Berm Application Justification

Project Description:

The Department of Beaches and Harbors requests a one-time emergency authorization to construct an extension of our permitted protective sand berm on Dockweiler State Beach (CDP 5-14-1345). The proposed berm extension would have the following approximate dimensions: 10-15 feet tall, 20 feet wide, and 1300 feet long (see attached aerial map).

The forecasted 2015 El Niño storm season has the potential to create a unique situation in the vicinity of Dockweiler State Beach immediately south of Ballona Creek, where a large volume of untreated stormwater outflows from Ballona Creek. Coupled with an El Niño storm surge and high tides, there is a strong possibility that waves will uprush onto the back beach. In the past, similar events have led to the pooling of contaminated water on a plateaued area of the back beach between Culver Boulevard and south of Surf Street. Typically, when storm surges cause pooling on a beach, our Department can quickly mitigate the problem by mechanically breaching the pooled area to allow the trapped water to flow back into the ocean. This option is not possible at this particular location because the plateau where the water pools is landward of the Marvin Braude Bike Trail, thus preventing the temporary construction of "v"-ditch to drain the pool. Since the concrete bike path acts as a barrier dam once it has been overtopped by waves, a protective sand berm is needed during the forecasted El Niño event to prevent the localized accumulation of contaminated stormwater runoff on the public beach adjacent to the Ballona Creek ocean outlet.

This area of Dockweiler State Beach is heavily used by local and regional visitors, and tourists. It is also a very wide beach that accommodates many different beach-use activities, including beach volleyball courts, the Marvin Braude Bike Trail, and two wheelchair accessible paths to mid-beach. Allowing the large area described above to fill with contaminated stormwater and to remain pooled on the beach for a week or longer following each large storm could potentially have significant negative impacts on public coastal access, coastal resources, and public health. These potential hazards include the risk of human contact with contaminated water (attractive nuisance), pooled water exceeding two feet in depth (child drowning), and entrapment risk of quicksand-like conditions. Since draining or pumping is not an effective or efficient method to remove the potential hazard, the Department of Beaches and Harbors is proposing to construct the berm extension during November of 2015, and to remove the berm by April 2016.