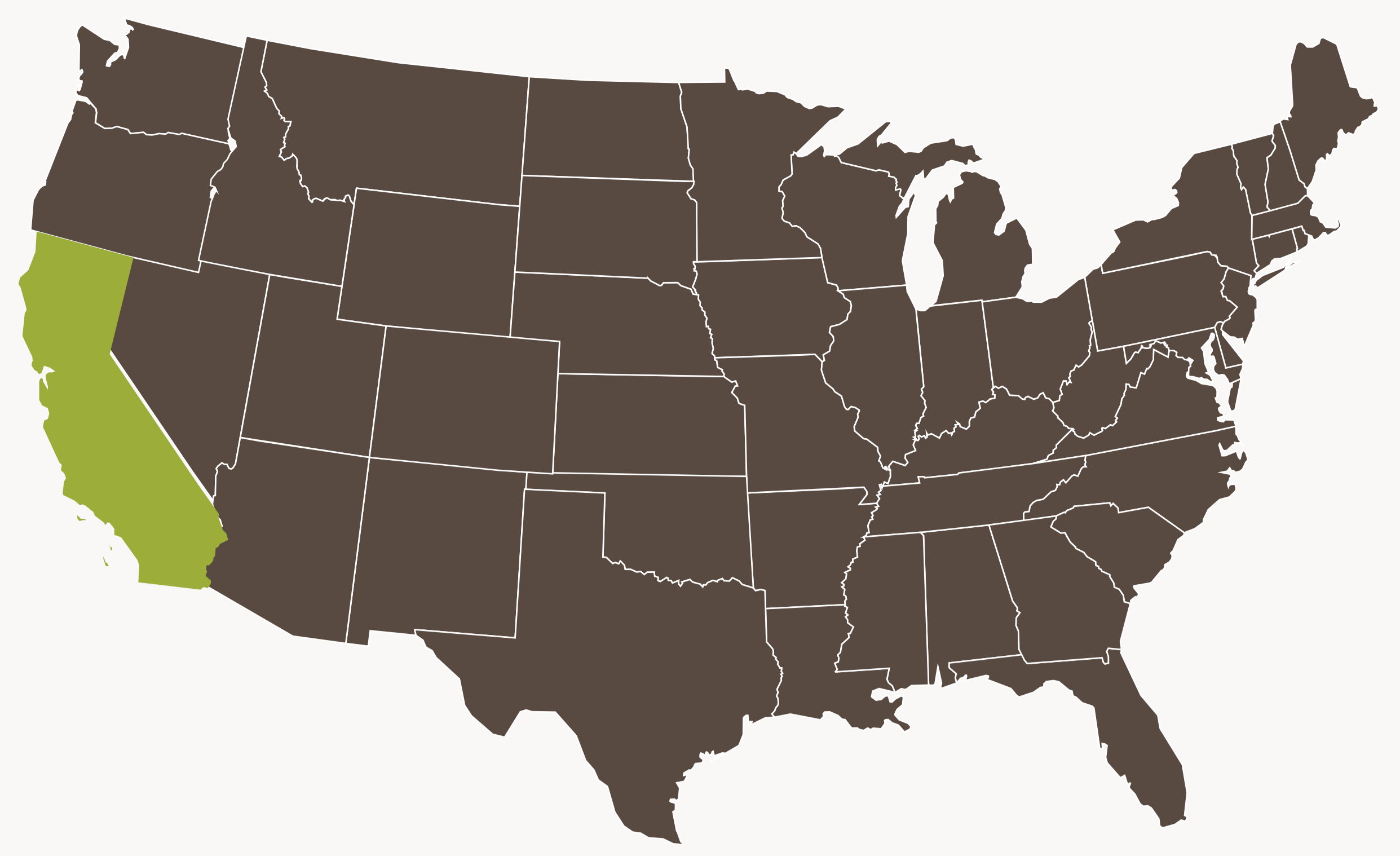


COASTAL FLOODING IN CALIFORNIA



Californians may see significant coastal flooding more often this winter. With today's rising sea levels, sometimes all it takes is a high tide to cause flooding. When climate and weather come into the mix, floods can become worse and more frequent.

CONTRIBUTING FACTORS:

Daily Tides
High tides and low tides occur twice per day in California, with one high tide higher than the other and one low tide lower than the other. Tides are the regular, predictable rise and fall of the ocean caused by the moon's and sun's gravity.

King Tides
King Tides is a non-scientific term people often use to describe exceptionally high tides. These higher than normal "spring" tides occur during a new or full moon during specific seasons around the country, such as in winter along the West Coast.

El Niño
El Niño causes changing weather patterns and warmer surface waters in the Pacific, which can lead to increases in sea level. NOAA predicts that this year's El Niño, among the strongest on record, will peak this winter.

Coastal Storms
Storms can cause an abnormal rise in water level over and above the predicted tide. This rise in water level can cause extreme flooding in coastal areas particularly when storm-driven waves coincide with high tide.



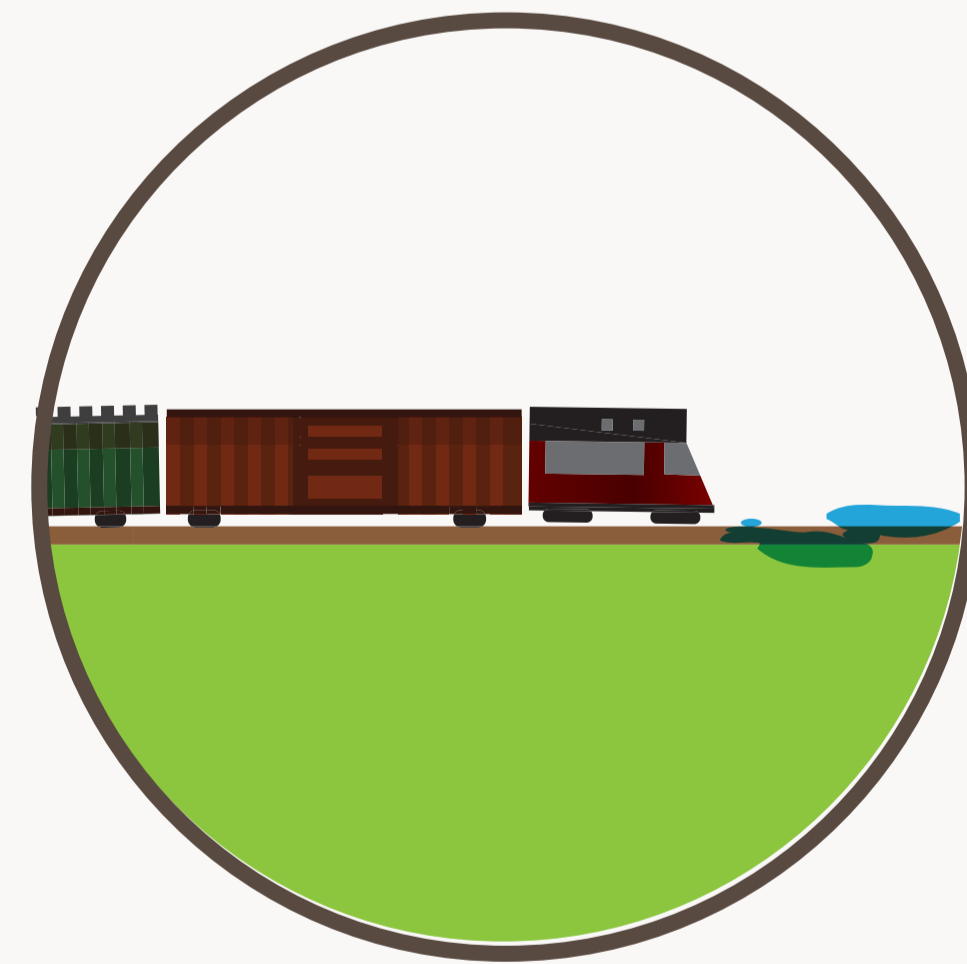
WHAT ARE THE IMPACTS ???



ROAD CLOSURES



OVERWHELMED STORM WATER SYSTEMS



DAMAGE TO TRANSPORTATION INFRASTRUCTURE



COASTAL EROSION

WHAT IS AT RISK?



NEARLY 200,000 PEOPLE LIVING IN LOW-LYING COASTAL AREAS*



873 MILES OF COASTAL ROAD ARE AT RISK FROM FLOODING DURING KING TIDES, STORMS, AND OTHER PERIODS OF ELEVATED SEA LEVEL*

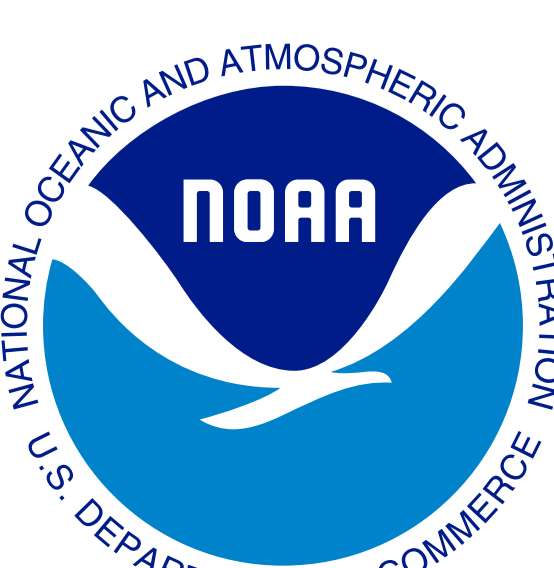
WHEN IT FLOODS, WORK & TOURISM ARE INTERRUPTED.



COASTAL TOURISM ACCOUNTING FOR **39%** OF CALIFORNIA'S **\$17.6 BILLION OCEAN ECONOMY****



\$662 BILLION IN WAGES & \$1.7 TRILLION IN GDP FROM CALIFORNIA'S COASTAL ECONOMY**



Sources:
*Climate Central. Surging Seas. Analysis of California's population and infrastructure on lands 1 foot below sea level. <http://sealevel.climatecentral.org/ssrf/california>** NOAA. Office for Coastal Management. 2015. "The National Significance of California's Ocean Economy." Charleston, SC: NOAA Office for Coastal Management. Available at <https://coast.noaa.gov/data/docs/digitalcoast/ca-ocean-economy.pdf>.