



Lower Bay Dredging & Confined Aquatic Disposal (CAD)

FAQs

Why does Newport Harbor need to be dredged?

Over time, sediment accumulates on the harbor floor, which reduces water depths and can impede navigation. Dredging Newport Harbor is essential to maintain safe, navigable waterways for recreational and commercial boaters as well as public safety vessels.

As the largest small-craft harbor in the western United States, Newport Harbor is a local, regional and national asset. It serves about 4,500 recreational and commercial boaters and is home to U.S. Coast Guard, Orange County Sheriff's Department and Newport Beach Harbor Department vessels. Newport Harbor has the largest shipyards and fuel docks between Los Angeles and San Diego.

Newport Harbor generates about \$393 million a year in direct economic output, more than \$1 billion a year in indirect economic impacts, and directly supports more than 4,800 jobs. Dredging is critical to maintaining one of the City's most vibrant recreational areas and economic engines.

What would the dredging project accomplish?

The proposed dredging project would remove about 1 million cubic yards of accumulated sediment. By removing the sediment, the harbor floor would return to its design depths of 10 to 20 feet. The project will also provide an opportunity for disposal of dredged material by private dock owners who would like to dredge their own slips.

When was the harbor last dredged and what quantity?

The harbor was last dredged in 2012, but only a partial amount of the sediment deposits (600,000 cubic yards) was removed. No other major dredging has been done since the original construction of the harbor by the federal government in 1936.

What happens to the dredged material once it is removed from the harbor floor?

Most material will be placed in the open ocean (an offshore site known as "LA-3") or nearshore ocean placement off the Newport Beach peninsula.

About 100,000 cubic yards of material does not meet the open ocean disposal criteria and requires alternative disposal. This material will be sequestered using an EPA-approved method called

Confined Aquatic Disposal (CAD).

What is a CAD and is it safe?

Confined Aquatic Disposal has been shown to be an effective long-term management solution for sediment that does not meet regulatory standards for open ocean disposal. The material is placed in a large depression (hole), then capped with sediment. It has been used in several other locations in Southern California and is widely accepted by the regulatory agencies as an environmentally safe approach for sediment management. Regulatory agencies such as the EPA and the Regional Water Quality Board supported, and even encouraged, the CAD concept when evaluating the harbor's sediment characterization. No dredged material from outside Newport Harbor will be permitted.

Where would the CAD be located?

The proposed site is within a large area of water outside of the main navigational channel between Lido Isle and Bay Island. There are several benefits to this location: It will not impede navigation during construction; it is the center point of the dredge locations; it contains beach-suitable material that can be added to the City's beaches; and, it is located away from the sensitive eelgrass beds near the entrance channel.

Why can't we dispose the unsuitable material in the open ocean (at LA-3)?

The material does not meet the EPA's standards for open ocean disposal of dredged materials. Therefore, placement of unsuitable material is not allowed.

Why is the material considered unsuitable for open ocean disposal?

It is important to know that the material is not toxic nor hazardous as defined by the regulatory agencies. The terms "toxic" and "hazardous" have very specific regulatory definitions, and this material is not considered to be either. Rather, the material is considered "unsuitable" for open ocean disposal at EPA's dredged material disposal sites.

The primary concern in the harbor is the presence of mercury. The generally accepted threshold allowed in Southern California for open ocean disposal is 1.0 parts per million (ppm). The in-harbor mercury levels to be placed within the CAD range from about 1.5 ppm to 5 ppm.

Can a CAD site be created in the ocean within 1-2 miles of the coast?

No. Federal regulations do not allow CAD sites or similar construction activities in the open ocean.

Can the unsuitable material be taken to a landfill?

The City considered this option; however, it is unfeasible for this project. Upland landfill disposal can be used for low volumes of dredged material, but generally not used for higher volumes due to the high costs and impacts to neighboring communities. Water Boards generally do not support large-volume disposal at public landfills. Therefore, the City would be limited to out-of-county private landfills such as Otay Landfill in San Diego or Azusa Landfill in Azusa, or beyond, assuming available capacity and daily limitation.

Transporting dredged material by truck would cause negative impacts on the community through increased truck traffic and related air emissions. The City estimates that at least 8,800 truck trips would be required over 9 months to transport the material by land.

Has an inland confined disposal facility (CDF) been considered? How about the LA/Long Beach ports?

Yes, but this disposal method would have the same concerns as landfill disposal, unless a large area in the harbor could be converted to land, or a location was available near the water so the material could be transferred via barge instead of via trucks. Occasionally, the Ports of LA and Long Beach have accepted dredged material for shipping terminal construction projects. However, there are no CDFs currently in construction, and no CDFs have been identified for the next 5-10 years that would have the potential for receiving outside material.

Will the CAD be open after dredging is complete?

No. After the main harbor dredging is complete, the CAD will be closed for two years. Then, it is proposed to be reopened for 6 months during which time Newport residents may dispose their own in-slip dredged material. After this time, the CAD will be closed and preparations for the final cap will be implemented.

Will the CAD construction and placement disrupt sailing activities and general harbor use?

No. During construction, the existing anchorage will be relocated to the Turning Basin at the western tip of Lido Isle. Therefore, most of the entire area between Lido Isle and Bay Island will be unobstructed and free of anchored vessels (except for the footprint of the barge, scow and safety buffer zone). During the disposal period, the area between Lido Isle and Bay Island will be occupied by the tug and scow approximately 2-3 times a day for brief periods (typically 10-20 minutes). Otherwise, this area will remain unobstructed and open for navigation, regattas, instruction, etc.

Who is funding the dredging project?

It will be jointly funded by the federal government, the City, and the County.

What happens if the City does not dispose the unsuitable material through the CAD?

The federal government and City will still collaborate to dredge the suitable material for nearshore ocean or open ocean placement. This work is projected to start in 2021. The unsuitable material would be left in place and would not be dredged, therefore creating high spots in the channels that would continue to build up over time.

Navigation would be affected along the entirety of W. Coast Highway as well as the peninsula channel from 12th Street to 19th Street. Larger vessels and vessels with deep keels would be restricted to favorable tides, and they would continue to stir up unsuitable sediment and create plumes in the harbor. Navigation concerns affect all vessels, including visiting vessels, and vessels requiring shipyard maintenance that require passage through these channels. The Lower Harbor would continue to experience reduced tidal flushing due to the shallower water depths.

Unsuitable material would remain within the Federal Channels and other areas of Lower Newport Harbor where they could be stirred up or resuspended by vessel activities. Chemicals in the environment are typically only able to cause impacts when they are mobilized within the water column through resuspension or when they diffuse into the water from the upper layers of the sediment.

One of the added benefits of constructing the CAD facility for material disposal is that the underlying sediments in the target location for the CAD facility contain clean, high-quality beach sand which can be used to nourish the adjacent ocean shoreline. Not constructing the CAD facility would mean that beach nourishment would not occur, thereby exacerbating coastal erosion.

What is the City's Sediment Management Plan (SMP)?

The City has developed an SMP which is a planning document that builds on previous harbor-wide planning tools and projects to assist the City in managing sediment. An SMP was prepared and included in Appendix D to the Draft Environmental Impact Report. The SMP creates an inventory of all sediment requiring dredging both within and outside of the federal channels. It identifies currently available management options depending on sediment characteristics (i.e. alternate disposal locations and permitting requirements) and what procedures would be required to implement each option.