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Shoreline Property Preparedness Checklist for El Niño

1. **Inspect structures:** Visually inspect all seawalls, revetments, cave fills, bulkheads, *etc*. for signs of distress, loss of material, obstructed drainage, exposed reinforcing steel, *etc*. Inspect these structures before the storm season and after every storm. If significant problems are observed, it may be advisable to contact an engineer for maintenance suggestions.

2. **Inspect the beach areas:** Visually inspect the area seaward of all seawalls, revetments, cave fills, bulkheads, *etc*. for objects which could become battering rams or damaging projectiles during a storm event (sailboards, furniture, *etc*.). It is advisable to remove such objects from the beach or secure them so that they will not cause any damage during a storm.

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

4. **Inspect 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 geologist or geotechnical engineer.

5. **Preparedness or extraordinary protection that could require a permit:** Many properties will be safe during normal storms but could be at risk during an extreme storm event. Given the potential that El Niño may cause extreme storm conditions this winter, individual property owners and communities may want to add temporary and removable protection. Examples of temporary protection are banking or berming existing sand or cobble at the back of a beach or against bluffs, bulkheads, seawalls, *etc*.; adding to existing sand with a nourishment project; placing engineered sand bags or short sand tubes at the back of a beach or the base of a bluff, bulkhead, seawall; placing keyed-in articulated concrete matting on beaches (only at beach and dune locations with engineered designs for placement and anchoring); vegetating exposed slopes; and, others.

   There are potential adverse effects from most temporary shoreline protection and slope stabilization activities so **please contact the local Commission staff** before you undertake any protection measures. Once you formulate a plan for such protection, staff will work with you to better understand the proposed actions and to determine what permits will be needed to let you proceed with your plans in a timely and environmentally acceptable fashion.

6. **Permit steps for preparedness activities**: Talk with or write to Coastal Commission staff now about actions you may want to take prior to the storm season. In general, it may be possible to expedite the permit process for projects that:
    - have little or no environmental impact
    - have little or no effect on public access and recreation
    - are temporary
    - are removable
    - pose no risk to public safety

7. **Emergency permits**: Emergency permits may be issued when sudden, unexpected events occur, requiring immediate action to prevent or mitigate loss of life, health, property or essential public services. Timely coordination with Coastal Commission staff can ensure prompt protective action. For information of locations and contact information for the Coastal Commission Offices, please visit our website at: https://www.coastal.ca.gov/contact/#/.

2023 – 2024 Winter High Tides

Based on past El Niño events, some of the most damaging storms are those that coincide with times that have higher than normal tides. Some of the highest tides for the 2023-24 winter season are identified in the attached table.

		Dates of Significant High Tides at Major Tide Stations, Winter 2023-24						
		San Diego	**Los Angeles**	**Santa Barbara**	**Monterey**	**San Francisco**	**Humboldt**	**Crescent City**
NOV	Tides > 6 ft	13 – 16 24 – 29	12 – 16 24 – 29	13 – 16 24 – 29	14 – 15 24 – 29	1, 12 – 16 23 – 29	most of month	most of month
	Tides > 7 ft						1, 11 – 17 23 – 30	1, 11 – 17 23 – 30
	Tides > 8 ft						26 – 27	25 – 27
DEC	Tides > 6 ft	11 – 15 23 – 27	10 – 16 23 – 28	11 – 15 23 – 27	11 – 15 23 – 27	10 – 16 21 – 28	most of month	most of month
	Tides > 7 ft						9 – 17 21 – 29	9 – 17 21 – 29
	Tides > 8 ft						12 – 14 24 – 26	12 – 13 24 – 25
JAN	Tides > 6 ft	9 – 13	9 – 14 23 – 25	9 – 13	9 – 13 22 – 23	7 – 14 18 – 25	most of month	most of month
	Tides > 7 ft						7 – 14 17 – 27	7 – 14 16 – 27
	Tides > 8 ft						10 – 13	10 – 13
FEB	Tides > 6 ft	7 – 11	7 – 11	7 – 11	7 – 10	6 – 11 14 - 16	most of month	most of month
	Tides > 7 ft						5 – 18, 22	5 – 17
	Tides > 8 ft						8 – 10	8 – 10
MAR	Tides > 6 ft	8 – 9	8 – 10	8 – 9		7 – 15	most of month	most of month
	Tides > 7 ft						7 – 15	7 – 15
APR	Tides > 6 ft	9	8 – 10	9 – 10		9 – 12	most of month	most of month
	Tides > 7 ft						7, 9 – 13	7, 9 – 13

Source: Developed from NOAA Tide Predictions (https://tidesandcurrents.noaa.gov/tide_predictions.html)