



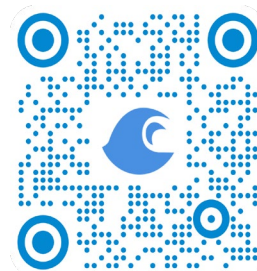
MyCoast: New Jersey

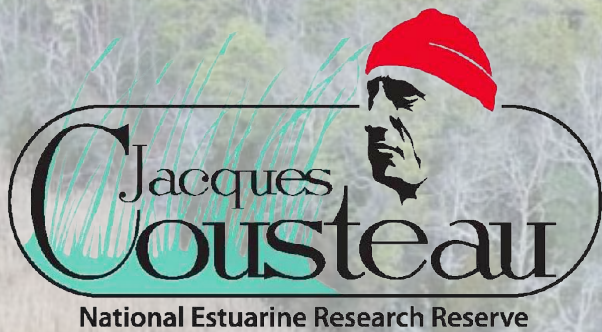
2024 ANJEC ENVIRONMENTAL CONGRESS

9/27/2024

Amanda Archer, Jacques Cousteau National Estuarine Research Reserve - Rutgers University

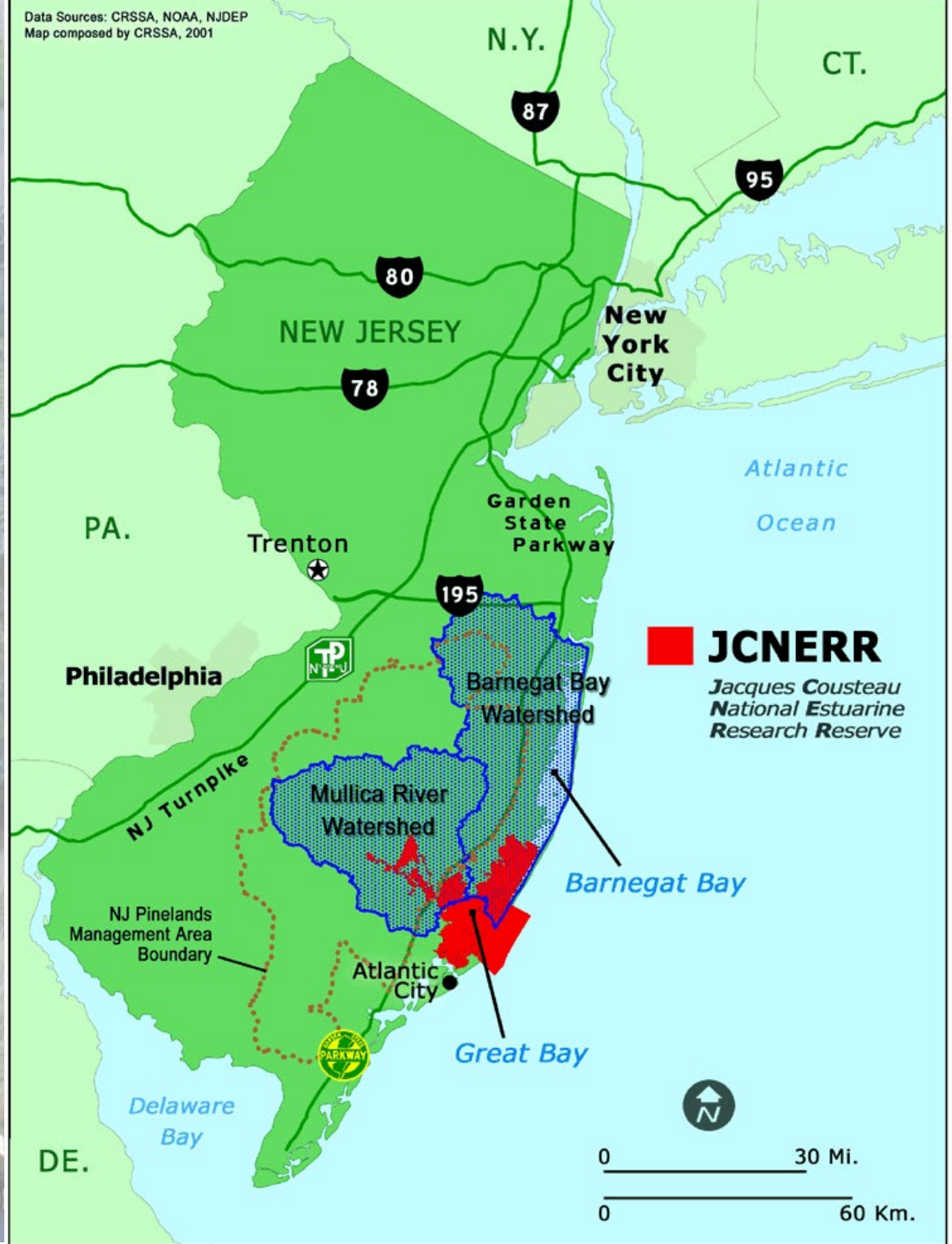
Devon Haines, NJ Department of Environmental Protection- Coastal Management Program



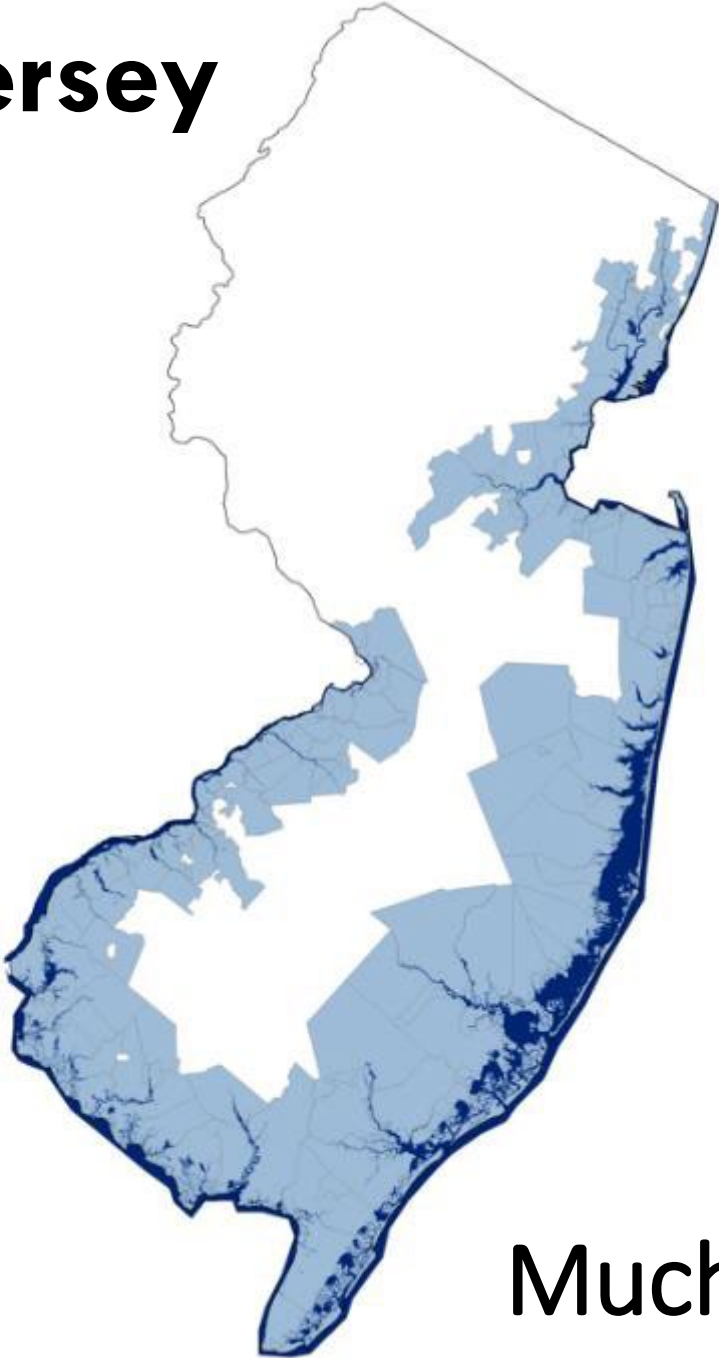


JC NERR Coastal Center and Grassle Ma
PC: Life on the Edge Dro

Data Sources: CRSSA, NOAA, NJDEP
Map composed by CRSSA, 2001

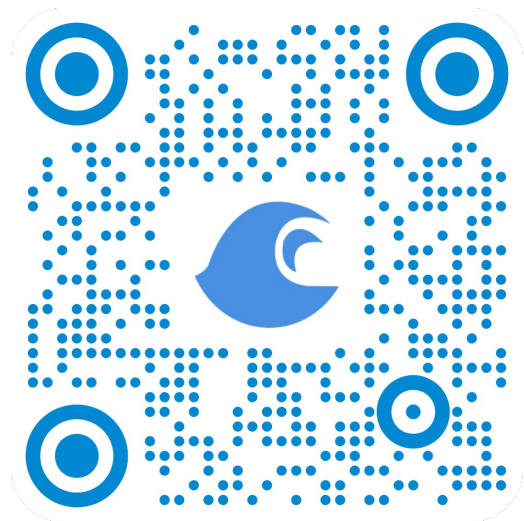


Coastal New Jersey



Much more than the Shore!

- Portal used to collect and analyze photos of coastal events and places.
- Photos are linked to data about weather and tides to create reports that help stakeholders like government agencies, business owners, and residents understand coastal change and make informed decisions.



MyCoast

NJ MyCoast High Water Places We Love Photo Stations Know Your Tides Rising Together NJ Download App Log In Register More...

DEPARTMENT OF ENVIRONMENTAL PROTECTION NEW JERSEY

Jacques Cousteau National Estuarine Research Reserve

RUTGERS School of Environmental and Biological Sciences DEPARTMENT OF MARINE AND COASTAL SCIENCES

MyCoast: New Jersey

Help Document our Changing Coast

The MyCoast: New Jersey portal is used to collect and analyze photos of coastal events and places. Photos are linked to data about weather and tides to create reports that help stakeholders like government agencies, business owners, and residents to understand coastal change and make informed decisions.

New Jersey MyCoast Tools

Use these buttons to view existing photos and submit your own.



High Water

Tracking flooding
across the state



Know Your Tides

Monitoring local tides



Places We Love

Documenting the coastal
places we love



Photo Stations

Community shoreline monitoring



Rising Together NJ

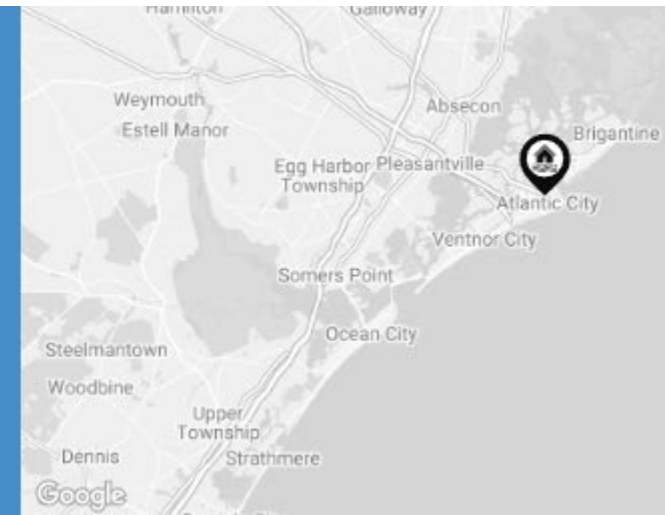
Sharing flood stories

Atlantic City, NJ Atlantic County

High Water Report
by **Angela Walters**

01/23/2023 | 9:53 am

High Water



[View on NJFloodMapper](#)



01/23/2023 | 9:53 am

Tidal Overview

1 hours 17 minutes after high tide

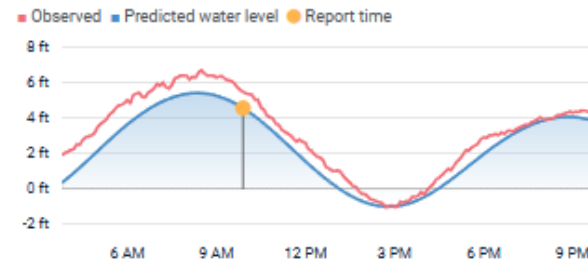
Data from **ATLANTIC CITY, OCEAN** (1 miles away)

All heights shown relative to Mean Lower Low Water (MLLW): the daily low tide level averaged over a 19-year period.

Water Level (at time of report): 9:53 am, 5.7'

High Tide (Predicted): 8:22 am, 5.4'

High Tide (Observed): 8:36 am, 6.4'



The accuracy of the predicted tides at the photo location may vary depending on distance from the nearest tide station and due to wind, rain, and other short-term meteorological events.

[\(Click here for full tide details from NOAA Tides & Currents\)](#)

Weather Overview



Wind Speed: 11.7 MPH

Wind Direction: WSW (255°)

Temperature: 40°F

Rainfall (Calendar Day): 0.27"

Rainfall (Past 24 Hours): 0.63"

Riverine Overview

Data from **ABSECON CREEK AT ABSECON NJ** (6.9 miles away)

Water level: 3.15' (NWS Flood Status: Not defined)

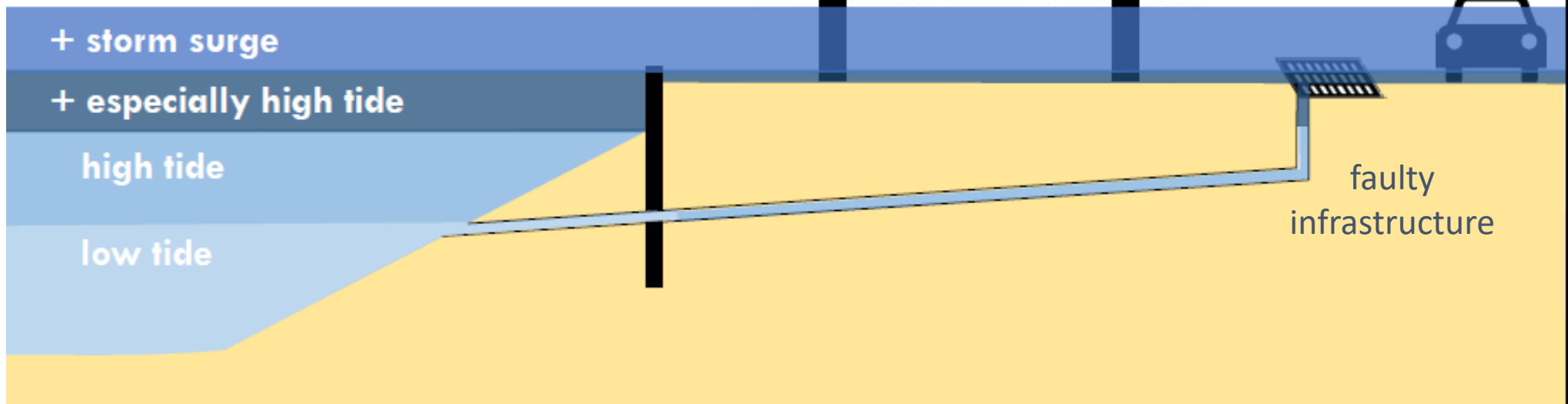
[\(Click here for full riverine details from USGS\)](#)

Source of Flooding: Ocean

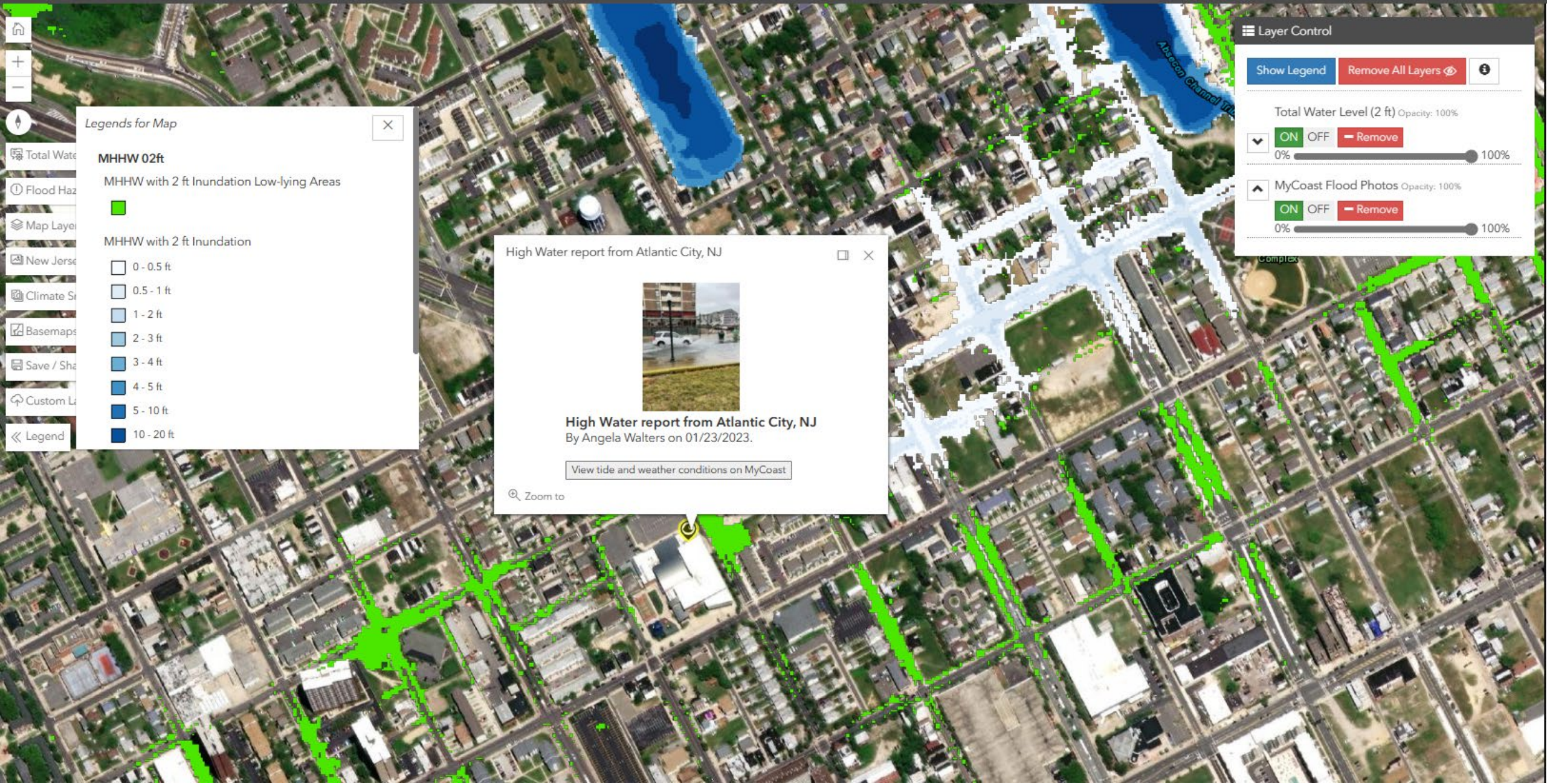


Where does the water come from?

sea levels rising



"The Perfect Storm" isn't always a storm




Legends for Map

MHHW 02ft
MHHW with 2 ft Inundation Low-lying Areas

MHHW with 2 ft Inundation

- 0 - 0.5 ft
- 0.5 - 1 ft
- 1 - 2 ft
- 2 - 3 ft
- 3 - 4 ft
- 4 - 5 ft
- 5 - 10 ft
- 10 - 20 ft

High Water report from Atlantic City, NJ



High Water report from Atlantic City, NJ
By Angela Walters on 01/23/2023.

[View tide and weather conditions on MyCoast](#)

Zoom to

Layer Control

Show Legend Remove All Layers

Total Water Level (2 ft) Opacity: 100%

ON OFF Remove

0% 100%

MyCoast Flood Photos Opacity: 100%

ON OFF Remove

0% 100%



Legends for Map

MHHW 03ft
MHHW with 3 ft Inundation Low-lying Areas

MHHW with 3 ft Inundation

- 0 - 0.5 ft
- 0.5 - 1 ft
- 1 - 2 ft
- 2 - 3 ft
- 3 - 4 ft
- 4 - 5 ft
- 5 - 10 ft
- 10 - 20 ft



Layer Control

Show Legend Remove All Layers

Total Water Level (3 ft) Opacity: 100%

ON OFF Remove

0% 100%

MyCoast Flood Photos Opacity: 100%

ON OFF Remove

0% 100%

Total Water

Flood Haz

Map Layer

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Climate S

Basemaps

Save / Sha

Custom L

Legend



Submitting Past Reports

- MyCoast allows you to upload pictures from any past flooding event. The date, time, and location of the photo will automatically be linked upon submission.
- If the photo is not embedded with that information, it is important to review when and where the photo was taken to ensure an accurate report.
- We **encourage** submissions of past flooding so that we can compare them to recent reports.

"Ramapo River flooding. Pompton Lakes, NJ. April 2007."

04/26/2021 | 9:25 am

Tidal Overview

2 hours 7 minutes after high tide

Data from **ATLANTIC CITY, OCEAN** (5.8 miles away)

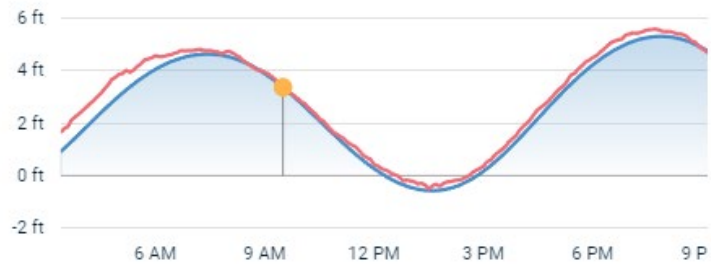
All heights shown relative to Mean Lower Low Water (MLLW): the daily low tide level averaged over a 19-year period.

Water Level (at time of report): 9:25 am, 3.7'

High Tide (Predicted): 7:23 am, 4.7'

High Tide (Observed): 7:18 am, 4.8'

■ Observed ■ Predicted water level ● Report time



The accuracy of the predicted tides at the photo location may vary depending on distance from the nearest tide station and due to wind, rain, and other short-term meteorological events.

[\(Click here for full tide details from NOAA Tides\)](#)

Weather Overview



Wind Speed: 7.1 MPH

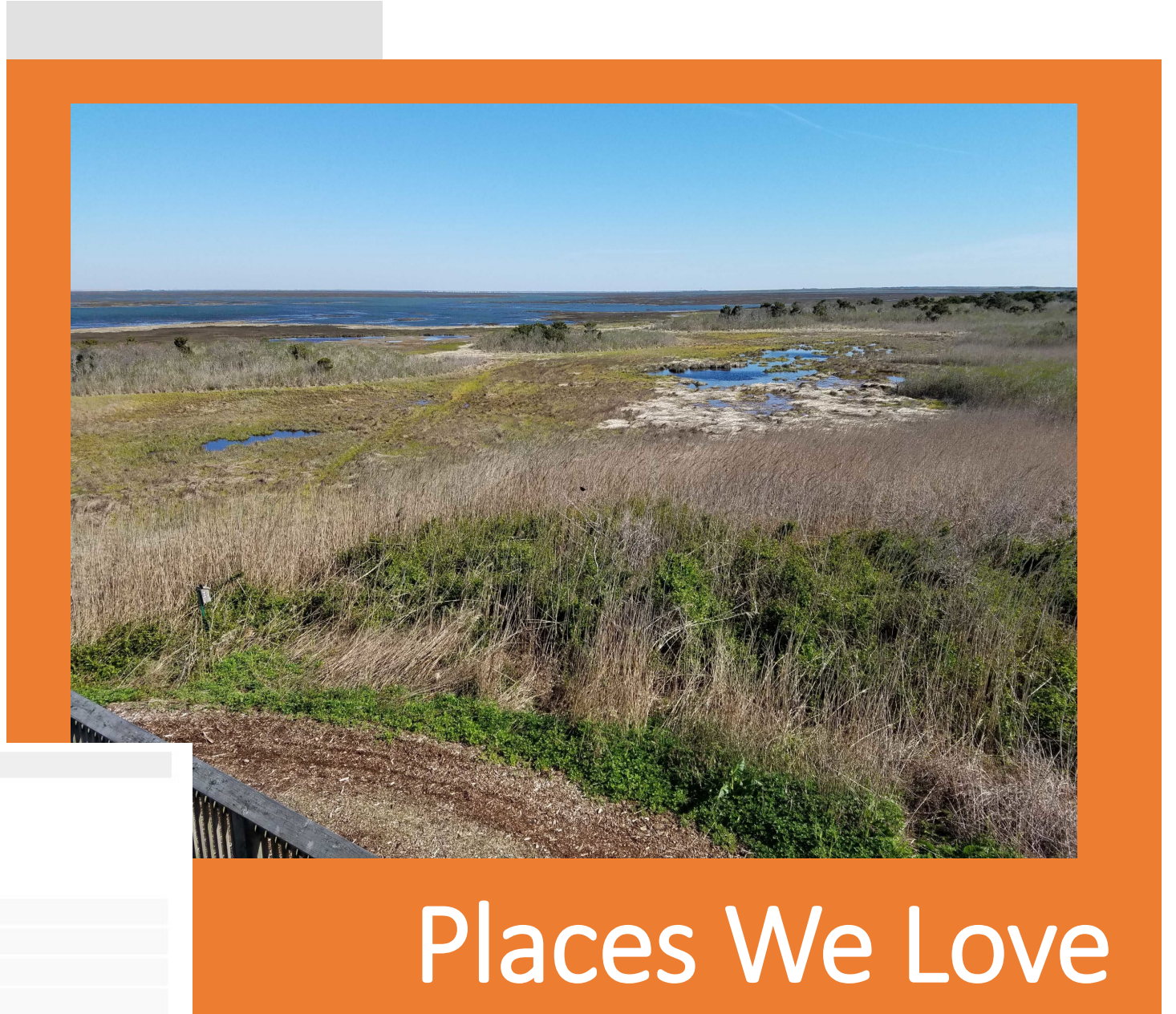
Wind Direction: NW (320°)

Temperature: 48°F

Rainfall (Calendar Day): 0"

Rainfall (Past 24 Hours): 0"

[\(Click here for full weather details\)](#)



Places We Love



BE TIDE SMART

1

Check your tides

Use mycoast.org/nj/tides for local tide information.

2

Download the MyCoast app

Get tide info and flooding photos on-the-go with the MyCoast app.

3

Sign up for flood alerts

Use nixle.com to receive texts with local flood alerts.

4

Know your risk

Assess your risk from flooding and storms with njfloodmapper.org.

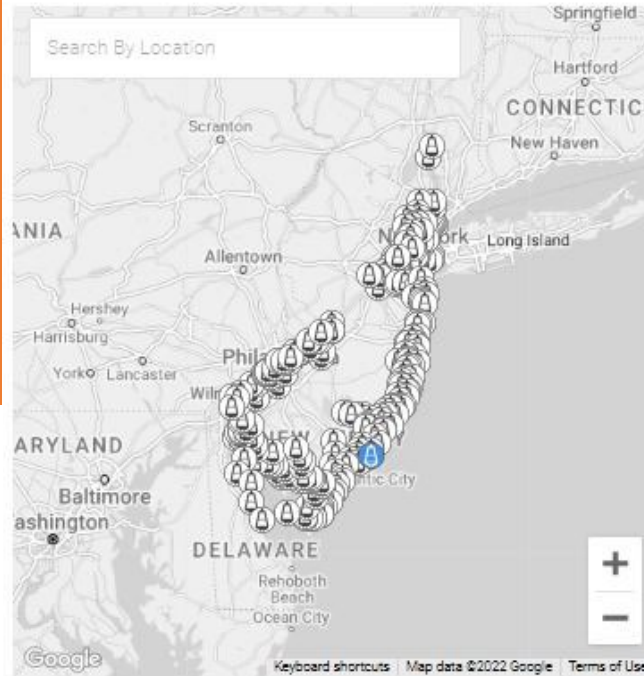


Sunny Day Flooding

Flooding doesn't only happen during storms. It can occur during very high tides.



Click on a Station



Selected Station: ATLANTIC CITY, OCEAN

All heights shown relative to Mean Lower Low Water (MLLW): the daily low tide level averaged over a 19-year period.

Tides Today

■ Observed ■ Predicted water level ● Report time



Upcoming Tides

(Scroll to see future days)

Date	Time	Type	Height
Today	3:45 PM	High	4'1"
	10:24 PM	Low	0'11"
Tomorrow	4:30 AM	High	3'5"
	10:15 AM	Low	1'1"
	4:27 PM	High	4'2"

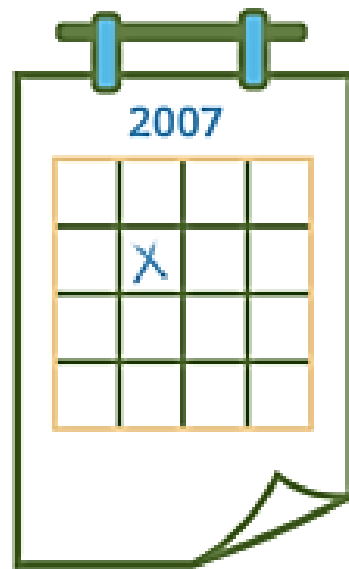
(Click here for full tide details from NOAA Tides & Currents)



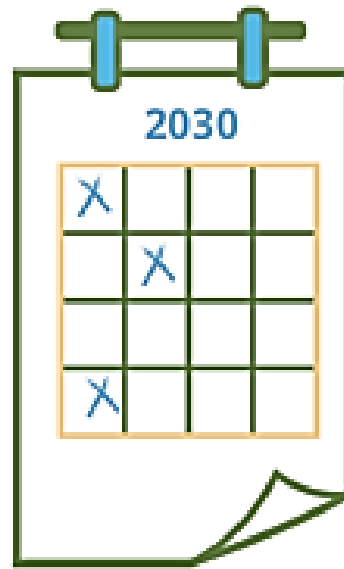
Know Your Tides

More Sunny Day Flooding

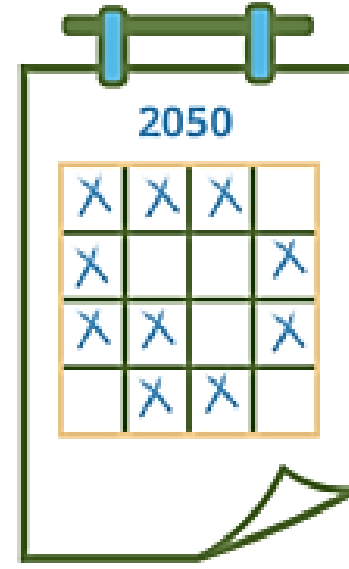
In 2007, Atlantic City experienced 8 tidal (sunny) flooding days.



By 2030, there's a 50% chance that will increase to 34 days.



And by 2050, it could reach 120 days a year.



When Will Tides be Higher?

According to NOAA's monthly high tide flooding outlook, in 2024 New Jersey will see higher than normal tides on:

September 17-21

October 15-21

November 14-18

December 13-16

 MyCoast: New Jersey



KING TIDES ARE COMING!

Did you know that tides are influenced by the moon? This summer, a full moon will be the closest to the earth during its monthly orbit, causing higher than normal tides. Upload high water photos during contest dates for a chance to win prizes!

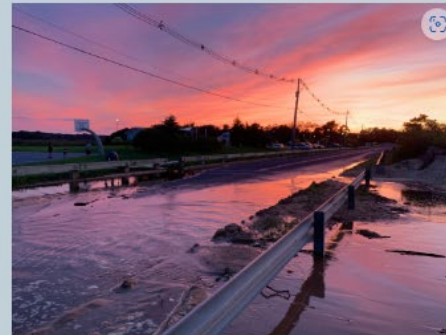
Wave 1 begins July 31 and closes August 5

King Tide Photo Contest Results

Summer 2023 Winners Gallery

A total of 163 high water reports documenting flooding in NJ communities were submitted during the MyCoast Madness King Tide Photo Contest during the summer of 2023.

King Tide Champion



George Noble
Raritan Bay, Keyport, NJ

[View Report](#)

King Tide Runner-Up



John Pitts
Atlantic Ocean, Margate City, NJ

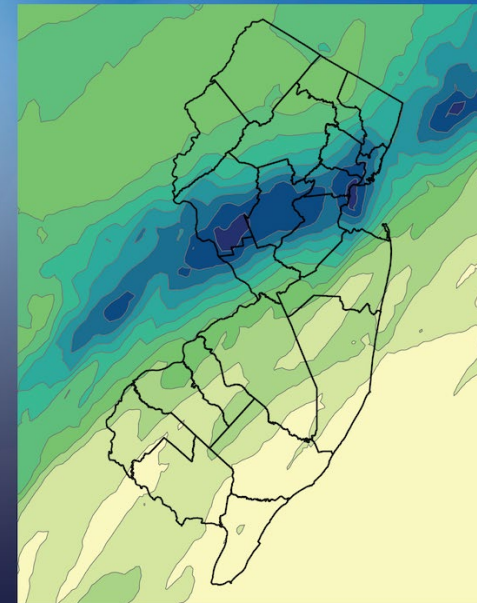
[View Report](#)

RISING TOGETHER NJ

Everyone in New Jersey has a flood story to share. Some stories are about small changes over time, others are about life-changing events. Join us in telling New Jersey's high water story by participating in Rising Together, NJ—a forum for everyone to share their New Jersey flooding experiences. By sharing our stories, we'll be better prepared to rise together in the future.



What was your Ida experience?



11 inches



Rainfall over
48 hours
during Ida

1 inch



Data courtesy the New Jersey Climate Change Resource Center at Rutgers University.



- Six locations
 - Various coastlines
- Document climate/coastal changes
- Time-lapse of photos collected
- Installed for climate week launch September 2023



Photo Stations

Photo Station locations

5 Locations | 6 Photo Stations





*Fisherman's Walkway -
Amanda Archer, 2/27/23*



*Margate City Pier- NJ Anonymous,
11/28/23 2:44pm*



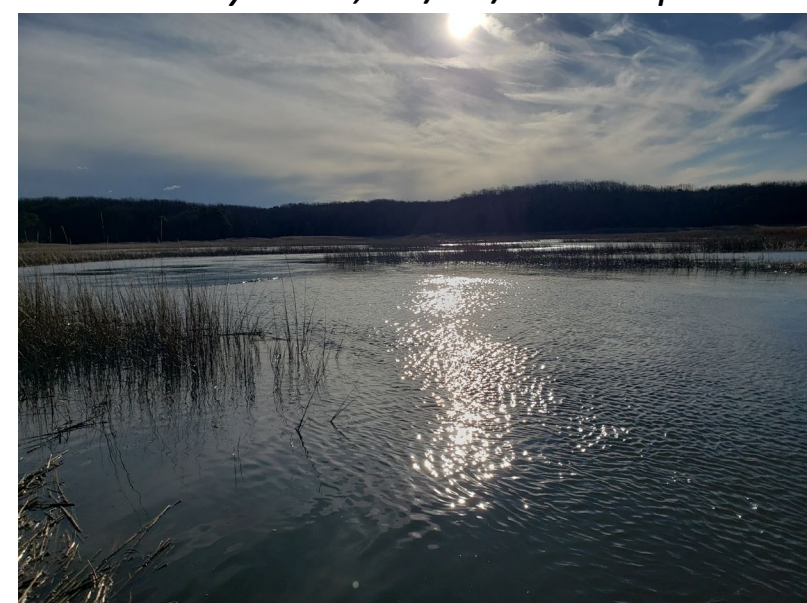
*Cheesequake State Park-
NJ Anonymous, 12/27/23 2:15pm*



*Fisherman's Walkway -
NJ Anonymous, 9/16/23 3:57pm*



*Margate City Pier- Steven Jasiiecki,
1/10/24 7:36pm*



*Cheesequake State Park-
NJ Anonymous, 1/10/24 9:32am*

Follow one or more of these accounts on Facebook, Instagram, or X to stay up to date on MyCoast happenings!



Jacques Cousteau NERR
New Jersey Department of Environmental
Protection



@jacquescousteaunerr
@njcoastalmanagment
@nj.dep



@JCNERR
@NewJerseyDEP



MyCoast: New Jersey PHOTO STATION CHALLENGE

AUGUST 30 – OCTOBER 31

Calling all community scientists and coastline travelers!

Shorelines are constantly changing due to higher tides, more intense storms, and frequent erosion. Join the MyCoast Photo Station Challenge this summer to help document important impacts to our New Jersey shorelines!

TO PARTICIPATE:

- 1 Download the MyCoast app
- 2 Submit a report at each location by taking a photo of the shoreline
- 3 Visit all six MyCoast Photo Stations during the challenge period

Once you complete the challenge, visit the MyCoast NJ website to claim your prize!

CONTEST DETAILS:

www.mycoast.org/nj
amanda.archer@marine.rutgers.edu





Education & Outreach

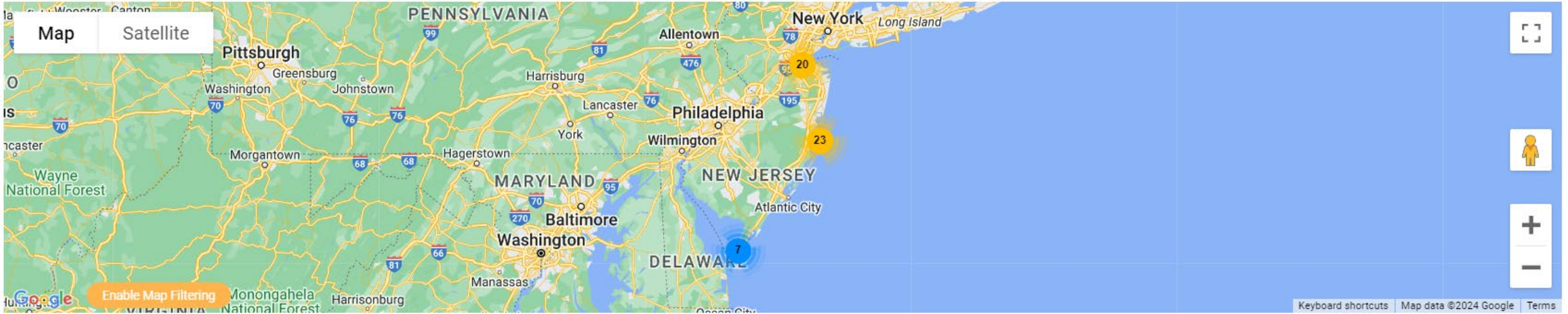
 MyCoast: New Jersey

Informed Management Decisions



Visual Science & Storytelling





Filter Reports

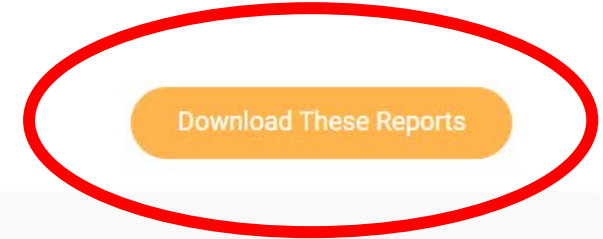
1-50 of 4064

All Report Types

All Counties

All Communities

Start Date



Matawan, NJ

Photo Station | February 5, 2024 at 2:01 pm



Ways to Use MyCoast data and photos!

Real – time
awareness

Planning

Project
siting/design

Permit review

Grant proposals

Model
calibration/ground-
truthing

"Seeing changes over time in our coast is so impactful."

~ TOTE Workshop 2023

"Documenting coastal degradation through MyCoast might make the difference in getting approval[s] and acquiring funding."

~ Green Team member 2023

1,203 users with an account

5,741 reports submitted

15 NJ flood notifications sent in 2023

9 NJ flood notifications sent in 2024

Users & Feedback

What is to come?

Continued use of this platform to go **beyond** coastal flooding



Work with partners to install more photo stations to document shoreline changes



Use community reports to document changes to habitat restoration sites



Engage educators to use MyCoast: New Jersey in classrooms as a local, on-the-ground climate change education tool

Nominate a Site!



You want to take part... but what can YOU do?



Download the app and
sign up for high water
alerts



Post your photos and
stories to MyCoast NJ



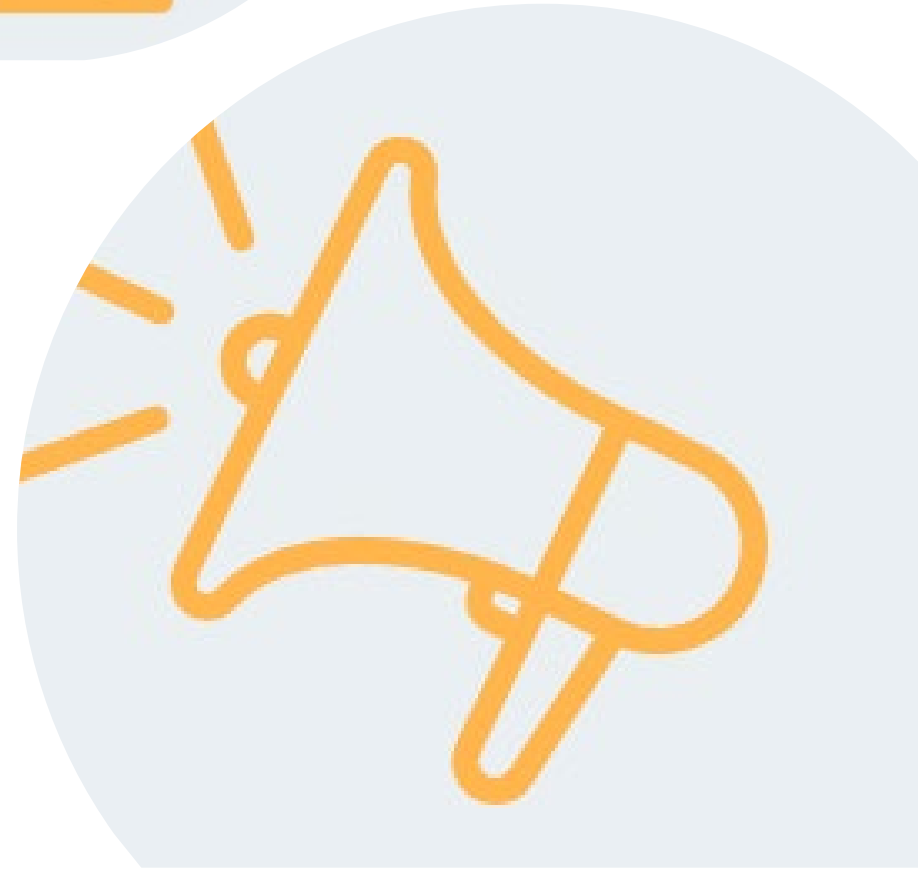
Share on social media



Attend community
events and become an
amplifier



Keep using MyCoast
NJ



We can't do it without you!

Questions?



Contact

Amanda Archer | amanda.archer@marine.rutgers.edu

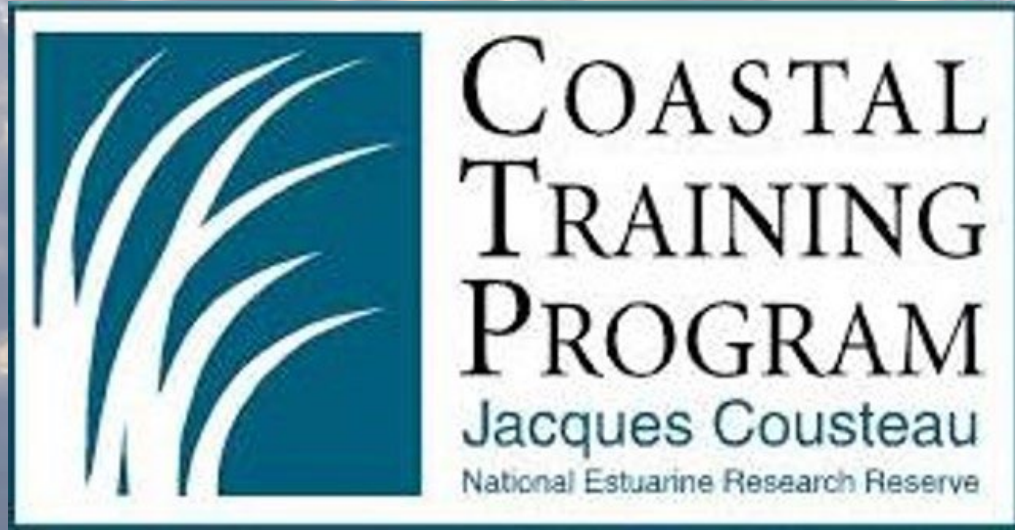
Devon Haines | devon.haines@dep.nj.gov



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AND COASTAL SCIENCES





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Amanda Archer, Coastal Training Program Coordinator
amanda.archer@marine.rutgers.edu