

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400



General Checklist for Community Preparedness for El Niño

- 1. Know your watershed:** Recent fires have left behind large denuded areas, some on steep slopes and hillsides. Even if these burn areas are outside your community, winter rains may trigger detrimental mudslides and debris flows that can put downstream communities at risk. Determine as soon as possible the fire-affected portions of your watershed and identify possible risks. Some potential protective measures, like cleaning out debris basins and flood channels, are described below. Larger actions like debris dams or diversion structures should only be considered in situations of significant risk and in coordination with other at-risk communities. If considered for areas in the coastal zone, a permit will be needed, so discuss the action with staff as soon as possible.
- 2. Check debris basins and flood control channels:** If basins or flood channels are clogged with sediment, debris, or vegetation, they will not function as intended during a storm. Cleaning out debris basins and flood channels should be part of regular maintenance. If there is no approved maintenance plan or if the basins or channels have berm overgrown with vegetation due to deferred maintenance, contact Coastal Commission staff about permit requirements, possible need for vegetation surveys, sediment tests, or monitoring efforts.
- 3. Check storm drains and culverts:** Poor functioning storm drains and culverts can cause localized flooding, scour, and erosion. Storm drains and culverts need to be cleared out regularly. As with debris basins and flood channels, check with Coastal Commission staff about permit requirements.
- 4. Temporary stockpile sites:** If there is the potential for localized slides, debris flows or slumps that could affect public services (roads, utilities, *etc.*) consider developing a plan for transport, temporary storage and eventual disposal of this material. Contact Coastal Commission staff about possible permit requirements. Beach quality sand may be used in an opportunistic beach nourishment program if one exists.
- 5. Estuary breaching:** If estuary closures present a flood risk, consider developing an estuary breaching plan that covers conditions under which a breach might be done, method, pre-breaching studies, monitoring needs and appropriate breaching locations. Ideally a plan will have already been prepared and approved. If not, contact Coastal Commission staff about permit requirements for breaching.
- 6. Temporary beach berms:** Many California communities have effectively used sand berms as temporary protection from winter storm waves and a replacement for more permanent structures such as bulkheads, or revetments. Normally berms are built in the fall, maintained throughout the storm season, and knocked down before the summer season. Contact Coastal Commission staff about permit requirements

7. **Protect street ends:** Street ends tend to be low spots along the coast and can become conduits for ocean waves to flood inland areas. Temporary berms or sand bag structures can provide flood protection and be designed to accommodate beach access. Contact Coastal Commission staff about permit requirements.
8. **Check community buildings:** If communities own or maintain public buildings, review the General Checklist for Property Preparedness for El Niño.
9. **Check shore protection structures:** If communities own or maintain shore protection such as bulkheads, seawalls, revetments, levees, or floodwalls, review the Shoreline Property Preparedness Checklist for El Niño.
10. **Outreach efforts:** Community staff, residents and visitors need to be prepared for El Niño storms and likely consequences to the community. Questions and Answers on El Niño, General Checklist for Property Preparedness for El Niño and Shoreline Property Preparedness Checklist for El Niño can be used to help with outreach. Outreach can encompass public meetings and web information. Additional local information could include contact information for local staff, links to FEMA flood maps, information of evacuation routes, *etc.*

For information on locations and **contact information** for the Coastal Commission Offices, please visit: <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)