

Resilient Inland Bays

Launching the Southern Delaware Coastal Resilience Plan



Sussex Preservation Coalition Monthly Meeting (12/11/24)
Melina Vella, Data Coordinator
Meghan Noe Fellows, Director of Estuary Science and Restoration





Southern Delaware Coastal Resilience Plan

Delaware Inland Bays Watershed



Our mission is to preserve, protect, and restore Delaware's Inland Bays and their watershed.



Our mission is to preserve, protect, and restore Delaware's Inland Bays and their watershed.

We achieve this through science-based: research, restoration, education, outreach, public policy, and advocacy.

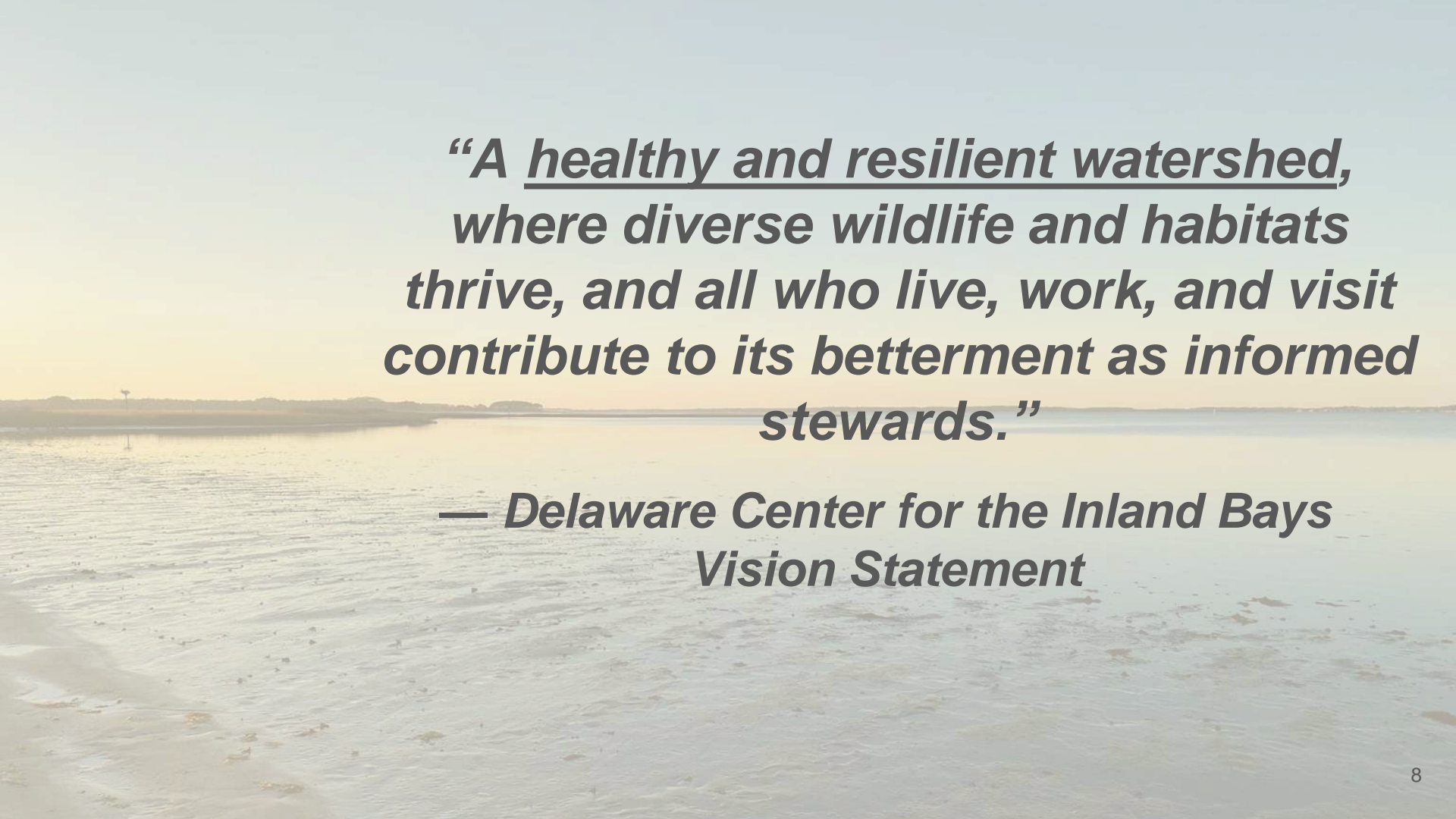




DON'T CHUCK YOUR SHUCKS

DELAWARE CENTER FOR THE INLAND BAYS





***“A healthy and resilient watershed,
where diverse wildlife and habitats
thrive, and all who live, work, and visit
contribute to its betterment as informed
stewards.”***

***— Delaware Center for the Inland Bays
Vision Statement***



Resilience is the ability to adapt to changing conditions and withstand—and rapidly recover from—disruption due to emergencies.

(FEMA, 2000)

Image: Driscoll Drones

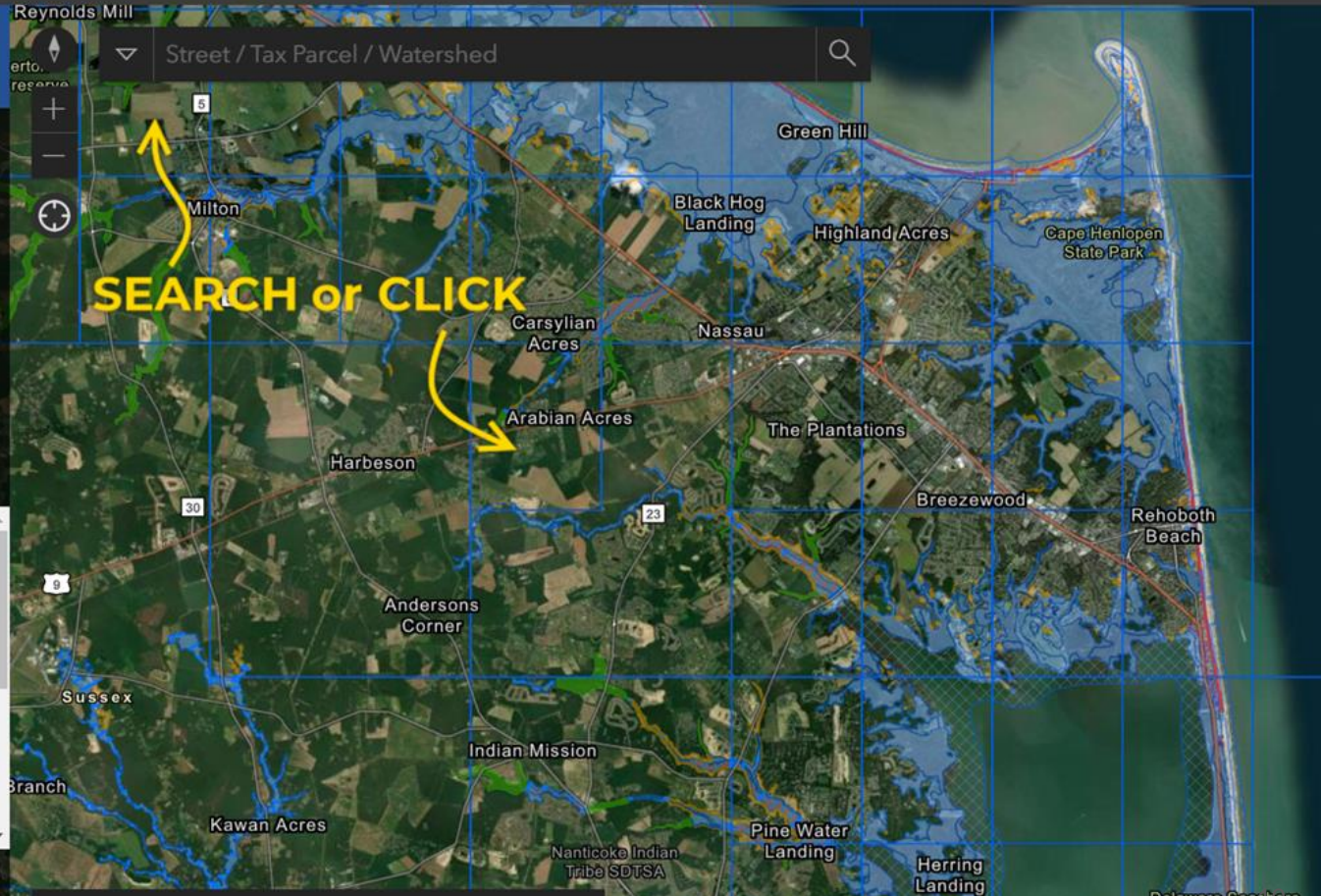
FLOOD PLANNING TOOL

The Delaware Department of Natural Resources and Environmental Control (DNREC) Flood Planning Tool is an interactive web map application designed to aid you in researching your flood risk in the State of Delaware.

Disclaimer: The Flood Planning Tool provided herein is for reference only within the State of Delaware boundaries. The user of this information understands and acknowledges that



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SEARCH or CLICK

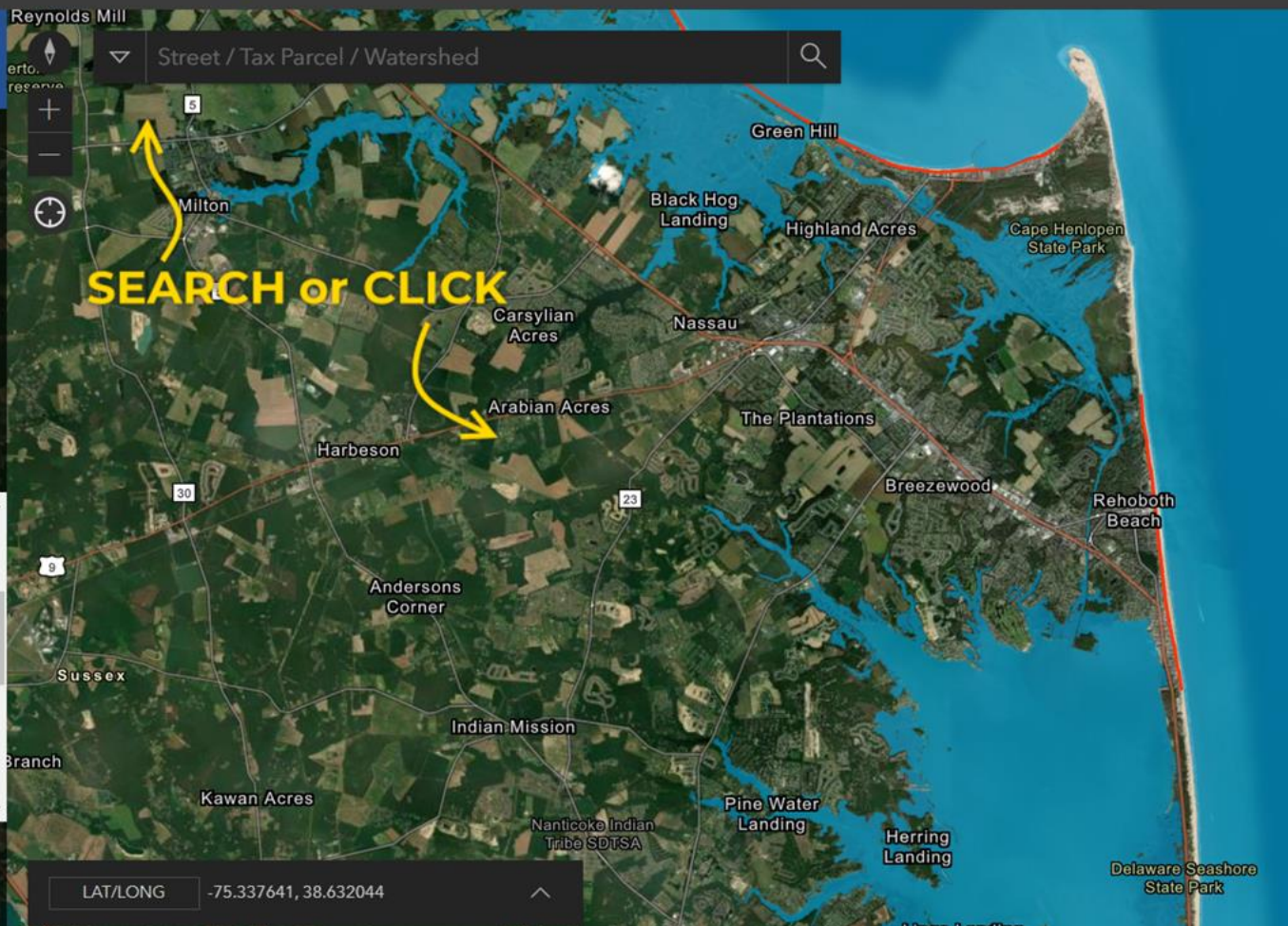
LAT/LONG -75.144282, 38.782503

Data Source: FEMA Floodplain mapper

FLOOD PLANNING TOOL

Municipalities
 Sea Level Rise
 MHHW
 MHHW + 1 ft
 MHHW + 2 ft
 MHHW + 3 ft

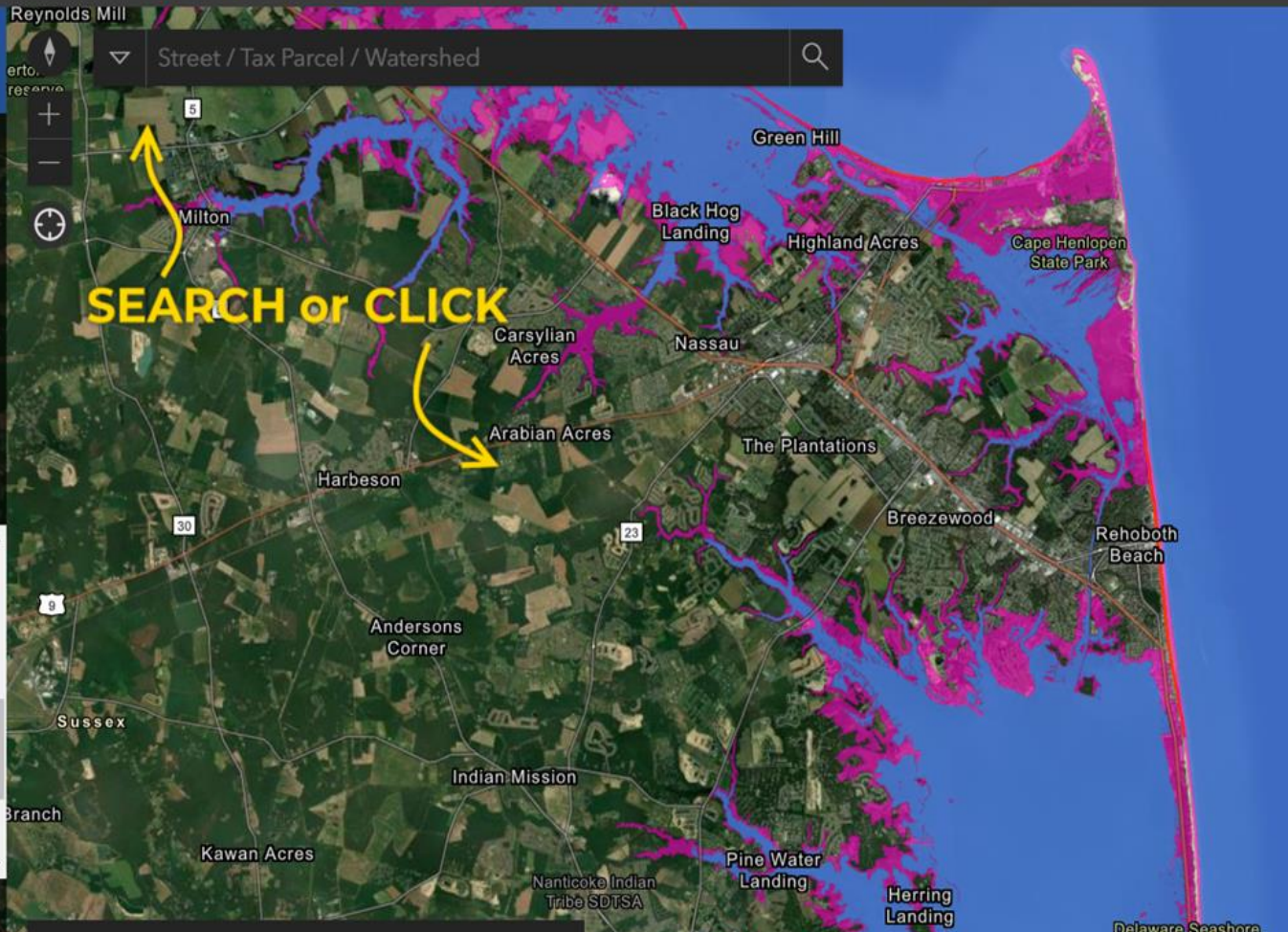
DELAWARE DEPARTMENT OF
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 ENVIRONMENTAL CONTROL



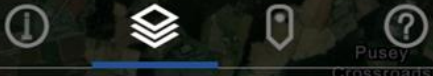
FLOOD PLANNING TOOL

📍 🗄️ 📏 ?

- MHHW + 2 ft
 - MHHW + 3 ft
 - MHHW + 4 ft
 - MHHW + 5 ft
 - MHHW + 6 ft
 - MHHW + 7 ft
 - Tax Parcels
- DELAWARE DEPARTMENT OF



FLOOD PLANNING TOOL

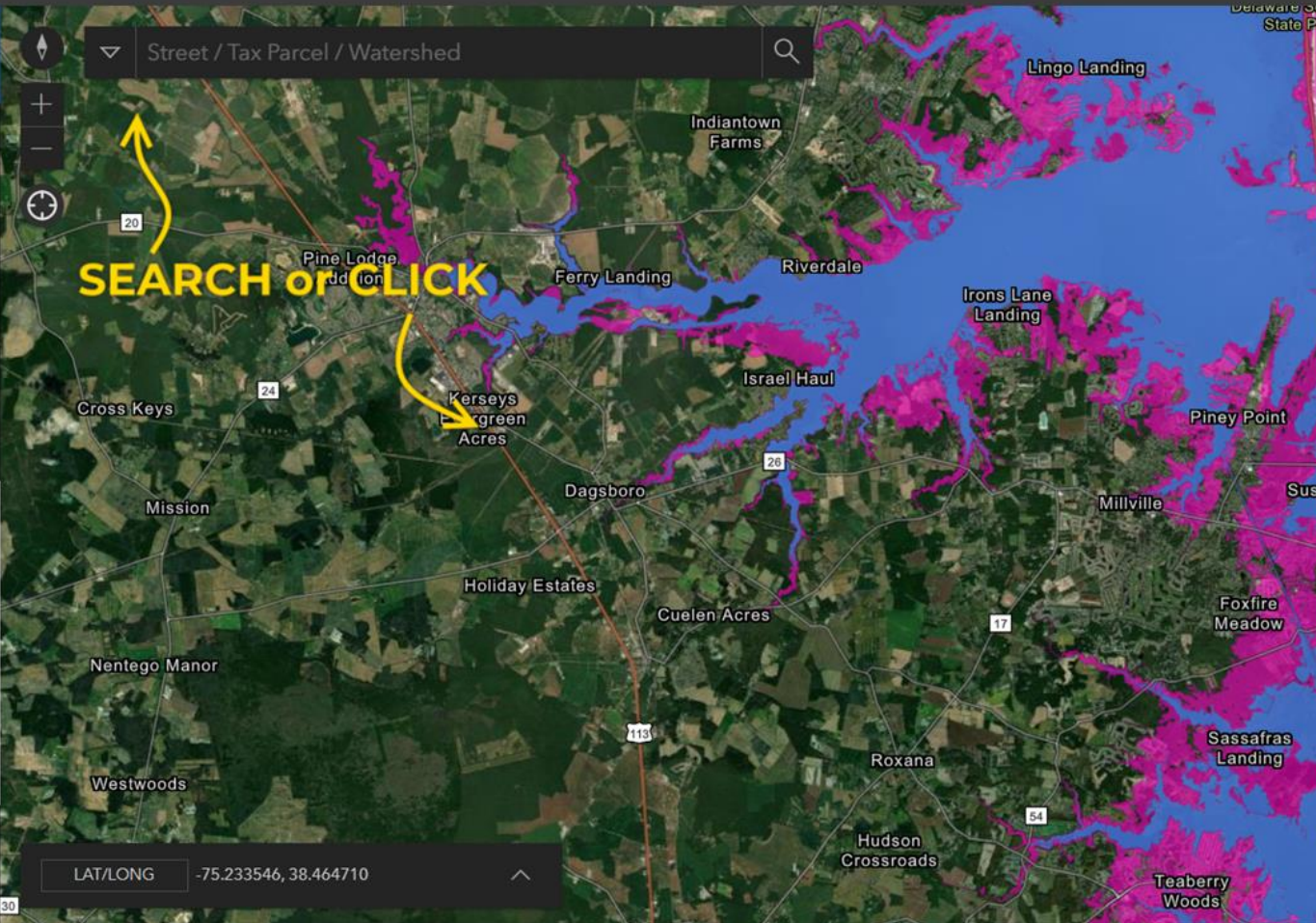


- MHHW + 2 ft
- MHHW + 3 ft
- MHHW + 4 ft
- MHHW + 5 ft
- MHHW + 6 ft
- MHHW + 7 ft

Tax Parcels



DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL



Home / Earth / Earth Sciences
Home / Earth / Environment

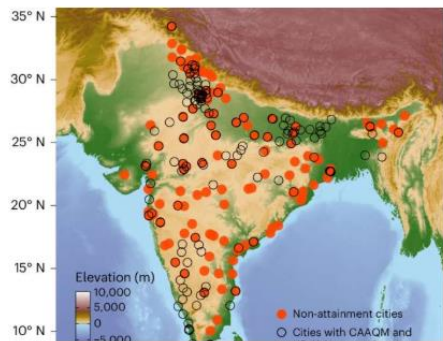
JULY 24, 2024

Editors' notes

Air quality improvements in India partially due to weather, study finds

by University of Reading

Facebook 1
Twitter
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Availability of continuous PM monitoring data in Indian cities. Credit: Nature Sustainability (2024). DOI: ...

A significant portion of recent improvements in air quality in India resulted from favorable meteorological conditions that are unlikely to persist as the climate changes, a new study has found.



Can an RMD Be Transferred into a Roth IRA?

Rapid industrialization and **population growth** have led to significant increases in emissions and **air pollution** to dangerous levels in India. To address this challenge, the Indian government implemented the National Clean Air Programme (NCAP) to reduce emissions of fine particulate air pollutants (**particulate matter** with diameters less than 2.5 microns (PM_{2.5}) and 10 microns (PM₁₀) and their

“.. improvements in air quality in India resulted from favorable meteorological conditions... unlikely to persist as the climate changes. . . .”

“Nature-based solutions are sustainable planning, design, environmental management and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience.”

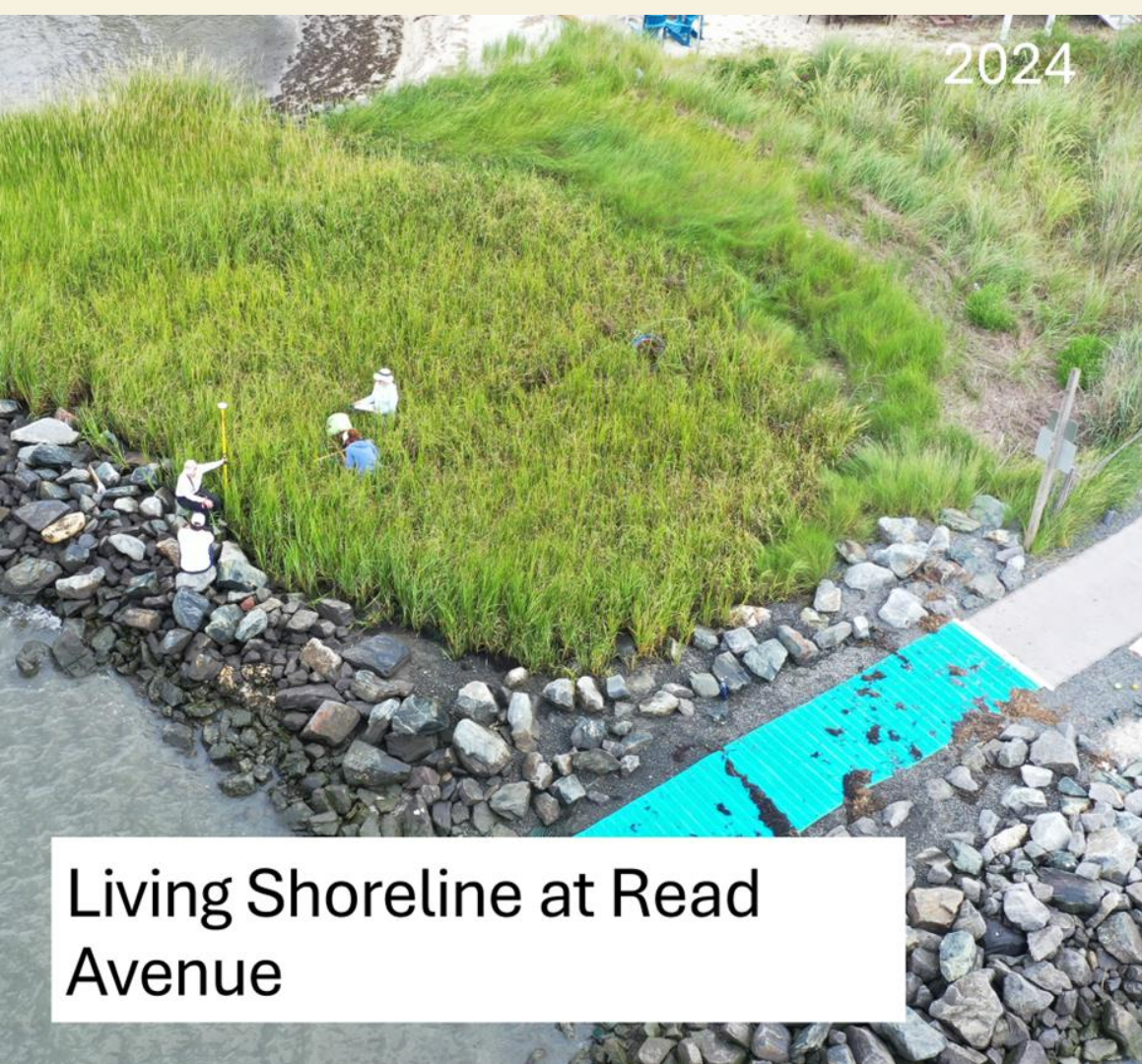
- *Building Community Resilience with Nature-Based Solutions (FEMA, 2021)*

“Nature-based solutions are sustainable planning, design, environmental management and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience.”

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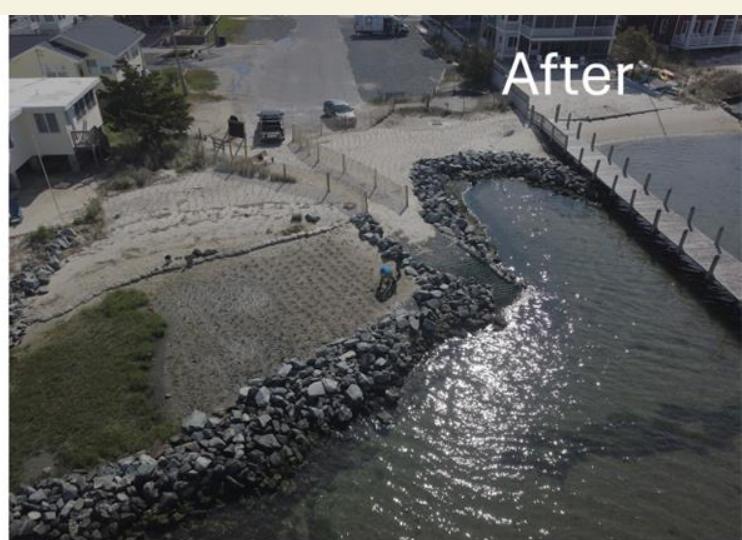


2024



Living Shoreline at Read Avenue

After



Before





After



Before

Living Shoreline at
Delaware Botanical Garden



After



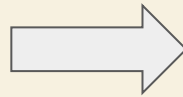
Before

Before

Living Shoreline at Angola by the Bay

Southern Delaware Coastal Resilience Plan

Strategies For Information Collection



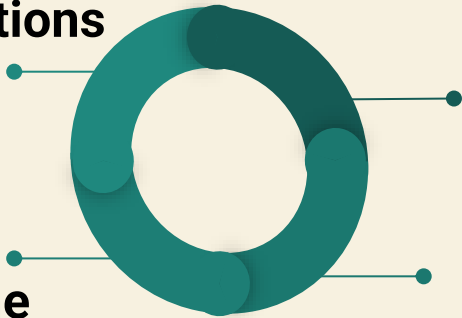
Outcomes

Three empty, light blue rounded rectangular boxes stacked vertically, intended for listing outcomes.

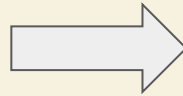
Southern Delaware Coastal Resilience Plan

Strategies For Information Collection

Community
Conversations



Online
Questionnaire

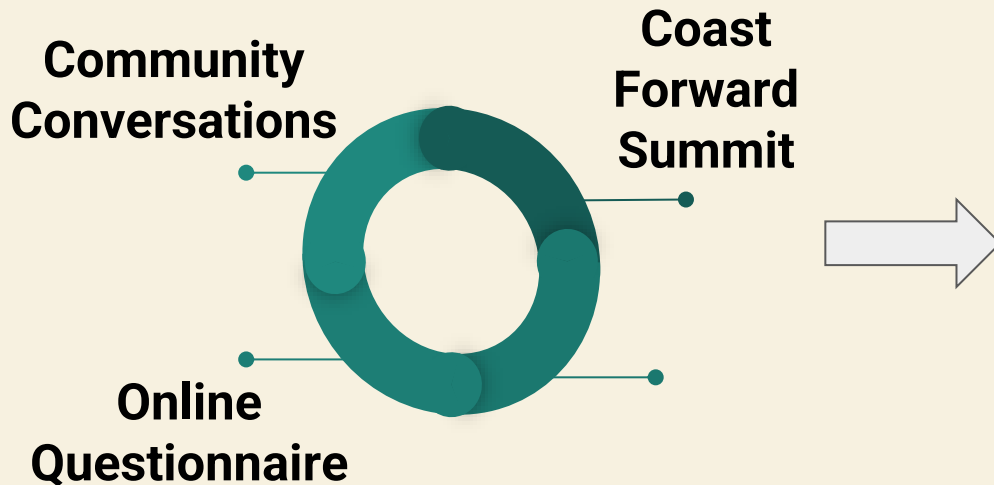


Outcomes

Three empty, rounded rectangular boxes stacked vertically, intended for listing outcomes.

Southern Delaware Coastal Resilience Plan

Strategies For Information Collection

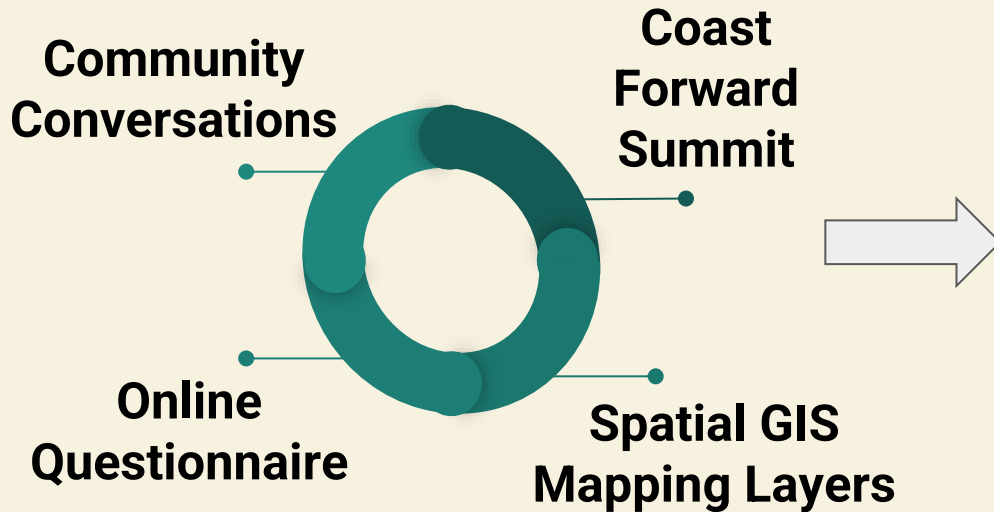


Outcomes

Three empty, light blue rounded rectangular boxes are stacked vertically, intended for listing the outcomes of the information collection strategies.

Southern Delaware Coastal Resilience Plan

Strategies For Information Collection

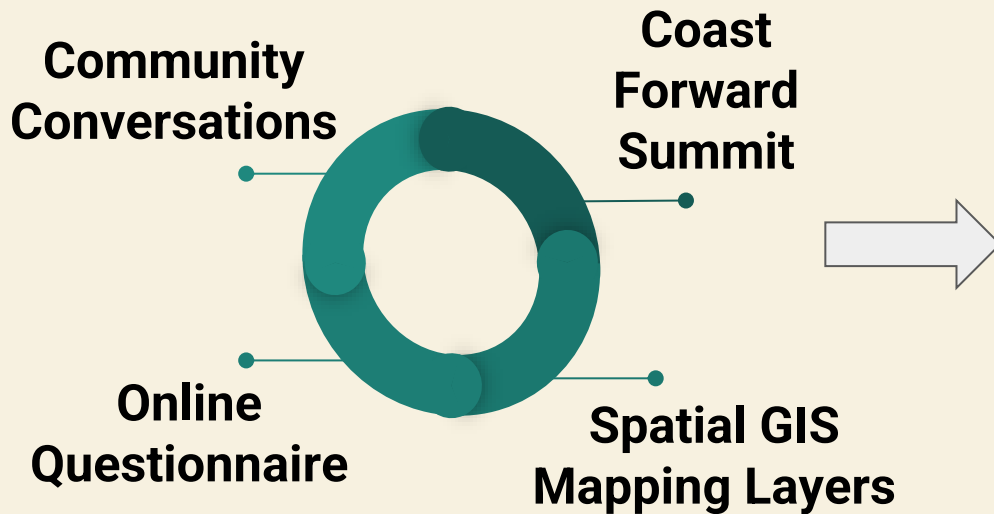


Outcomes

Three empty, rounded rectangular boxes are stacked vertically, representing the outcomes of the information collection strategies.

Southern Delaware Coastal Resilience Plan

Strategies For Information Collection

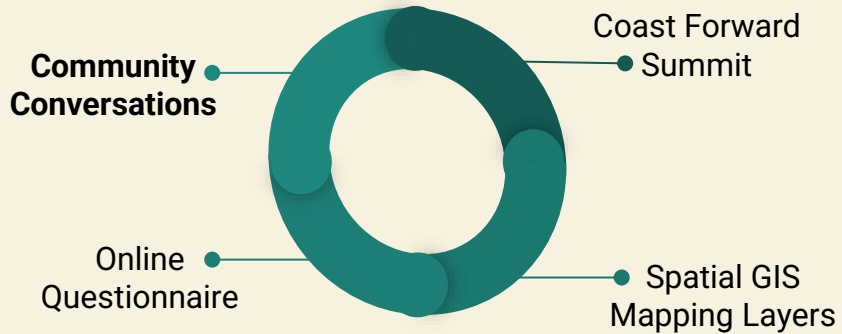


Outcomes

Shared Vision Document

Participatory Science Tools

Inland Bays GIS Data Hub



Community Conversations



From road flooding to loss of wildlife habitat, we want to know what concerns you and your community have, and how you think we might be able to address them.

Southern Delaware Coastal Resilience Plan

We are looking for small groups (6-8 people) who are interested in sharing their experience, opinions, and thoughts through facilitated discussions about coastal resilience.

If interested, please contact Melina Vella
 mvella@inlandbays.org

Unable to attend? Fill out our questionnaire to have your voice heard!



Compensation will be provided for participants.



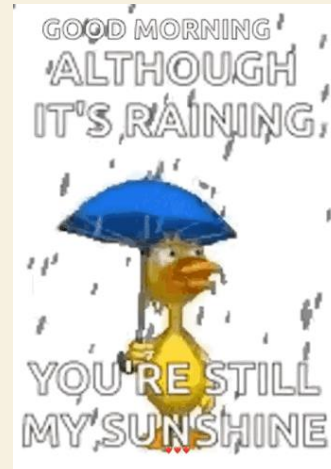
DELAWARE CENTER INLAND BAYS





Small groups of community members will discuss climate resilience and solutions in facilitated conversations

Audience Participation



Southern Delaware Coastal Resilience Plan

What areas of concern do you have with a changing climate?

Southern Delaware Coastal Resilience Plan

Rank the climate strategies you would be interested in seeing implemented from most to least interest.

Resilience

Resistance (Heavy

Infrastructure/Sea Walls)

Rebuild (Start Overs)

Mitigate (Sacrifice Zones)

Migrate

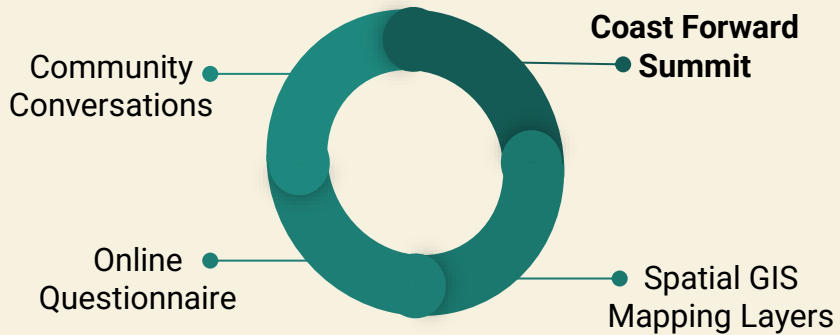
Other

Southern Delaware Coastal Resilience Plan

**Who should be responsible for climate
resilience?**

Audience Participation

Thank you.



Coast Forward Summit

Learn what you can do about coastal resilience and contribute to the Southern Delaware Coastal Resilience Plan.

Please join us for guided conversations and an informational open house. Discussions will be on climate and coastal resilience in the Inland Bays Watershed.

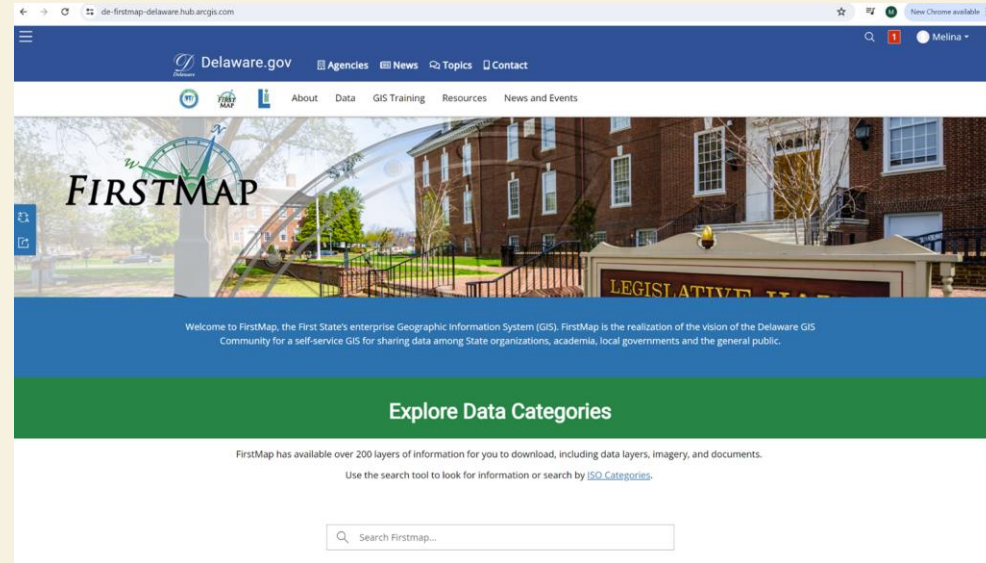
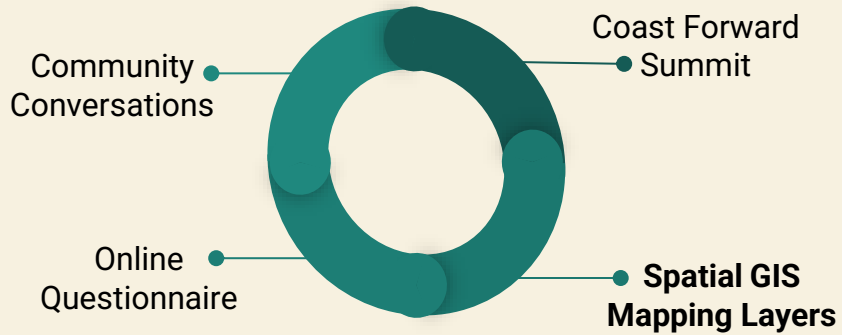
Visit us at inlandbays.org to get updates on date, time, and venue.

For more information, please contact Melina Vella mvella@inlandbays.org





Participants will draw from across the professional and community resources.



Coastal Resilience Evaluation and Siting Tool (CREST)

Home Where Should I Do a Resilience Project? Analyze Project Sites Targeted Watersheds Examples Data & Reports About

Coastal Resilience Evaluation and Siting Tool (CREST)

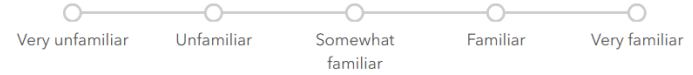
CREST is used to make informed decisions about the siting of coastal restoration and resilience projects. The tool identifies Resilience Hubs, which are areas of open space where projects may have the greatest potential to benefit both human community resilience and fish and wildlife. Resilience Hubs incorporate multiple indices, all of which are available in CREST.



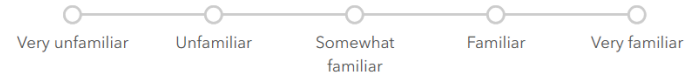
Southern Delaware Coastal Resilience Plan Questionnaire

Introduction

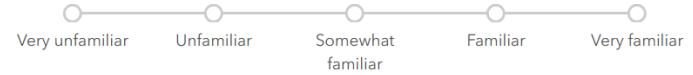
How familiar are you with the Center for the Inland Bays?



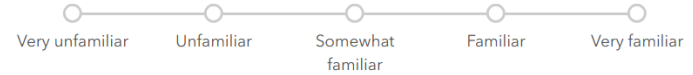
How familiar are you with Rehoboth Bay, Indian River Bay, and Little Assawoman Bay, which make up the Inland Bays of Delaware?



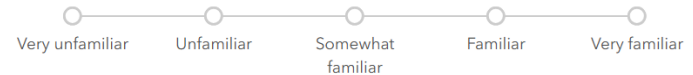
How familiar are you with coastal or climate resilience?



How familiar are you with nature-based solutions?

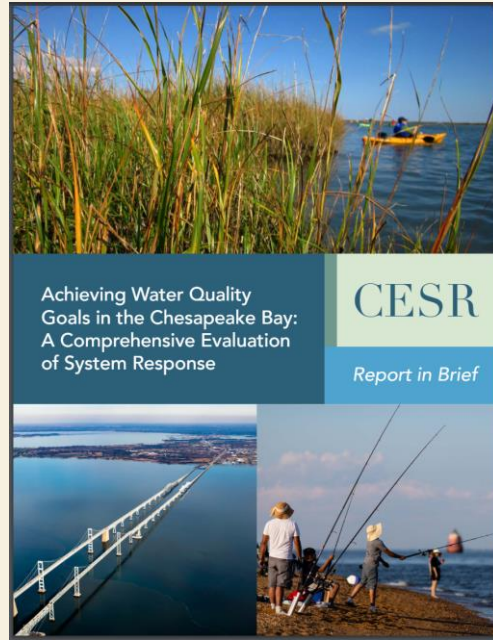
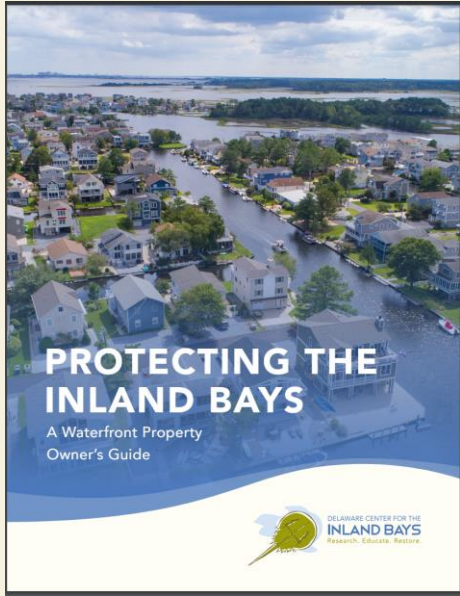


How familiar are you with climate change?





Participants can complete the survey from their phones or computers.



Outcomes

Shared Vision Document

Participatory Science Tools

Inland Bays GIS Data Hub

Online publication of shared vision for the next 50 years including recommendations for language and actions to increase the use of nature-based solutions.

2024 Diamondback Terrapin Water-Based Survey Count



DO NOT pick up or touch diamondback terrapins. *astericks are required questions

Volunteer 1 Information ▼

Name 1*

Email 1

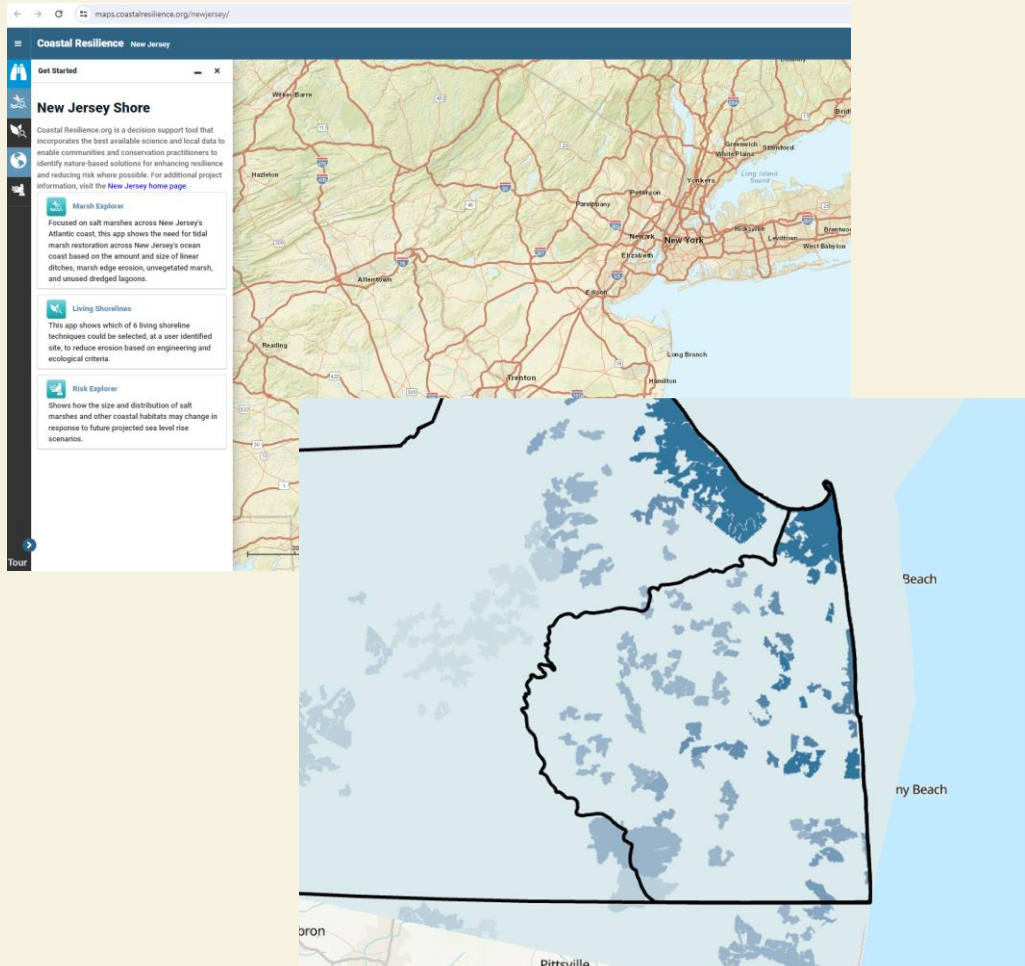
Phone number 1

Outcomes

Shared Vision Document

Participatory Science Tools

Inland Bays GIS Data Hub



Outcomes

Shared Vision Document

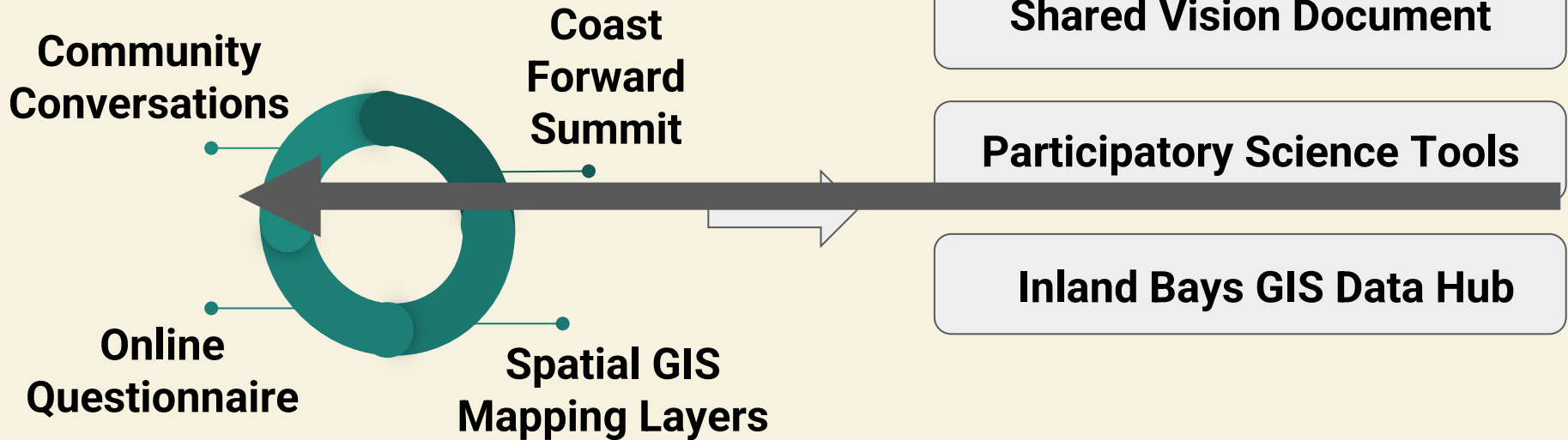
Participatory Science Tools

Inland Bays GIS Data Hub

Southern Delaware Coastal Resilience Plan

Strategies For Information Collection

Outcomes





Please answer
our
Questionnaire:



<https://arcg.is/1DWnai>

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For more information, please contact Melina Vella mvella@inlandbays.org

The bottom of the graphic features three logos: the Delaware Center for the Inland Bays logo (a horseshoe crab), the National Fish and Wildlife Foundation (NFWF) logo (a globe with a fish), and the NOAA logo (a blue circle with a white bird and the text 'NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE').

Thank you! Visit inlandbays.org to learn more about the Center!



DELAWARE CENTER FOR THE INLAND BAYS
preserve • protect • restore

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