

King tides to swamp the Pacific coast, give glimpse at future sea level rise

February 9 2024, by Laylan Connelly, The Orange County Register



Credit: Pixabay/CC0 Public Domain

Mega high tides known as king tides are hitting beaches Feb. 9, giving a



glimpse at what future sea level rise could mean for coastal towns and shorelines across California.

The California King Tides Project is asking for people to document the coast for a citizen-science project that aims to give <u>decision-makers</u> a look at how to address sea-level rise in future years.

Many beaches will be swallowed by <u>salt water</u> in the early morning hours Friday, Feb. 9, with tides reaching 6.6 feet high at about 8 a.m.

The phrase "king tides" is used to describe very high tides, caused when there is alignment of the gravitational pull between the sun, moon and Earth. They are predictable and happen a few times of year, allowing documentation of vulnerable areas impacted by high sea levels, officials with the California King Tides Project say.

When king tides occur during floods or storms, water levels can rise even higher and have the potential to cause great damage to the coastline and coastal property. Waves on Friday, however, are expected to be small, and flooding issues will likely be minimal, though high waters due to the recent rain could push water levels up over harbor seawalls and into streets.

KC Fockler, educational coordinator for Surfrider Foundation North Orange County chapter, said he planned to photograph Dog Beach in Huntington Beach, an area he has been keeping an eye on in recent weeks as sand has eroded with recent big swell events.

He's noticed rocks that have been buried for decades exposed as <u>high</u> <u>tides</u> and storms have swept sand away, he said. The space for dogs to frolic is shrinking; at higher tides just a sliver is left for the pooches to play on.



"We need to be able to show a history, for scientific reasons. That way we can look back at these incidents and be able to take measurement of what's happening," he said. "Why is the <u>beach</u> eroding? How can we protect it in the future? Are stronger storms driving stronger waves and moving the sand away?"

The Roundhouse Aquarium at the Manhattan Beach Pier will host a "King Tide Watch" from 8:30 to 9:30 a.m. Friday during which nature enthusiasts and scientists will document the king tides from the base of the pier.

Climate Action Santa Monica will host a 7:30 a.m. gathering at the Santa Monica Pier to explain how the king tides happen and to document the phenomenon.

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