

Nuisance Flood Plan – Monitoring Report

2023 Quarterly Threshold Review Q1

Q1	Q2	Q3	Q4
<u>0</u> High Tide <u>1</u> Heavy Rainfall >1” <u>0</u> days >1’ Depth <u>1</u> day Duration <u>avg</u> Extent <u>0/Qtr</u> Frequency 0 NF Event	<u>__</u> High Tide <u>__</u> Heavy Rainfall >1” <u>__</u> days >1’ Depth <u>__</u> day Duration <u>avg</u> Extent <u>/Qtr</u> Frequency NF Event	<u>__</u> High Tide <u>__</u> Heavy Rainfall >1” <u>__</u> days >1’ Depth <u>__</u> day Duration <u>avg</u> Extent <u>/Qtr</u> Frequency NF Event	<u>__</u> High Tide <u>__</u> Heavy Rainfall >1” <u>__</u> Depth <u>__</u> day Duration <u>avg</u> Extent <u>/Qtr</u> Frequency NF Events

* NF events based on Hight Tide threshold, heavy rainfall events tracked separately

Threshold Criteria

	Nuisance Flood Area (Tidal)	Special Flood Hazard Area (FEMA 100 year storm)
Frequency	3.7 times per year average	0.1 times per year average
Depth	1 foot	2 to 4+ feet
Duration	One tide cycle (2 to 3 hours)	Multiple tide cycles (1 to 3 days)
Extent	Area 72 acres Buildable % 4% Structures 450	Area 1,157 acres Buildable % 58% Structures 2,500

- Tracking the number of minor flooding days per year, and comparing prior years of data from the tide gauge provides an important planning tool to identify changing conditions. New community responses may be initiated when:

	2022 Prior Year Annual
✓ FREQUENCY - Nuisance Flooding exceeds 10 to 12 events per year	5 high tide events exceed the Nuisance Flooding threshold (2.3’ NAVD88), 16 heavy rainfall events >1”
✓ DEPTH - Flood depths during nuisance flooding events reach 2 feet deep (moderate flooding) on a sustained annual basis	Tidal events do not exceed Minor Flooding, Additional study required for rainfall events
✓ DURATION - Nuisance flood duration regularly exceeds one tide cycle	Three extended events May 7 - 10, September 7 – 9, October 2 - 4
✓ EXTENT - When the extent of local nuisance flooding doubles in area, or exceeds 10% of the community buildable area	Typical Minor Flooding events only during this period, Additional study required for area comparison

- When any one or more annual threshold(s) are exceeded, the Nuisance Flood Plan work group will meet to evaluate the data and community concerns, and will present a report to the Mayor and City Council with recommendations for action.

Stage	NWS Elevation (MLLW datum)	FEMA Elevation (NAVD88 datum)
Major	6.0+ feet	4.3+ feet
Moderate	5.0 feet	3.3 feet
Minor	4.0 feet	2.3 feet
Action	3.5 feet	1.3 feet

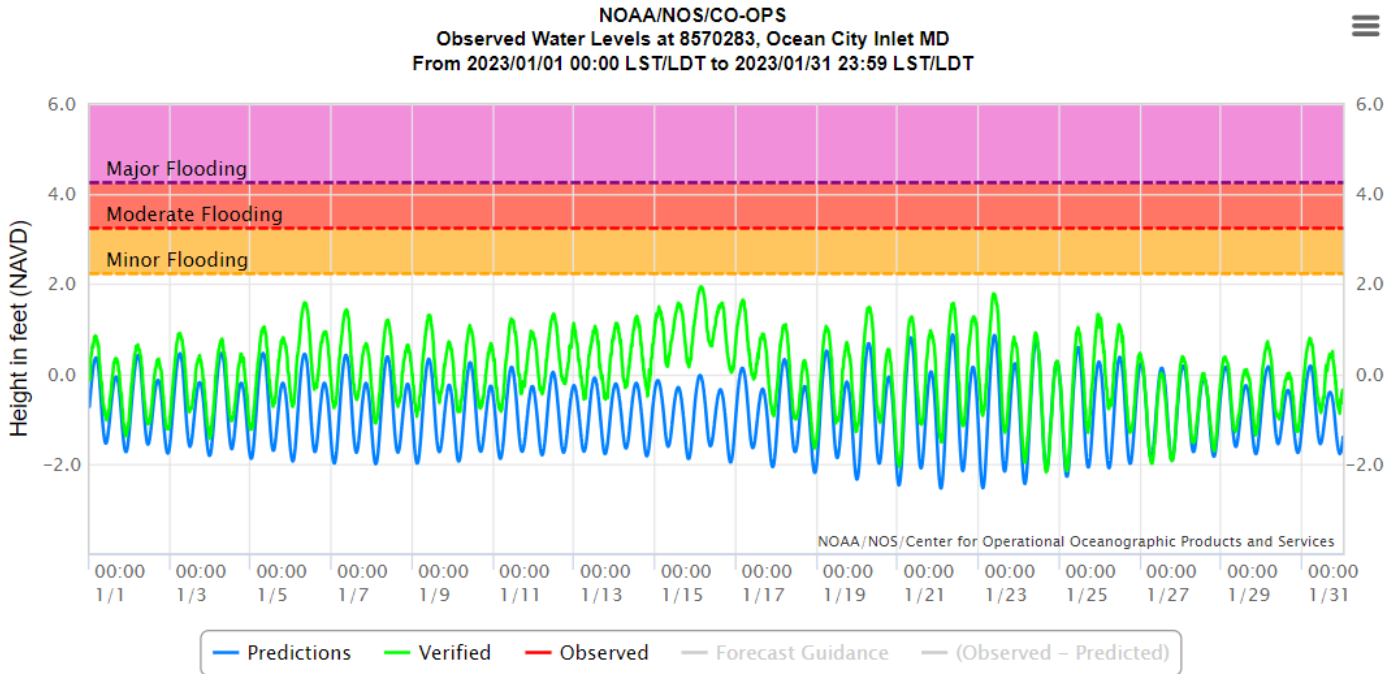
NWS	Elevation (Feet above MHHW)	Tide Elevation (NAVD)	Event Date	Rainfall	Event Type	MyCoast
			1.25.23	1.38"		
			12.23.22	2.52		
		2.51	12.15.22	2.51		
			11.27.22	1.47		
			10.17.22	1.03		*
			10.3.22	0.87	Remnant H. Ian Coastal Low	*
		2.91	10.2.22	1.95	H. Ian Coastal Low	
			10.1.22	1.78	H. Ian Coastal Low	
			9.30.22	1.22	H. Ian Coastal Low	*
		2.32	9.7.22		H. Earl	
			9.1.22	1.51	Coastal Low H. Fiona	*
			8.27.22	1.60		
			8.19.22	1.91		
			8.7.22	1.60		
			7.26.22	1.94		
			6.16.2022	1.62		
			5.16.2022	0.94		
		2.59	5.8.2022	0.73	Coastal Low Pressure	*
			3.12.2022	1.06		
		2.54	1.4.2022	1.46	Winter Storm	
		2.95	10/30/2021	1.14"	Coastal Low Pressure	*
		2.67	10/1/2021		King Tide and Wind	
			9/9/2021	1.91"	TS Ida (remnant)	
			8/2/2021	1.95"	TD Fred (remnant)	
			7/30/2021	1.02"	Thunderstorm	
		0.00	7/9/2021	0.8"+	TS Elsa	
			6/9/2021	1.3"	Thunderstorm	
		2.50	5/29/2021	0.79"	High Tide plus rainfall event (2")	
			4/25/2021	0.46"		
			3/18/2021	1.43"		
		2.71	2/1/2021	0.93"	Nor'easter WS Orlena	*
	3.94	2.21	12/17/2020		Winter Solstice High Tide	
	4.27	2.53	10/30/2020	1.98"	Rainfall	
	3.86	2.13	9/2/2020		H Teddy	*
	3.90	2.17	9/17/2020	1.38"	Coastal Flood Advisory	
	4.03	2.30	8/17/2020		Coastal Storm	
			8/4/2020	1.23"	TS Isaias 1.23" Rainfall Wind	
			7/10/2020	1.92"	TS Fay 5" Rainfall Event	
			7/7/2020	2.56"	Rainfall	*
	4.02	2.29	4/4/2020		Coastal Storm	*
	4.10	2.37	12/2/2019		Winter Storm	

Minor Flooding

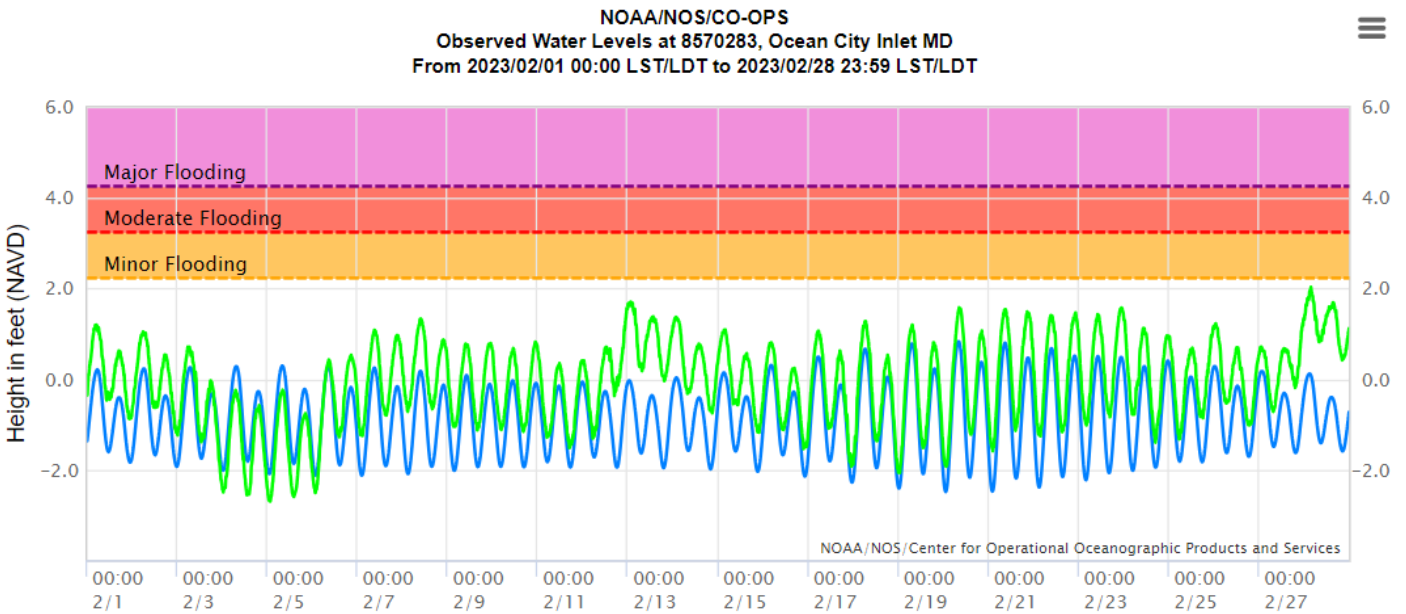
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2023 Tide Elevations Q1

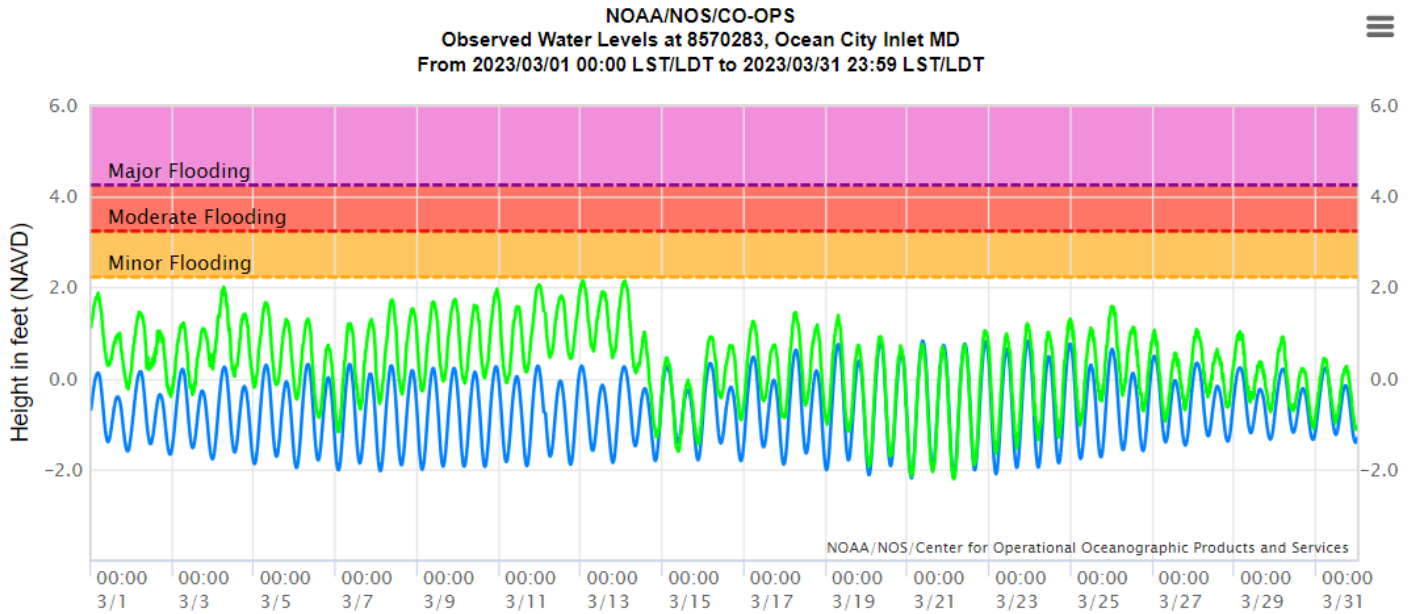
January 2023 – 0 High Tide Flooding Events



February 2023 – 0 High Tide Flooding Events



March 2023 – 0 High Tide Flood Events (Above threshold 2.3' NAVD)



MID-ATLANTIC OUTLOOK

New Jersey, Delaware, Pennsylvania, Maryland, District of Columbia, Virginia

Dates:

- March 19-22
- No dates in April - May

Locations:

Tide stations at the following locations have the greatest chance of seeing high tide flooding:

- Sandy Hook, New Jersey
- [Visit the NOAA Coastal Inundation Dashboard for this region to view real-time water levels with forecasts out to 48 hours.](#)

Why will they be higher than normal?

- In March, a perigean spring tide will occur. This is when the moon is either new or full and closest to earth. Higher than normal high tides and lower than normal low tides will occur.

What kind of impact might I expect along the coast?

- Minor tidal flooding along the coast, in particular in low-lying areas.
- If a storm occurs at this time, increased levels of tidal flooding and coastal erosion may occur.
- Lower than normal low tides will also occur.

NOTE: Higher than predicted tides March 10-14, 2023 – no flooding

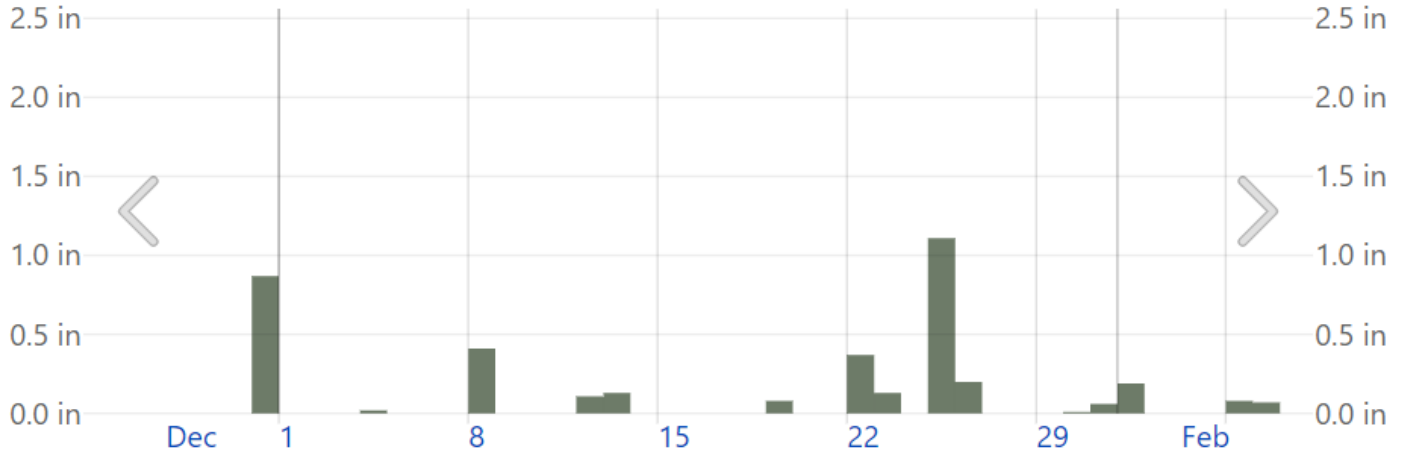
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2023 Rainfall Events Q1

Daily Precipitation in January 2023 at Ocean City Municipal Airport

← Winter 2023 [Link](#) [Download](#) [Compare](#) [Averages](#)

History: **Jan** F M A M J J A S O N D 2022 2021 2020 2019

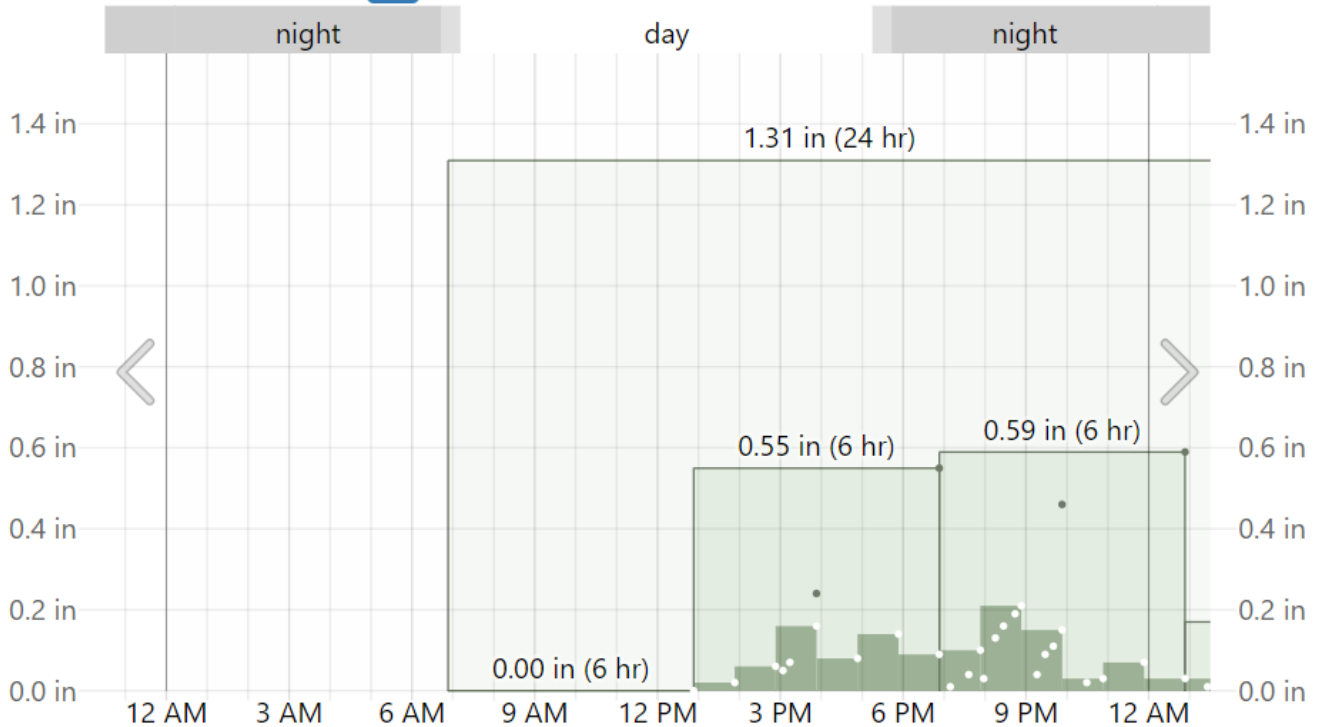


The daily measured quantity of liquid or liquid-equivalent precipitation.

Liquid-Equivalent Precipitation on Wednesday, January 25, 2023 at Ocean City Municipal Airport

← Jan 2023 [Link](#) [Download](#) [Compare](#) [Averages](#)

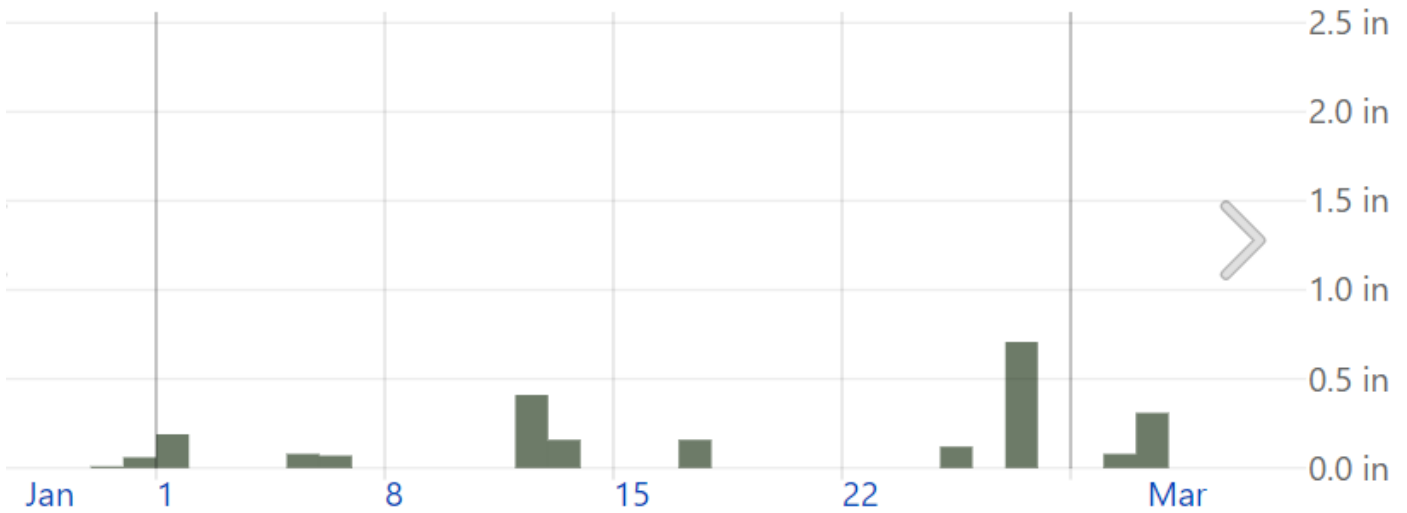
History: **Jan** F M A M J J A S O N D 2022 2021 2020 2019



Daily Precipitation in February 2023 at Ocean City Municipal Airport

[← Winter 2023](#)
[Link](#)
[Download](#)
[Compare](#)
[Averages](#)

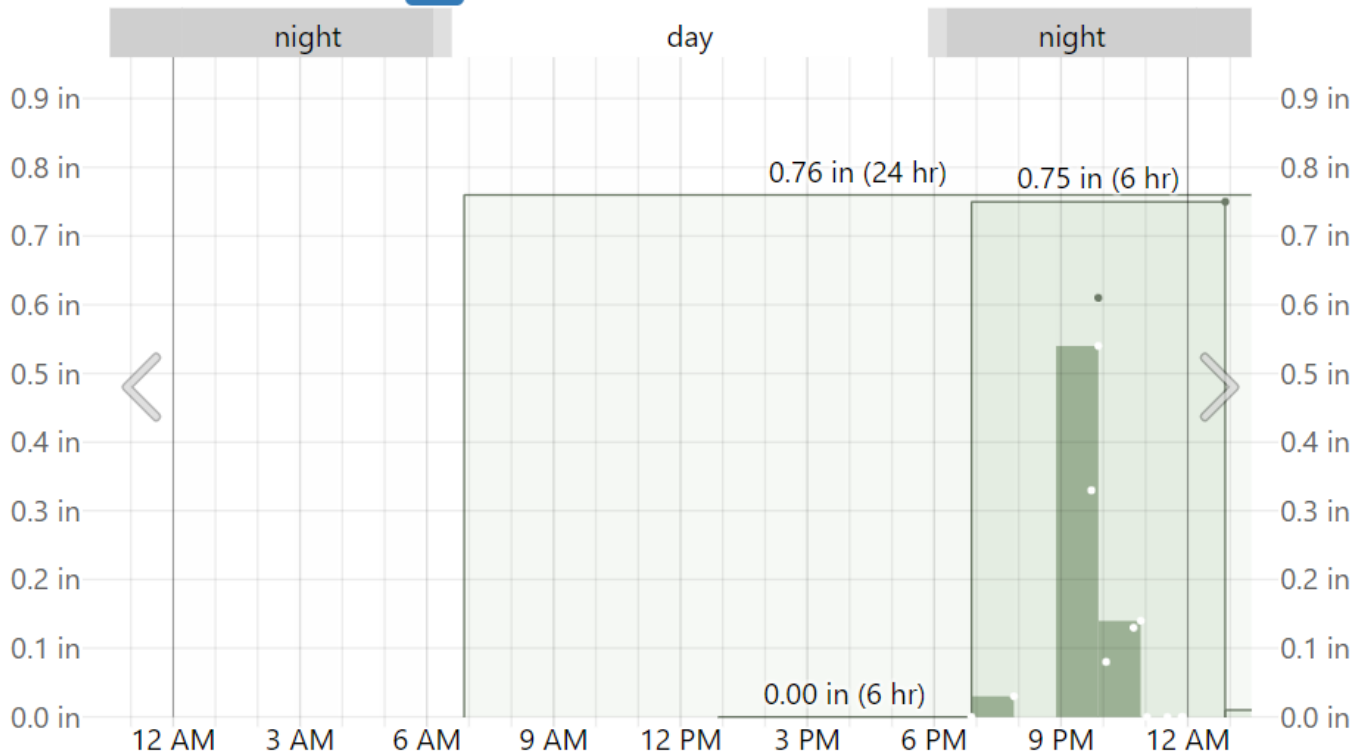
History: J **Feb** M A M J J A S O N D 2022 2021 2020 2019



Liquid-Equivalent Precipitation on Monday, February 27, 2023 at Ocean City Municipal Airport

[← Feb 2023](#)
[Link](#)
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[Compare](#)
[Averages](#)

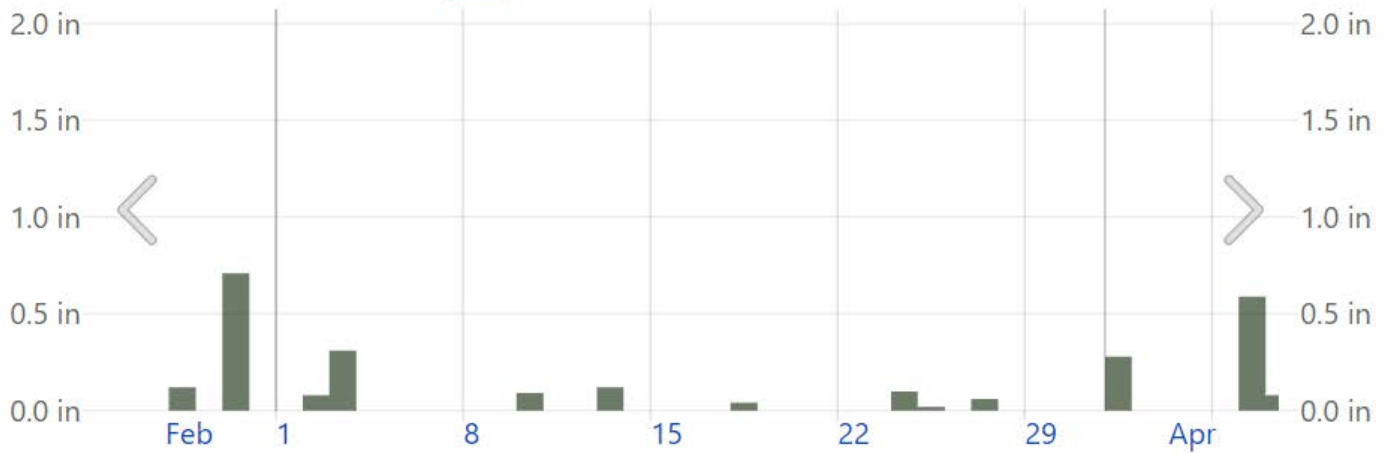
History: J **Feb** M A M J J A S O N D 2022 2021 2020 2019



Daily Precipitation in March 2023 at Ocean City Municipal Airport

← Spring 2023 [Link](#) [Download](#) [Compare](#) [Averages](#)

History: J F **Mar** A M J J A S O N D 2022 2021 2020 2019



MD MyCoast Nuisance Tidal Flooding Storm Reporter

Nuisance Tidal Flooding Report

MyCoast reports from January through March 2023 (none)