



US Army Corps
of Engineers®
Los Angeles District

PUBLIC NOTICE

APPLICATION FOR PERMIT Orange County Public Works (OCPW) Orange County Sand Compatibility and Opportunistic Use Program

Public Notice/Application No.: SPL-2025-00886
Project: Orange County Sand Compatibility and Opportunistic Use Program
Comment Period: December 17, 2025 through January 16, 2026
Project Manager: Eric Sweeney; (760) 602-4837; Eric.R.Sweeney@usace.army.mil

Applicant

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Contact

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This Regional General Permit (RGP) would be available to all public agencies seeking to conduct beach nourishment activities at the Orange County beach sites listed below.

Location

The proposed Orange County (OC) Sand Compatibility and Opportunistic Use Program (SCOUP) includes beaches within the cities of Seal Beach, Huntington Beach, Newport Beach, Dana Point, and San Clemente in Orange County, CA. The 25 potential receiver beach sites are listed below and shown in Figure 1.

Table 1: OC SCOUP Receiver Beach Locations

Location	Latitude	Longitude
West Beach, Seal Beach	33.740992	-118.110233
East Beach, Seal Beach	33.736601	-118.102355
Surfside Beach	33.727198	-118.084358
Sunset Beach	33.720044	-118.075543
Huntington Harbour Beaches	33.721007	-118.064932
Bolsa Chica State Beach	33.705704	-118.058648
Huntington Beach Bluffs	33.672640	-118.025010
Huntington Beach State Beach	33.640316	-117.976817
West Newport Beach	33.621583	-117.943604
Balboa Beach	33.600200	-117.901217
Newport Harbor Beaches	33.616354	-117.891972
Newport Dunes	33.616631	-117.892036

Location	Latitude	Longitude
Corona del Mar Beach	33.592988	-117.875735
Little Corona del Mar Beach	33.590019	-117.868800
Crystal Cove State Beach	33.568732	-117.835247
Salt Creek Beach	33.471572	-117.719919
Baby Beach	33.462878	-117.704996
Doheny State Beach	33.458411	-117.674175
Capistrano Beach County Park	33.454510	-117.668364
Poche Beach	33.440960	-117.644956
Capistrano Shores	33.435039	-117.638008
San Clemente North Beach	33.429811	-117.631261
San Clemente Central City Beaches	33.416417	-117.617723
San Clemente State Beach	33.406887	-117.608690
Cyprus Shore/Cottons Beach	33.395929	-117.600277

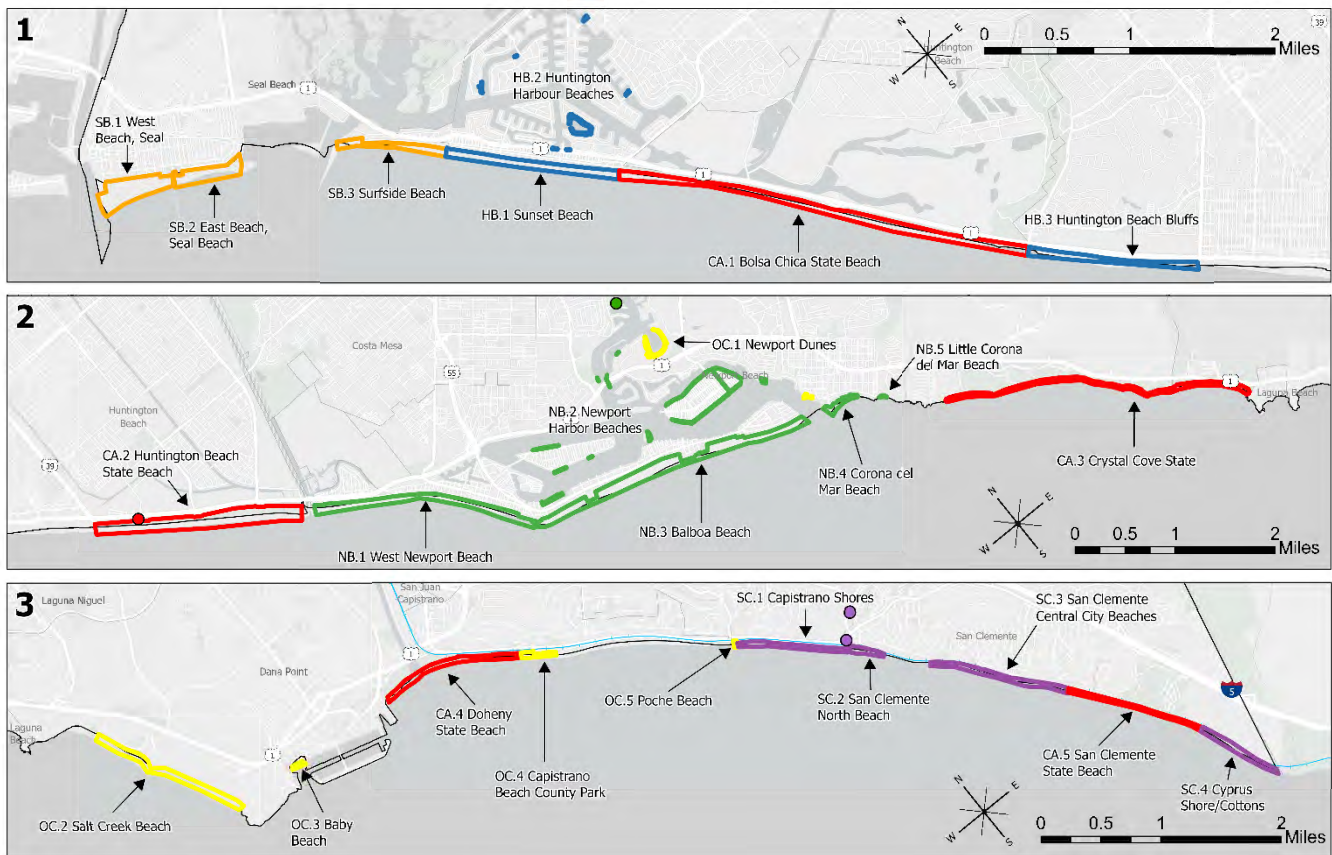


Figure 1 – Orange County SCOUP Vicinity Map

Activity

The OC SCOUP would authorize public agencies to beneficially use beach-quality sand from maintenance and construction sediment removal activities, as these opportunities arise. Removal/excavation of the source sediment would be separately approved by local, state, and federal

agencies as appropriate (i.e., not under OC SCOUP), but without the OC SCOUP, the sediment would go to landfills or be used in construction, rather than be beneficially used on OC beaches. Through this RGP, OC Public Works (OCPW) aims to reduce barriers faced by local jurisdictions who seek to use opportunistically available sand sources for beach nourishment projects. OCPW indicates that beach nourishment projects conducted under this RGP will provide recreational benefits, habitat enhancement, protection for shoreline infrastructure, as well as economic benefits.

The proposed program includes pre-established source sediment acceptability criteria, monitoring requirements, and notifications, documented in an *Implementation Guidelines* document (available upon request). The source sediment acceptability criteria, to maintain healthy beaches for humans and habitat, includes chemistry, grain size and color compatibility with the receiver beach, and debris/vegetation content. The program would include sand placement at up to twenty-five receiver beach sites. OC SCOUP specifies typical and annual maximum sand placement volumes and footprints for each receiver beach; see attached figures for typical and maximum sand placement footprints for each site. Typical sand placement quantities range from 1,000 to 100,000 cubic yards.

Existing biological and other resources have been defined at each of the receiver sites and serve as “trigger criteria” for monitoring to avoid potential impacts to these resources. Both Marine and Terrestrial Biological Assessments Reports were prepared in 2025 for the OC SCOUP.

Submittal of Public Comments

Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today’s public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps’ decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

Please do not mail hard copy documents, including comments to any Regulatory staff. Instead, your comments should be submitted electronically to:

Eric.R.Sweeney@usace.army.mil

Should you have any questions or concerns about the Corps’ proposed action or our comment period, you may contact Eric Sweeney directly at (760) 602-4837.

The mission of the U.S. Army Corps of Engineers (USACE or “Corps”) Regulatory Program is to protect the Nation’s aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation’s waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation’s navigable waters and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects and makes permit decisions that recognize the essential values

of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable effects. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal discharged dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above.

Preliminary Review of Selected Factors

Water Quality- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board (RWQCB). Section 401 requires any applicant for an individual Section 404 permit to provide proof of water quality certification to the Corps of Engineers prior to permit issuance. OCPW is also exploring the potential to use the Water Board's Statewide Restoration General Order No. 2022-0048-DWQ which lists "beach renourishment" as an eligible activity.

Since the Program spans two RWQCBs, the application for permit was submitted to the State Water Resources Control Board (SWRCB) on November 7, 2025. Mark Chin with the SWRCB is processing the application. Contact information is as follows: Mark.Chin@Waterboards.ca.gov.

Coastal Zone Management- For those projects in or affecting the coastal zone, the Federal Coastal Zone Management Act requires that prior to issuing the Corps authorization for the project, the applicant must obtain concurrence from the California Coastal Commission that the project is consistent with the State's Coastal Zone Management Plan and the California Coastal Act. The applicants have submitted a Coastal Development Permit application to the California Coastal Commission.

Essential Fish Habitat- The Magnuson-Stevens Fisheries Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires Federal agencies to consult with the National Marine Fisheries Service (NMFS) on activities that may adversely affect Essential Fish Habitat (EFH). The objective of the EFH assessment is to describe potential adverse effects to designated EFH for federally managed fisheries species within the proposed action area.

An Essential Fish Habitat Assessment was completed for this Program which indicates EFH exists within and near the OC SCoup beach receiver sites. Both impacts and mitigation to the EFH are provided in the document and note that any influences to the EFH would be related to grunion during the spawning season and thus of short duration and limited spatial extent. The beaches associated with OC SCoup can support California grunion (*Leuresthes tenuis*) spawning from approximately Mid-March through August of each year. The proposed project would follow the specific grunion avoidance protocols contained in the OC SCoup *Implementation Guidelines*. The nearshore areas of some of the beach receiver sites do support reef, kelp, surfgrass (*phyllospadix*), or eelgrass (*Zostera marina*) habitat, however, with appropriate placement design and water quality monitoring, these resources would not be impacted.

Cultural Resources – Across the entirety of the project, the opportunistic beach nourishment material would not affect negatively any historic resource due to sand placement on existing sandy beaches.

Endangered Species - Preliminary determinations indicate the proposed activity would be in the vicinity of California least tern (federal endangered) and western snowy plover (federal threatened). Qualified biologists would be retained by the applicant to monitor the beach placement sites prior to and potentially also during any sand placement on the beach. Detailed monitoring protocols can be found in Section 5 of the OC SCoup *Implementation Guidelines* (available upon request).

Public Hearing - Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Proposed Activity for Which a Permit is Required

Basic Project Purpose - The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). **There are no special aquatic sites within the proposed project area. Meaning that a basic project purpose is not necessary for this application.**

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. **The overall purpose of OC SCOUNP is to establish a Regional General Permit that reduces permitting times and costs for all public agencies seeking to conduct opportunistic beach nourishment along the Orange County coast.**

Additional Project Information

Sand placement may occur within or outside of waters of the U.S. (WOUS), as shown in the attached figures. To allow for the specific needs of each beach receiver site, multiple potential sand placement locations within the beach profile (cross-section designs) have been identified:

- on the dry beach as a beach berm,
- below the mean high tide line,
- on the dry beach as a storm (winter) dike,
- on the back beach as a dune,
- on the back beach as a cliff/bluff stabilization measure.

The first two designs would include fill within WOUS, whereas the last three designs would not.

Table 2 lists maximum volumes and alongshore distances, however in practicality the actual (typical) sand placement will be less and typically only every few years (perhaps decades for some beaches) based on source sand availability. The exact footprint and cross-section of sand placement for a given receiver beach will be developed and documented in the Project Notification for each event, based on the existing beach's need at the time of source sediment opportunity.

Table 2 – Sand Placement Volumes and Alongshore Reaches

Beach Nourishment Site	Maximum Sand Placement Volume (cy/yr)	Alongshore Distance (ft)
West Beach, Seal Beach	100,000	1,000
East Beach, Seal Beach	200,000	1,000
Surfside Beach	300,000	2,000
Sunset Beach	200,000	2,000
Huntington Harbour Beaches	17,500	<2,000
Bolsa Chica State Beach	300,000	2,000
Huntington Beach Bluffs	300,000	2,000
Huntington Beach State Beach	200,000	2,000
West Newport Beach	300,000	2,000
Balboa Beach	300,000	2,000

Beach Nourishment Site	Maximum Sand Placement Volume (cy/yr)	Alongshore Distance (ft)
Newport Harbor Beaches	10,000	<2,000
Newport Dunes	50,000	800
Corona del Mar Beach	100,000	1,000
Little Corona del Mar Beach	5,000	200
Crystal Cove State Beach	300,000	2,000
Salt Creek Beach	200,000	1,000
Baby Beach	10,000	550
Doheny State Beach	300,000	2,000
Capistrano Beach County Park	150,000	1,000
Poche Beach	1,000	140
Capistrano Shores	300,000	2,000
San Clemente North Beach	150,000	1,000
San Clemente Central City Beaches	300,000	2,000
San Clemente State Beach	300,000	2,000
Cyprus Shore/Cottons Beach	300,000	2,000

Proposed Mitigation: The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance: Opportunistic nourishment activities would be performed only as needed and when suitable material is identified.

Pre-construction and during-construction monitoring would identify the presence of sensitive habitat and sand placement construction activities would avoid the sensitive habitat. The OC SCOUP *Implementation Guidelines* document (available upon request) defines these monitoring activities and the trigger criteria for monitoring.

Minimization: OC SCOUP nourishment activities would include only the minimum amount of work necessary to take advantage of the opportunistically available sandy material and would not exceed the design specifications set forth above on an annual basis. As described above, sensitive species monitoring would be conducted to avoid and minimize potential impacts to the sandy beach habitat. Beach construction activities would include standard safety procedures and implement Best Management Practices (BMPs), including vehicle speed limits on the beach and proper storage, cleaning and maintenance of construction equipment, and avoidance of construction equipment in the tidal waters. Both Marine and Terrestrial Biological Assessments were developed in 2025 for the OC SCOUP.

Proposed Special Conditions

The following list is comprised of proposed Permit Special Conditions, which are required of similar types of projects:

1. **Water Quality Certification:** The Permittee shall comply with the terms and conditions of the Clean Water Act Section 401 Water Quality Certification ([WQC ID#]), dated [TBD] (Enclosure [TBD]). This WQC is hereby incorporated by reference.
2. **Coastal Zone Management Act:** The Permittee shall comply with the terms and conditions of the Coastal Development Permit (CDP), as amended (CDP ID#), dated [TBD] (Enclosure [TBD]). This CDP is hereby incorporated by reference.
3. **Grunion surveys:** The Permittee shall conduct all sand placement activities outside of the California grunion (*Leuresthes tenuis*) spawning season (March 1st through August 30th or per schedule published annually by the California Department of Fish & Wildlife) to the maximum extent practicable. If opportunistic sand becomes available during the spawning season, pre-project surveys for grunion activity shall be conducted by a qualified biologist in accordance with the protocols described in the OC SCoup *Implementation Guidelines* (Enclosure 1). Impacts to grunion spawning areas shall be avoided or minimized in accordance with the protocols described in this plan.
4. **Federally listed bird species monitoring:** For beach receiver sites with potential nesting of listed bird species and if sand placement is conducted during bird nesting season (March 1st through September 30th), prior to commencing each sand placement activity, Permittee shall provide Corps and Carlsbad Fish and Wildlife Office with pre-construction surveys, conducted by a qualified biologist, for western snowy plover (*Charadrius alexandrinus*; plover) and California least tern (*Sterna antillarum browni*; tern). If plovers or terns are observed within 300 feet of the sand placement area, Permittee shall cease work and notify the Corps (Eric.R.Sweeney@usace.army.mil or splregorcs@usace.army.mil) and Carlsbad Fish and Wildlife Office within 24 hours. No project-related activities shall occur until Permittee is notified by the Corps that the requirements of the Endangered Species Act have been satisfied, and that the activity is authorized.

This Corps permit does not authorize you to take any threatened or endangered species. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g. ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply).

5. **Interference with navigation:** During beach nourishment operations the permitted activity shall not interfere with the public's right to free navigation on all navigable waters of the United States.
6. **Obstructions:** The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers Regulatory Division, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

7. **Sediment testing:** The Permittee is prohibited from disposing material in navigable waters of the United States that has not been tested and determined by the Corps Regulatory Division, in consultation with the U.S. Environmental Protection Agency (EPA), to be suitable for disposal in ocean waters. Sampling and testing of previously tested sediment or previously excavated/dredged areas is required after three years from the date of initial sediment sampling and testing unless the Corps deems that conditions warrant another testing duration be formulated with EPA consultation. This time limit is subject to change at the discretion of the Corps Regulatory Division if any event causes previously determined suitable material to become potentially unsuitable. The Permittee must demonstrate the proposed excavated/dredged materials are chemically and physically suitable for disposal in ocean waters according to the provisions of the Inland Testing Manual (ITM) and the Corps Regional Guidance Letter (RGL) 06-02, as appropriate. If the material does not meet the physical and chemical criteria for unconfined disposal in ocean waters, the excavated/dredged material shall be disposed at a Corps approved upland disposal location. The applicant shall perform sampling and analysis for each opportunistic event per the approved OC SCoup Programmatic Sampling and Analysis Plan (SAP). If deviating from the approved OC SCoup Programmatic SAP is required, the Permittee shall notify the Corps Regulatory Division (Eric.R.Sweeney@usace.army.mil or splregorcs@usace.army.mil) and EPA. Sampling may not commence until any deviations are approved, in writing, by the Corps Regulatory Division, in consultation with EPA. Further, the SAP Results (SAPR) must also be reviewed and approved, and the Permittee must receive a written authorization to proceed.
8. **Post-project reporting:** Following each beach nourishment event, you shall submit a written report to this office as soon as practicable (within 45 days of completing the project) after completion of any action conducted under this RGP). PROVIDING THIS REPORT IS MANDATORY. At a minimum the Report shall include the following the following information:
- a) Source of material used for beach nourishment
 - b) Beach nourishment site used, site acreage, and total cubic yards of sand placed at that site
 - c) Modes of transportation and sand placement
 - d) State and completion dates of transport and nourishment operations
 - e) Results of plover/tern monitoring conducted under Special Condition 4



Regulatory Program Goals:



- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
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West Seal Beach

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7ft MLLW)

-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 300
US Feet






East Seal Beach

 Fill Area Below Highest Tide Line

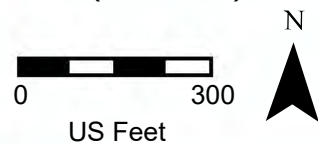
 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events



*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.





Surfside Beach

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7 ft MLLW)


-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events


*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 400
US Feet





Sunset Beach

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7 ft MLLW)

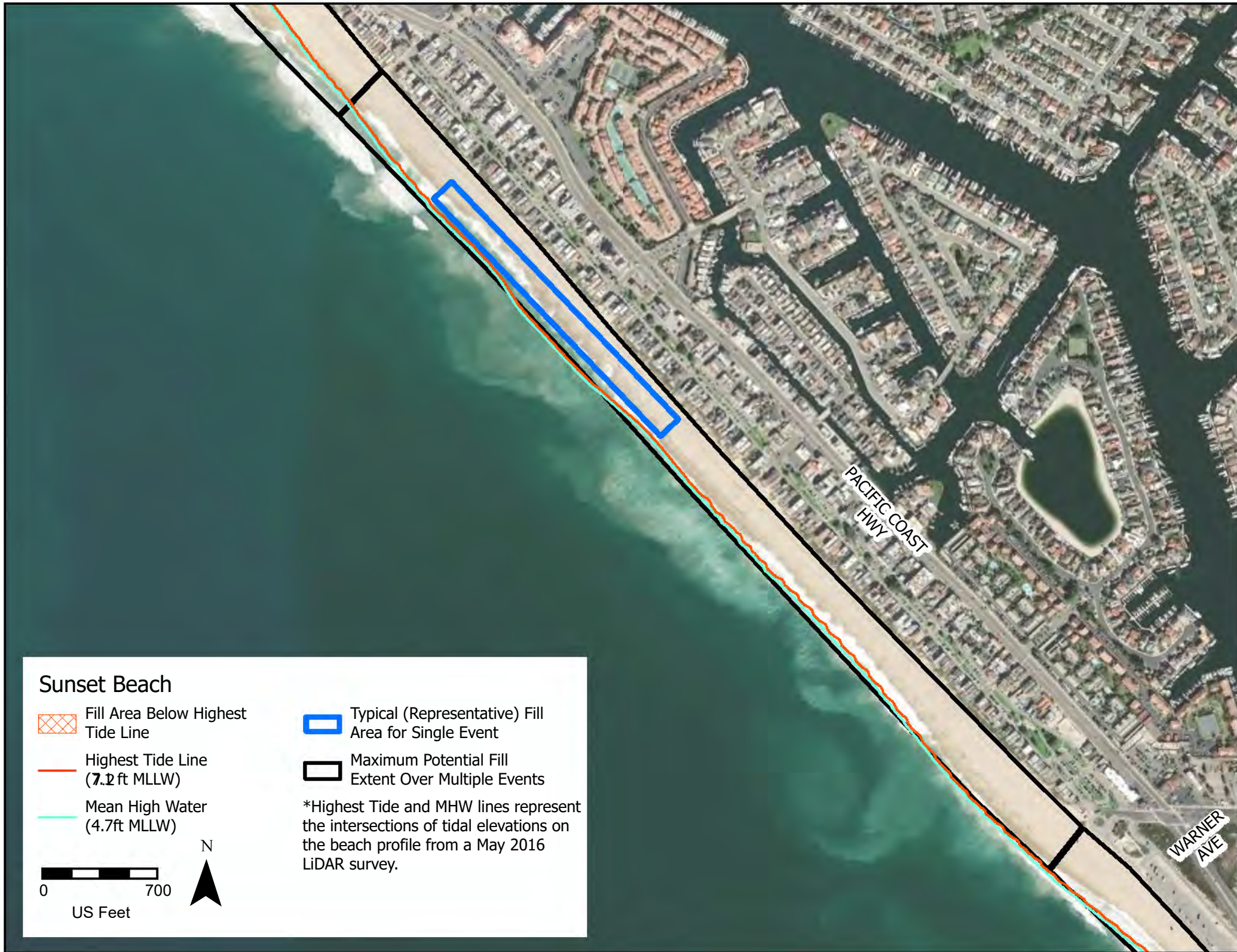
 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.

0 700


US Feet









Bolsa Chica 2

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7ft MLLW)

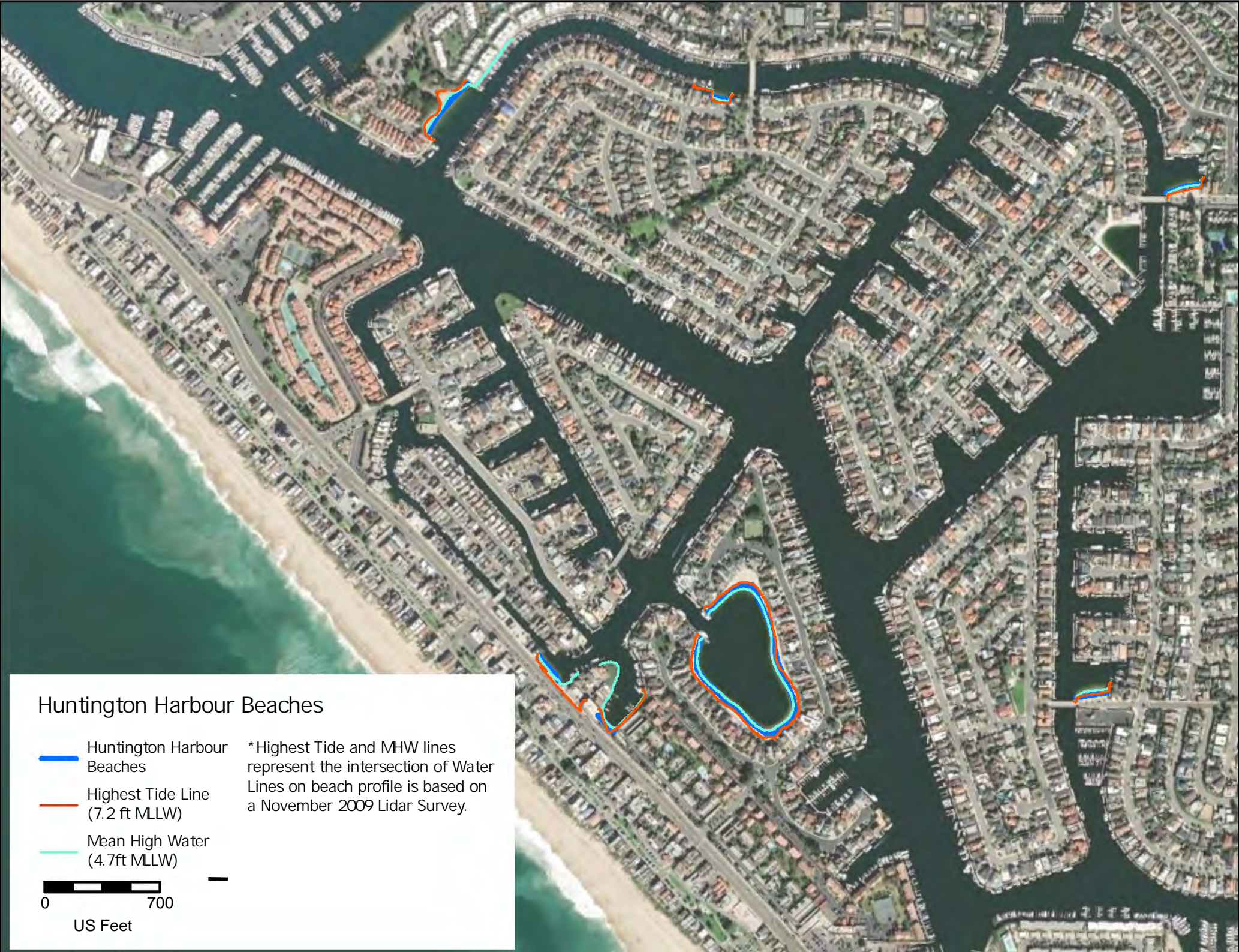
-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.

0 750
US Feet







Huntington Harbour Beaches

- Huntington Harbour Beaches
- Highest Tide Line (7.2 ft MLLW)
- Mean High Water (4.7ft MLLW)

0 700
US Feet

* Highest Tide and MHW lines represent the intersection of Water Lines on beach profile is based on a November 2009 Lidar Survey.












Newport Harbor Beaches

- Newport Harbor Beaches
- Highest Tide Line (7.2 ft MLLW)
- Mean High Water (4.7ft MLLW)

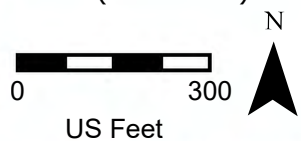
*Highest Tide and MHW lines represent the intersection of Water Lines on beach profile is based on a 2010 Lidar Survey.



Newport Dunes

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7ft MLLW)
-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events


*Highest Tide and MHW lines represent the intersection of Water Lines on beach profile is based on a 2010 Lidar Survey.





Jamboree Rd




West Newport Beach 2

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

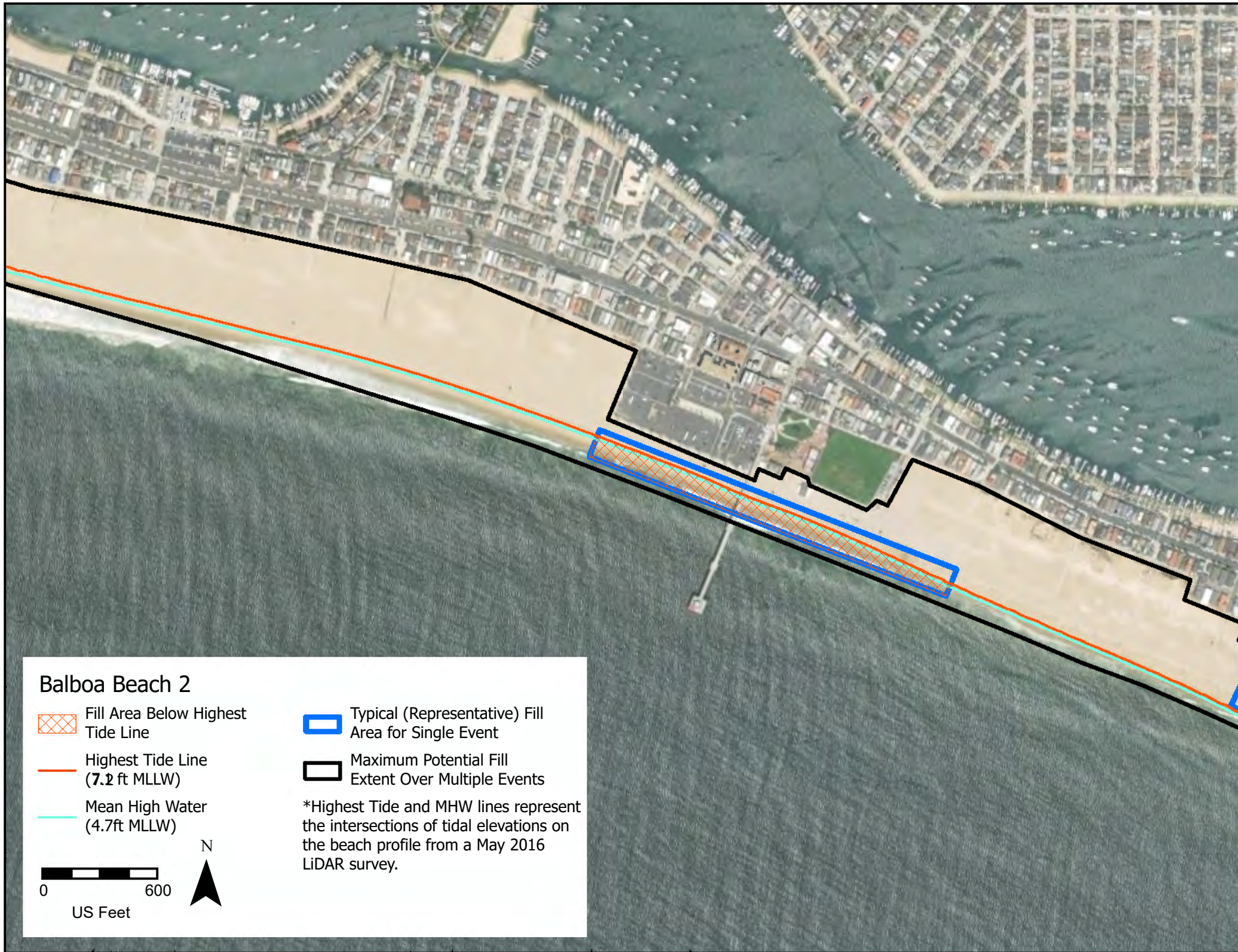
*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.

0 600

US Feet


















Crystal Cove State Beach 1

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7ft MLLW)
-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events


*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 800
US Feet




Crystal Cove State Beach 2

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 800


US Feet




Salt Creek Beach 1

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.1 ft MLLW)

 Mean High Water (4.7 ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events


*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 600


US Feet




Salt Creek Beach 2

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.

0 600


US Feet








Dana Point Harbor Dr


Baby Beach

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7 ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LIDAR survey.




0 200
US Feet









Capistrano Beach

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7 ft MLLW)

-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.



0 200
US Feet









Capistrano Shores

-  Fill Area Below Highest Tide Line
-  Highest Tide Line (7.2 ft MLLW)
-  Mean High Water (4.7 ft MLLW)

-  Typical (Representative) Fill Area for Single Event
-  Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 500


US Feet




North Beach

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 200


US Feet




San Clemente Central City Beaches

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7 ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events


*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.


0 600


US Feet




San Clemente State Beach

 Fill Area Below Highest Tide Line

 Highest Tide Line (7.2 ft MLLW)

 Mean High Water (4.7 ft MLLW)

 Typical (Representative) Fill Area for Single Event

 Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LiDAR survey.

0 700

US Feet



Cyprus Shore/Cottons



Fill Area Below Highest Tide Line



Highest Tide Line
(7.2 ft MLLW)



Mean High Water
(4.7ft MLLW)



Typical (Representative) Fill Area for Single Event



Maximum Potential Fill Extent Over Multiple Events

*Highest Tide and MHW lines represent the intersections of tidal elevations on the beach profile from a May 2016 LIDAR survey.

0 600

US Feet

