How to Read These Flood Hazard Maps

- The United States Geological Survey (USGS) has developed the Coastal Storms Modeling System (CoSMoS), which projects coastal flooding and erosion from coastal storms, in combination with rising seas.
- CoSMoS recreated, or “hindcast,” a 2010 winter storm that occurred along the Southern California coast. It then used this to forecast, or project, the impacts of a similar storm with 0.5 meters (1.6 feet) and 1.4 meters (4.6 feet)
- Based on this information, coastal planners and managers can begin to understand which areas of their community are most vulnerable and need to be managed first.
- The “Management Needs” box along the bottom of the flood map indicates the areas of highest concern for coastal municipalities and where King Tides pictures are most needed.

Flood projections are overlayed on a Google-based image of the coastline. The legend indicates the color scheme utilized to delineate the different projections.
- Blue indicates the extent of flooding from the January 2010 storm;
- Yellow indicates where a similar storm with 1.6 feet of sea level rise (~50 years in the future) is projected to occur;
- Red indicates where a similar storm with 4.6 feet of sea level rise (~100 years in the future) is projected to occur.

Areas in yellow are projected to be impacted sooner (e.g. ~2050) than the areas in red (e.g. ~2100).

In the instance of Redondo Beach, the area near the south side of the International Boardwalk is projected to be vulnerable to flooding from a coastal storm by ~2050. This is compared to the area north, which is projected to be vulnerable later in the century.

This information can be determined from both looking at the blue, yellow and red color overlays as well as reading the “Management Needs” box.

King Tides are the highest high tides of the year. For 2014, they will occur on Dec. 21, 22, and 23. This box provides the time of the highest high tide and the lowest low tide. It also provides the tide height – which is a measure of how much higher, or lower, the sea level is compared to current sea level. When shooting King Tides images, it is best to be at the location at the time of the highest high tide in order to capture the most dramatic images. If possible, it is also great to capture the lowest low tide in order to provide a comparison between the tides. But, above all, it is most important to BE SAFE!