

Nuisance Flood Plan – Monitoring Report

2023 Quarterly Threshold Review Q2

Q1	Q2	Q3	Q4
<u>0</u> High Tide <u>1</u> Heavy Rainfall >1” <u>0</u> days >1’ Depth <u><1 day</u> Duration <u>avg</u> Extent <u>1/Qtr</u> Frequency	<u>1</u> High Tide <u>2</u> Heavy Rainfall >1” <u>0</u> days >1’ Depth <u><1 day</u> Duration <u>avg</u> Extent <u>1/Qtr</u> Frequency	<u>__</u> High Tide <u>__</u> Heavy Rainfall >1” <u>__</u> days >1’ Depth <u>__ day</u> Duration <u>avg</u> Extent <u>/Qtr</u> Frequency	<u>__</u> High Tide <u>__</u> Heavy Rainfall >1” <u>__</u> Depth <u>__ day</u> Duration <u>avg</u> Extent <u>/Qtr</u> Frequency
0 NF Event	1 NF Event	NF Event	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.

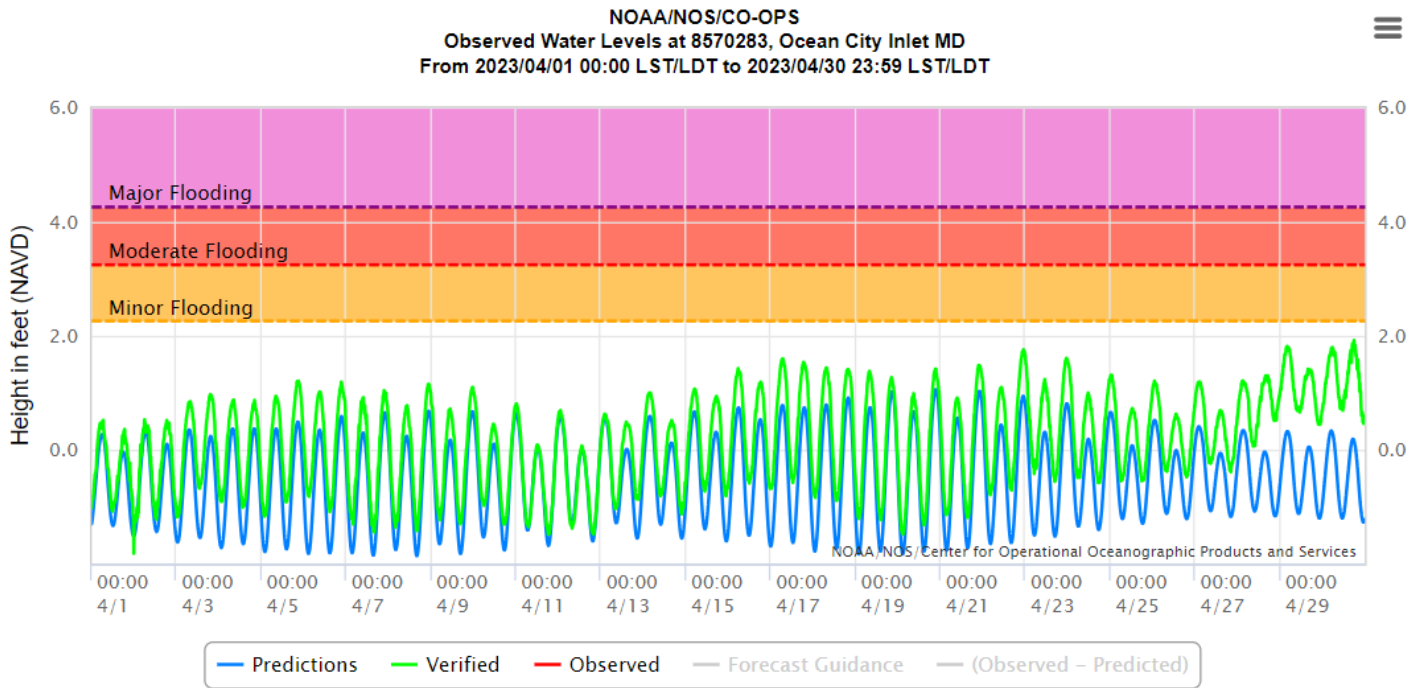
Stage	NWS Elevation (MLLW datum)	FEMA Elevation (NAVD88 datum)
Major	6.0+ feet	4.3+ feet
Moderate	5.0 feet	3.3 feet
Minor	4.0 feet	2.3 feet
Action	3.5 feet	1.3 feet

NWS	Elevation (Feet above MHHW)	Tide Elevation (NAVD)	Event Date	Rainfall	Event Type	MyCoast
			6.12.23	1.33*		
		2.36	6.3.23		Coastal Low	
			4.22.23	1.61*		
			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	

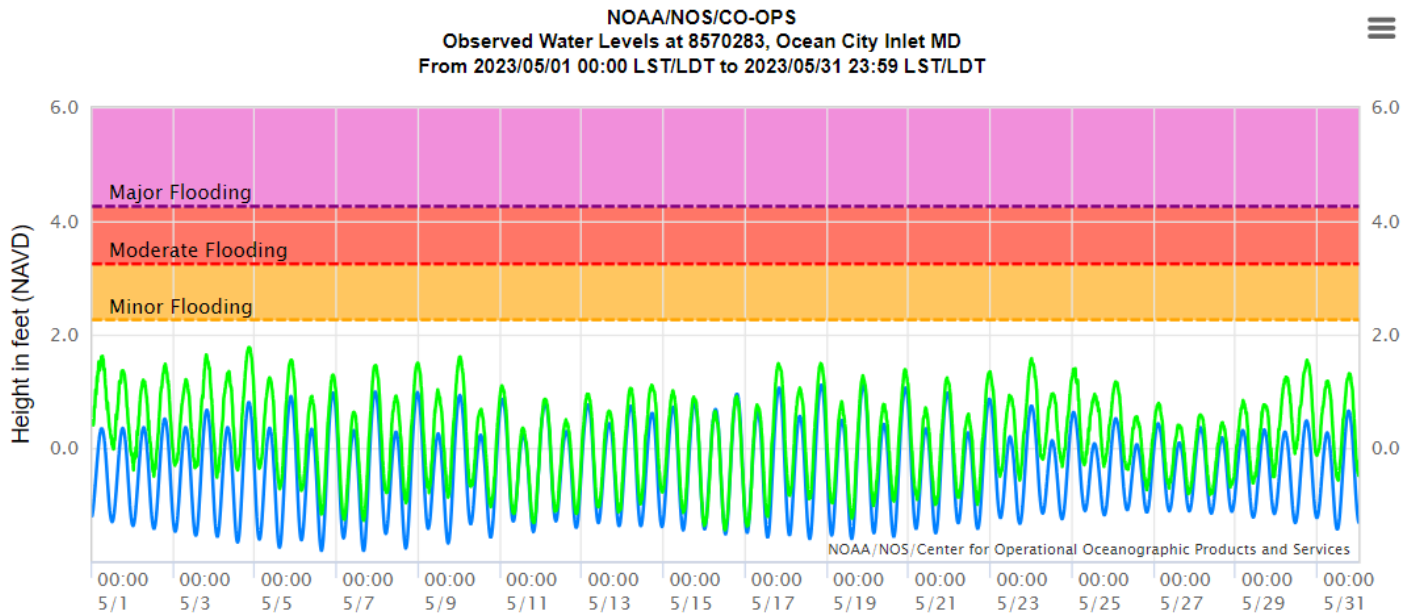
Nuisance Flood Plan – Monitoring Report

2023 Tide Elevations Q2

April 2023 – 0 High Tide Flooding Events

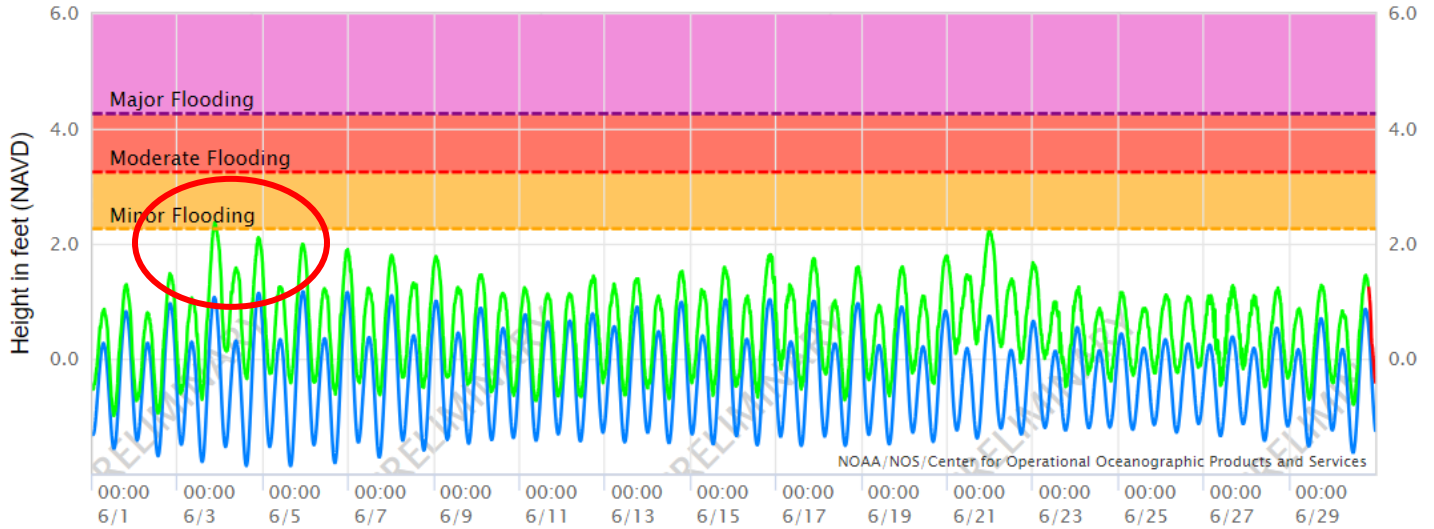


May 2023 – 0 High Tide Flooding Events



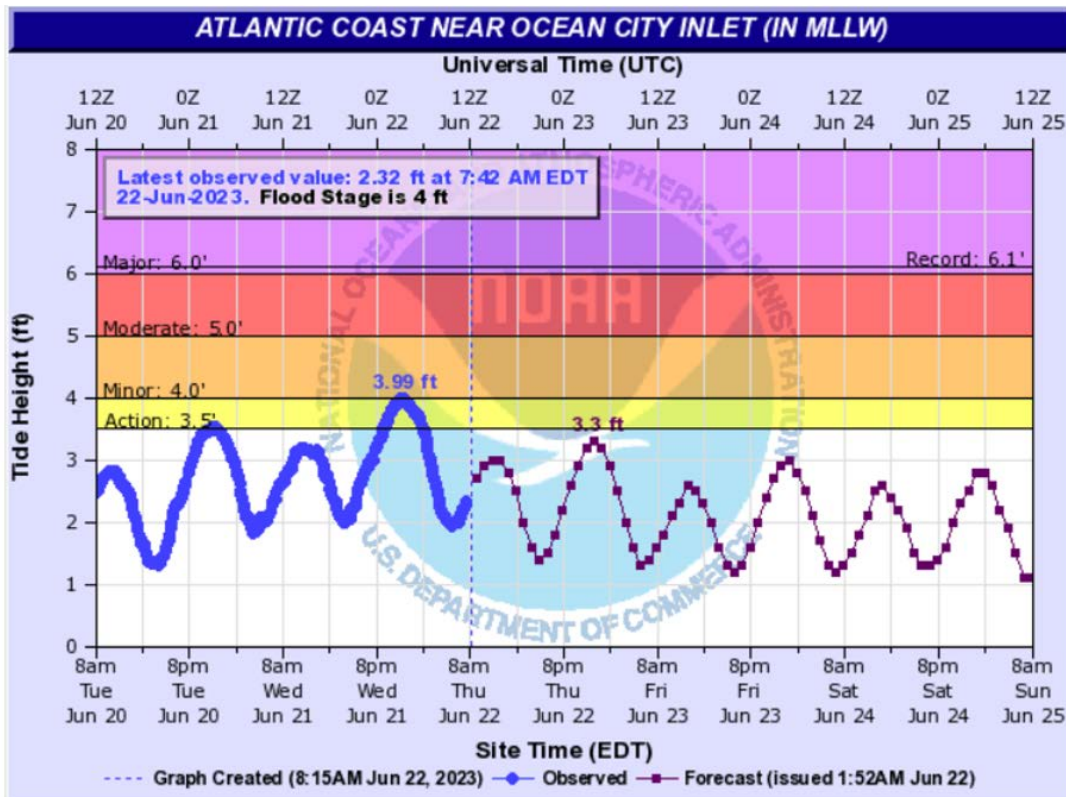
June 2023 – 0 High Tide Flood Events (Above threshold 2.3' NAVD)

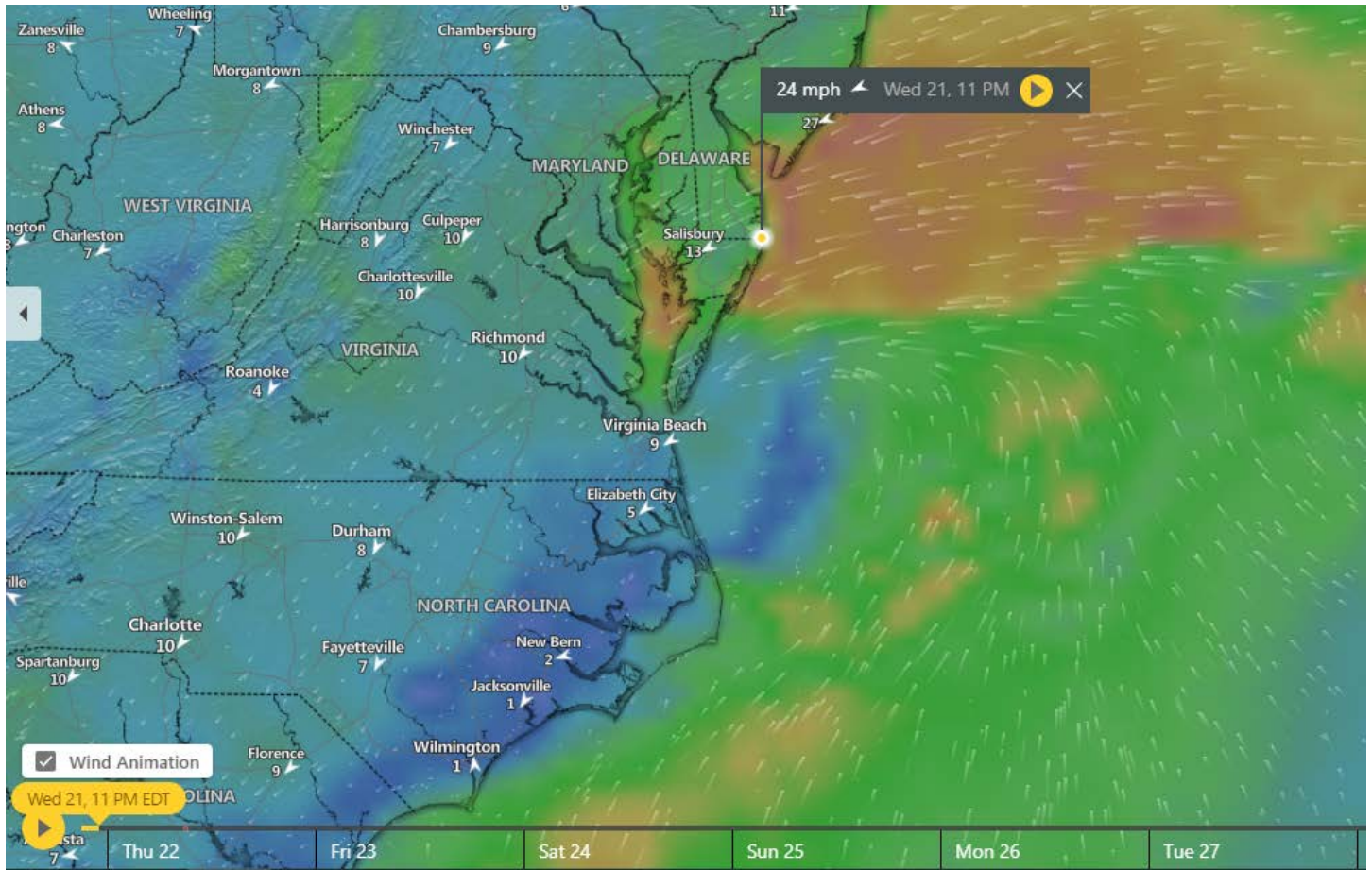
NOAA/NOS/CO-OPS
 Observed Water Levels at 8570283, Ocean City Inlet MD
 From 2023/06/01 00:00 LST/LDT to 2023/06/30 23:59 LST/LDT



June 3, 2023 – 2.36' minor flooding at high tide

[June 21, 2023 – 2.25' below minor flooding at high tide]





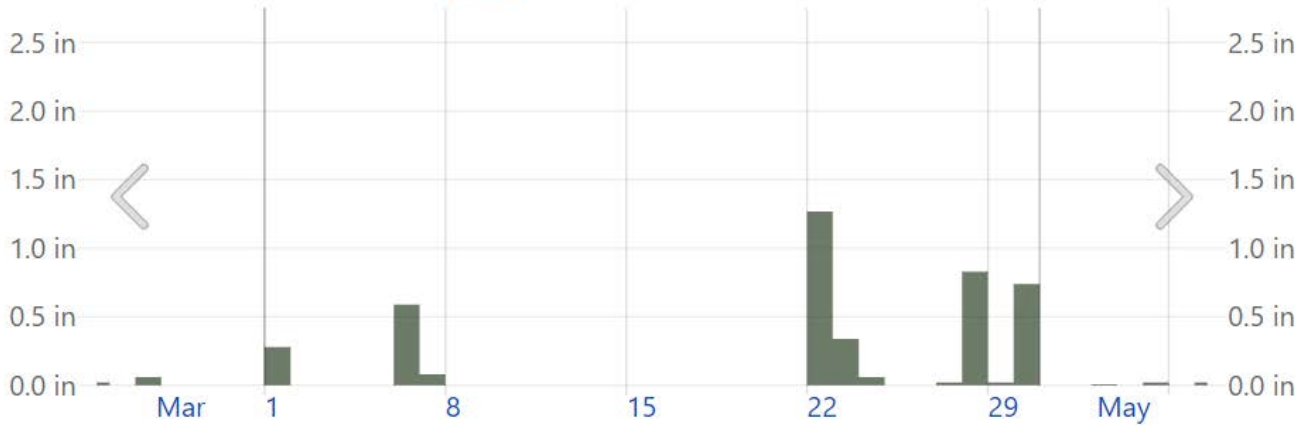
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2023 Rainfall Events Q2

Daily Precipitation in April 2023 at Ocean City Municipal Airport

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

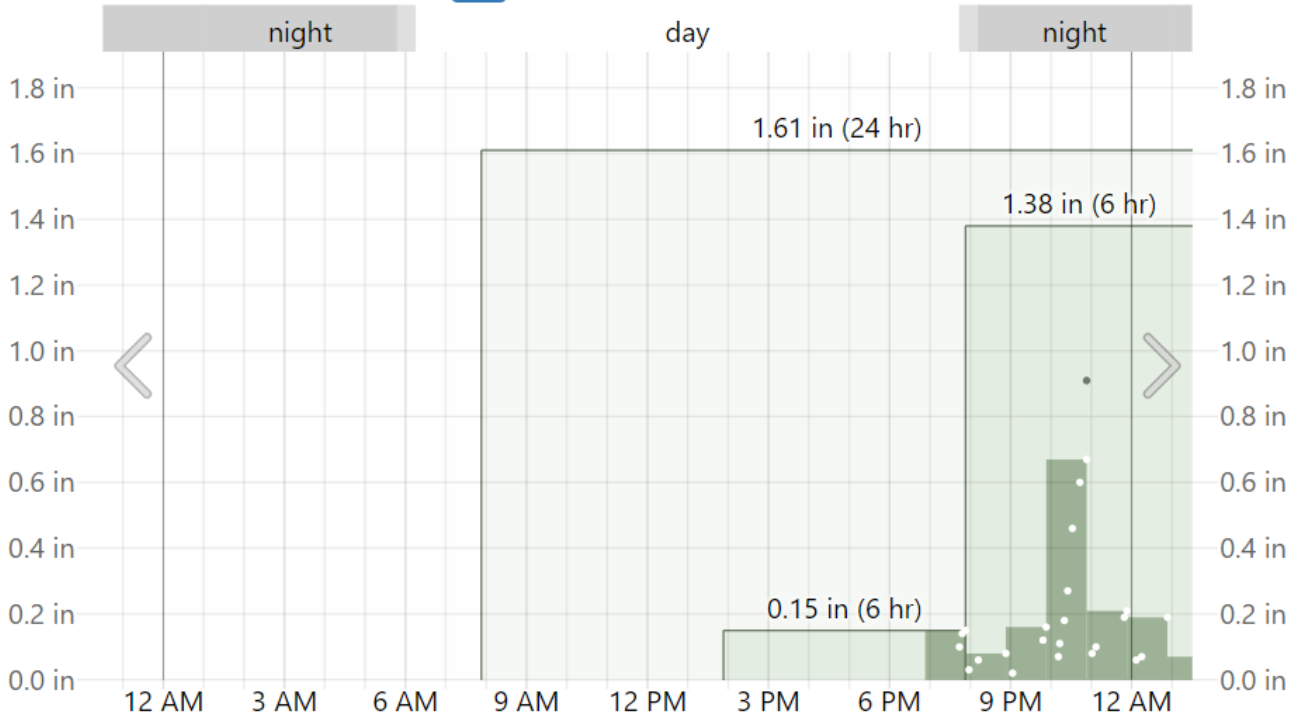
History: J F M **Apr** M J J A S O N D 2022 2021 2020 2019



Liquid-Equivalent Precipitation on Saturday, April 22, 2023 at Ocean City Municipal Airport

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

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

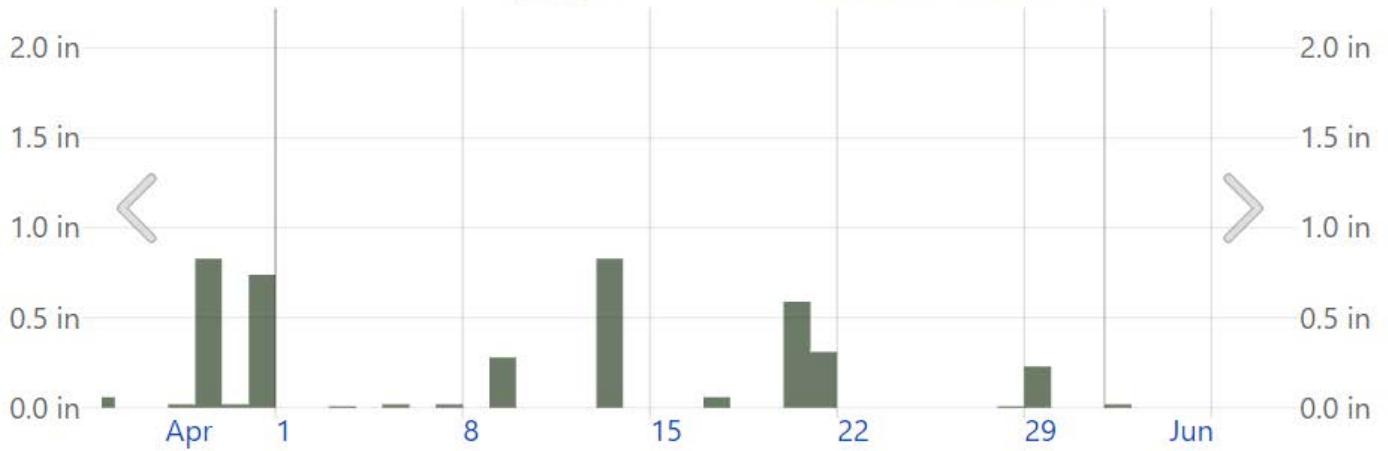


Thunderstorms

Daily Precipitation in May 2023 at Ocean City Municipal Airport

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[Averages](#)

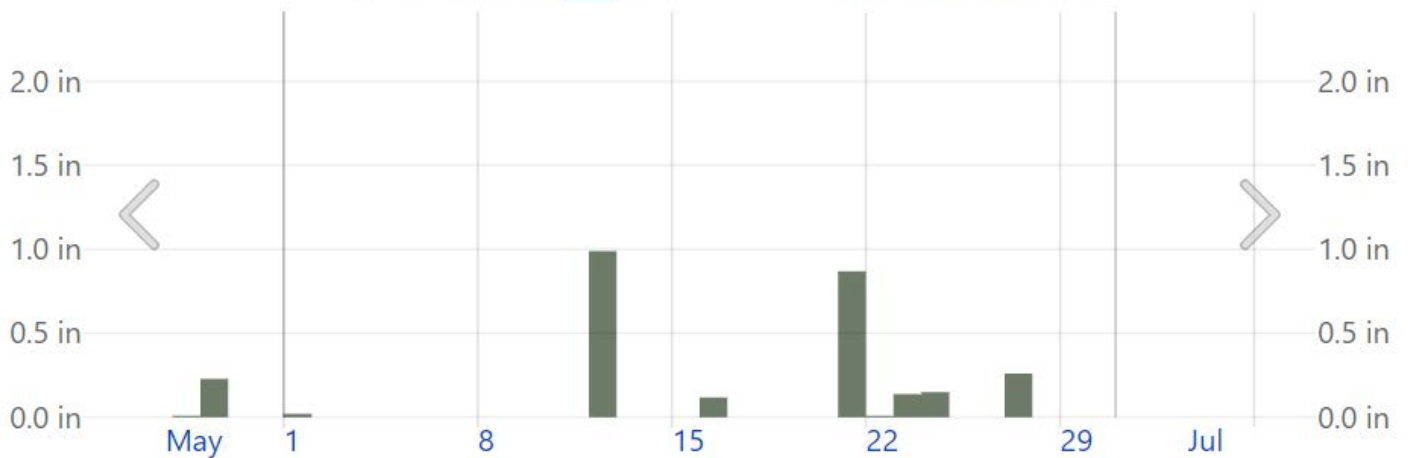
History: J F M A **May** J J A S O N D 2022 2021 2020 2019



Daily Precipitation in June 2023 at Ocean City Municipal Airport

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

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



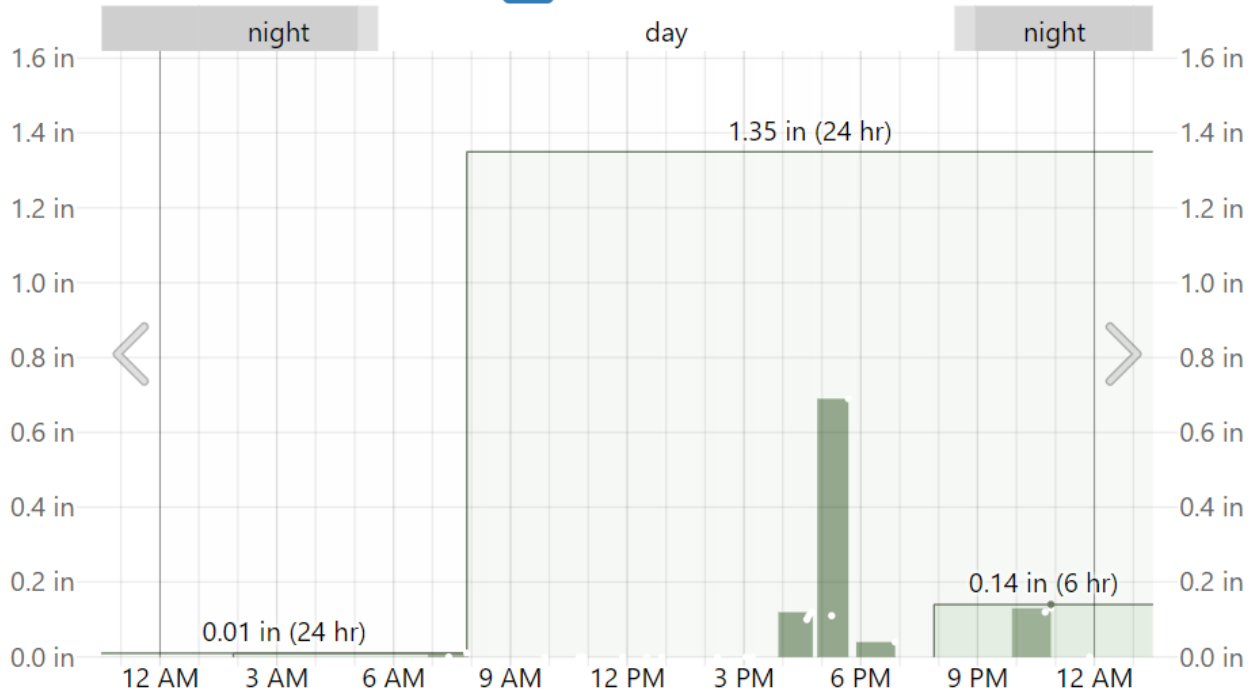
June 12, 2023 – 1.33” rainfall recorded in OC

June 16, 2023 – 1.49” rainfall recorded in OC [0.7” at OC Airport]

Liquid-Equivalent Precipitation on Monday, June 12, 2023 at Ocean City Municipal Airport

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

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



Thunderstorm



MD MyCoast Nuisance Tidal Flooding Storm Reporter

Nuisance Tidal Flooding Report

MyCoast reports from April through June 2023 (none)