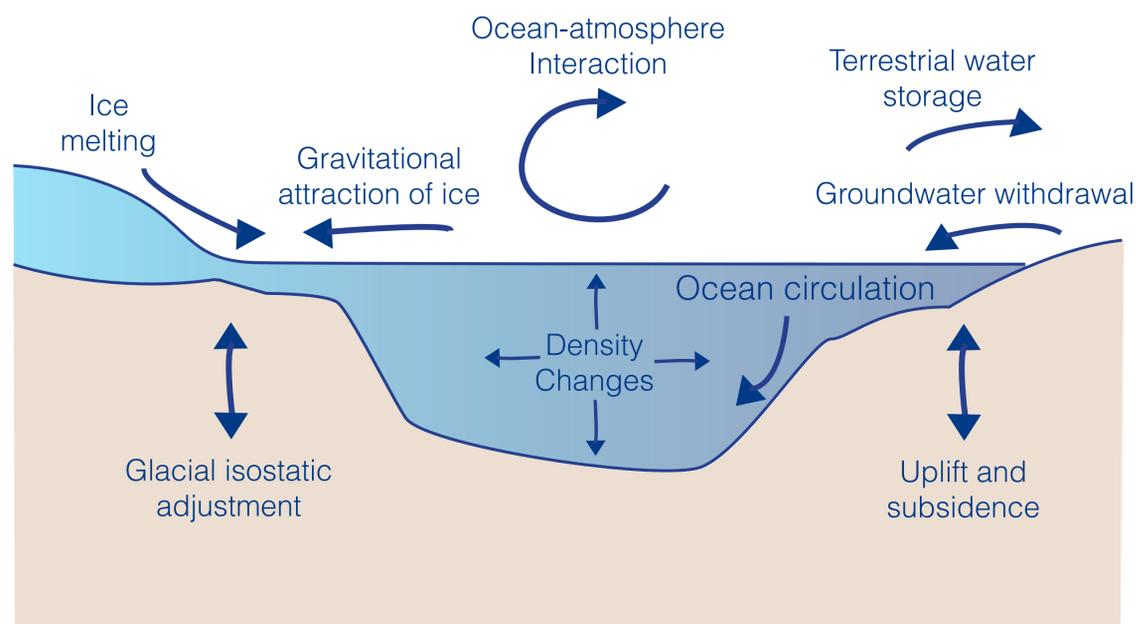


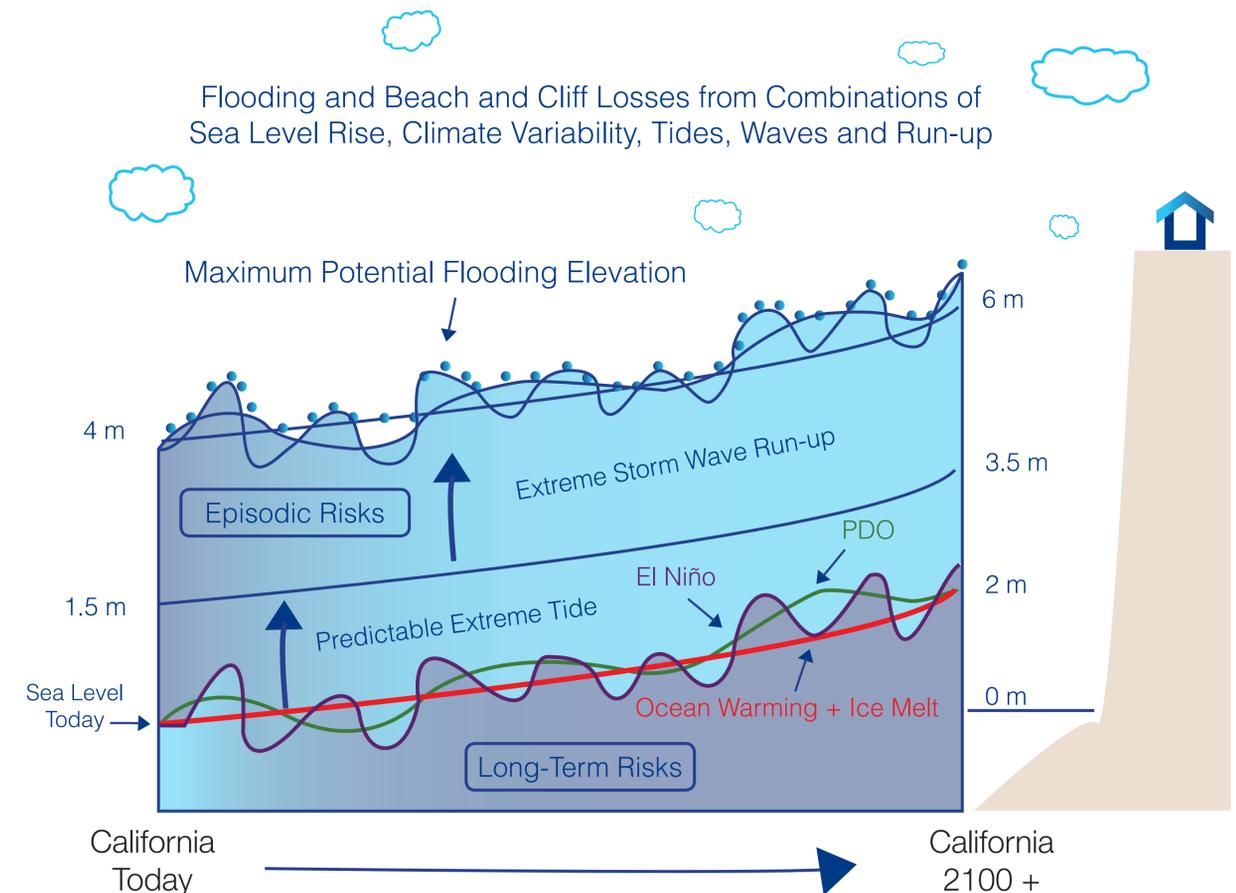
# Sea Level Rise and Coastal Storms Science

“Rising seas increase the risk of coastal flooding, storm surge inundation, coastal erosion and shoreline retreat, and wetland loss. Most of the damage along the California, Oregon, and Washington coasts, however, is caused by storms—particularly the confluence of large waves, storm surges, and high astronomical tides during a strong El Niño. The water levels reached during these large, short-term events have exceeded mean sea levels projected for 2100, so understanding their additive effects is crucial for coastal planning.” (NRC 2012)

## Components of Sea Level Rise



## More Than “Just” Sea Level Rise



## Sea Level Rise Projections for Southern California

YEAR (Relative to 2000)	PROJECTIONS
2030	1.8 - 11.8 inches
2050	5.0 - 23.9 inches
2100	17.4 - 65.6 inches

\* Sea level rise projections and illustration (left) are adapted from National Research Council. *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*. Washington, DC: The National Academies Press, 2012.  
 \*\* Sea level rise, storm, and tide illustration (above) is adapted from Dr. Bill O’Reilly (UCSD, Scripps Institution of Oceanography)