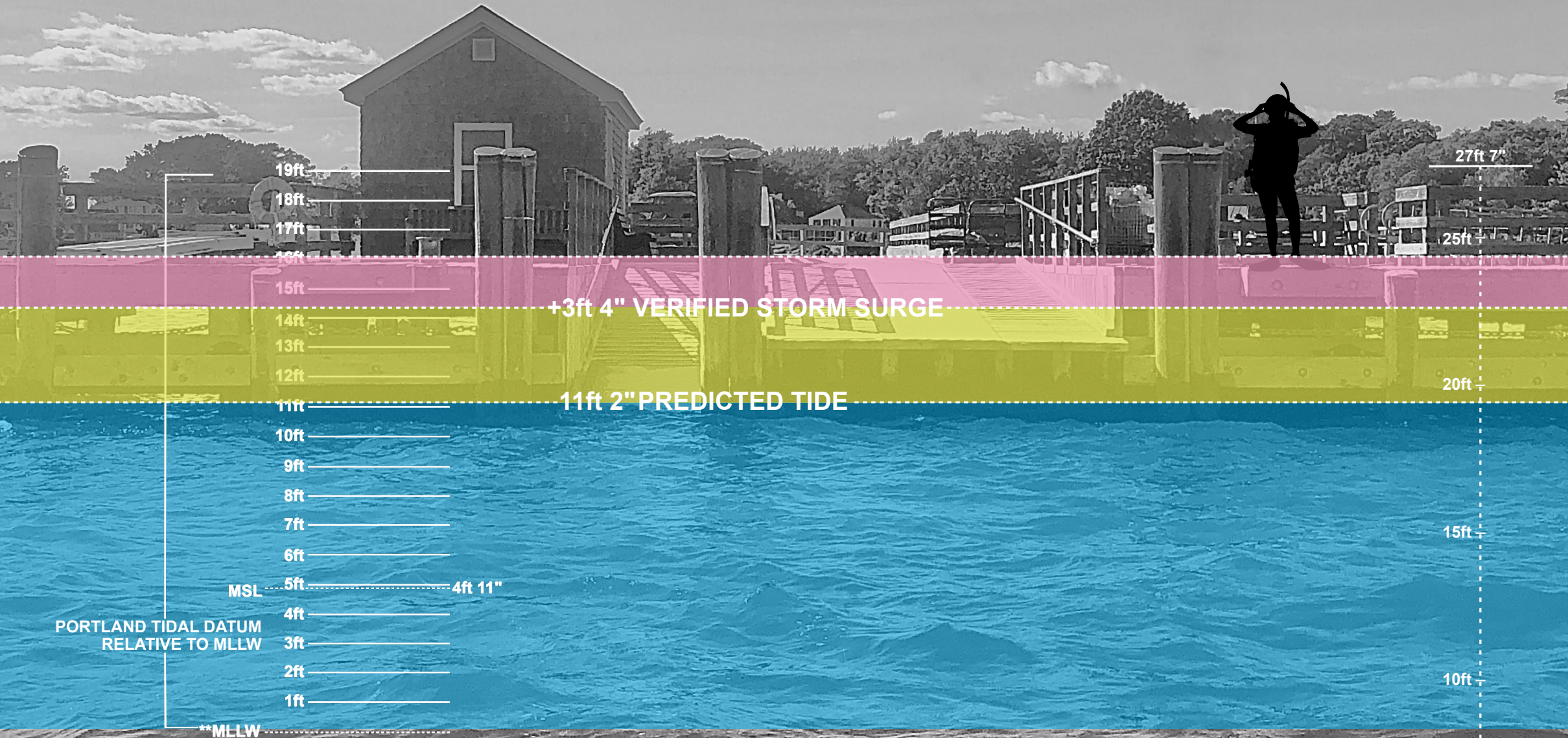


2024 JANUARY 13 WINTER STORM AT GREAT DIAMOND ISLAND STATE PIER



HOW BAD WAS IT?

The January 13, 2024 storm produced a storm tide of 14ft 8", making it the highest water-level event recorded along Maine's coast since record-keeping began in 1912, surpassing the previous record set during the February 1978 storm.

Winter Storm Heather was a powerful extratropical cyclone that arrived during a period of exceptionally high astronomical tides associated with the January new moon. Strong southeasterly winds, nearly 3" of rain, and waves reaching 15-20ft in Gulf of Maine combined to create prolonged coastal impacts throughout Casco Bay. These elevated winds pushed water directly into Portland Harbor and prevented it from receding during the peak of the storm.

The impacts were felt throughout Maine's coastal communities. Water levels rose so high that DiMillo's massive floating restaurant in Portland nearly lifted off its securing pilings, requiring staff to use a boat to keep the restaurant from floating free and colliding into harbor infrastructure.

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](#)
[GDI SEA LEVEL RISE PROJECTIONS](#)



TIDAL DATUM, TIDE HEIGHT AND DOCK TO SCALE

