



Welcome to Marshes for Tomorrow

Community Meeting

Berlin Library

Berlin

January 25th 2024

What are we doing today?

Welcome, introductions, and housekeeping

Ice breaker(s)

Project presentation from Audubon

Mapping exercise

Whole group discussion

Close out

Introductions

- **Team:** Give name, organization affiliation
- **Note taker:** Give name, organization affiliation & role during meeting
- **Public:** Name and where you live

Housekeeping

- Please get up and move around
- Facilities – Thanks to library staff
- Food
- Listen and speak up
- Please complete survey



Maryland Eastern Shore Marsh Use Survey

Hello! We are interested in understanding your relationship with Maryland's tidal salt marshes. Marshes for Tomorrow is an ambitious project led by Audubon Mid-Atlantic aimed at creating an implementation plan for tidal marsh restoration on a landscape scale in Maryland.

Maryland's coastal marshes are undergoing dramatic rates of loss due to erosion and sea level rise, and scientists predict that marsh erosion will accelerate and the great majority of our marshes will disappear by the year 2100. Restoration practices will enable us to maintain some of these marshes over the long term but it won't be feasible to keep all, or even most of, the marshes. The Marshes for Tomorrow initiative will identify 25,000 acres of the most resilient and best quality marsh on Maryland's Eastern Shore and determine which restoration actions will be needed to prevent their loss. As part of this plan, we recognize the essential input of communities living in or close to tidal salt marshes whose culture, livelihoods, identities, and resources are under threat from marsh loss.

We invite you to participate in this project by completing the following marsh use survey. This survey is made up of **17 questions**, many of which are optional, and we estimate it will take approximately **10 minutes** to complete.

Icebreaker(s)

- What brought you to the meeting/what you want to learn?

OR

- What is your favorite marsh animal (including any colloquial name)?

An aerial photograph of a salt marsh landscape. A paved road with a white car driving on it runs diagonally through the center of the image. The marsh is characterized by numerous small, irregularly shaped water bodies interspersed with green and brown vegetation. The sky is overcast, and the overall scene conveys a sense of a coastal wetland environment.

Marshes for Tomorrow – Can we save Maryland's Threatened Salt Marshes?

DAVID CURSON, AUDUBON MID-ATLANTIC



Audubon

Photo credit: Eric Liner/Cornell Lab of Ornithology







High marsh in Dorchester County

Photo credit: Larisa Prezioso

What's so special about tidal marshes?

Irreplaceable ecosystem services:

- Nursery areas for commercial fisheries.
- Buffer against storm surge.
- Recreation and tourism.
- Filter of nutrient pollutants.
- Huge store of sediment and “blue carbon”.
- Unique biodiversity.



Photo credit: David Curson/Audubon

What's so special about tidal marshes?

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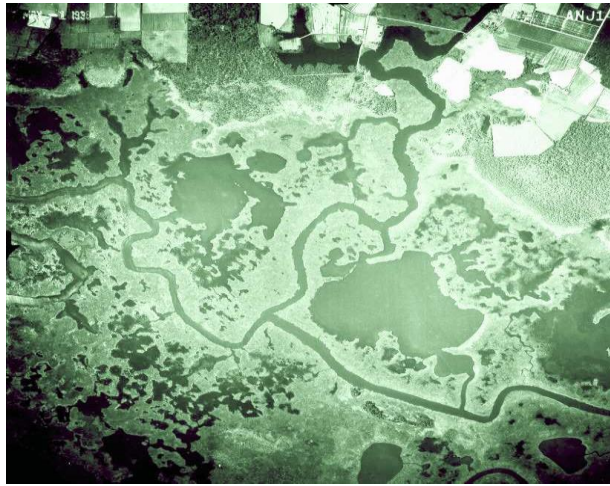
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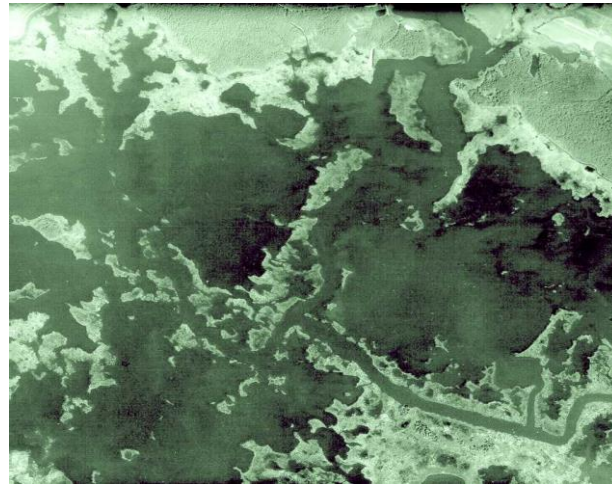
Saltmarsh Sparrow

Photo credit: Neil Pearson

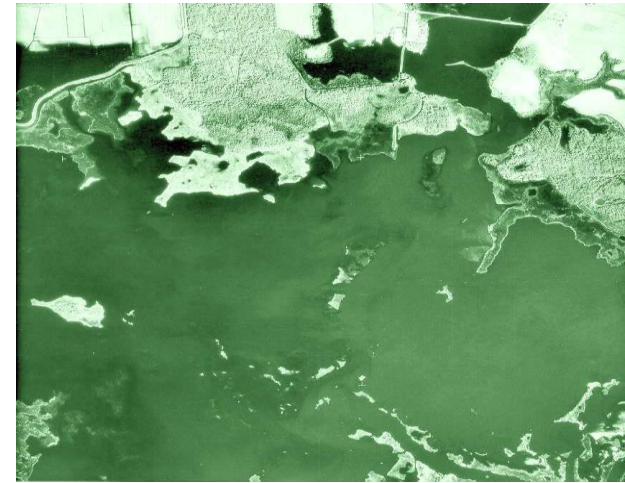
Blackwater's disappearing wetlands



1938



1974



1989



Maryland vulnerable to sea level rise

- Relative sea level rise in MD is twice the global average.
- Land subsidence (sinking)
- Narrow tides mean flat marshes.
- MCCC predicts SLR of approx. 3 feet (0.9m) by 2100.
- Most of today's marshes will drown by 2100.



Public Landing boat ramp, Worcester County



Farm Creek Marsh, Dorchester County



Marsh restoration methods are being applied – but need scaling up rapidly!

1. Marsh high enough to drain:

Relieve flooding with runnels
(small hand-dug channels).

Cost: \$1000/acre



Runneling project: Coastal Bays (2023)

2. Marsh too low to drain:

Add sediment to raise the marsh
surface.

Cost: >\$20,000/acre



Sediment enhancement: Blackwater NWR (2016)

Marshes for Tomorrow: a project of



**DELMARVA RESTORATION &
CONSERVATION NETWORK**

**Collaborative of local, state and federal
agencies and NGO's working on the scale
of the Delmarva Peninsula**

Del - Mar - Va =
Delaware, Maryland, and Virginia

Convened in 2017 by:



LOWER SHORE
**LAND
TRUST**



Marshes for Tomorrow

Goal: Create an implementation plan to restore and maintain tidal marsh on a landscape scale in Maryland.

We can't save all of the marshes. Which areas should we keep?

Objective 1

Prioritize!

Identify the “best” 25,000 acres of marsh in Maryland to maintain long term.

This is the minimum area needed to prevent Saltmarsh Sparrow from going extinct.

Objective 2

Restoration strategy

Which restoration actions are needed to keep the priority marshes from drowning long term?

Objective 3

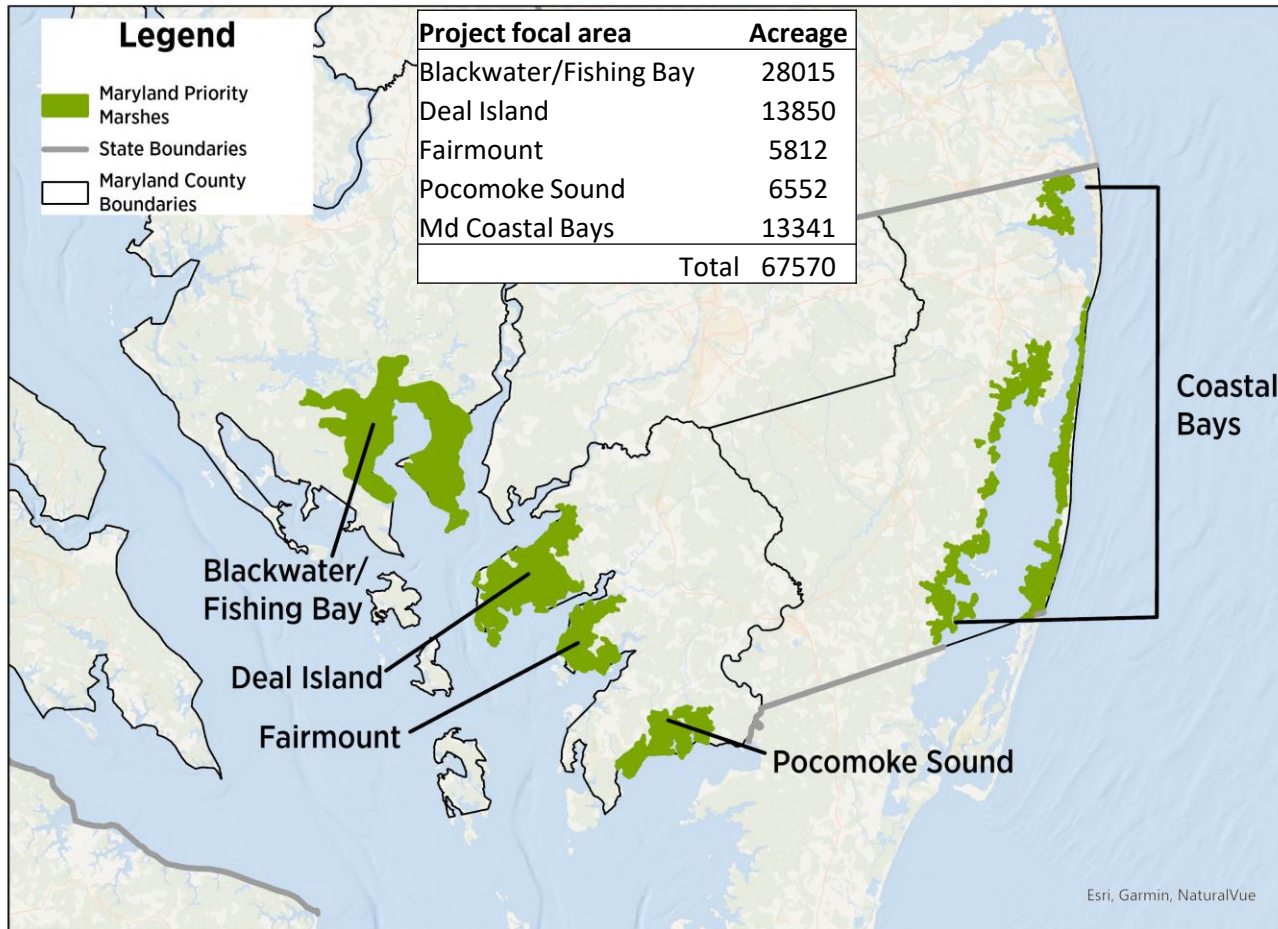
Community input

Create different conservation strategies in teach local/county area.

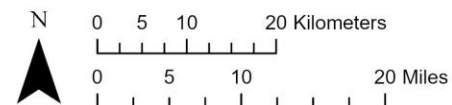
Include input from local communities

Marshes for Tomorrow project focal areas

Maryland Priority Marshes for Saltmarsh Sparrow



Map prepared by Audubon Mid-Atlantic
in collaboration with ACJV and bird conservation
experts



Marshes for Tomorrow

25,000 acre target - What kinds of places will be selected?

- Resilient high marsh:
 - Predicted to remain as marsh for a long time.
 - Still intact – not too badly eroded
- Large, contiguous areas of marsh.
- Feasible to restore and maintain, e.g. sediment supply accessible.
- Good Saltmarsh Sparrow habitat (salt hay meadows)
- Include marshes from each of the project's areas.
- Incorporate community input.

Marshes for Tomorrow

What will be in the plan?

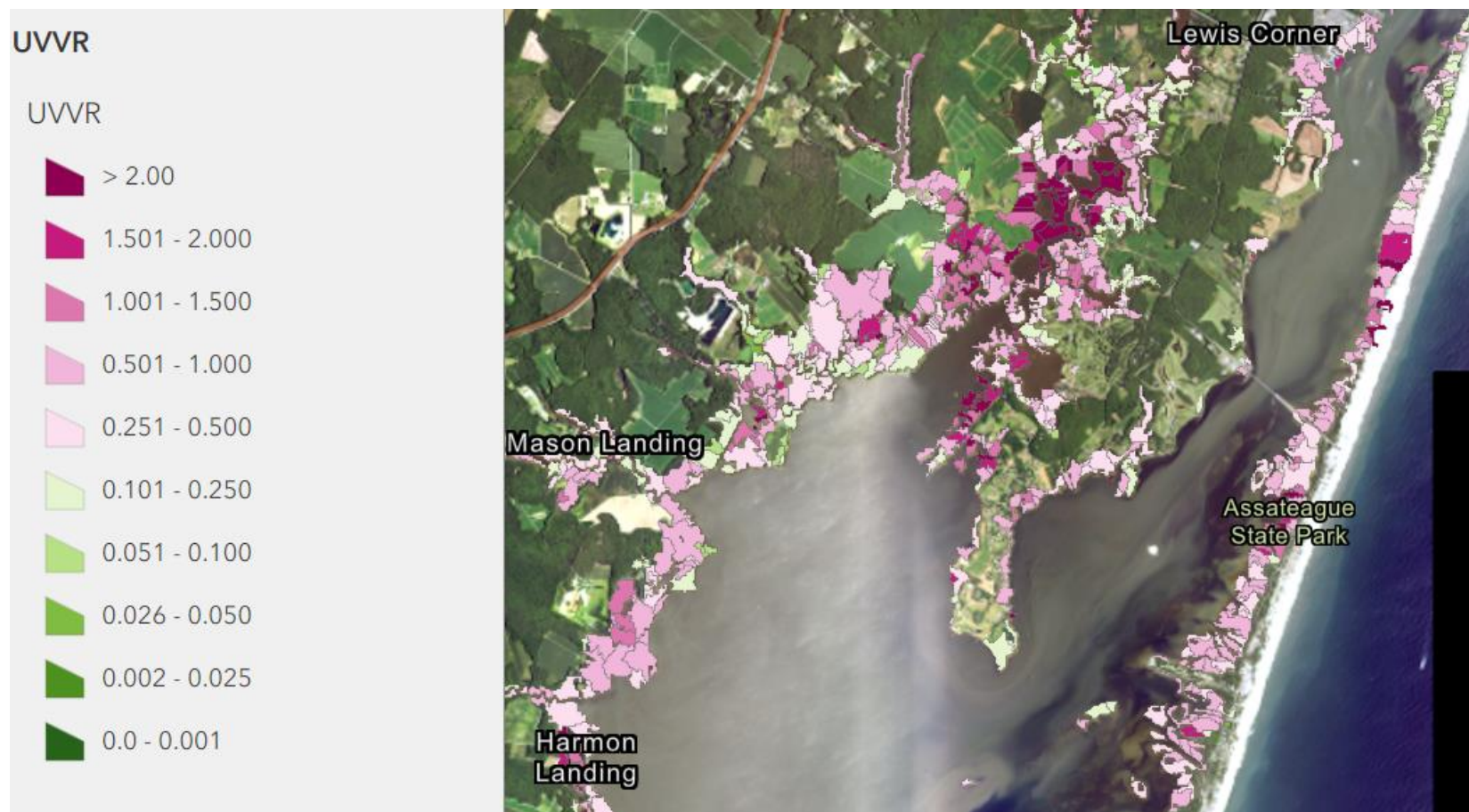
Maps:

- Marsh condition.
- Type of restoration needed
- Restoration opportunities
- Selection of priority marshes

Written plan for each of the focal areas

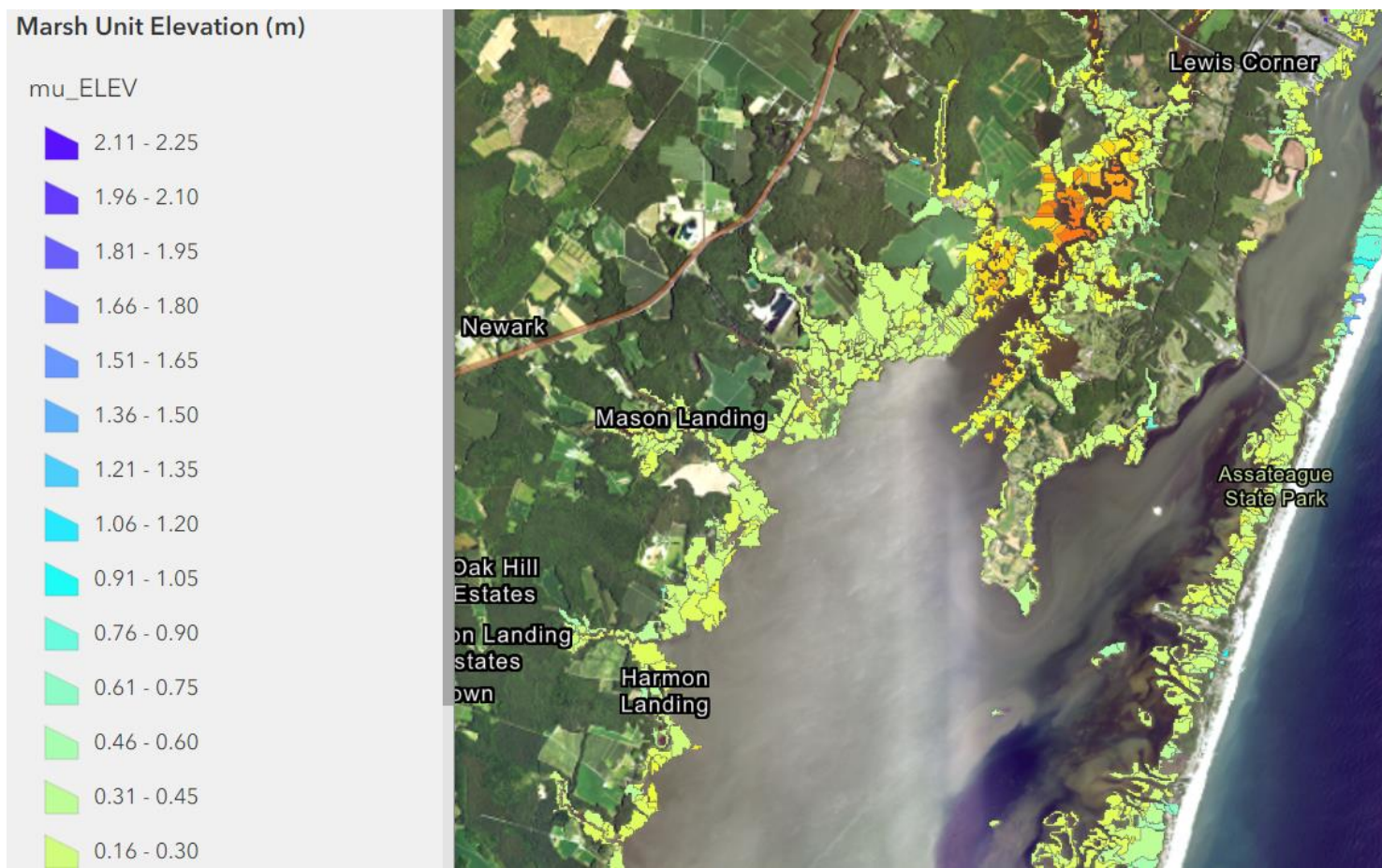
Maps:

- Marsh condition.
- Type of restoration needed

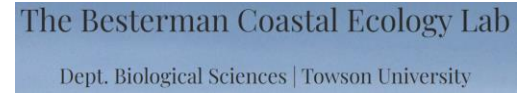


Maps:

- Marsh condition.
- Type of restoration needed



Thank you to our Partners and Funders



GEDAN LAB @ GWU



Questions?

Mapping exercise

Mapping exercise

- Use printed maps and colored stickers to indicate,
 - Where are the most **intact areas of high marsh** you are aware of? Please give precise location, i.e. "marshes between Dame's Quarter and Pigeon House Creeks".
 - Where have you noticed flooding (blue sticker), invasive species (pink), high biodiversity (black), agricultural conversion (yellow), other?
 - Which **marsh(es) do you use** and for what purpose? Please give the name or a brief description of the location.
 - Which areas **should be assessed** or considered for restoration.
 - Are you a private land owner? Come to speak with one of the team

Pocomoke Sound: Cash Corner - Marumsco



Crisfield Hwy

Frogeye

Tulls Corner

Conners Corner

Marumsco

Parsonville

Indian Hammock

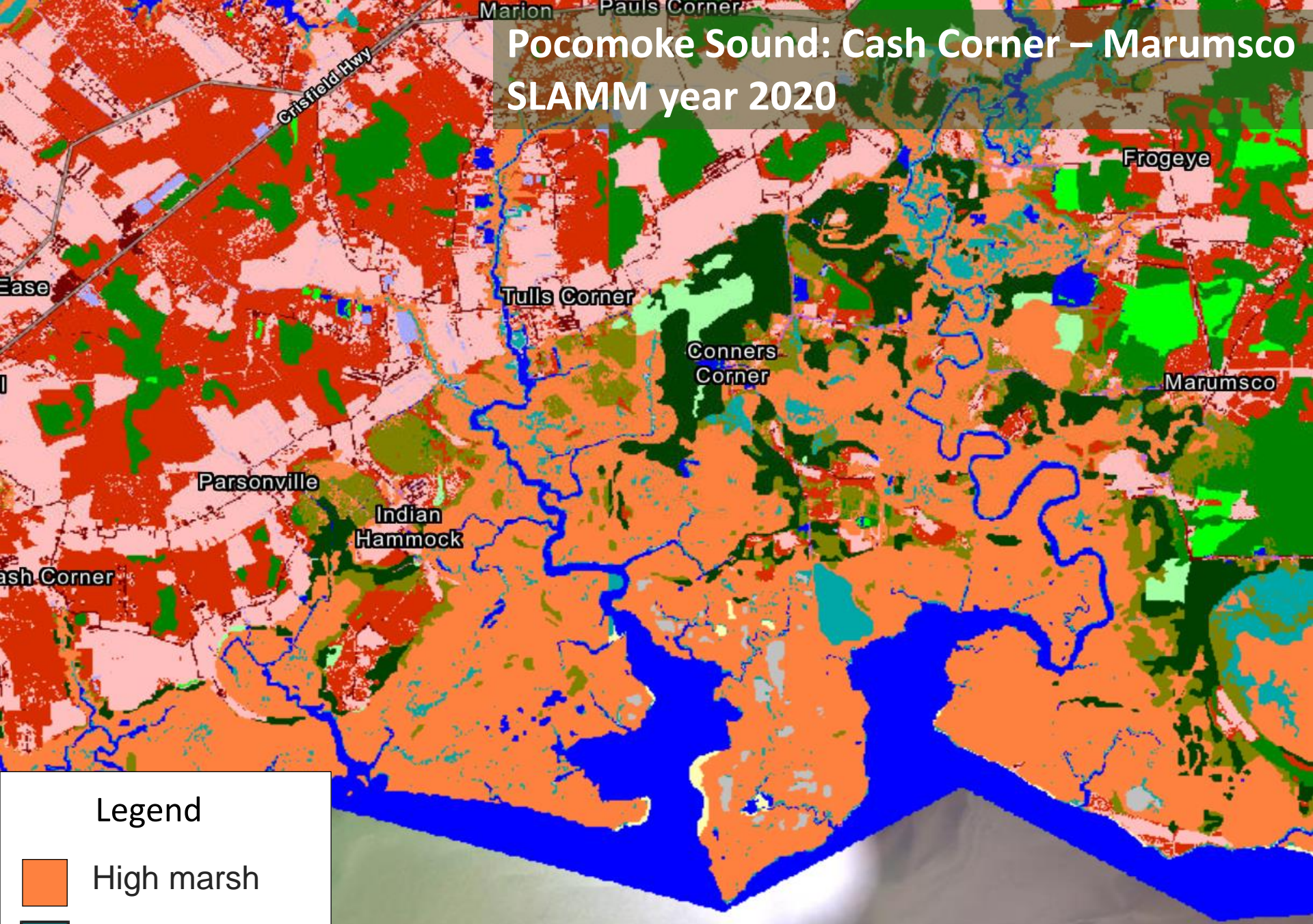
Ease

Cash Corner



Marion

Pauls Corner

Pocomoke Sound: Cash Corner – Marumsco SLAMM year 2020



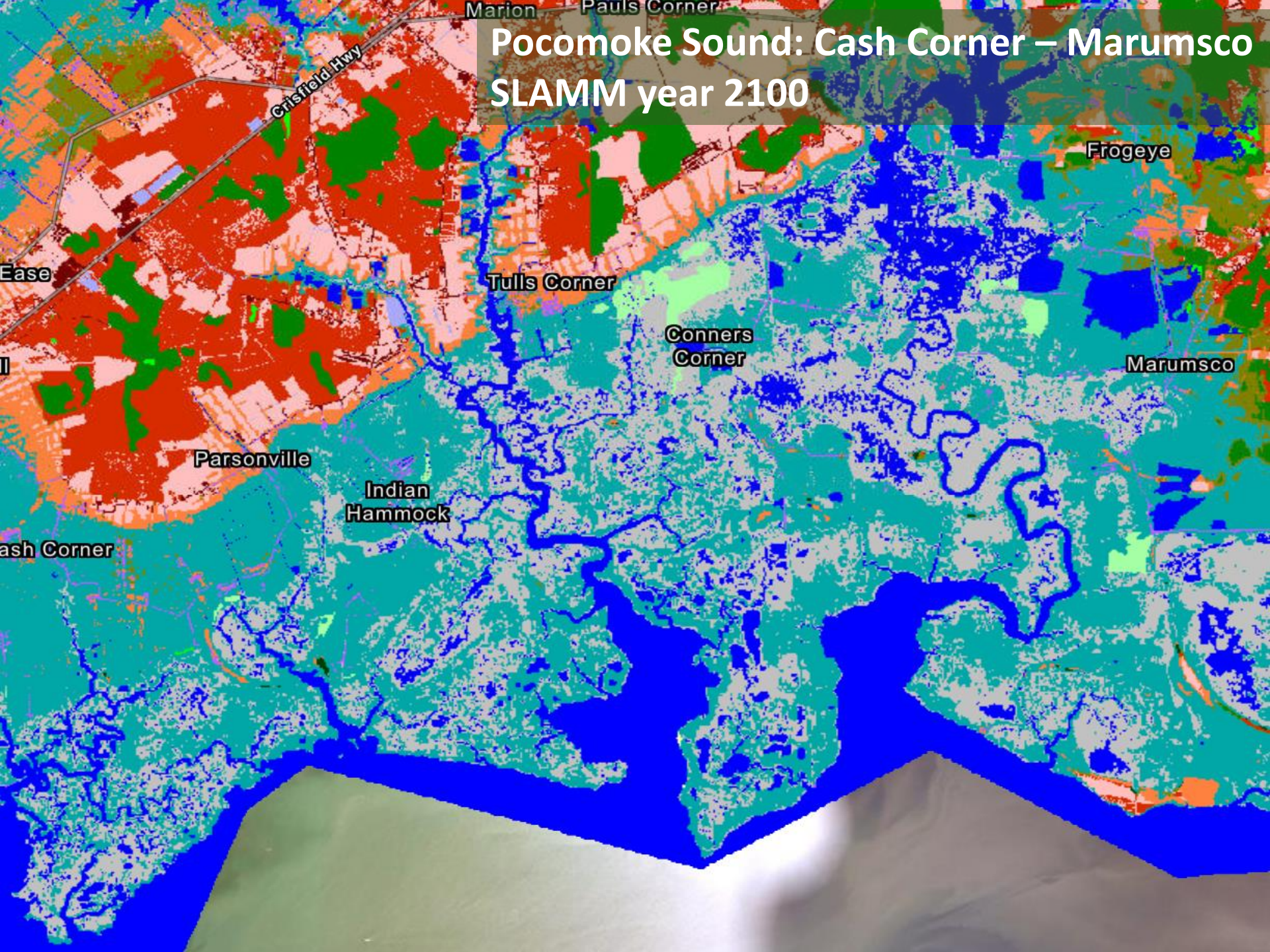
Legend

-  High marsh
-  Low marsh

Pocomoke Sound: Cash Corner – Marumsco SLAMM year 2050



Pocomoke Sound: Cash Corner – Marumscos SLAMM year 2100





Iverness

Fairmount

Saint Pierre
Marsh

Upper Hill

Fairmount

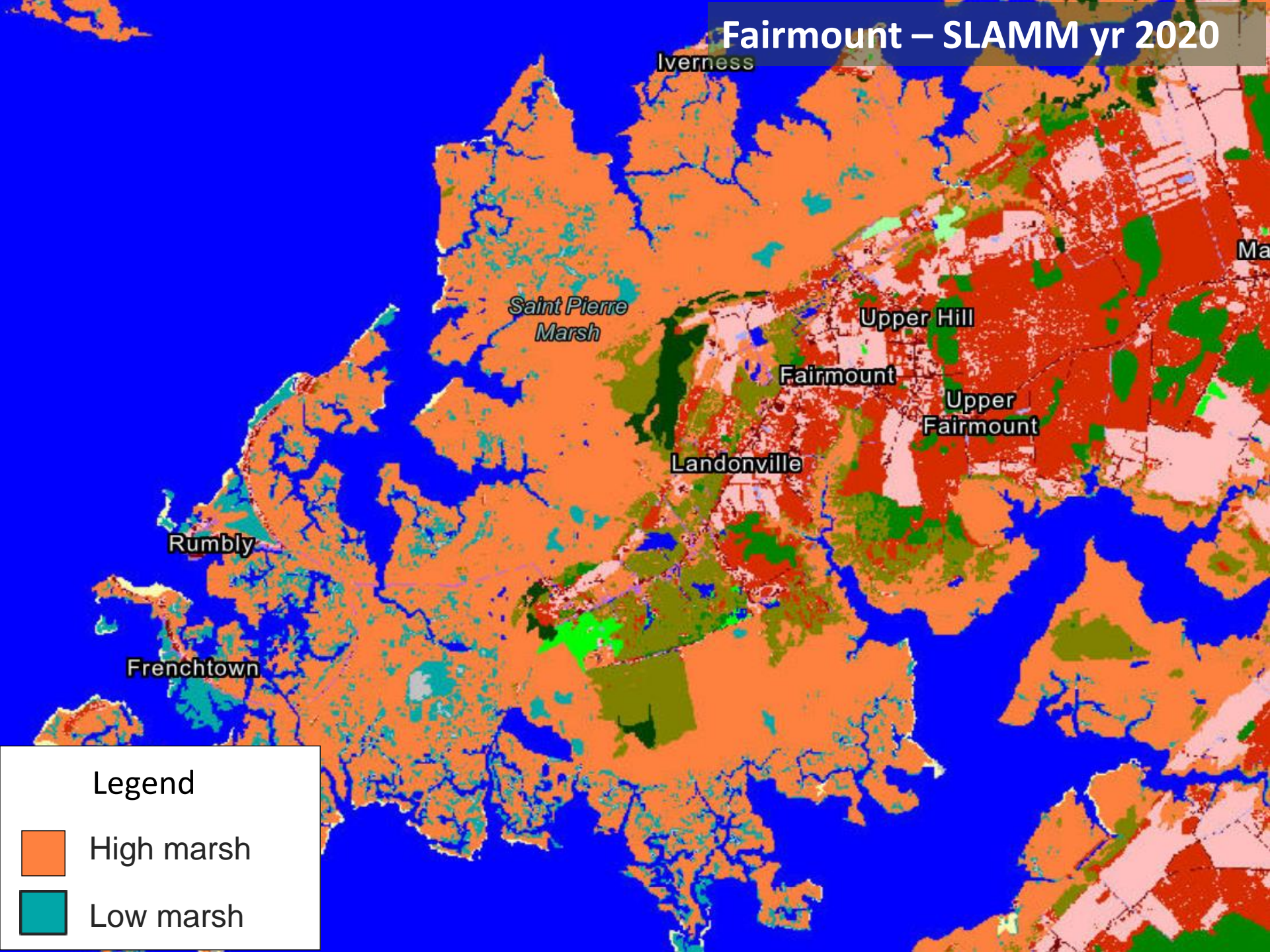
Upper
Fairmount

Landonville



Rumbly

Frenchtown

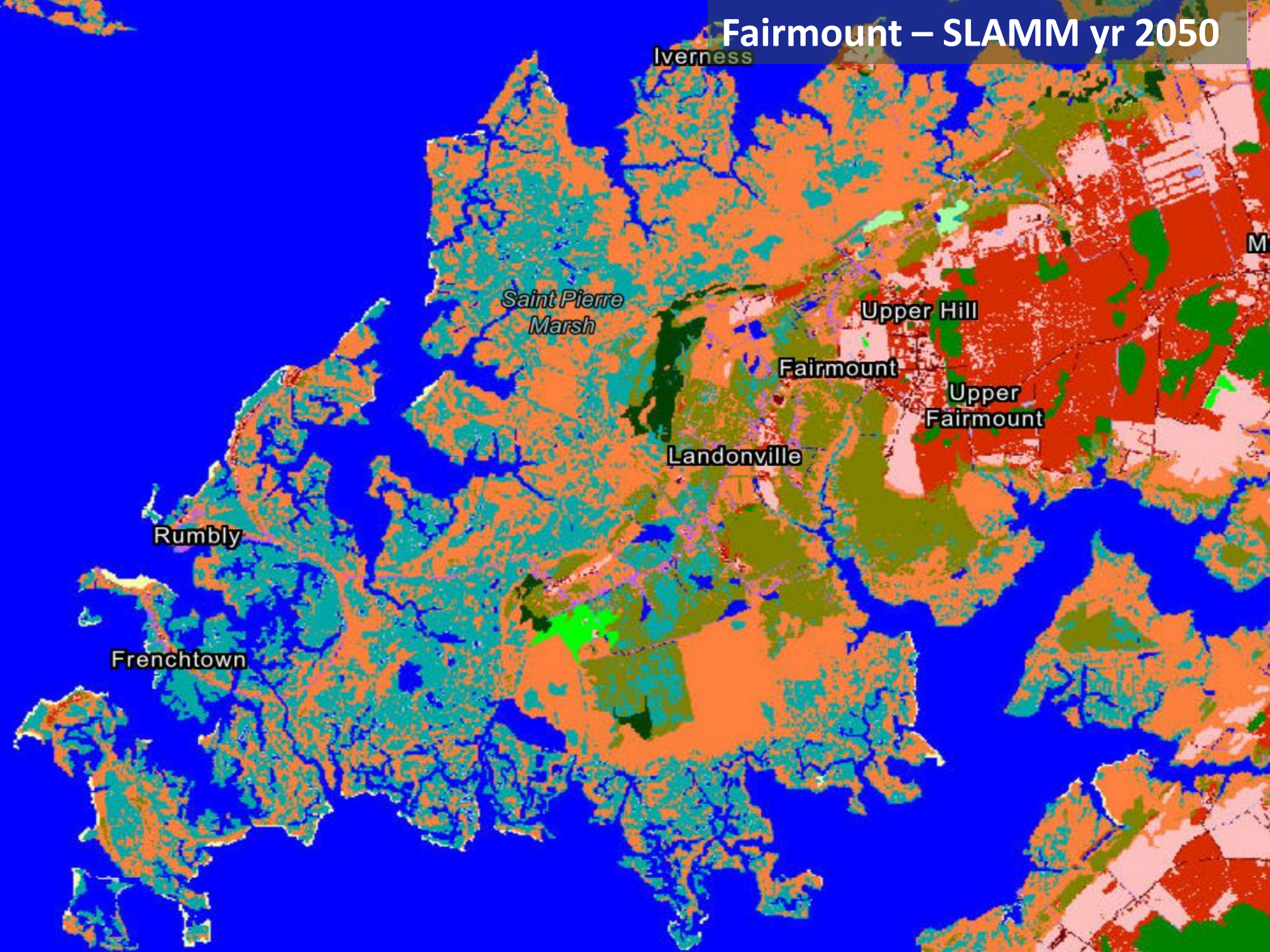
Fairmount – SLAMM yr 2020



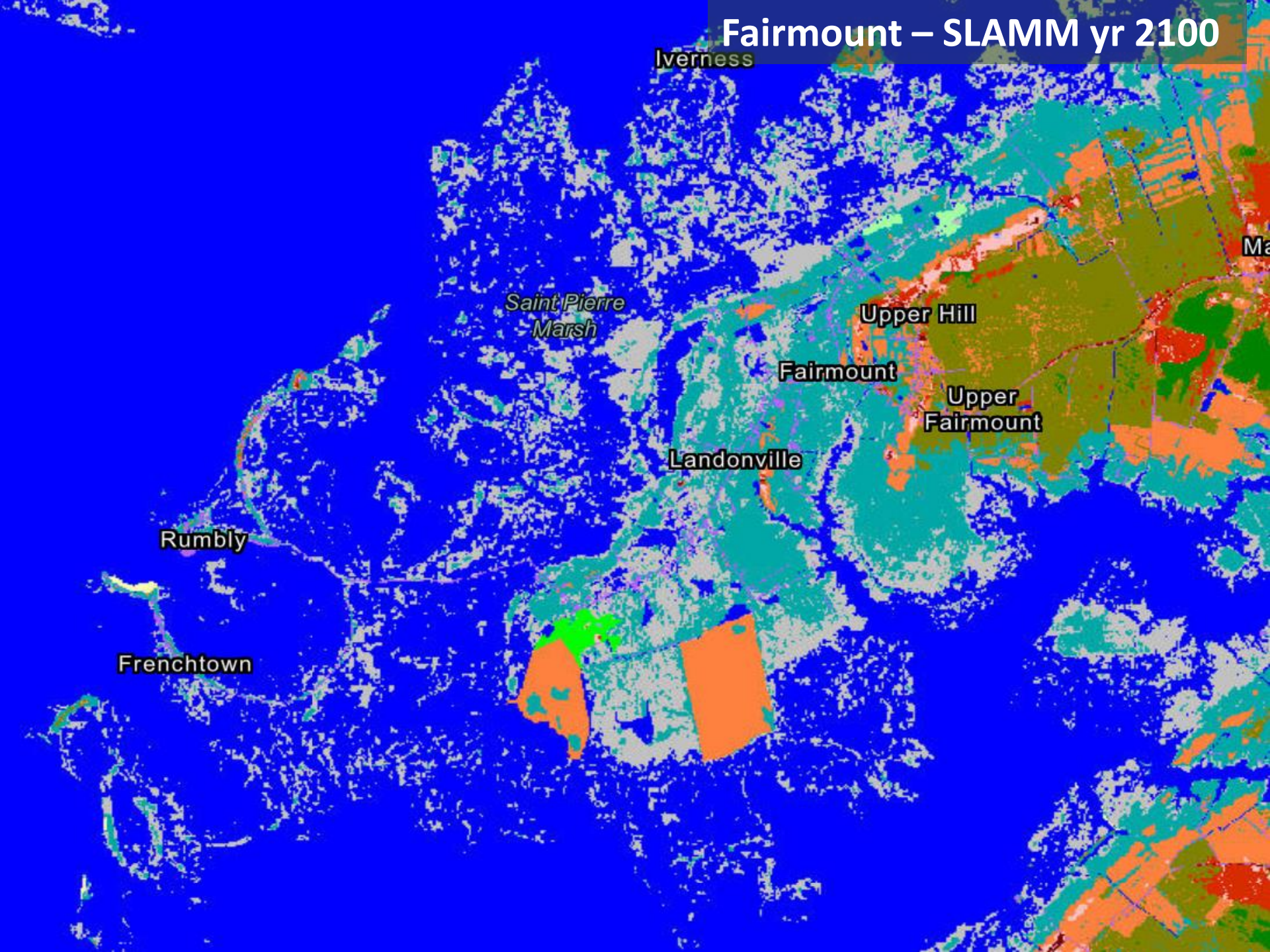
Legend

-  High marsh
-  Low marsh

Fairmount – SLAMM yr 2050



Fairmount – SLAMM yr 2100



Coastal Bays



Newark

Mason Landing

113

Snow Hill

Worcester

Castle Haven Estates

Scarboro

Girdletree

Hollow Acres

Scarboro Landing

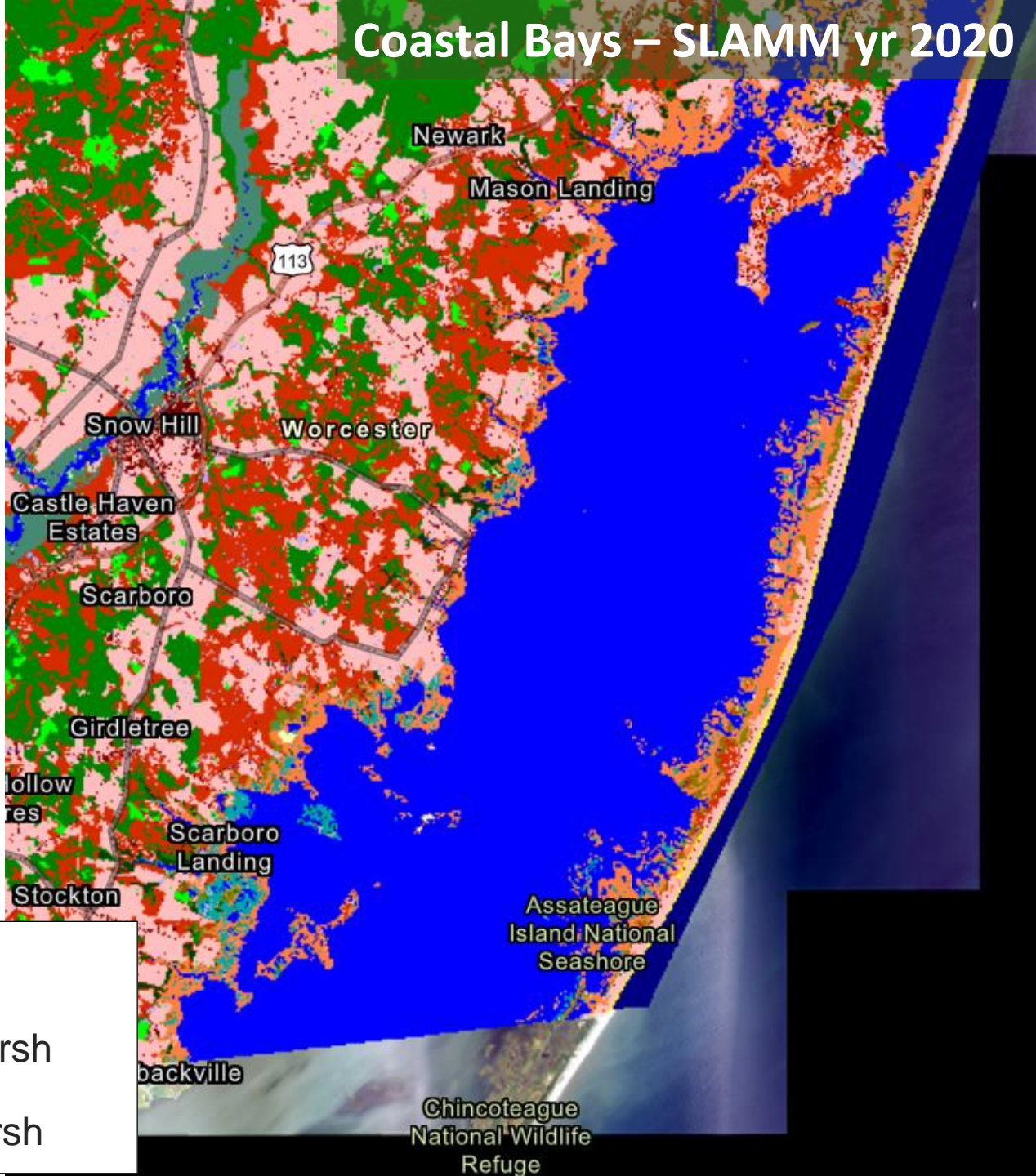
Stockton

Greenbackville



Assateague Island National Seashore

Chincoteague National Wildlife

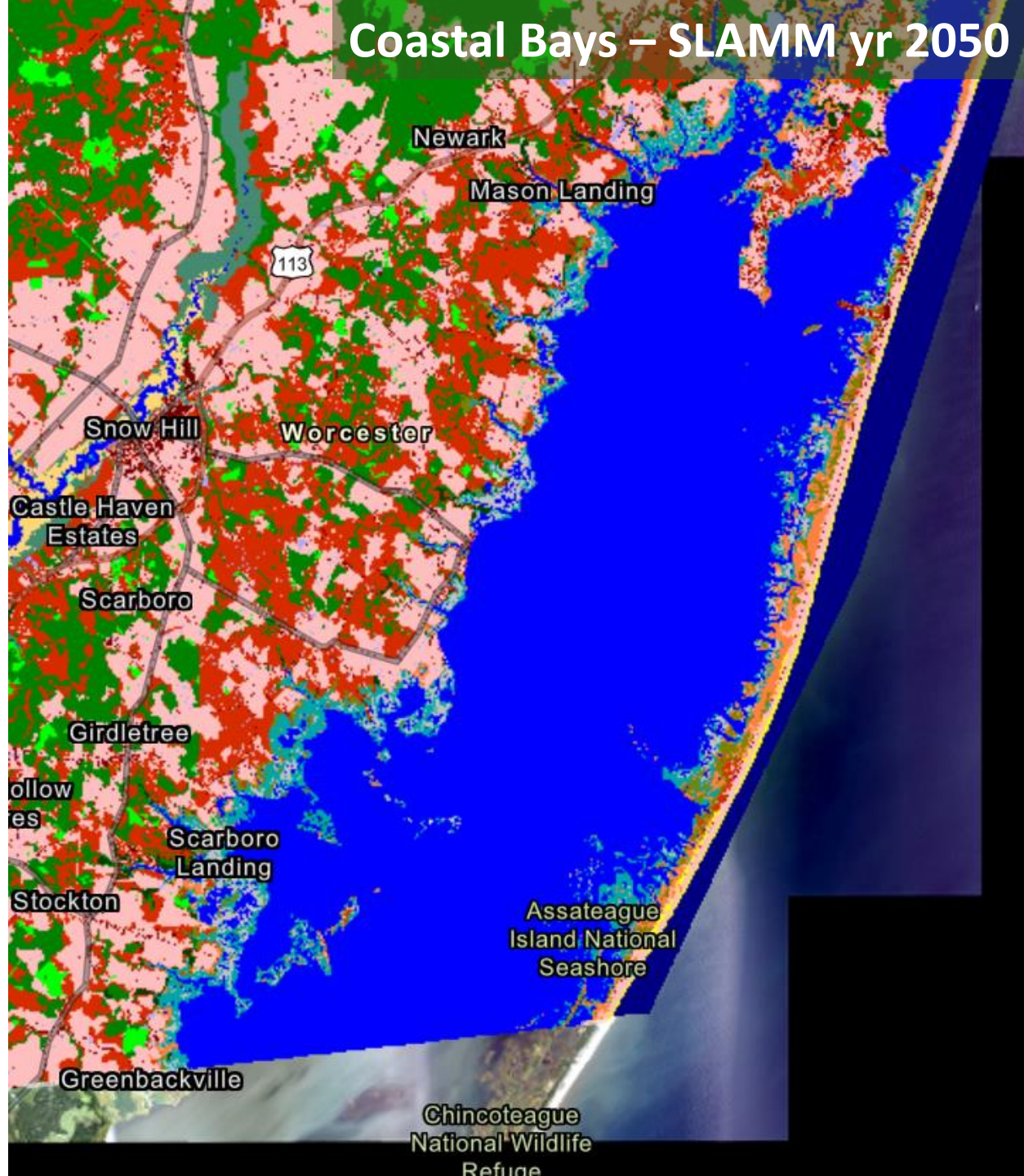
Coastal Bays – SLAMM yr 2020



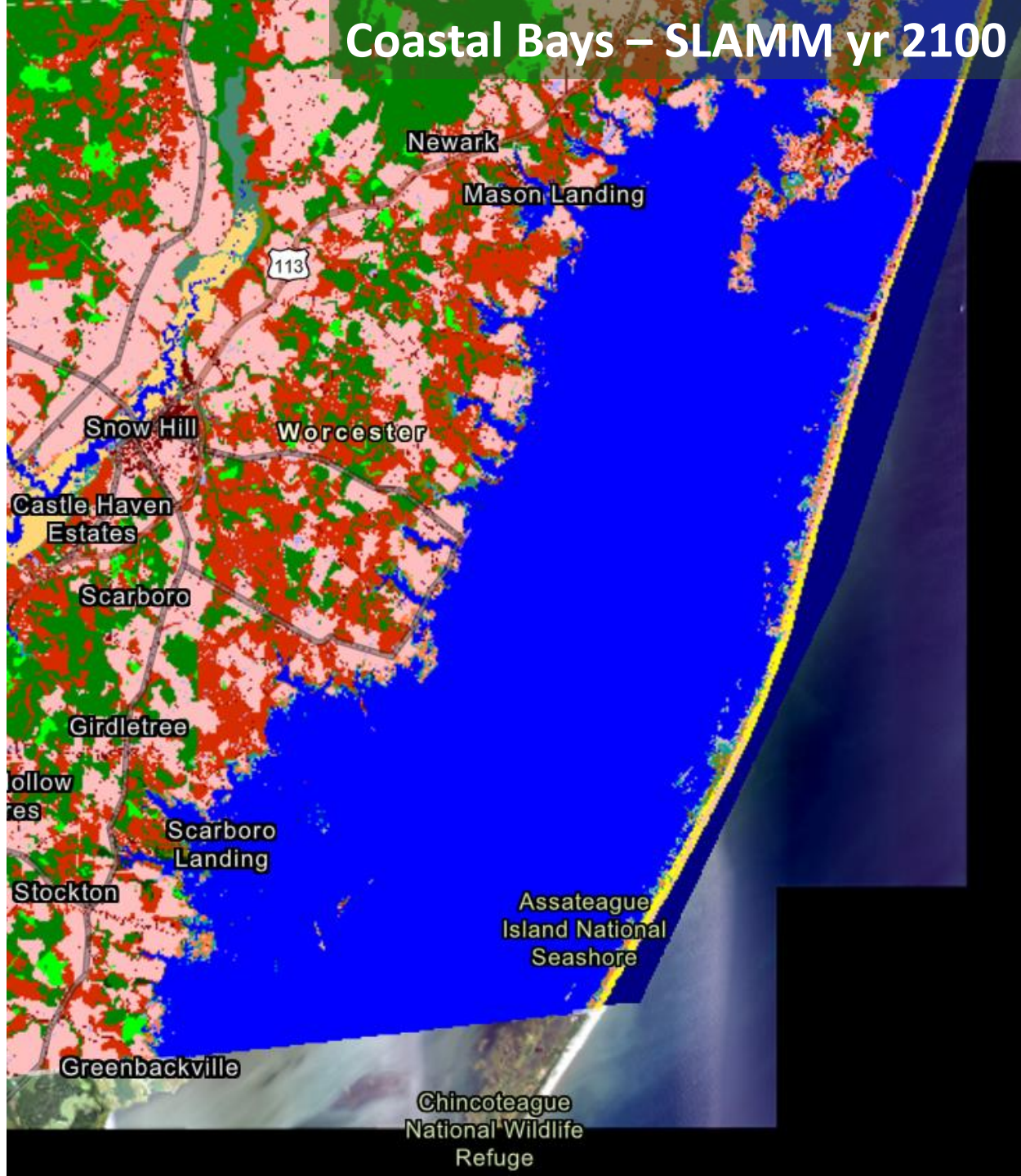
Legend

-  High marsh
-  Low marsh

Coastal Bays – SLAMM yr 2050



Coastal Bays – SLAMM yr 2100



Deal Island

Dames Quarter

Saint Stephen

363

Chance

Oriole

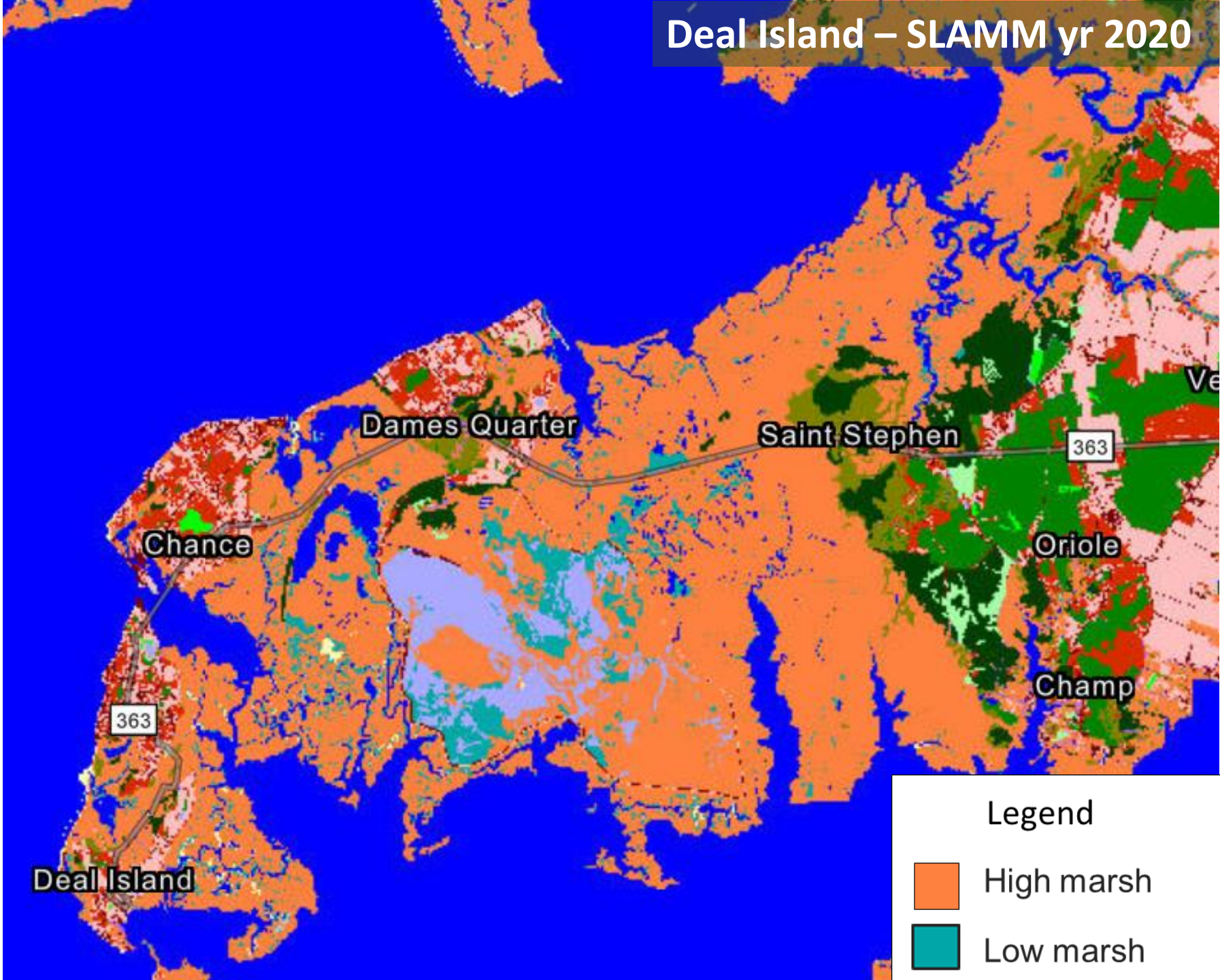
Champ

363



Deal Island



Deal Island – SLAMM yr 2020



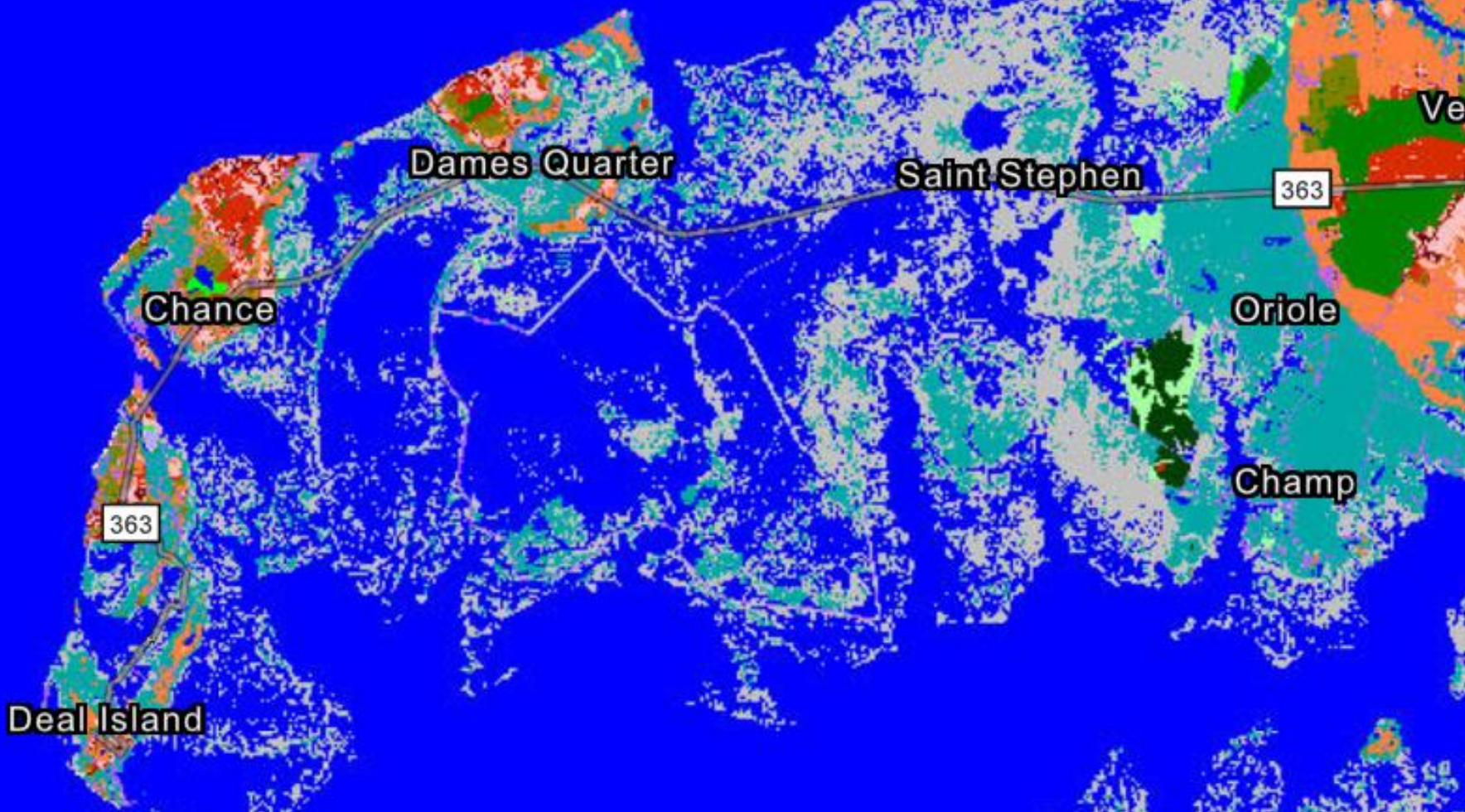
Legend

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Deal Island – SLAMM yr 2050



Deal Island – SLAMM yr 2100



Dorchester

Blackwater-Fishing Bay

Crapo

Elliott

Toddville

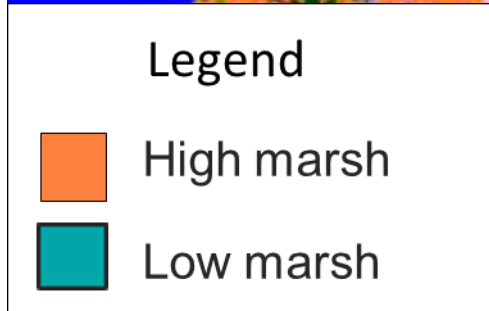
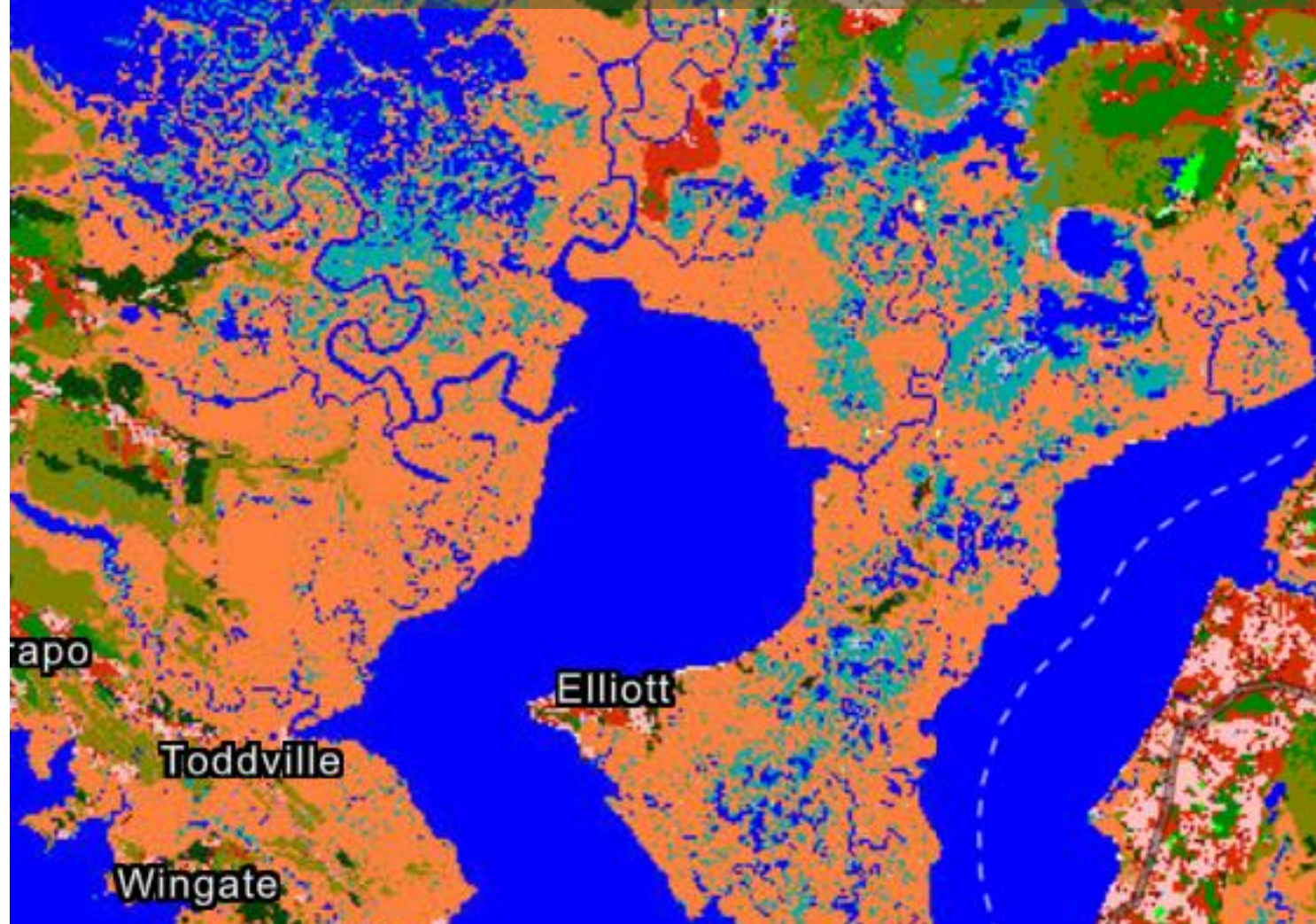
Wingate

Bishops Head

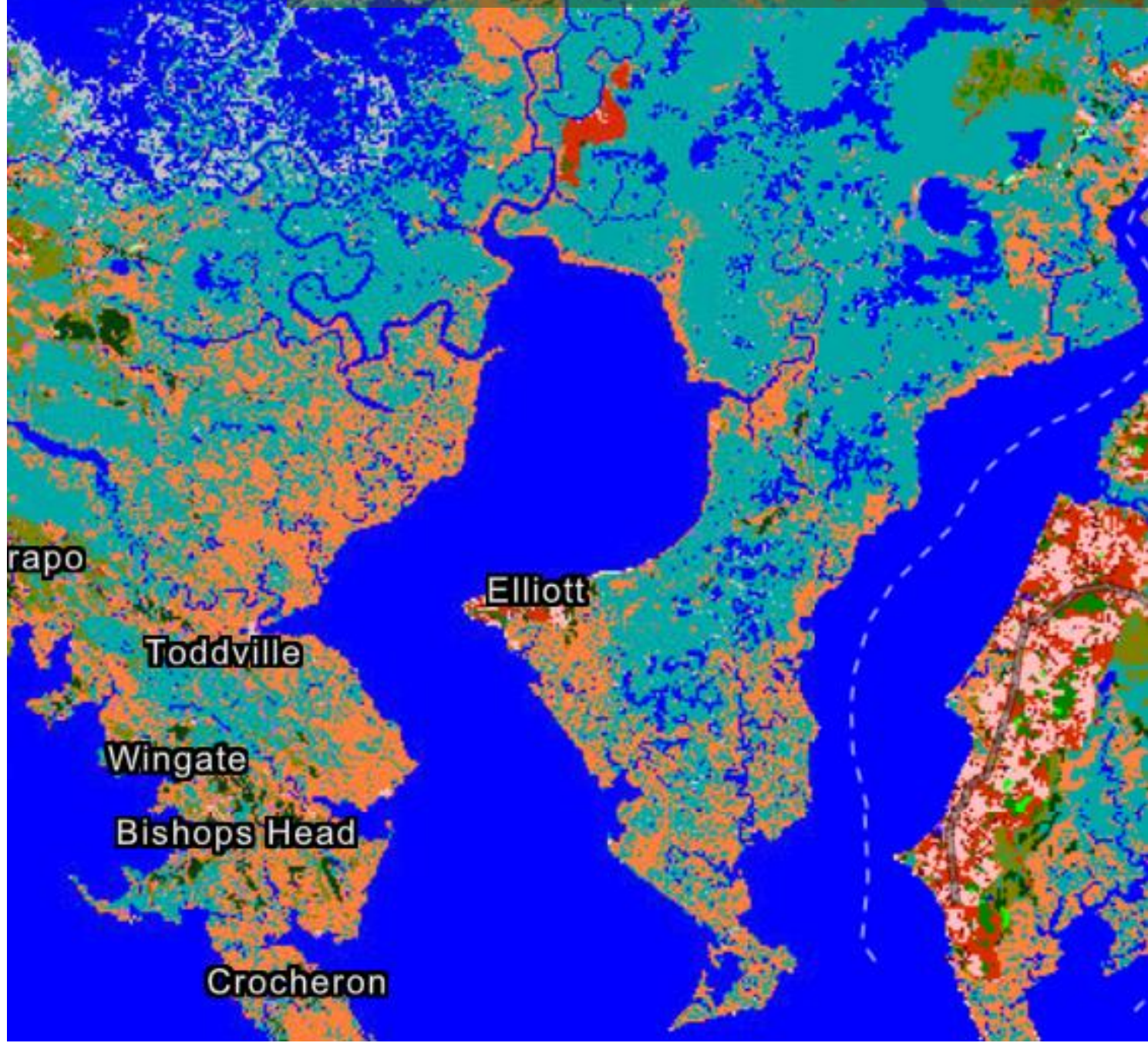
Crocheron



Dorchester Blackwater-Fishing Bay– SLAMM yr 2020

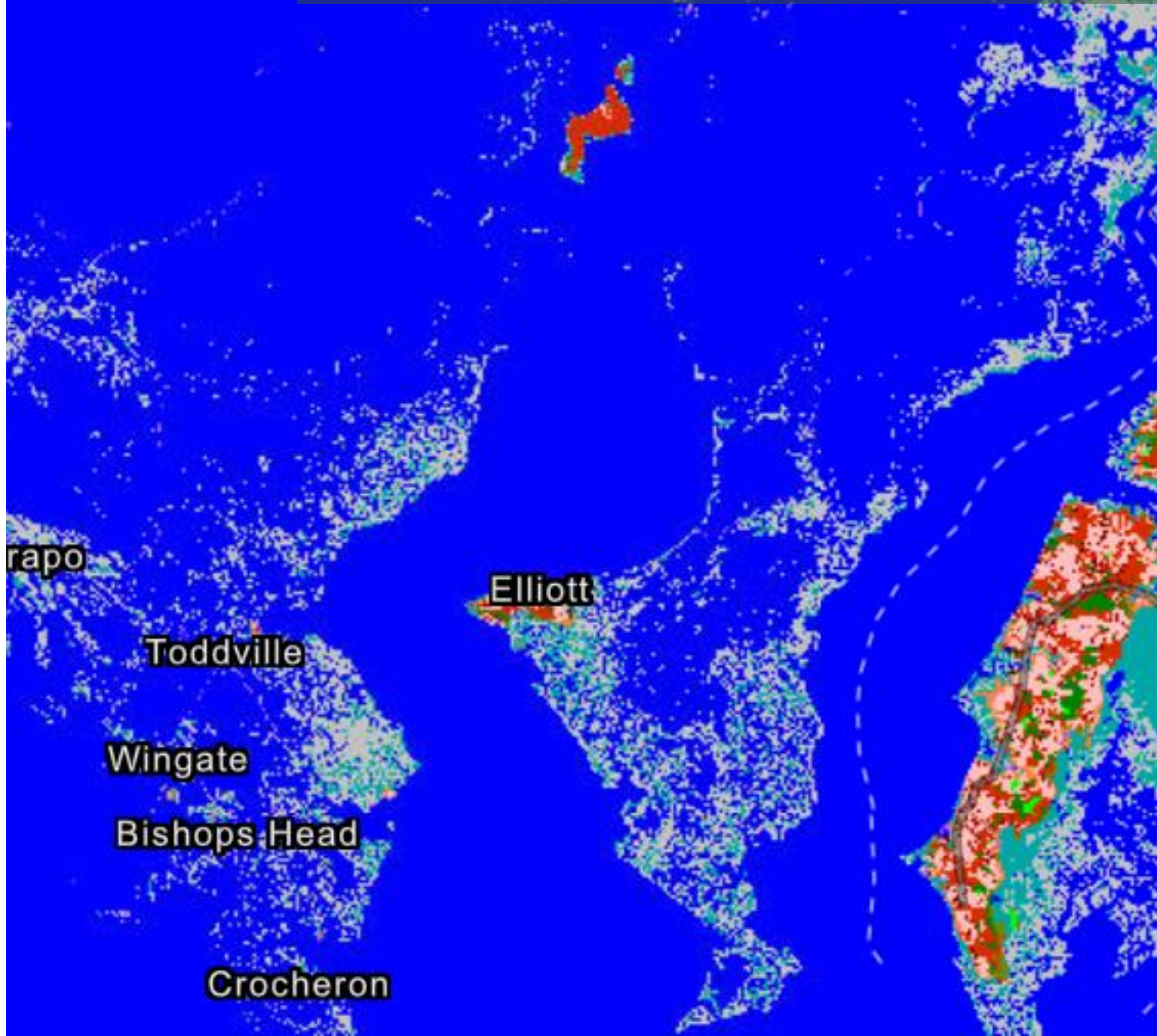


Dorchester Blackwater-Fishing Bay– SLAMM yr 2050



Dorchester

Blackwater-Fishing Bay– SLAMM yr 2100



rapo

Toddville

Wingate

Bishops Head

Crocheron

Elliott

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Whole group discussion

- What comments/questions came up during mapping exercise?
- Does anyone wish to share or elaborate on their input from the exercise?
- What other questions or concerns do you have?

- Thank you for your contributions
- Second-round of meetings in the spring
- Please turn in paper survey
- Raffle draw
- Safe travels home!





Audubon

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