## CALIFORNIA COASTAL COMMISSION

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## **General Checklist for Property Preparedness for El Niño**

**1. Yard clean-up:** Make a general inspection of your entire yard area for dead trees or dead limbs, yard debris, outdoor furniture, or other objects that could be blown by storm winds. An afternoon spent tidying up the yard and either storing furniture and other loose items indoors or securing them can prevent a frantic scramble to collect items that have landed on your roof or in your neighbors' yards.

**2. Drains and gutters:** Make sure all drains and gutters are cleared of debris and functioning properly before the storm season. If buildings do not have gutters and drains, consider having them installed. Storm water runoff from impermeable surfaces (*e.g.*, roofs, driveways, and patios) should be directed into appropriate drainage control areas, including the use of a collection system to avoid excessive soil saturation where applicable.

**3. Roofs:** Inspect your roof, or hire a roofing contractor, to check for loose tiles, holes, or other signs of trouble.

**4. Retaining walls:** Visually inspect all retaining wall drains, surface drains, culverts, ditches, *etc.* for obstructions or other signs of malfunction, before the storm season, and after every storm event.

**5. Slopes:** Visually inspect all sloped areas for signs of gullying, surface cracks, slumping *etc*. Also inspect patios, retaining walls, garden walls, *etc*. for signs of cracking or rotation. Such signs might be indications of slope movement, and if you notice any problems it would be prudent to have the site inspected by a geotechnical engineer.

**6. Bare ground:** Make sure your yard does not have large bare areas that could be sources for mudflows during a storm event. The fall is a good time to put down mulch and establish many native plants; it may be possible to vegetate these bare areas before the storm season. Mounds of loose soil or fill material should be covered and secured (*e.g.*, with visqueen, jute, or geo-fabric matting).

**7. Storm drains:** Visually inspect nearby storm drains, before the storm season and after every rain. If the storm drains are obstructed, clear the material from the drain or notify the local Department of Public Works or other agency responsible for drain maintenance.

**8.** Preparedness actions that could require a permit: If, after taking prudent steps to prepare your property for winter storms, you still have some concerns about slope stability, flooding, mudflows, *etc.*, contact Commission staff about the possible use of sand bags, plastic sheeting, or other materials that can be used to construct temporary, low flood barriers or to cover slopes to prevent gullying or soil loss.

For information on locations and contact information for the Coastal Commission Offices, please visit our website at: <u>http://www.coastal.ca.gov/address.html</u>.

Based on past El Niño events, some of the most damaging storms are those that coincide with periods having higher than normal tides. Some of the highest tides for the 2015/16 winter season are identified in the table below.

		Locations with Major Tide Stations & Corresponding Dates						
MONTH	Tides	San Diego	Los Angeles	Santa Barbara	Monterey	San Francisco	Humboldt	Crescent City
November	Tides > 6 ft	9 <sup>th</sup> -14 <sup>th</sup> 22 <sup>nd</sup> -29 <sup>th</sup>	22 <sup>nd</sup> - 28 <sup>th</sup>	23 <sup>rd</sup> -27 <sup>th</sup>	23 <sup>rd</sup> -27 <sup>th</sup>	22 <sup>nd</sup> -28 <sup>th</sup>	1 <sup>st</sup> -2 <sup>nd</sup> 5 <sup>th</sup> -17 <sup>th</sup> 19 <sup>th</sup> -30 <sup>th</sup>	1 <sup>st</sup> -2 <sup>nd</sup> 5 <sup>th</sup> -17 <sup>th</sup> 19 <sup>th</sup> -30 <sup>th</sup>
	Tides > 7 ft	24 <sup>th</sup> -27 <sup>th</sup>	25 <sup>th</sup>				10 <sup>th</sup> -14 <sup>th</sup> 22 <sup>nd</sup> -29 <sup>th</sup>	10 <sup>th</sup> -14 <sup>th</sup> 21 <sup>st</sup> -29 <sup>th</sup>
	Tides > 8 ft						24 <sup>th</sup> -27 <sup>th</sup>	24 <sup>th</sup> -27 <sup>th</sup>
December	Tides > 6 ft	8 <sup>th</sup> -14 <sup>th</sup> 21 <sup>st</sup> -27 <sup>th</sup>	10 <sup>th</sup> -13 <sup>th</sup> 21 <sup>st</sup> -27 <sup>th</sup>	22 <sup>nd</sup> - 26 <sup>th</sup>	21 <sup>st</sup> -26 <sup>th</sup>	9 <sup>th</sup> -13 <sup>th</sup> 20 <sup>th</sup> -27 <sup>th</sup>	1 <sup>st</sup> -31 <sup>st</sup>	1 <sup>st</sup> -31 <sup>st</sup>
	Tides > 7 ft	23 <sup>rd</sup> -25 <sup>th</sup>					8 <sup>th</sup> -14 <sup>th</sup> 19 <sup>th</sup> -28 <sup>th</sup>	8 <sup>th</sup> -14 <sup>th</sup> 9 <sup>th</sup> -28 <sup>th</sup>
	Tides > 8 ft						22 <sup>nd</sup> -26 <sup>th</sup>	22 <sup>nd</sup> -26 <sup>th</sup>
January	Tides > 6 ft	7 <sup>th</sup> -12 <sup>th</sup> 19 <sup>th</sup> -25 <sup>th</sup>	8 <sup>th</sup> -11 <sup>th</sup> 20 <sup>th</sup> -24 <sup>th</sup>	10 <sup>th</sup> 21 <sup>st</sup> -22 <sup>nd</sup>	9 <sup>th</sup> -11 <sup>th</sup> 20 <sup>th</sup> -23 <sup>rd</sup>	6 <sup>th</sup> -12 <sup>th</sup> 17 <sup>th</sup> -25 <sup>th</sup>	1 <sup>st</sup> -31 <sup>st</sup>	1 <sup>st</sup> -31 <sup>st</sup>
	Tides > 7 ft						6 <sup>th</sup> -13 <sup>th</sup> 16 <sup>th</sup> -26 <sup>th</sup>	6 <sup>th</sup> -13 <sup>th</sup> 15 <sup>th</sup> -26 <sup>th</sup>
February	Tides > 6 ft	6 <sup>th</sup> -10 <sup>th</sup> 19 <sup>th</sup> -22 <sup>nd</sup>	7 <sup>th</sup> -9 <sup>th</sup>		1 <sup>st</sup> -8 <sup>th</sup>	5 <sup>th</sup> -10 <sup>th</sup> 13 <sup>th</sup> -21 <sup>st</sup>	1 <sup>st</sup> -29 <sup>th</sup>	1 <sup>st</sup> -29 <sup>th</sup>
	Tides > 7 ft						5 <sup>th</sup> -22 <sup>nd</sup>	5 <sup>th</sup> -22 <sup>nd</sup>
March	Tides > 6 ft	6 <sup>th</sup> -9 <sup>th</sup>	8 <sup>th</sup>			6 <sup>th</sup> -9 <sup>th</sup> 11 <sup>th</sup> -13 <sup>th</sup>	1 <sup>st</sup> -29 <sup>th</sup>	1 <sup>st</sup> -29 <sup>th</sup>
	Tides > 7 ft						6 <sup>th</sup> -14 <sup>th</sup>	6 <sup>th</sup> -14 <sup>th</sup>
April	Tides > 6 ft	6 <sup>th</sup> -9 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>			7 <sup>th</sup> -11 <sup>th</sup>	3 <sup>rd</sup> -14 <sup>th</sup> 18 <sup>th</sup> -27 <sup>th</sup>	3 <sup>rd</sup> -13 <sup>th</sup> 19 <sup>th</sup> -27 <sup>th</sup>
	Tides > 7 ft						7 <sup>th</sup> -11 <sup>th</sup>	6 <sup>th</sup> -11 <sup>th</sup>

Dates of Tides Greater than 6 Feet, for the 2015/16 Winter Season

*Source*: Developed from NOAA Tide Predictions on the Tides & Currents page <<u>https://tidesandcurrents.noaa.gov/tide\_predictions.html?gid=235</u>>