

CAPISTRANO BAY DISTRICT
AGENDA REPORT
July 28, 2020

Manager Reports

ITEM 7a

Damaging High Tide over Fourth of July – Contributing Factors

The super high tides over the Fourth of July weekend caught all of us unprepared. It is commonly known that the full moon lunar cycle will cause higher-than-normal tides, but what was going on in the equatorial Pacific as a lead-up to Fourth of July was not so closely followed.

If any of us had been following the Pacific Hurricane forecast, we would have known that a very strong south swell was coming as a result of warmer sea-surface temperatures in the south and equatorial Pacific this time of year that drive tropical storms and hurricanes.

The combination of the full moon effect on the tides plus the strong south swell joined forces to create one of the highest tide events the community has seen in a very long time.

The eastern portion of the Pacific Ocean basin, which abuts the coastline of North America, is experiencing above average sea-surface temperatures due to climate change and for the past several years, the number of tropical storms and hurricanes in the Pacific has increased. Anyone interested in such things can go to any internet browser and type in *PACIFIC HURRICANES 2020* and follow the forecast on a weekly basis.

The ten-day forecast for our coastline is calm as you can see by the fact that the recent new-moon lunar cycle had nothing like the punch of the Fourth of July event – even though the tide calendar indicated that the tides would be as high as over the Fourth – the missing element was a lack of a storm-driven swell.

The District will attempt to more closely follow the hurricane season and try to give homeowners some advanced notice for sandbagging and protecting windows and doors.