**King Tides talking points**

#### King Tide events for the 2013-2014 season are:

* December 30th-31st
* January 1st-2nd
* January 29th-31st

Organization

* The California King Tides Initiative was launched in the winter of 2010/2011 by a partnership of state and federal agencies and non-profit organizations.
* The Initiative was inspired by similar projects across the globe, including Washington, Oregon, British Columbia and Australia.
* Organizing partners include: [California Coastal Commission](http://www.coastal.ca.gov/), [California Coastkeeper Alliance](http://www.cacoastkeeper.org/), [Gulf of the Farallones National Marine Sanctuaries](http://farallones.noaa.gov/), [San Francisco Bay National Estuarine Research Reserve](http://www.sfbaynerr.org/), [Thank You Ocean](http://www.thankyouocean.org/), [Tijuana River National Estuarine Research Reserve](http://trnerr.org/).

Purpose

* Seasonal high tide events can show us how rising sea levels due to climate change might impact our communities in the future. The King Tide Photo Initiative is an opportunity to share what you see in your community with others.
* The objectives of the CA KT Initiative are to:
	+ Engage Californians in a conversation about the future of our beloved coast
	+ Identify and catalog coastal areas that are currently vulnerable to tidal inundation
	+ Build an online resource of images that can be used by everyone – be that artists, high school students, public servants, non-profit organizations, scientists – to communicate about coastal hazards

Get Involved

* You can take photos anywhere along the California coastline.
* Photo recommendations:
	+ coastal areas that are subject to flooding and erosion
	+ areas where high water levels can be gauged against familiar landmarks
	+ areas prone to flooding: beaches, roads, parks, piers, and estuary shorelines.
	+ “before and after” photos showing average water levels and the extreme high water levels for the same location
* Upload photos to the [California King Tides Flickr group](http://www.flickr.com/groups/cakingtides/). Please include your contact information and geographically reference the photos with specific locations, orientation, date and time of day.
* *Be safe*! Take extra precautions when you walk on slippery areas or near big waves, and always be aware of your surroundings and the weather conditions.

Science

* “King Tides” are high tides that occur when the gravitational pull of the sun and the moon are in alignment.
* When King Tides occur at the same time as stormy weather (as is often the case during California’s winters), water levels can rise even higher.
* Normal climatic cycles and weather variability also influence coastal sea levels through storm surges, the El Niño/La Niña-Southern Oscillation (ENSO) and Pacific Decadal Oscillation (PDO).
* Resulting high tides from a combination of these conditions can cause widespread damage from flooding and erosion.

Sea Level Rise

* Increases in global sea levels (average increase of 8 inches over the last 100 years) have been recorded by NOAA tide gauges for many years, and more recent observations have been collected by NASA satellites.
* Relative to sea level in 2000, sea level rise projections for the state of California range from 5 to 24 inches (0.4 to 2 feet) by 2050 and 17 to 66 inches (1.4 to 5 feet) by 2100.
* While tides themselves are not affected by climate change, rising sea levels and increased coastal flooding are expected to occur due to climate change impacts including ocean warming and expansion, increased land ice melting, and increased storm severity.
* Climate modeling combined with these direct observations suggest sea level rise will continue well into the future with significant implications for California’s coastal communities.