

2022 JANUARY 17 WINTER STORM AT MOON GARDEN PIER

HOW BAD WAS IT?

The January 17, 2022 storm produced a storm tide of 12ft 8" at Diamond Cove. With an open exposure to Hussey Sound, the Moon Garden is particularly vulnerable to wave and swell action, and storm tides between 11ft and 12ft frequently overtop this infrastructure.

Winter Storm Izzy was part of a large extratropical cyclone that developed as warm and cold air masses collided over eastern North America. Unlike hurricanes, which are warm-core systems fueled by ocean heat, extratropical cyclones are cold-core systems. They get their strength from the clash between warm tropical air and cold polar air.

Along Maine's coast, sustained winds of 30-40mph with gusts reaching 54mph contributed to coastal flooding and rough seas. As the storm tracked northward, its broad circulation generated strong onshore winds and wave action along the Gulf of Maine.



STORM AND SURGE TIDAL STATS FROM 1912-2023 (MGS)		
frequency	storm surge (ft)	storm tide (ft)
every year	2	11.7
every 5 years	2.9	12.6
every 10 years	3.3	12.9
every 25-100 yrs	+4	13.4-14.1

TIDAL STATS DO NOT INCLUDE WAVE HEIGHT OR SWELLS. TYPICAL WAVE HEIGHTS IN CASCO BAY RANGE FROM 1-3 FEET.

- HIGH WATER MARK
- SEVERE STORM SURGE +4-4.7FT
- 5-10 YEAR STORM SURGE +3FT
- ANNUAL STORM SURGE +2FT
- PREDICTED TIDE HEIGHT

SOURCE LINKS:
[MGS STORM SURGE AND TIDE FAQs](#)
[PORTLAND TIDAL STATION 8418150](#)
[DIAMOND COVE SEA LEVEL RISE PROJECTIONS](#)

TIDAL DATUM, TIDE HEIGHT AND DOCK TO SCALE

