly disposed. • Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to ensure minimal impacts to the aquatic and marine environments. • A 50-foot-long spill containment boom and absorbent pads shall be kept on-site and be deployed if there is a release of fluids into the water. 			
BIO-3 Grunion Surveys. The proposed project shall not place material or conduct any work on the beach below the Mean High Tide Line during the seasonally predicted grunion run period	Planner	During beach nourishment	

Mitigation Measures		Staff Monitor	Timing of Compliance	Date of Compliance
	and egg incubation period of March 14 through August 31. If proposed project activities must occur during an expected grunion run, a grunion survey shall be conducted by a qualified biologist in accordance with the expected grunion runs provided by the California Department of Fish and Wildlife (CDFW). The grunion run surveys shall include three to four consecutive nights during the expected grunion run timeframe provided annually by CDFW, typically every two weeks during the new and full moon cycle. The surveys shall take place prior to work activities and areas where spawning grunion are observed shall be avoided or work in those areas shall not proceed until the next grunion run survey confirms that no spawning grunion are present. Proposed project activities shall proceed only in areas where no grunion spawning was observed or may proceed after a subsequent survey (typically two-week cycle) which determines no spawning occurred in the proposed project area.		activities, if conducted between March 14 and August 31.	
BIO-4	<p>Western Snowy Plover, California Least Tern, and Nesting Bird Monitoring. To avoid disturbance of nesting and special-status birds, including western snowy plover and California least tern, activities related to the project shall occur outside of the bird breeding season for protected birds (generally February 1 through September 15), as feasible.</p> <p>If proposed project activities must occur during the breeding season, a pre-construction nesting bird survey completed within 72 hours of proposed project activities shall be conducted and full-time monitoring conducted by a qualified biologist shall be conducted during all beach nourishment activities. At all times, a qualified biologist shall walk ahead of vehicle(s) and equipment to assure that western snowy plover and California least tern are out of harm's way before the vehicle(s) or equipment can proceed. If birds do not move out of vehicle traffic path, the biologist shall attempt to guide vehicle(s) on an alternate path to avoid grounding birds and walk ahead of vehicle(s) to ensure the path is cleared while maintaining a minimum 150-foot buffer.</p> <p>If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside the site) shall be determined and demarcated by the biologist with bright orange fencing, flagging, or other means to mark the boundary. All proposed project personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No proposed project activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.</p>	Planner	During beach nourishment activities, if conducted between February 1 and September 15.	
BIO-5	Marine Mammal and Sea Turtle Avoidance. All proposed project personnel shall adhere to the guidelines set forth in the Marine Mammal Protection Act. If a stranded or hauled out	Planner	Throughout all beach	

Mitigation Measures		Staff Monitor	Timing of Compliance	Date of Compliance
	marine mammal or sea turtle is observed, all proposed project equipment and personnel shall remain at least 100 yards (300 feet) away from whales and 50 yards (150 feet) from dolphins, porpoises, seals, sea lions and sea turtles. Equipment and foot traffic shall remain at least 150 feet from hauled-out seals and sea lions that could occur on the rocky jetties within the proposed project area. The Marine Mammal Care Center shall be notified if the animal appears sick or injured. If the animal is unable to leave on its own, the Marine Mammal Care Center shall be contacted to carry out rescue/relocation procedures. Work shall cease within the buffer area until the animal has been allowed to leave on its own or at the conclusion of rescue/relocation procedures.		nourishment activities.	
BIO-6	Environmentally Sensitive Habitat Area (ESHA) Avoidance. Prior to the initiation of each beach nourishment event, ESHA (e.g., dune mat or areas that exhibit dune morphology) shall be clearly delineated by a qualified biologist in the field to prevent direct impacts outside the designated proposed project boundary. All sensitive species and sensitive species' habitats, including ESHA, located within 100 feet of proposed project activities shall be delineated with specific sensitive species labeling (e.g., signage stating, "No Entry – Environmentally Sensitive Habitat" attached to temporary fencing). In addition, a 50-foot-wide corridor around vegetated areas shall be implemented. No proposed project activities shall occur within these buffers. Since the proposed project is temporary, orange snow fencing would be sufficient for the duration of the proposed project. In areas that are separated by existing chain-link fencing, signage shall be secured to the existing fencing.	Planner	Prior to beach nourishment activities.	
BIO-7	Water Quality Monitoring. A Water Quality Monitoring Plan shall be prepared to avoid and minimize potential adverse effects to water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels). The Water Quality Monitoring Plan shall establish water quality thresholds consistent with the State Water Resources Control Board Ocean Plan and include measures for water quality monitoring up current and down current of the proposed project area. During proposed project activities, if water quality thresholds established in the Ocean Plan are exceeded, a water quality monitor shall inform the project manager and be granted the authority to temporarily halt proposed project activities until monitoring indicates the constituent measurements are within the Ocean Plan thresholds.	Planner	Prior to beach nourishment activities.	
CUL-1	Unanticipated Discovery of Cultural Resources. In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the resource find shall halt and an archaeologist meeting or exceeding the Secretary of the Interior's Professional Qualifications Standards for Archeology (NPS 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the	Planner	Throughout all beach nourishment activities.	

Mitigation Measures		Staff Monitor	Timing of Compliance	Date of Compliance
	qualified archaeologist to be prehistoric, a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for California Register of Historical Resources (CRHR) eligibility shall be completed. If the resource is determined to be eligible for the CRHR and significant impacts to the resource cannot be avoided via proposed project redesign, the qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any potential significant impacts to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The Los Angeles County Department of Beaches and Harbors (LACDBH) shall review and approve the treatment plan and archaeological testing, as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per CCR Guidelines Section 15126.4(b)(3)(C).			
TCR-1	Unanticipated Discovery of Cultural Resources. In the event that archaeological resources of Native American origin are identified during implementation of the proposed project, ground-disturbing activities within 50 feet of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the County, in consultation with traditionally and culturally affiliated Native American group(s), determines the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in consultation with traditionally and culturally affiliated Native American group(s). The plan shall include measures to ensure the find is treated in a manner that respectfully retains, to the degree feasible, the qualities that render the resource of significance to the local Native American group(s). Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, avoidance, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.	Planner	Throughout all beach nourishment activities.	

Project Design Features		Staff Monitor	Timing of Compliance	Date of Compliance
1.	As a standard construction procedure, fire suppression equipment shall be provided at the worksite. A fire extinguisher should be available in every 3,000 square feet of construction area, no more than 100 feet away from heavy equipment. Heavy equipment operators will attend a training session on appropriate responses to fire suppression during the pre-construction meeting.	Planner	Throughout all beach nourishment activities.	

Attachment C SCOUP Project Description

Zuma Beach, Malibu, CA



SAND COMPATIBILITY AND OPPORTUNISTIC USE PROGRAM FOR LOS ANGELES COUNTY BEACHES

PROJECT DESCRIPTION

Coastal Frontiers Corporation
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SAND COMPATIBILITY AND OPPORTUNISTIC USE PROGRAM FOR LOS ANGELES COUNTY BEACHES

PROJECT DESCRIPTION

Document Information

CFC project number	1189
Client	County of Los Angeles, Department of Beaches & Harbors
Document title	Sand Compatibility and Opportunistic Use Program for Los Angeles County Beaches Project Description
Prepared by	Coastal Frontiers Corporation
Collaborators	Moffatt & Nichol, Rincon Consultants, Summit Environmental Group
Status	Issued for Team Review

Revision	Description	Date	Issued by	Reviewed by	Reviewed by
00	Issued for Team Review	12/27/2024	C. Scott	T. Dobson	L. Meyerhoff

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Acronyms

BBGHAD	Broad Beach Geologic Hazard Abatement District
CDPR	State of California, Department of Parks and Recreation
EIR	Environmental Impact Report
LACDBH	Los Angeles County Department of Beaches and Harbors
LACFCD	Los Angeles County Flood Control District
MHTL	Mean High Tide Line
MLLW	Mean Lower Low Water
PCH	Pacific Coast Highway
SCOUP	Sand Compatibility and Opportunistic Use Program
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

Key Terms and Definitions

In the interest of clarity, the following key terms are defined:

- *Beach Nourishment*: The addition of sediment onto or directly adjacent to an eroding beach in an effort to advance the shoreline seaward of its present location (Dean and Dalrymple, 2002). Also referred to as “beach fill” and “beach replenishment.”
- *Depth of Closure*: The water depth, seaward of which net sediment transport is small or nonexistent (Brutsche *et al.*, 2016). Sand that moves offshore of the depth of closure typically is not considered an active part of the littoral cell.
- *Compatible Source Material*: When the range of grain sizes of a potential sand source lies within the range of grain sizes at the receiver beach.
- *Fine-grained Materials*: Clays and silts, passing the #200 soil grain size sieve, or less than 0.074 mm in diameter. Also referred to as “fines.”
- *Opportunistic Sand*: Surplus sand from various source materials, including upland land development projects, harbor maintenance dredging projects, and flood control maintenance operations.
- *Receiver Site*: The location where beach nourishment material is placed. Also referred to as a “receiver beach.”

SAND COMPATIBILITY AND OPPORTUNISTIC USE PROGRAM FOR LOS ANGELES COUNTY BEACHES

PROJECT DESCRIPTION

1 Introduction

This report outlines the key characteristics of a Sand Compatibility and Opportunistic Use Program (SCOUP) developed for the County of Los Angeles. The objective of the program is to streamline environmental compliance and regulatory approval of relatively small beach nourishment projects (typically up to 150,000 cubic yards per year, “cy/yr”) that leverage opportunistically available sand sources, such as those generated from upland land development projects, harbor maintenance dredging projects, and flood control maintenance operations, to increase the resilience of vulnerable coastal areas (California Division of Boating and Waterways, 2024).

The LA County SCOUP includes five pre-selected receiver sites: Zuma Beach, Will Rogers State Beach, Dockweiler State Beach, Manhattan Beach, and Redondo Beach (Figure 1-1). The sites have been selected based on a variety of factors that include present and future vulnerabilities, existing resources and amenities, potential benefits, and potential adverse effects.

The sections that follow outline the proposed project footprints, describe the project approach, and identify potential sediment sources. It has been prepared by a multi-disciplinary team of coastal engineers, coastal and marine scientists, and coastal planners from Coastal Frontiers Corporation, Moffatt & Nichol, Rincon Consultants, and Summit Environmental Group working in close collaboration with staff from LACDBH.

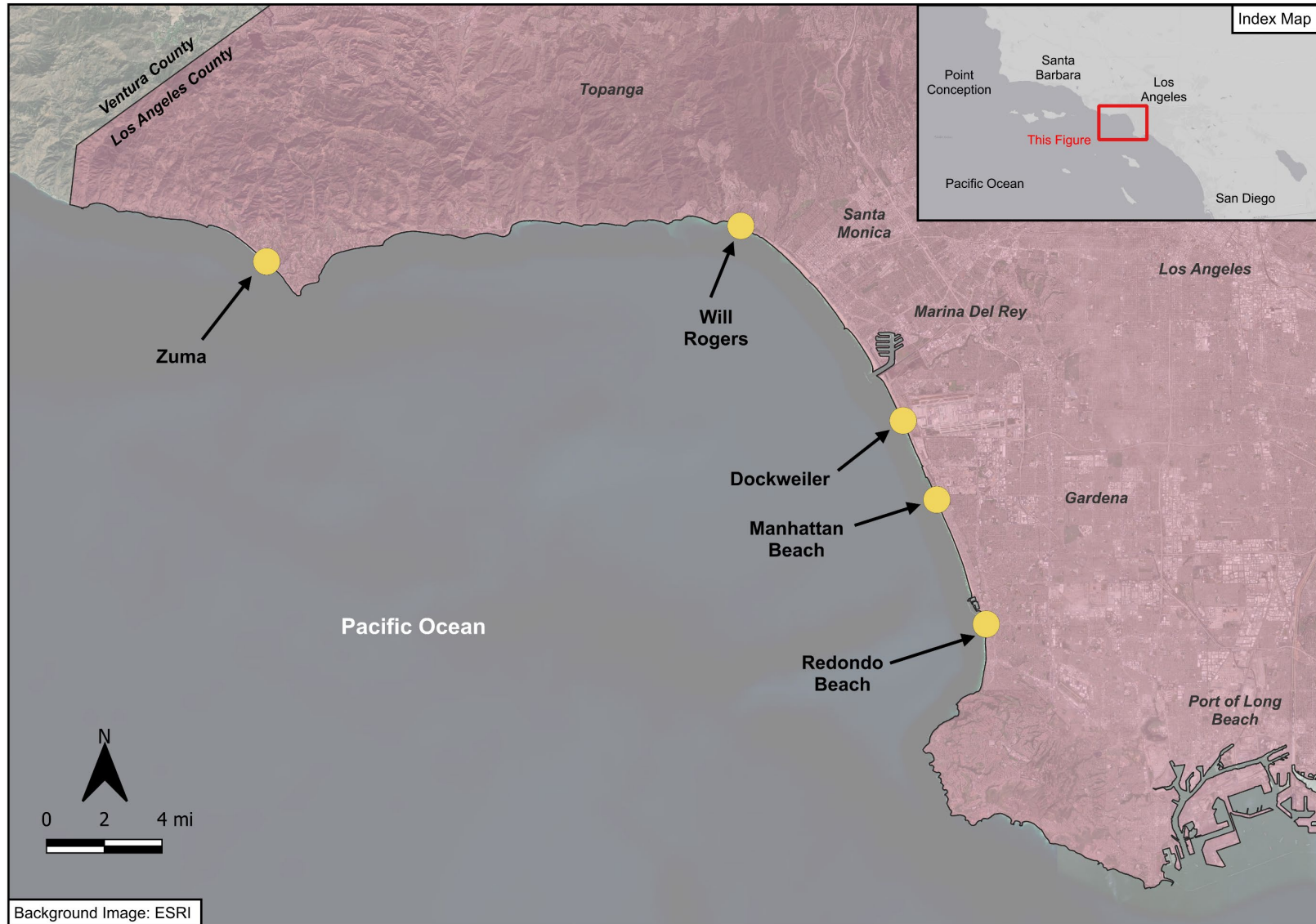


Figure 1-1. SCOUP Receiver Sites

2 Receiver Sites

This section outlines the proposed project footprints and the range of compatible grain sizes for each receiver site. The information is intended to guide the implementation of individual SCOUP projects, the details of which will be formulated at the time of the project based on the quantity and quality of the source material and the condition of the shoreline.

In the discussion that follows, the “Representative Fill Area for Single Event” identifies the typical footprint for a single SCOUP project, while the “Maximum Fill Area for Multiple Events” denotes the area within which multiple SCOUP projects may be implemented over the course of the program. This larger area is included to provide flexibility in the individual placement locations such that SCOUP projects can be implemented where they are needed most.

Figures referenced in this section are provided following the text. A summary of the key parameters for each site is provided in Table 2-1.

Table 2-1. Key Parameters for LACDBH SCOUP Receiver Sites

Receiver Site	Native Median Grain Size		Single Event		Multiple Events	
	Min (mm)	Max (mm)	Length (ft)	Area (acres)	Length (ft)	Area (acres)
Zuma Beach	0.12	0.53	2,000	13	7,200	91
Will Rogers SB	0.07	0.56	2,800	16	8,900	115
Dockweiler SB	0.10	0.37	2,400	16	5,400	150
Manhattan Beach	0.13	0.38	2,000	16	5,600	85
Redondo Beach	0.13	1.08	1,700	10	8,500	80

2.1 Zuma Beach

The footprints for the Zuma Beach receiver site are shown in Figure 2-1. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. The sand stockpile location is on the northwest end of the beach where trucks can enter and exit from Pacific Coast Highway (PCH). Additional stockpile locations may be used based on the location of the project.

The Maximum Fill Area for Multiple Events includes most of Zuma Beach. Buffers are provided on the east and west ends to prevent excess sediment accumulation where Zuma Creek and Trancas Creek discharge. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cubic yards, “cy”). As

noted above, the precise location for each SCOUN nourishment event will be based on the beach condition at the time of the project and the characteristics of the sediment source.

The envelope of compatible grain sizes at Zuma Beach is illustrated in Figure 2-2. The data shown in the figure have been provided courtesy of the Broad Beach Geologic Hazard Abatement District (BBGHAD; McMahon, 2024). As shown in the figure, the median grain size at the site varies between 0.12 and 0.53 mm.

2.2 Will Rogers State Beach

The footprints for the Will Rogers State Beach receiver site are shown in Figure 2-3. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. Trucks are expected to access the site from PCH at Temescal Canyon Road. A sand stockpile location and access to the beach have been identified east of the Lifeguard building on the east end of the State Beach.

The Maximum Fill Area for Multiple Events includes the portion of Will Rogers State Beach between the Bel Air Bay Club and Santa Monica Canyon. A buffer is provided on the east end to prevent excess sediment accumulation where Santa Monica Canyon discharges. The narrow area west of the Bel Air Bay Club was not included due to a lack of vehicular access.

The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy). The groin field is an ideal location to place opportunistically available sediment, as the structures will prolong the benefits afforded by the added sand.

The envelope of compatible grain sizes at Will Rogers State Beach is illustrated in Figure 2-4. As shown in the figure, the median grain size at the site varies between 0.07 and 0.56 mm.

2.3 Dockweiler State Beach

The footprints, potential truck access points, and sand stockpile location for the Dockweiler State Beach receiver site are shown in Figure 2-5. The Maximum Fill Area for Multiple Events was selected to avoid US Fish and Wildlife Service (USFWS) Critical Habitat for Western Snowy Plover and is coincident with a receiver site used by the US Army Corps of Engineers (USACE) to accept sediment dredged from Marina del Rey. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy) and is centered on the parking lot.

Trucks are expected to access the site via Imperial Highway. A sand stockpile location and access to the beach have been identified on the north end of the parking lot.

The envelope of compatible grain sizes at Dockweiler State Beach is illustrated in Figure 2-6. As shown in the figure, the median grain size at the site varies between 0.10 and 0.37 mm.

2.4 Manhattan Beach

The footprints for the Manhattan Beach receiver site are shown in Figure 2-7. The figure also illustrates potential truck access points, a sand stockpile location, and a representative cross section. Trucks are expected to access the site from 36th Street and exit at 40th Street. Sand will be stockpiled in the parking lot between the entry and exit and transported to the beach using the access ramp south of the restroom.

The Maximum Fill Area for Multiple Events includes the north half of Manhattan Beach. This area is both updrift of and historically narrower than the southern end. The Representative Fill Area for Single Event illustrates the scale of a single project with the maximum annual nourishment volume (150,000 cy) centered on the beach access point.

The envelope of compatible grain sizes at Manhattan Beach is illustrated in Figure 2-8. As shown in the figure, the median grain size at the site varies between 0.13 and 0.38 mm.

2.5 Redondo Beach

The footprints, potential truck access points, and sand stockpile location for the Redondo Beach receiver site are shown in Figure 2-9. Vehicular access to the beach and a sand stockpile location are provided via an access ramp to Torrance Beach located 1,300 ft south of Redondo Beach. No other viable truck access points are available. The Maximum Fill Area for Multiple Events includes the entire Redondo Beach shoreline, whereas the Representative Fill Area for Single Event is located on the narrow portion of the beach north of Topaz Groin.

The envelope of compatible grain sizes at Redondo Beach is illustrated in Figure 2-10. As shown in the figure, the median grain size at the site varies between 0.13 and 1.08 mm.

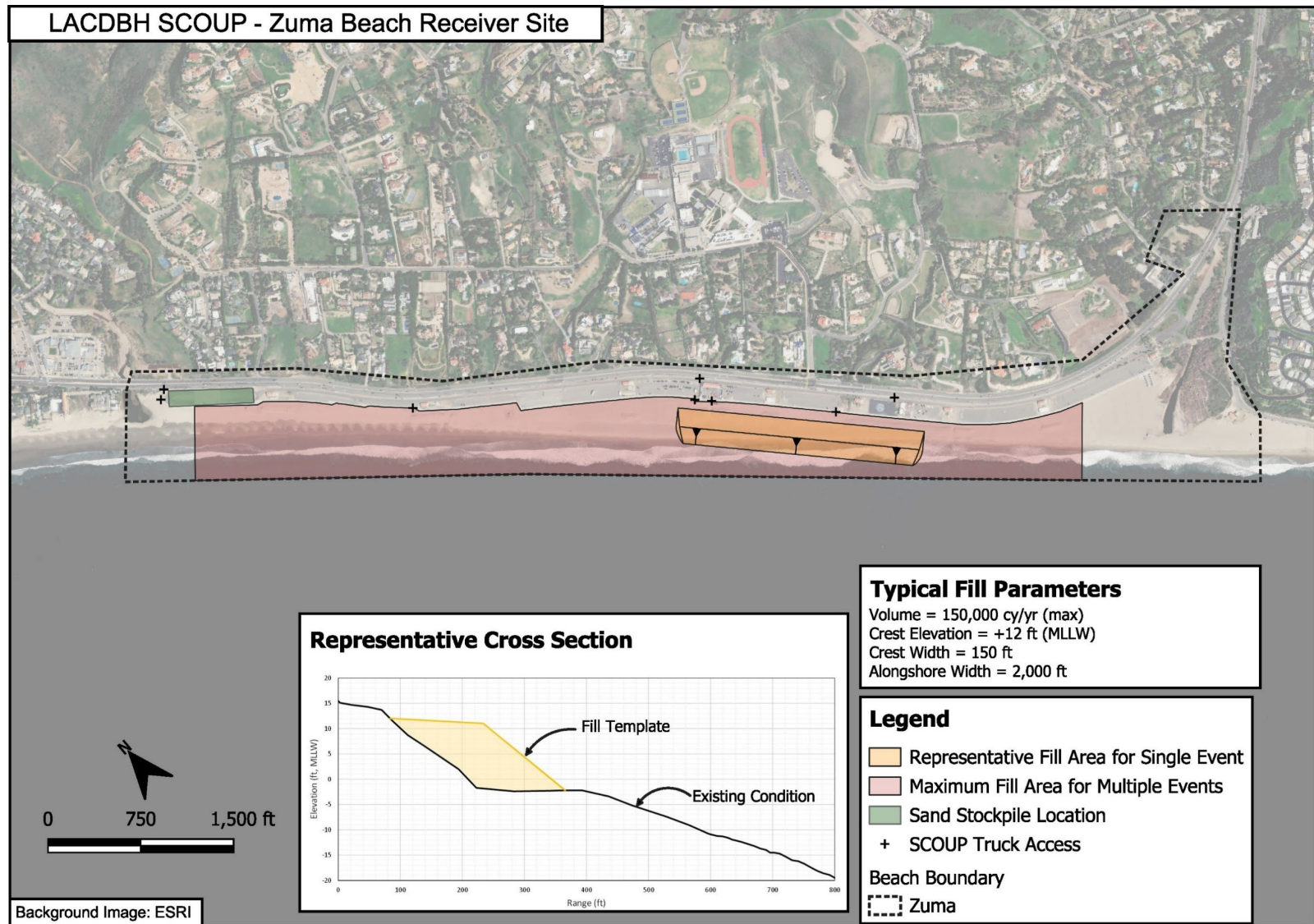


Figure 2-1. Zuma Beach SCOUN Receiver Site

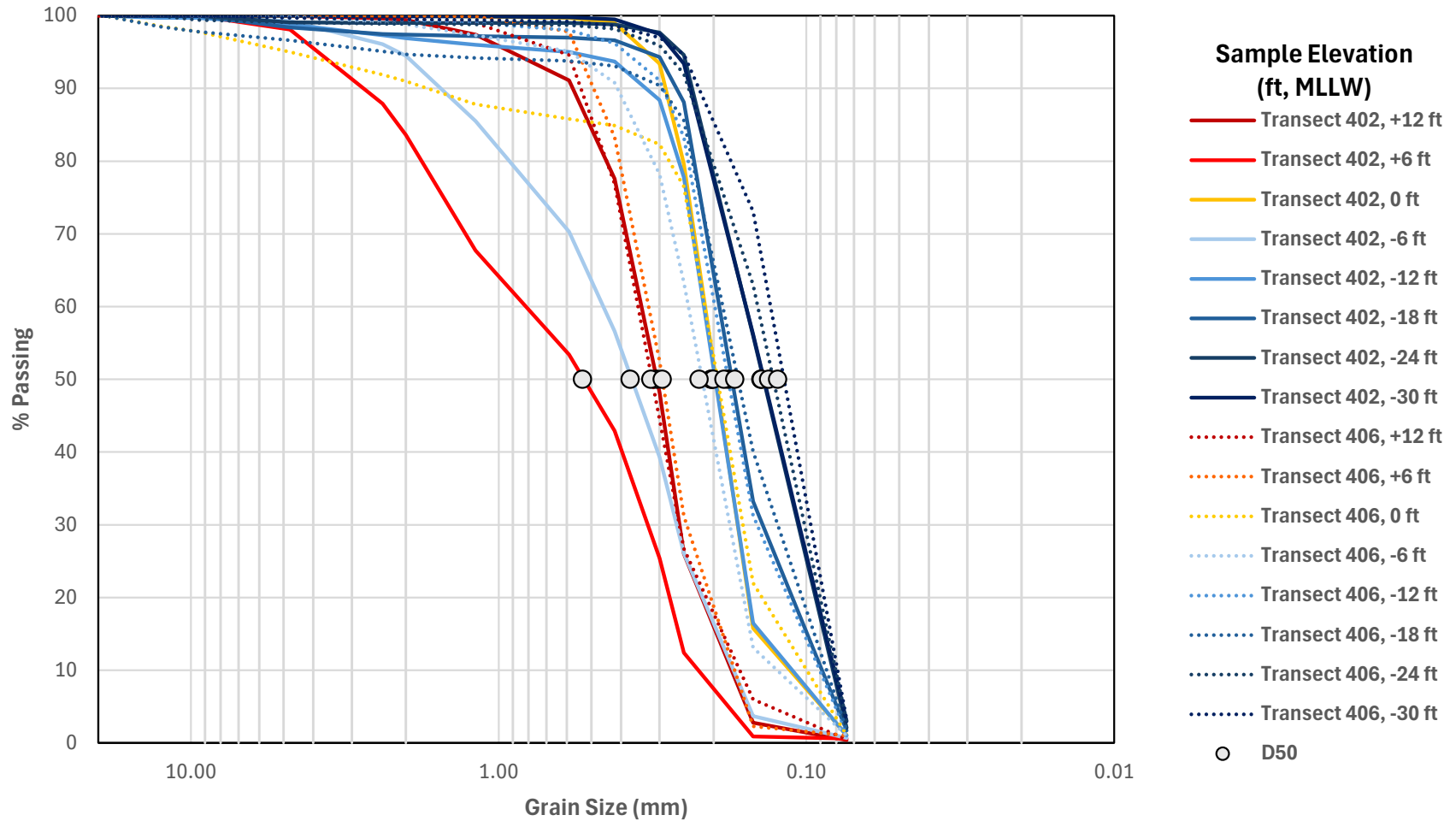


Figure 2-2. Sediment Gradation, Zuma Beach SCoup Receiver Site

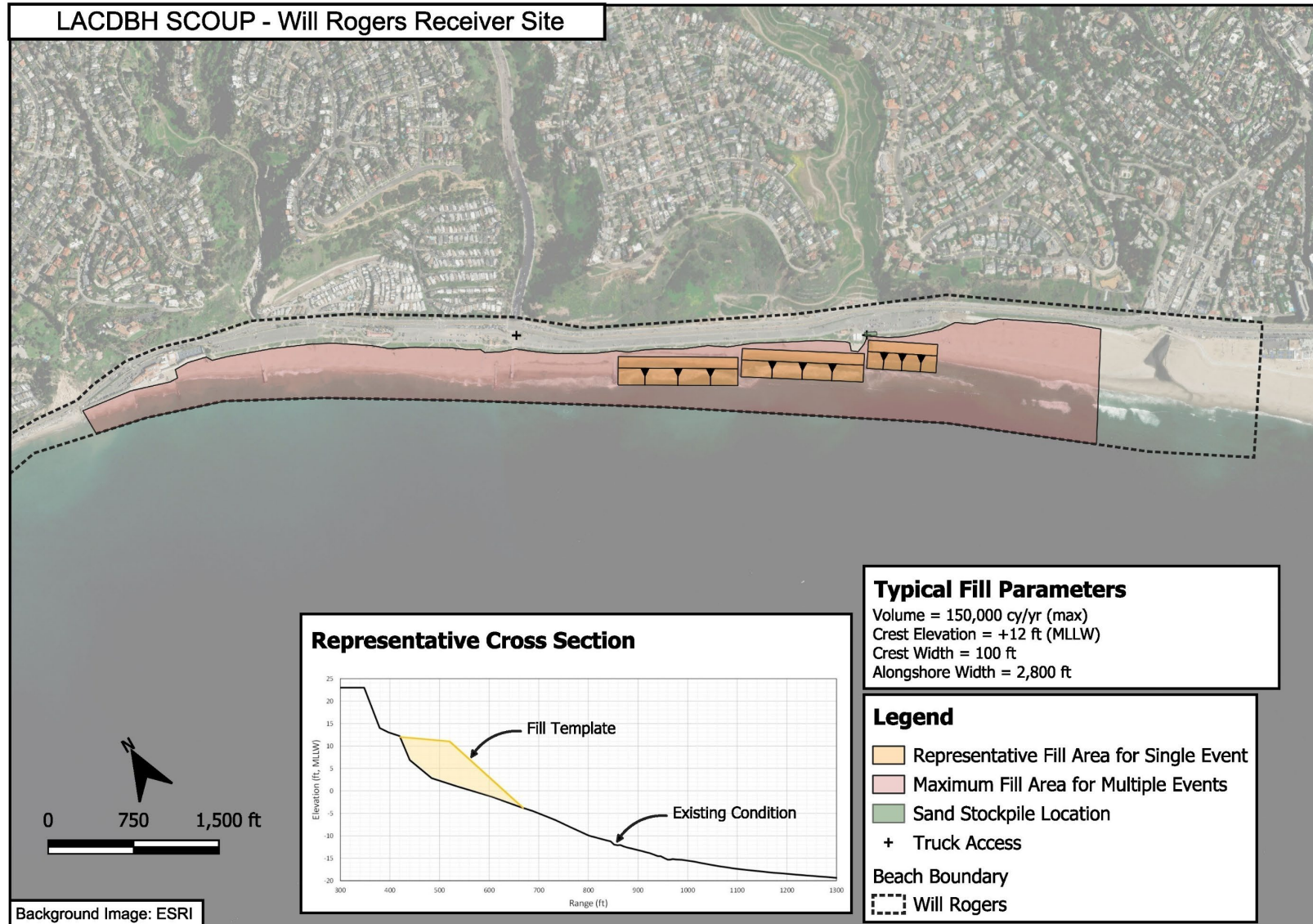


Figure 2-3. Will Rogers State Beach SCOUP Receiver Site

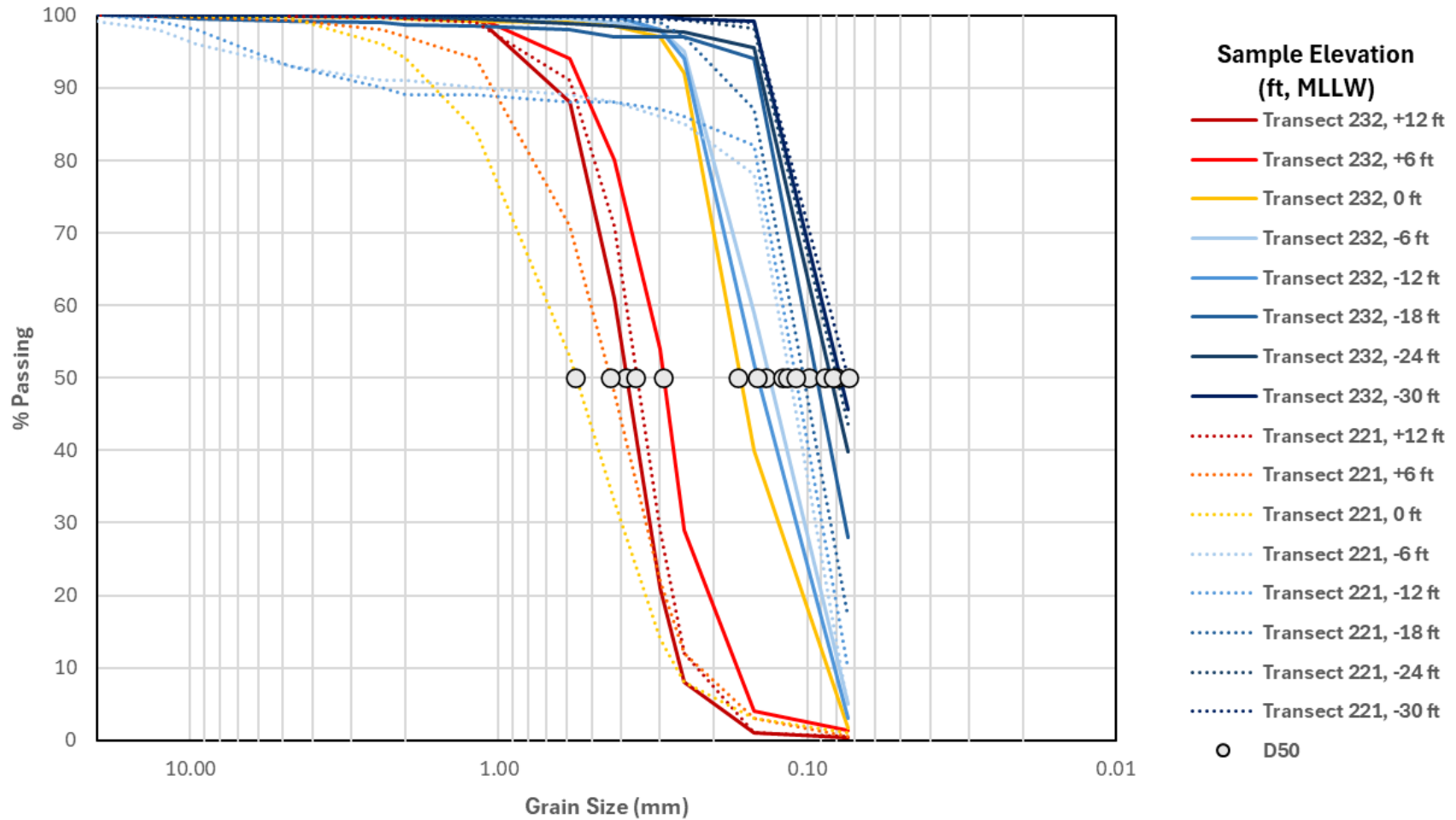


Figure 2-4. Sediment Gradation, Will Rogers State Beach SCoup Receiver Site

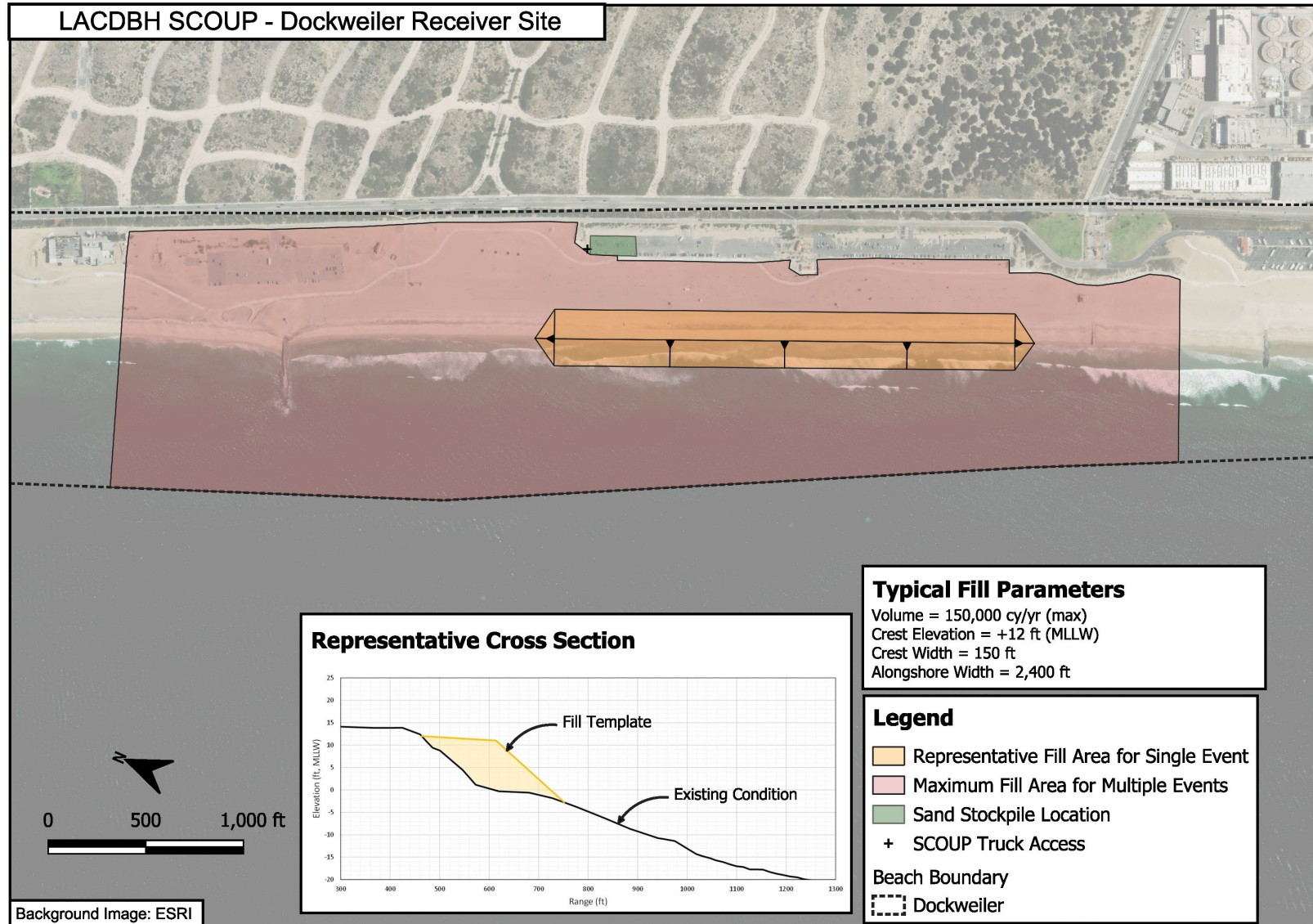


Figure 2-5. Dockweiler State Beach SCoup Receiver Site

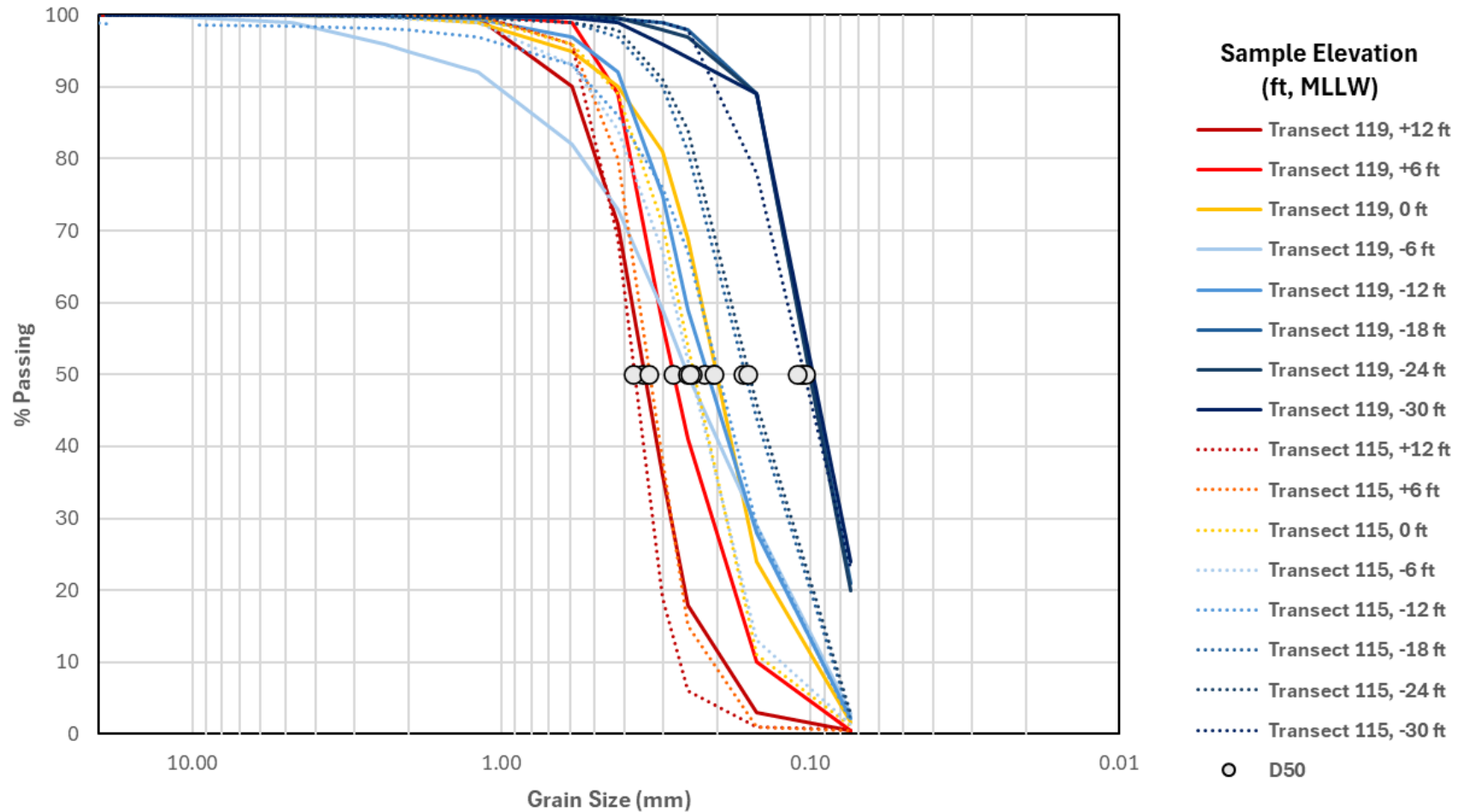


Figure 2-6. Sediment Gradation, Dockweiler State Beach SCoup Receiver Site

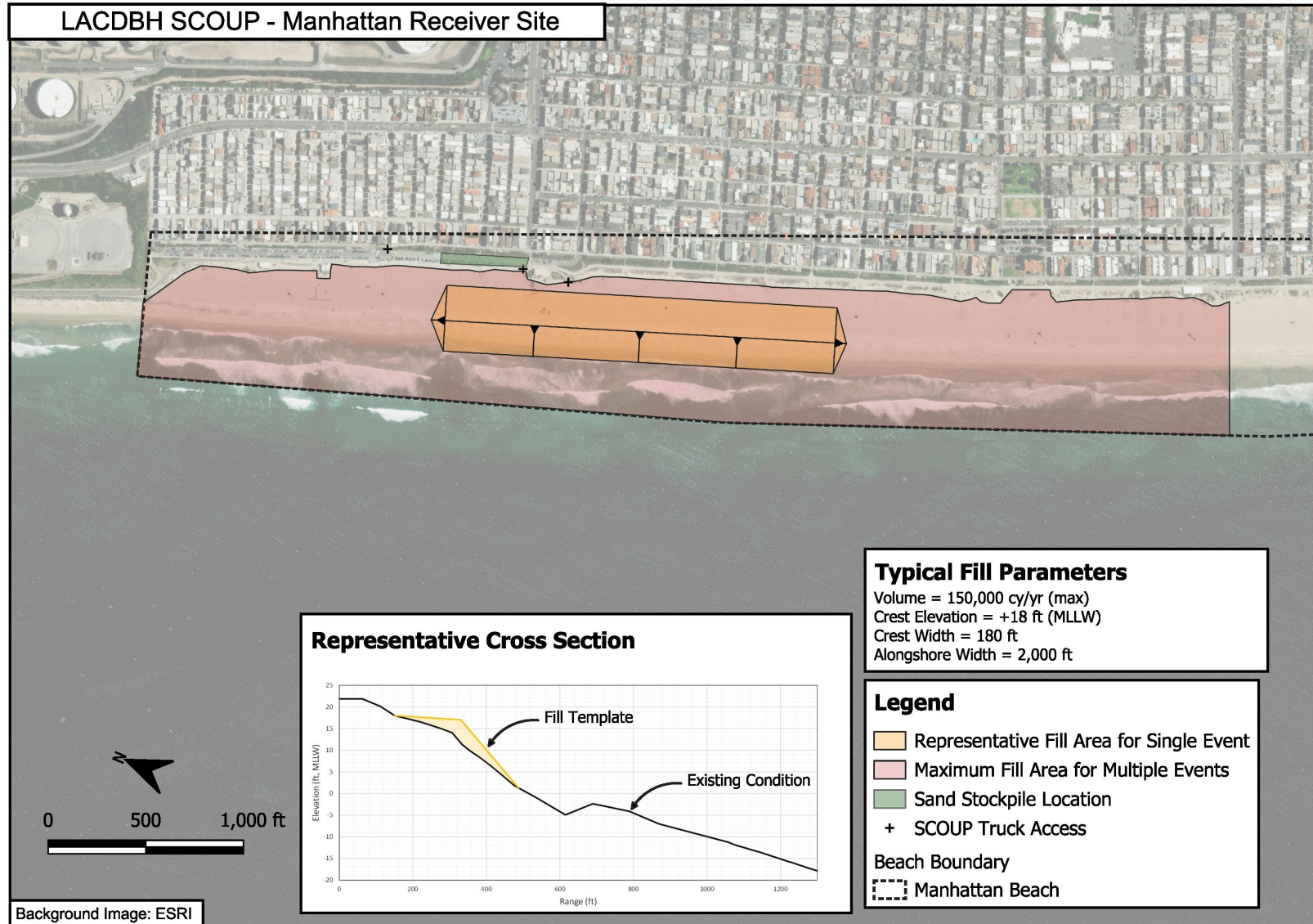


Figure 2-7. Manhattan Beach SCOUNP Receiver Site

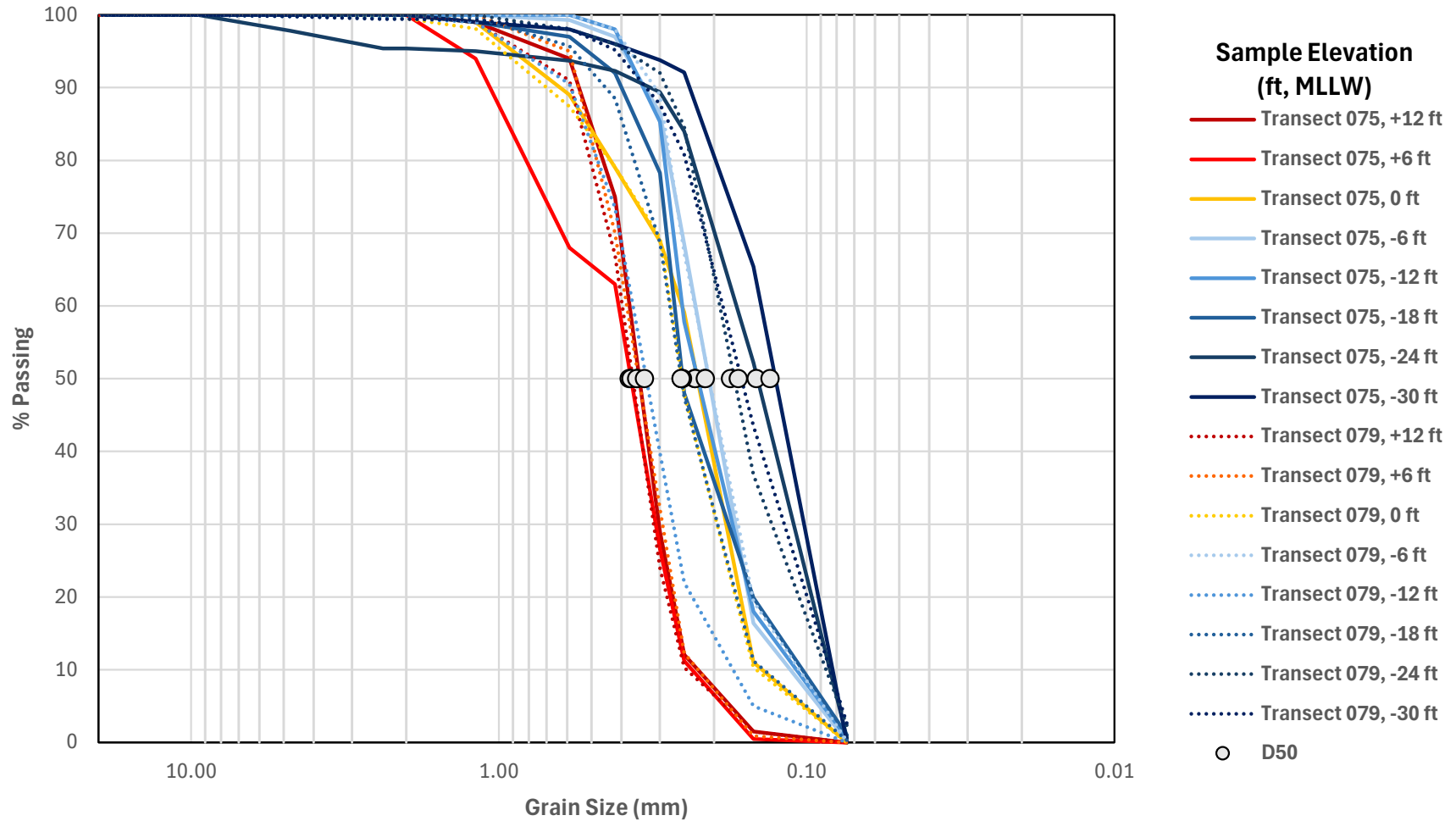


Figure 2-8. Sediment Gradation, Manhattan Beach SCoup Receiver Site

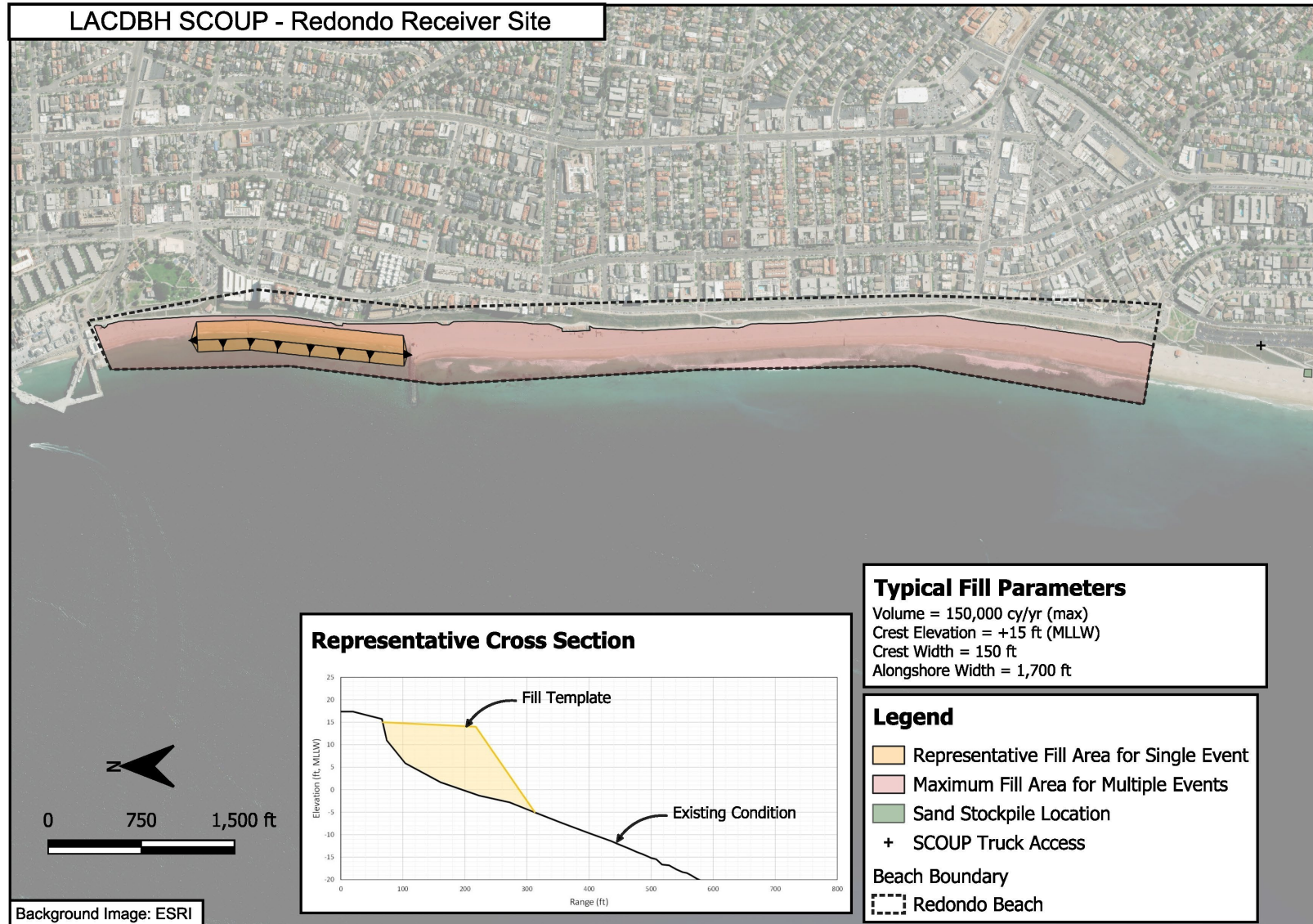


Figure 2-9. Redondo Beach SCOUNP Receiver Site

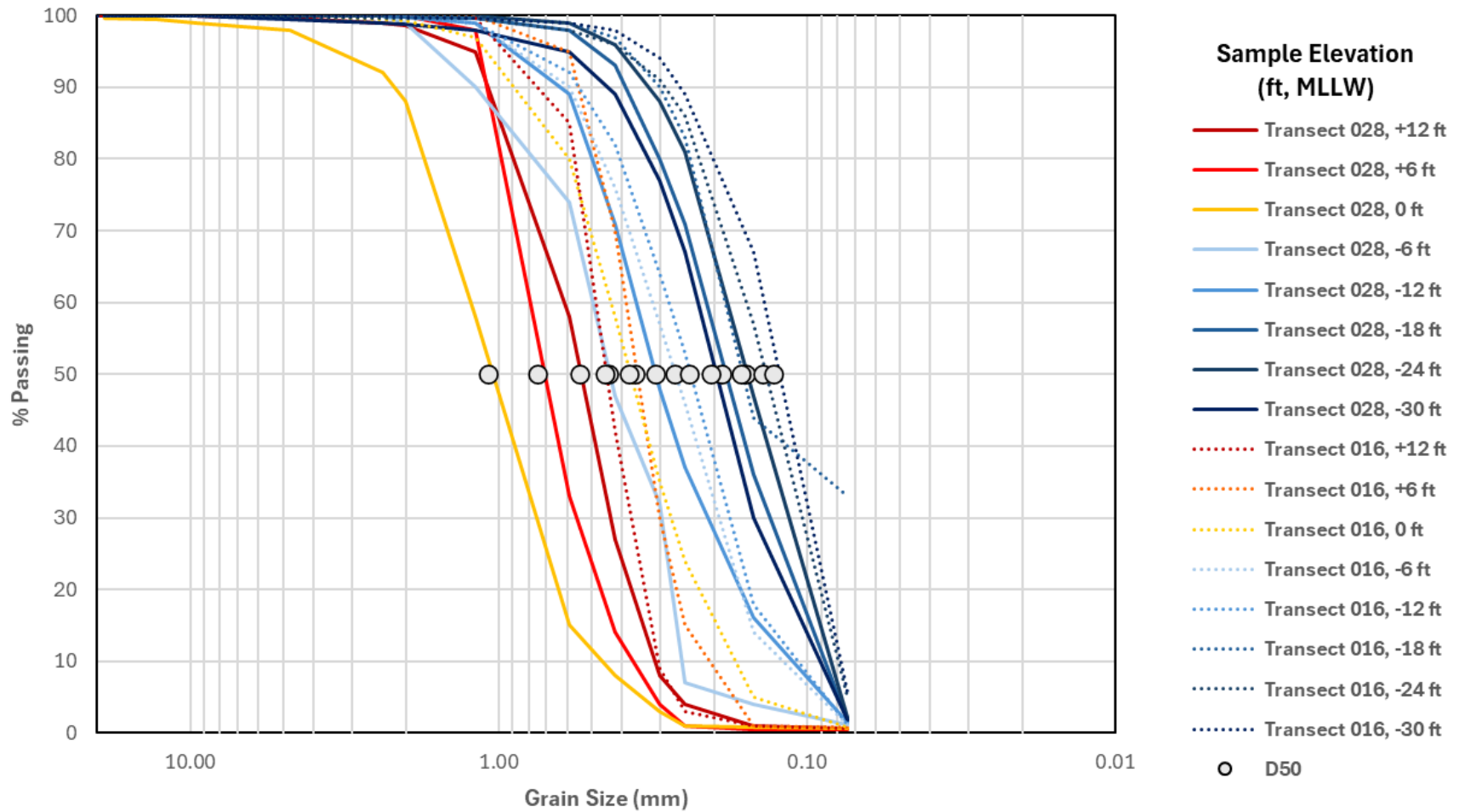


Figure 2-10. Sediment Gradation, Redondo Beach SCoup Receiver Site

3 Project Approach

This section outlines the SCoup approach, including placement strategies, timing, requirements for sediment quality and quantity, and potential transportation methods. A summary of the various requirements is provided in Table 3-1.

Table 3-1. Proposed Project Requirements for all SCoup sites

Fines Content	Maximum Volume	Placement Strategies			Transportation Methods	
(%)	(cy/yr)	Berm	MHTL	Nearshore	Truck	Vessel
Up to 15%	150,000	Yes	Yes	Yes	Yes	Yes
16 to 25%	50,000	No	Yes	Yes	Yes	Yes

3.1 Placement Strategies

Three placement strategies are included in the LACDBH SCoup. Each strategy is outlined in the *Final Sand Compatibility and Opportunistic Use Program Plan* (Moffatt & Nichol, 2006) adopted by the California Coastal Sediment Management Workgroup as part of their Coastal Sediment Management Master Plan:

Beach Berm:	Source material placed as an extension of the existing berm.
Mean High Tide Line:	Source material placed in a mound near the Mean High Tide Line.
Nearshore:	Source material placed in the nearshore waters landward of the depth of closure.

The Beach Berm method will be the primary method used and is recommended for high-quality source material with a fines content (percentage of material passing the #200 sieve) less than or equal to 15%. Mean High Tide Line and Nearshore placements will be used when the fines content of the source material is between 15% and 25%. Example beach berm placement strategies are shown in the SCoup footprint figures provided in Section 2.

3.2 Construction

Regardless of the method used to transport the material to the beach, it is expected that the heavy equipment listed in Table 3-2 will be used for each SCoup Project. It is possible, but not guaranteed, that Tier 3 or Tier 4 engines will be used. Approximately 10 construction personnel

are expected to be on site, resulting in 10 round-trip commutes per day. Parking will be provided in the lots adjacent to the beach. Construction activities will be conducted during daylight hours on weekdays, unless an acute need arises.

Table 3-2. Expected Heavy Equipment per Site per Project

Equipment	Dozer	Loader	Scraper	Sweeper
Number	2	2	2 ⁽¹⁾	1

Notes:

1. Scraper needed at Redondo Beach only.
2. Table does not include trucks hauling material from source to site.

3.3 Timing

Ideally, placement will occur in the fall and winter months to avoid disturbing beach users during the peak season (Memorial Day to Labor Day). However, placement during the peak season may occur in those cases where an acute need and suitable source are identified. To the extent possible, construction activities will be timed to avoid grunion runs and nesting of relevant threatened or endangered species.

3.4 Sediment Quality and Quantity

3.4.1 Maximum Volume

The maximum volume that can be placed at any one site in a given calendar year is 150,000 cy for material with a fines content less than or equal to 15%, and 50,000 cy for material with a fines content between 15% and 25%. This is consistent with the recommendation provided in the *Final Sand Compatibility and Opportunistic Use Program Plan* (Moffatt & Nichol, 2006) adopted by the California Coastal Sediment Management Workgroup.

3.4.2 Sediment Quality

Source material used as part of the LACDBH SCoup will adhere to the following requirements:

- Source material placed using the Beach Berm strategy will have a fines content less than or equal to 15%. Source material with a fines content of up to 25% can be placed using the Mean High Tide Line or Nearshore strategies. Each strategy is described in Section 2.
- The source material will be substantially free of chemical and biological contamination.

- The distribution of grain sizes found at the source will be similar to those found at the receiver site. The native distribution of grain sizes for each receiver site is shown in Section 2.
- The color of the source material will reasonably match the color of the receiving beach after reworking by waves.
- The source material will generally be free of trash, debris, and large fragments of organic material (e.g., tree limbs, shrubs) that can cause health and safety issues, odors, or visual impacts to beach users. Gravel is not acceptable, but rounded cobble in the source material may be acceptable if there is existing native cobble on the receiver beach.
- Source material that forms a hardpan can only be placed in the surf zone.
- Use of natural sand, rather than manufactured material, is recommended for beach nourishment projects based on the observation that the rounded particles are considered more comfortable to recreational users. The use of manufactured sand is discouraged, as it may irritate recreational users and inhibit colonization of interstitial flora and fauna.

3.5 Transportation Methods

Given the opportunistic nature of SCOUNP, the method used to deliver source material to the receiver site will be determined based on the constraints specific to each project. Potential delivery methods include those traditionally used for beach nourishment: trucking for inland sediment sources, and vessels for offshore sediment sources.

3.5.1 Trucking

Material from inland sources, such as development projects or flood control maintenance, can be delivered via truck and spread along the beach using traditional earthmoving equipment (e.g., dozers, loaders, scrapers). Ingress and egress points have been identified at each site, are shown in the figures provided in Section 2, and are described below.

Zuma Beach: Trucks enter from PCH at Trancas Creek or the main entrance to Zuma Beach and use the internal access road to reach the parking area nearest the target sand placement area. Material is stockpiled in the parking lot. Trucks exit at the nearest location. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Will Rogers State Beach: Trucks enter and exit at the intersection of PCH and Temescal Canyon Road and use the internal access road to reach the parking area nearest the target sand

placement area. Material is stockpiled in the parking lot. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Dockweiler State Beach: Trucks enter and exit at the intersection of Imperial Highway and Vista Del Mar. Trucks use South Marine Avenue to reach the parking area nearest the target sand placement area. Material is stockpiled in the parking lot. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Manhattan Beach: Trucks enter at the intersection of N The Strand and 36th Street. Trucks proceed to the parking area and stockpile sand in the parking lot. Trucks exit at the intersection of N The Strand and 40th Street. Loaders transport sand from the stockpile to the beach placement area. Dozers shape the material to match the construction template.

Redondo Beach: Trucks enter and exit at the intersection of Paseo De La Playa and Via Riviera. Trucks proceed to the access ramp, drive down the ramp to the beach, and stockpile sand on the concrete apron. Scrapers transport material to the target placement area. Dozers shape the material to match the construction template.

The number of truck trips will vary based on the quantity of material available for placement. Table 3-3 summarizes the maximum values based on the maximum volume of material that can be placed annually (150,000 cy). The assumed truck capacity, working period, and placement rate were derived from a similar project conducted in 2024 by the City of San Clemente (Meyerhoff, 2024). Based on information provided in Section 4, the maximum one-way truck trip is assumed to be 80 miles.

3.5.2 Vessel (Pipeline or Bottom-Dump)

In those cases where dredged material is used, the method of delivery will be based on the proximity of the receiver site to the dredging activities and the type of equipment available for the work. Two of the most common methods are to pump the material onto the beach via a connected pipeline and to dump the material into the nearshore zone (landward of the depth of closure) using a bottom-dump barge or scow.

Given that these represent less common transportation methods, detailed analyses are not provided herein. These will be developed prior to the specific project for which vessel-based transportation will be used.

Table 3-3. Proposed Maximum Number of Truck Trips per Year per Site

Maximum Volume/Site	Truck Capacity	Number of Trucks	Placement Rate	Duration	Trips				Trip Interval
(cy/yr)	(cy/truck)	(trucks/yr)	(cy/day)	(days)	(monthly)	(weekly)	(daily)	(hourly)	(minutes/truck)
150,000	14	10,714	1,000	150	1,440	360	72	6	10

Notes:

1. Rate of Placement based on 2024 San Clemente North Beach SCOUP Project (Meyerhoff, 2024).
2. Working hours assumed to be 12 hours per day, 5 days per week.

4 Sediment Sources

This section outlines potential SCoup sand sources, including reservoirs and debris basins managed by the County, dams, local watercourses (rivers, creeks, streams, and lagoons), harbor maintenance dredging, transportation projects, upland development projects, and landslides. While those within 20 miles of the receiver sites are considered most viable (Moffatt & Nichol, 2006), more distant sources have been included to expand potential SCoup opportunities. The locations of the potential sources are shown in Figure 4-1 along with haul routes to the five receiver beaches.

4.1 County-Owned Reservoirs and Debris Basins

Reservoirs and debris or retention basins trap material that may otherwise travel downstream and cause flooding. Infilling is sporadic and dependent on several factors, including the rate and timing of precipitation. Material that is impounded within these features is removed during maintenance events and typically is placed in a landfill, used as landfill cover, or repurposed as construction fill. If beach quality sediment within the reservoir can be identified and segregated, it can be used as beach nourishment.

Potentially viable beach sand sources from upland reservoirs and debris basins managed by the Los Angeles County Flood Control District (LACFCD) are listed in Table 4-1 along with the approximate minimum trucking distance between the sand source and each of the five SCoup receiver sites. The maximum distance from source to receiver site is 80 miles.

4.2 Dams

LA County's largest inland source of beach quality sediment proximate to the coast is the Rindge Dam reservoir in Malibu (Noble Consultants and Larry Paul & Associates, 2017). The dam was constructed in the 1920s along Malibu Creek for water supply and flood control purposes. The dam effectively trapped sediments that would have travelled to the coast naturally, resulting in rapid filling of the reservoir with soil and debris. By the 1950s, the reservoir was almost filled with sediment and no longer functional for water storage or flood protection.

The *Malibu Creek Ecosystem Restoration Study* (USACE and CDPR, 2020) is investigating removal of the dam and restoration of natural sediment delivery to the shoreline. As part of the project, approximately 276,000 cy of beach quality sediment has been identified as suitable for beach nourishment. While this material is presently designated for either onshore or nearshore placement just east of Malibu Pier, there is a potential need for the project to identify alternative receiver sites.

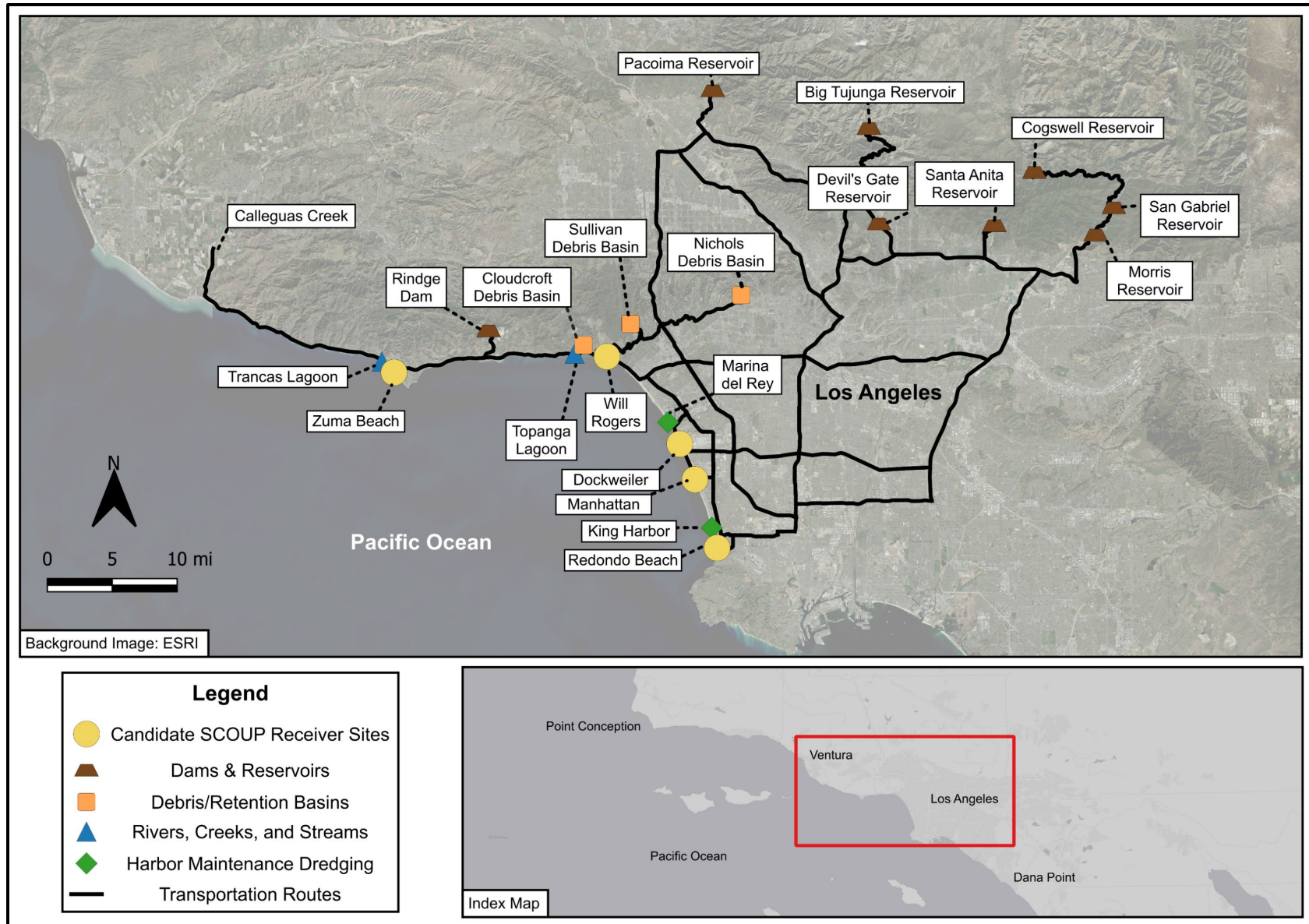


Figure 4-1. Location Map of Potential Sand Sources in Relation to Receiver Sites

Table 4-1. Distance Between Reservoirs / Debris Basins and SCoup Receiver Sites

Receiver Site	Minimum Distance (miles)									
	Reservoir							Debris Basin		
	Pacoima	Big Tujunga	Devil's Gate	Cogswell	San Gabriel	Morris	Santa Anita	Cloudcroft	Sullivan	Nichols
Zuma Beach	48	61	54	80	67	65	59	17	24	33
Will Rogers SB	32	45	34	62	51	49	41	1	9	18
Dockweiler SB	32	45	34	60	48	45	42	13	12	13
Manhattan Beach	40	52	37	63	50	47	44	18	17	18
Redondo Beach	42	54	39	65	52	49	47	24	23	24

4.3 Local Watercourses

Rivers, creeks, streams, and lagoons along the coast offer a potential source of opportunistic fill material when flood control or maintenance activities generate beach quality sediments. Three sites near the SCOUP receiver beaches are Calleguas Creek, Trancas Creek and Lagoon, and Topanga Lagoon.

4.4 Harbor Maintenance Dredging

Small craft harbors on the open California Coast generally create sand traps if located within a sediment transport pathway. These harbors require maintenance dredging at varying frequency depending on location and other factors. Small craft harbors within the Santa Monica Bay region include Marina del Rey Harbor and Redondo Beach – King Harbor. Dredged material from both harbors have been successfully placed on Dockweiler State Beach and at Redondo Beach in the recent past.

4.5 Transportation Projects

Major transportation projects such as roadways and bridges may generate surplus sediment from excavation activities. For example, replacement of the Trancas Creek Bridge at Zuma Beach resulted in a surplus sediment volume of approximately 20,000 cy, of which an estimated 8,000 cy was suitable for beach nourishment.

Landslide deposits are another potential source of sediment for SCOUP. Landslides generally occur during the wet winter season along road or railroad cuts, and other over-steepened areas. When landslides occur near roadways and railroad tracks, the material must be removed and disposed of properly. After the 2018 landslide in Santa Barbara and Montecito, the material was removed from the upland area and placed on the adjacent beaches as beach nourishment.

4.6 Upland Development Projects

Development projects frequently generate beach-quality sediments that can be used for beach nourishment. For example, development near the Santa Monica Bay Club in 2023 generated a small volume of high-quality sediments (500 cy) that could have been beneficially reused. However, in the absence of streamlined sampling, testing, and permitting protocols, the opportunity was not pursued.

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