



Welcome to the
Bay of Green Bay National
Estuarine Research Reserve
(NERR) Technical Webinar

OBJECTIVES

- Provide updates on the designation process and timeline
- Share natural area site-selection criteria
- Solicit feedback on the candidate natural areas

We at the University of Wisconsin-Green Bay acknowledge the First Nations people who are the original inhabitants of the region. The Ho-Chunk Nation and the Menominee Nation are the original First People of Wisconsin and both Nations have ancient historical and spiritual connections to the land that our institution now resides upon.

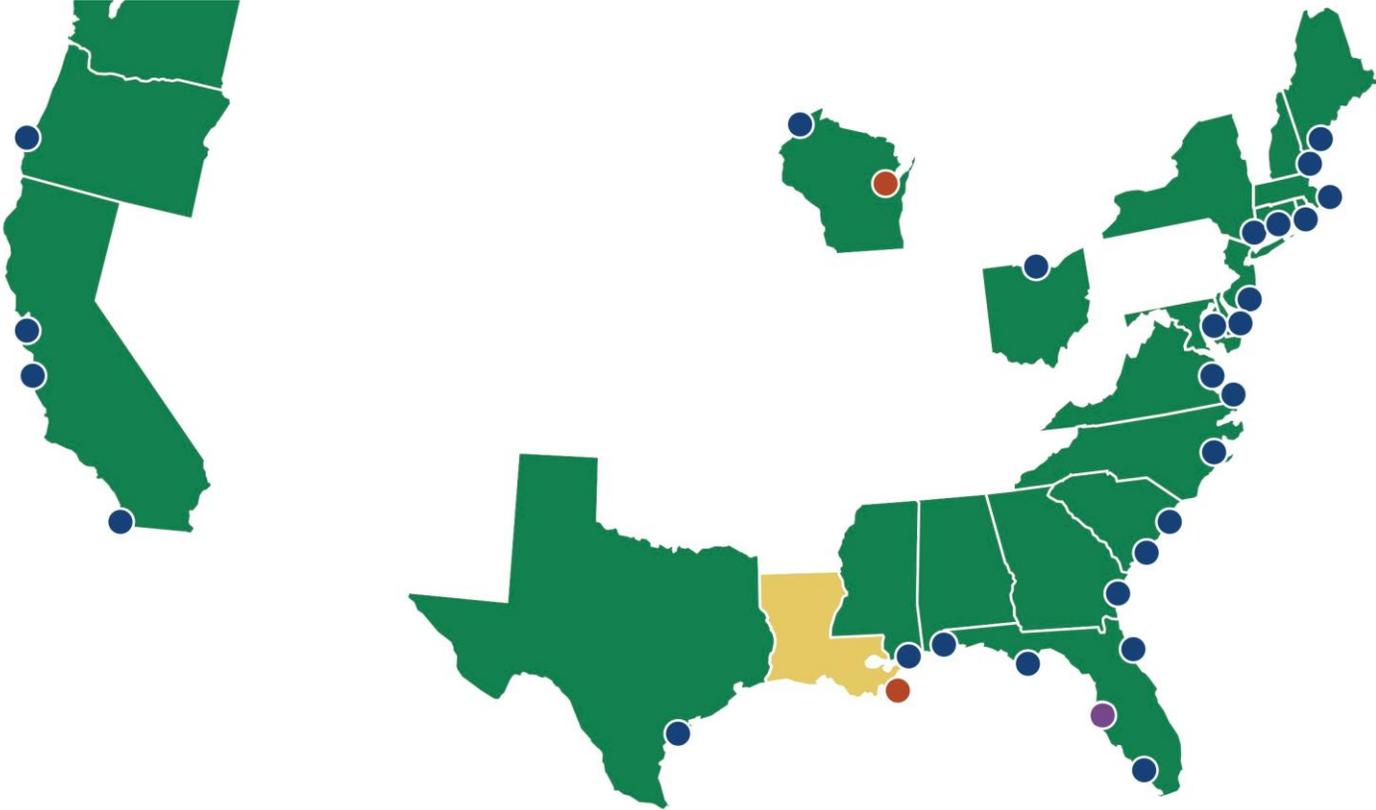
Today, Wisconsin is home to 12 First Nations communities including the Oneida Nation of Wisconsin, Forest County Potawatomi, Ojibwe Nation communities, Stockbridge-Munsee Band of the Mohicans, and the Brothertown Indian Nation.

We acknowledge the First Nations People of Wisconsin.

What is a National Estuarine Research Reserve (NERR)?

- Non-regulatory state-federal (NOAA) partnership focused on research and education around waters, estuaries, and coastlines.
- For the selection of natural area site(s), we are only considering publicly owned lands or lands open to the public, there is no new purchase of lands.

What is a National Estuarine Research Reserve (NERR)?



Alaska



Hawaii



Puerto Rico



U.S Virgin Islands



designated reserve



proposed reserve



designation in process



UNIVERSITY of WISCONSIN
GREEN BAY

WHAT DOES A NERR DO?

1. Address coastal management issues
2. Enhance public awareness and understanding of estuaries and coasts
3. Platform for coordinating research, education, stewardship
4. Celebrate holistic water connections to our communities and ecosystems



Research



Education



Stewardship



Training

Committees were formed to:

- Represent a range of interests around the bay
- Breadth of professional expertise
- Geographic representation

Members include representation from the Oneida Nation, Menominee Indian Tribe of Wisconsin, Wisconsin Sea Grant, Department of Natural Resources, UW-Extension, the University of Wisconsin-Milwaukee, Ducks Unlimited, US Fish and Wildlife Service, Microsoft TechSpark Wisconsin, the Wisconsin Coastal Management Program, the Calumet County Department of Administration, the Nature Conservancy, Wisconsin Wetland Association, NEW Water, Door County Soil and Water Conservation, Fincanterri Marine Group, NOAA Great Lakes Environmental Research Lab, Marinette School District, and Friends of Gibraltar Schools.

Committees represent NE Wisconsin



Site Coordination Committee

- Provide leadership and oversight to state designation
- Build state-wide regional support for the Bay of Green Bay NERR
- Complete Site Nomination Document for submission to Governor's Office
- Size of committee: 11 members

Site Development Committee

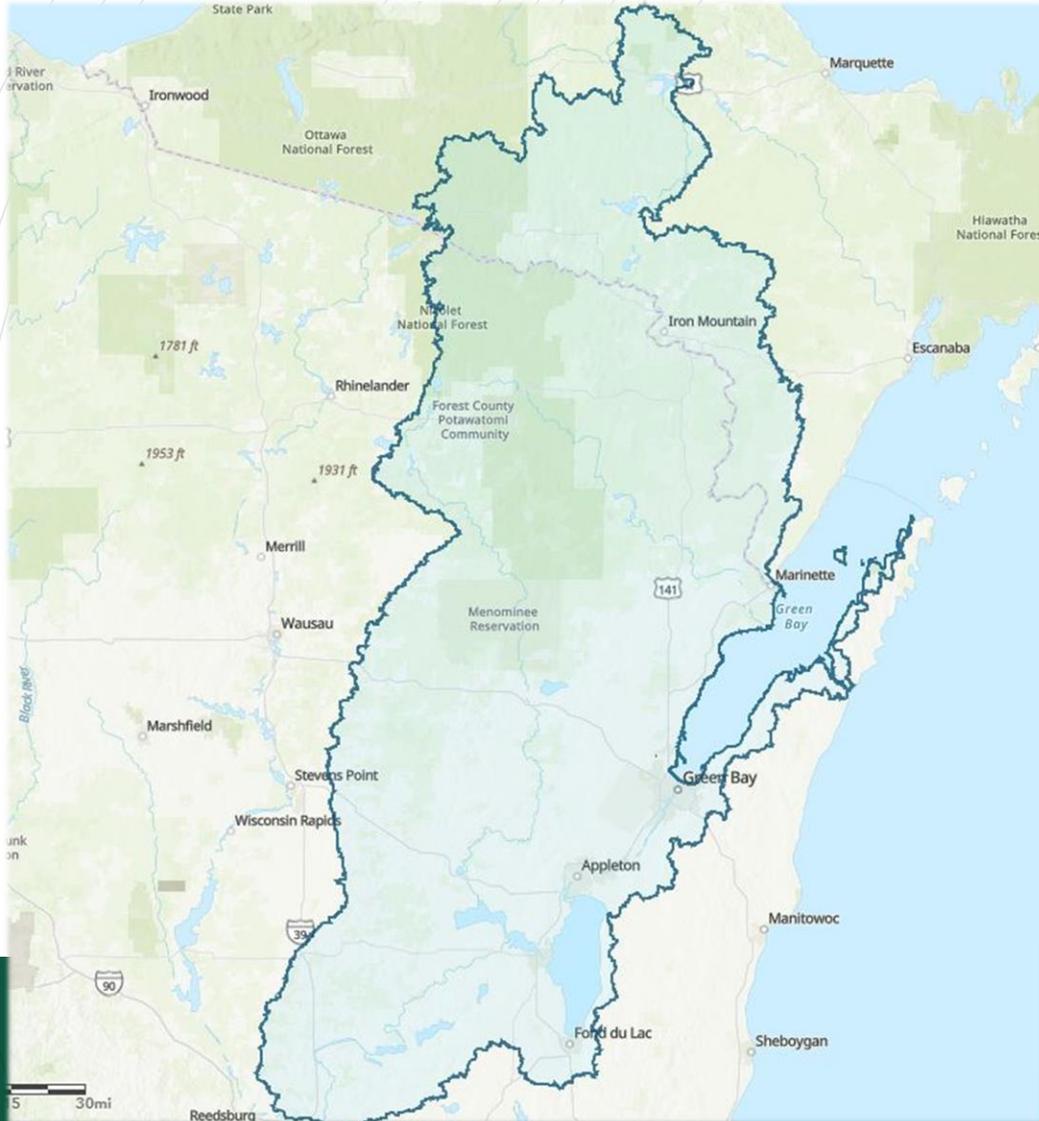
- Draft Site-Selection Criteria
- Determine Relevant Coastal Geography
- Pre-screening to determine 3-5 optimal natural area candidate sites
- Size of committee: 8 members

Site Evaluation Committee

- Apply Site-Selection Criteria to natural area candidate sites
- Recommend a site/assemblage of natural areas for the NERR
- Delineate the boundaries of the natural areas site(s) of the NERR
- Size of committee: 16 members

SITE-SELECTION COMMITTEES

THE PROCESS AND UW-GREEN BAY ARE AGNOSTIC ON SPECIFIC LOCATION(S) WITHIN THE BAY OF GREEN BAY

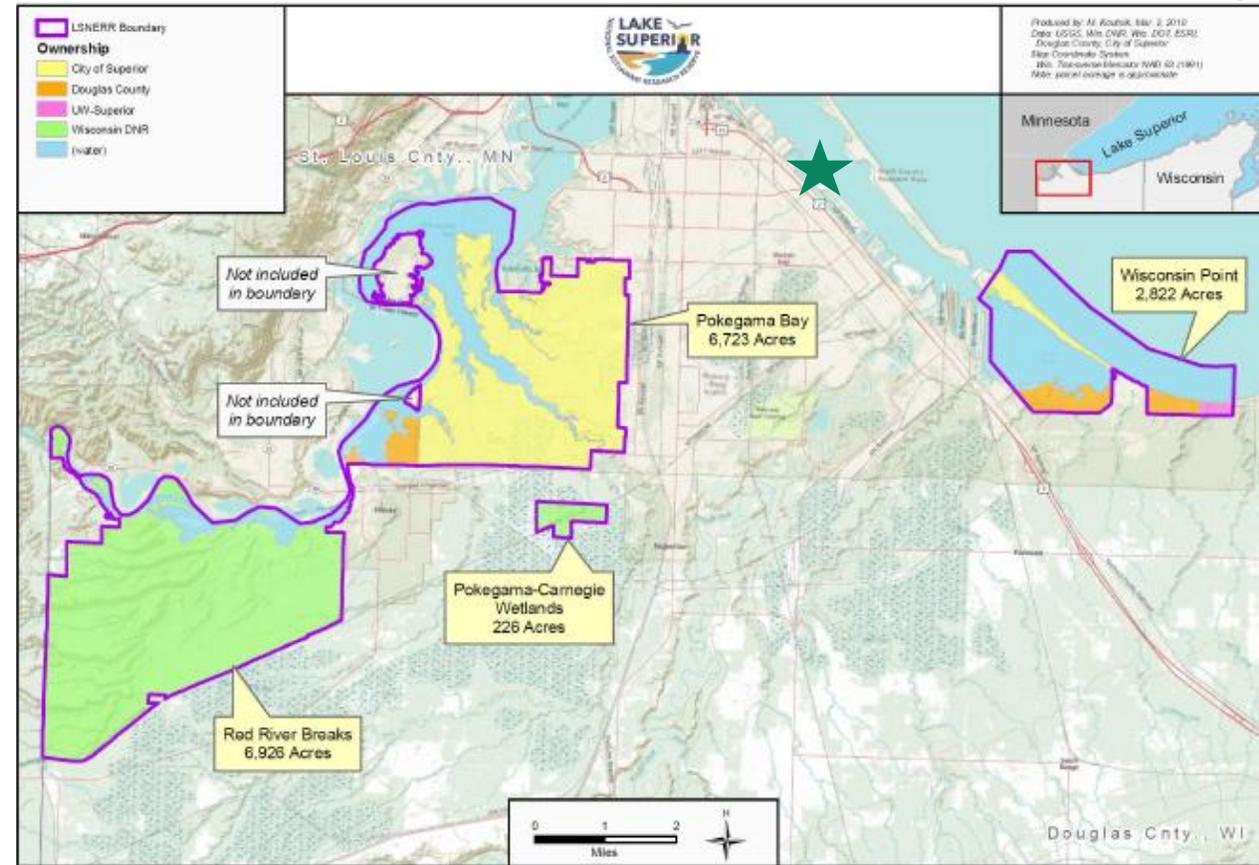


The goal of prescreening is to narrow the universe of the possible to a subset of most likely natural area sites for application of detailed criteria

The Bay of Green Bay Estuary is a large, dynamic, and complex system

Site selection of natural areas must capture two important gradients:

1. The disturbance gradient from minimally impacted habitats to areas recently restored
2. The south-to-north gradient capturing morphologic, estuarine, and trophic conditions driven by the hypereutrophic waters of the Fox-Wolf watershed in the south and the oligotrophic waters entering the bay from Lake Michigan





I. Environmental Representativeness



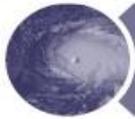
II. Value of the Site for Research, Monitoring, and Resource Protection



III. Suitability of the Site for Education and Interpretation



IV. Acquisition and Management Considerations



V. Natural Resource and Build Infrastructure Resilience to Climate Change Impacts



VI. Partnership Building

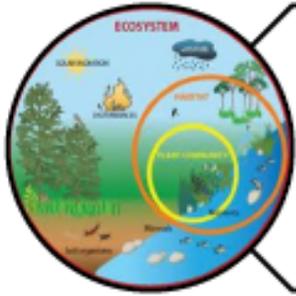


VII. Institutional Commitment

SITE SELECTION CATEGORIES – NATURAL AREAS



UNIVERSITY of WISCONSIN
GREEN BAY



IDENTIFICATION OF POTENTIAL SITES THAT ARE REPRESENTATIVE
of the biogeography, suitable for long-term research and education, compatible with existing uses, and containing key land and waters to approximate an ecological unit. Look at potential sites within the entire biogeographic sub-region of the state.

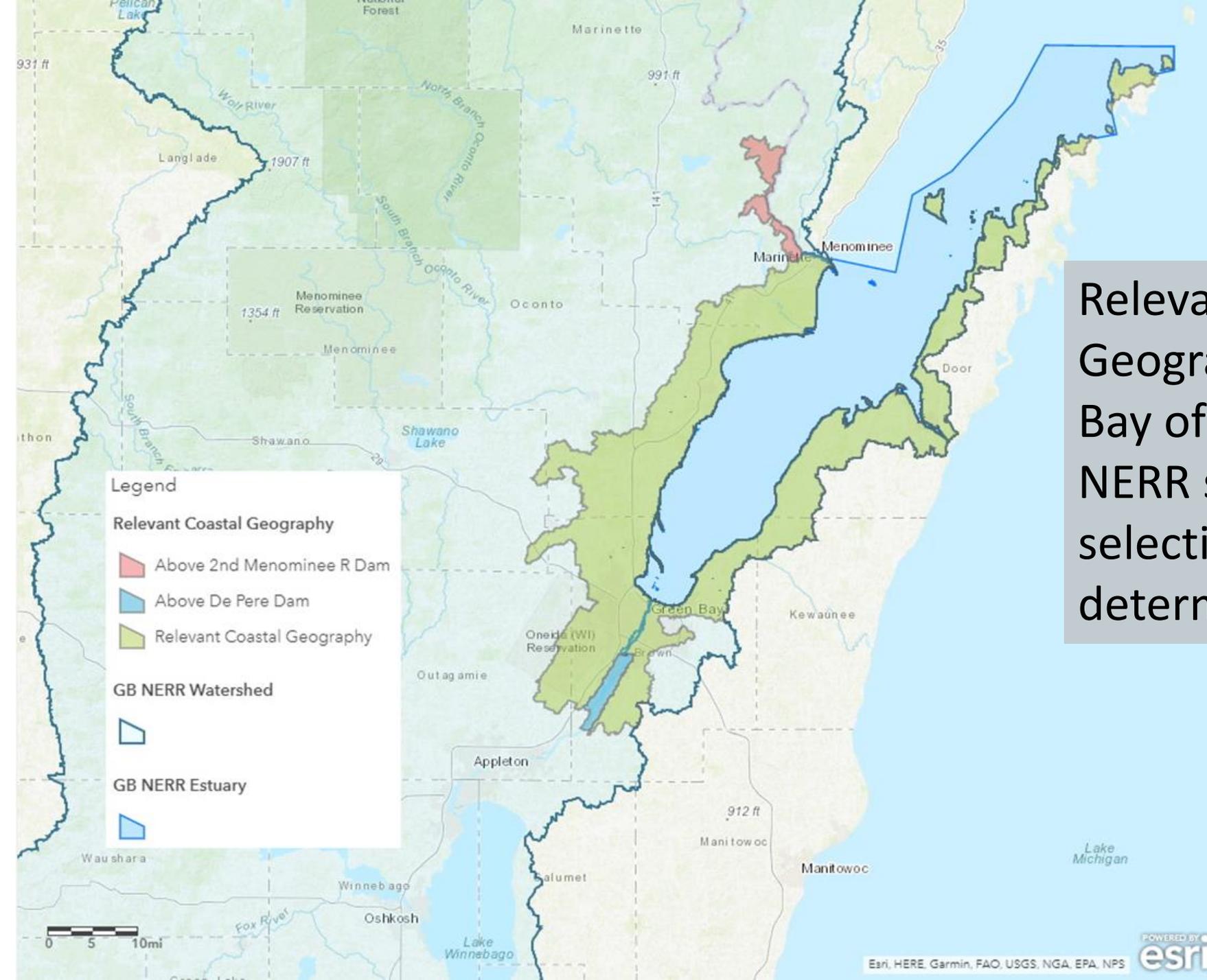
Pre-screening

Narrow the field of possible areas for application of the detailed site criteria.

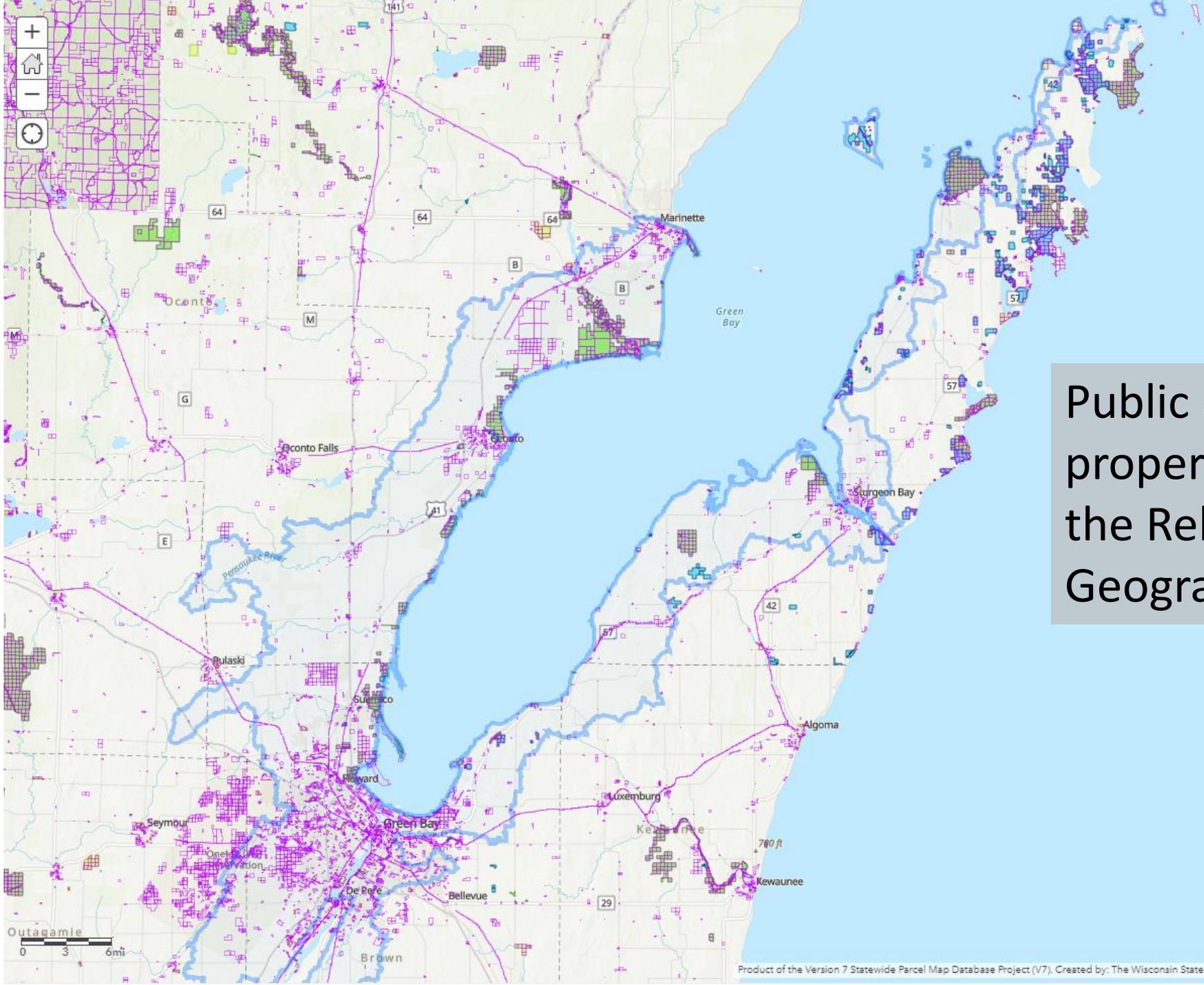
Four Pre-screening Criteria*

1. Is the area publicly owned or a land trust property?
2. Is the area coastal/estuarine?
3. Is the area connected to the estuary in a significant way?
4. Does the area have features aligned with the research and education goals of the NERR (i.e. not a playground)

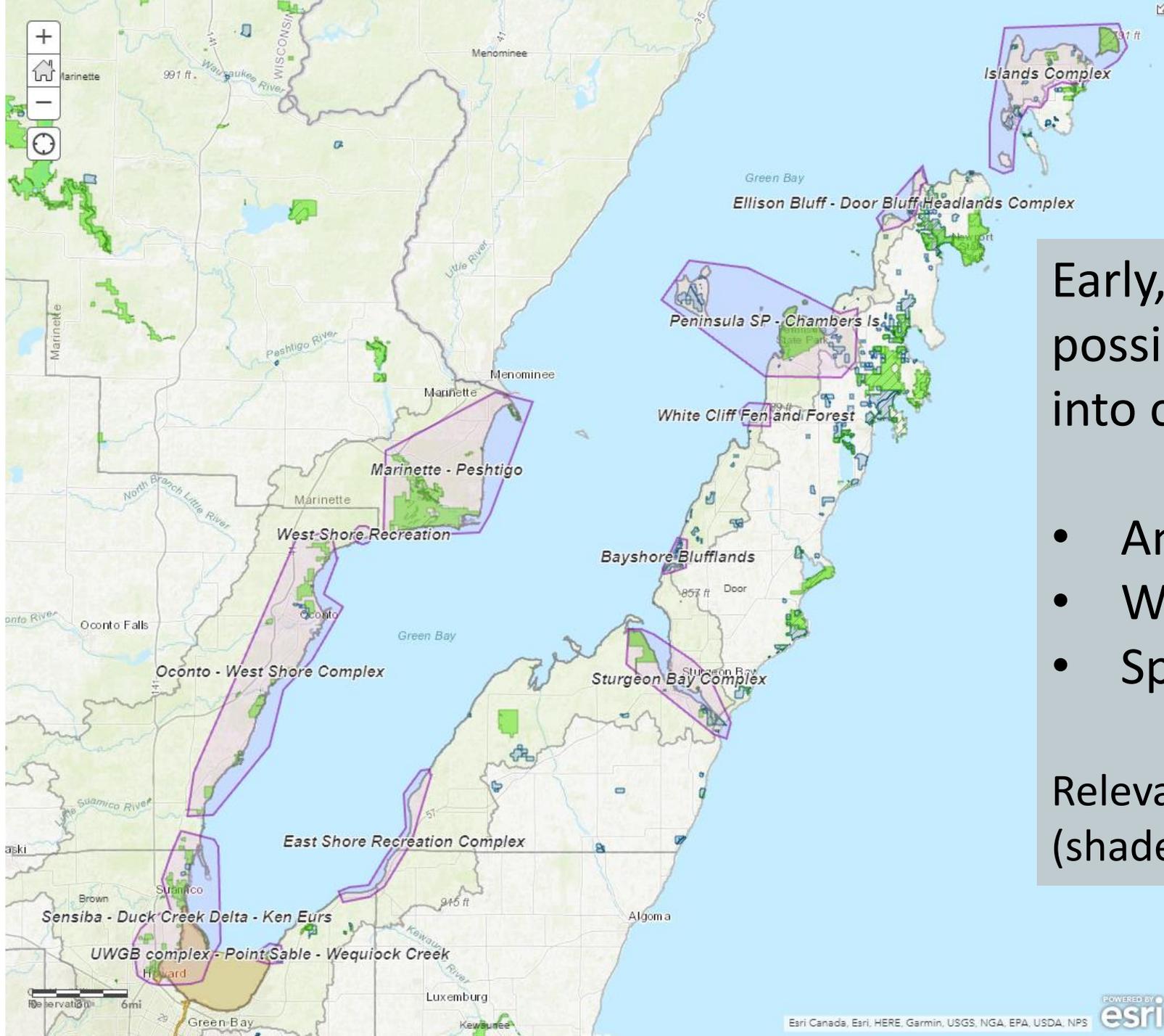
*Natural areas



Relevant Coastal Geography and Waters of Bay of Green Bay for NERR site component selection and boundary determination tasks



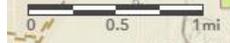
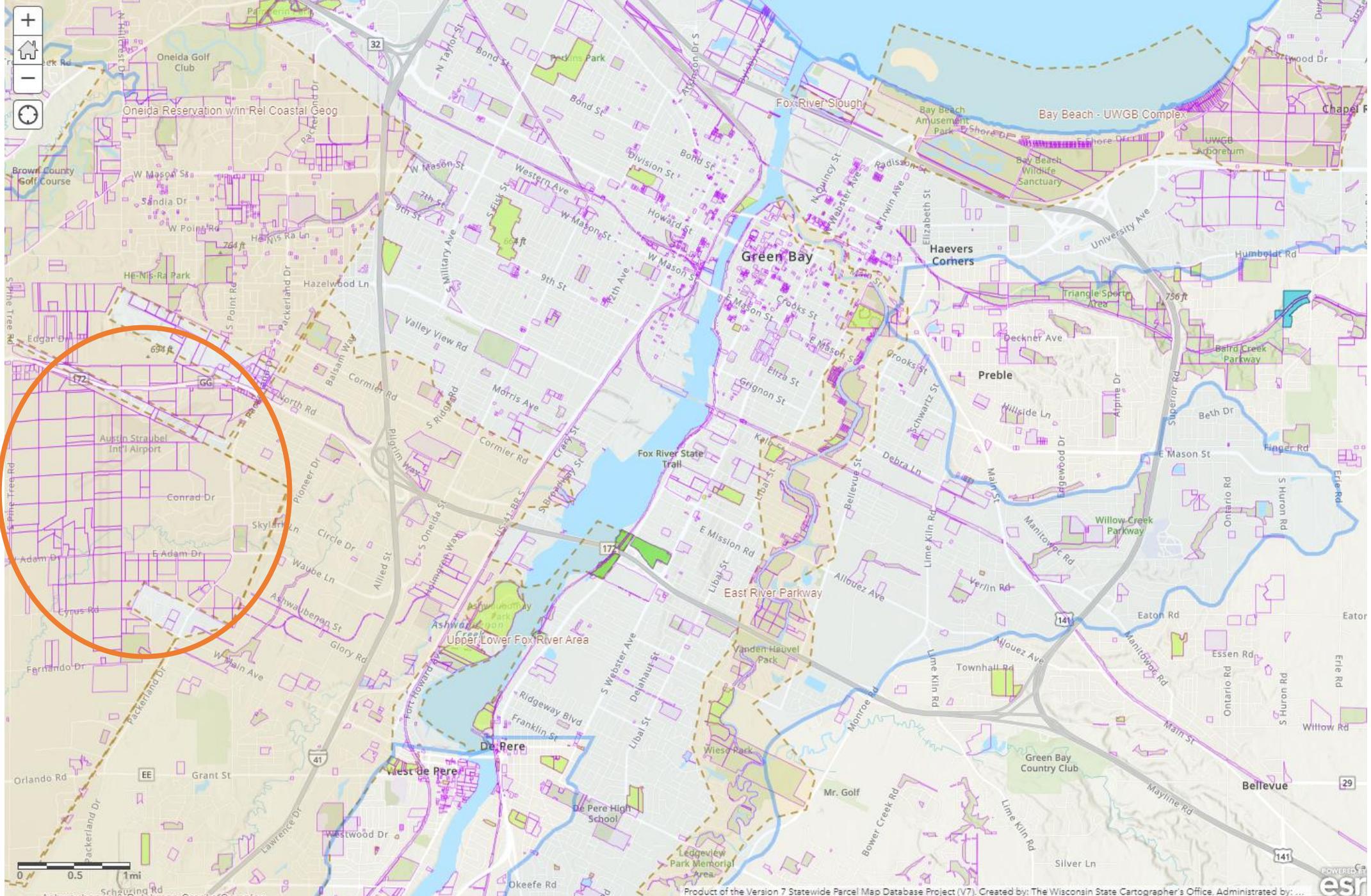
Public and Land Trust properties (magenta) and the Relevant Coastal Geography (blue line)



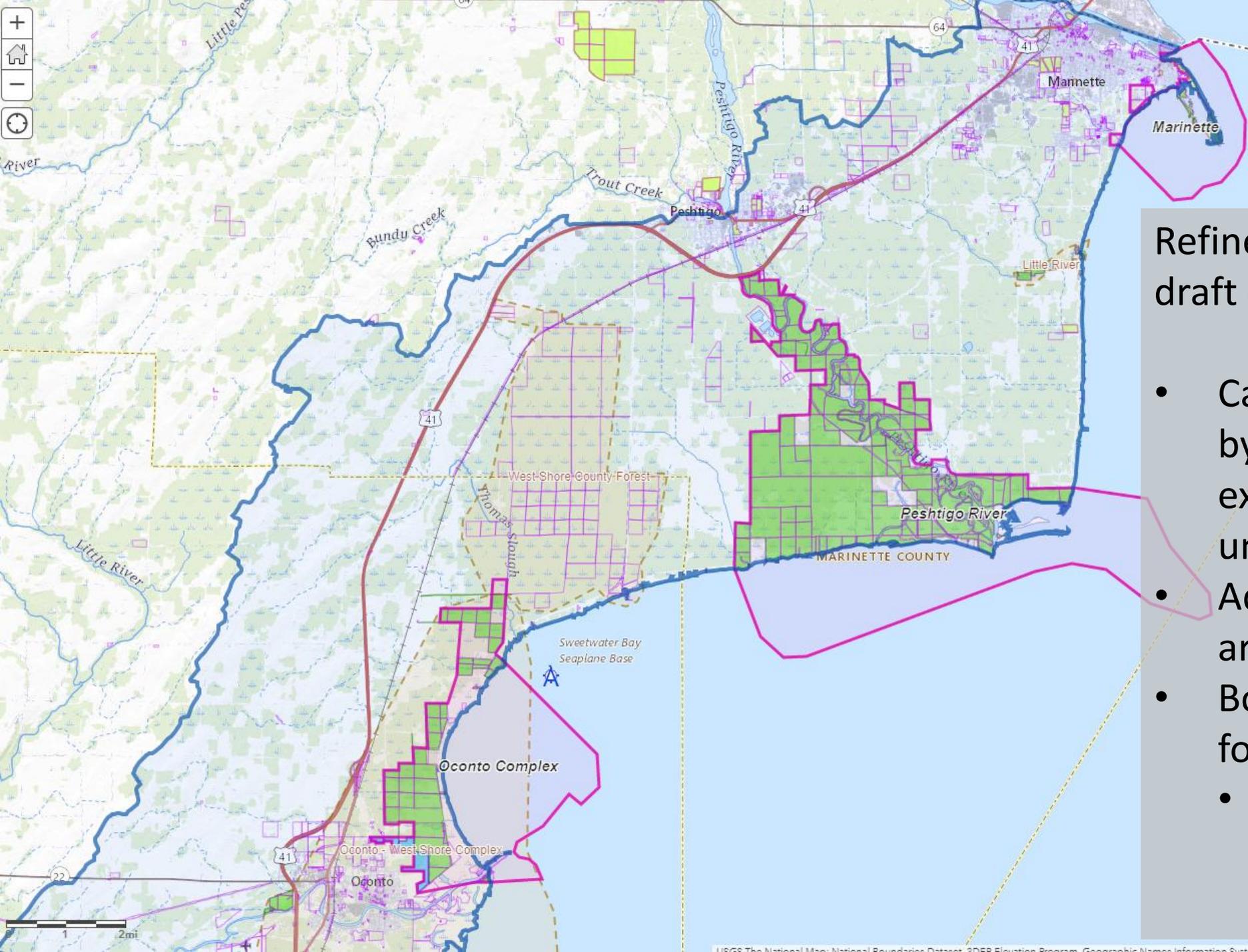
Early, draft grouping of possible candidate land areas into complexes (~Nov 2021)

- Anything missing?
- What clearly does not fit?
- Split or group?

Relevant Coastal Geography (shaded area w/ grey outline)

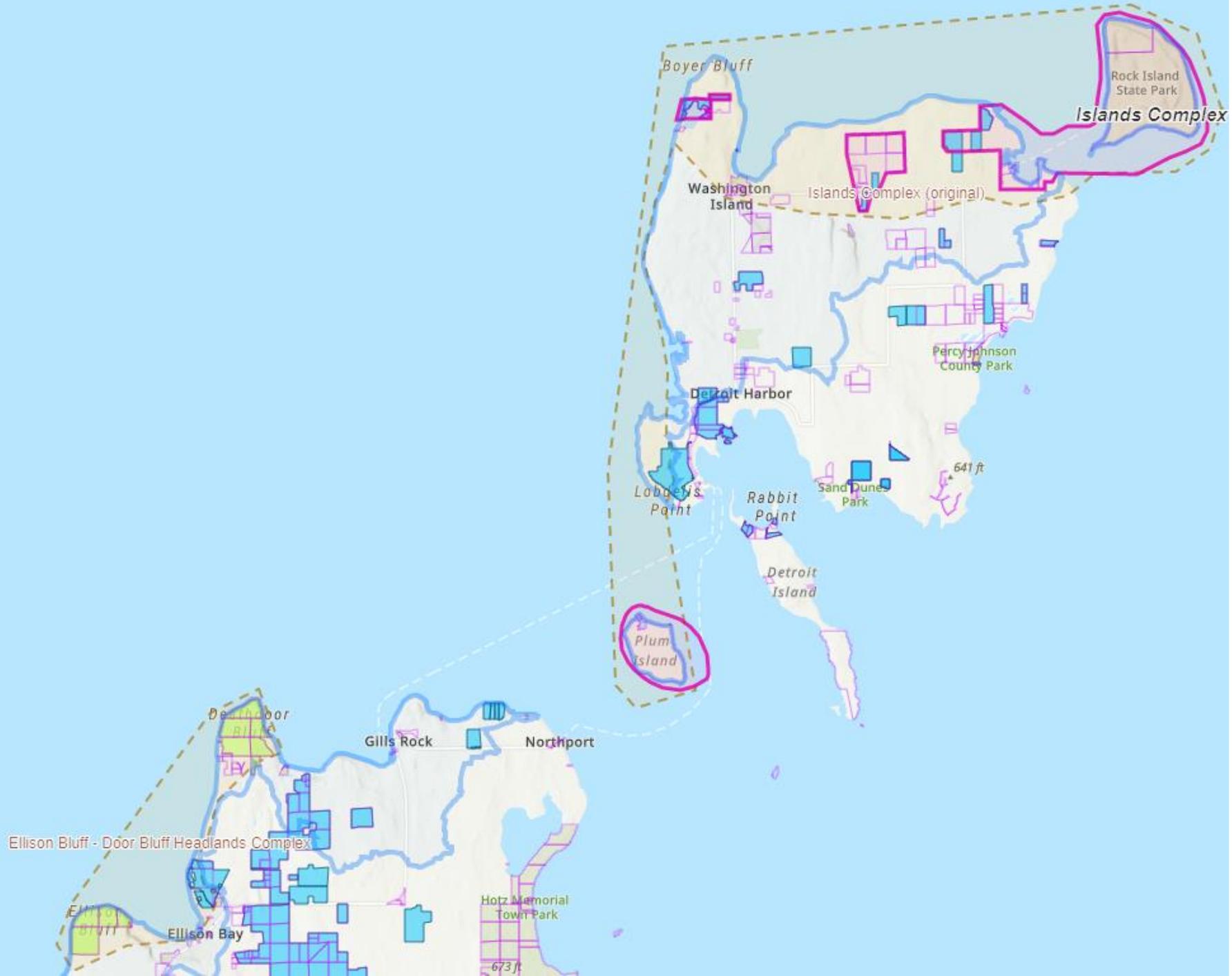


Ashwaubenon & Dutchman Creeks Complex



Refinement and narrowing to draft **Candidate Site Areas**

- Candidate lands, grouped by geographic proximity & existing management units
- Adjacent aquatic habitat areas outlined
- Boundary outlines were for evaluation purposes
 - These are not the proposed NERR site boundaries



Candidate Areas Explorer

Bay of Green Bay NERR

4,550.9 ac -- <i>Peshigo Harbor</i> WDNR
1,044.2 ac -- <i>Oconto Marsh</i> WDNR
982.5 ac -- <i>Rock Island</i> WDNR
912.7 ac -- <i>Peats Lake</i> Brown County
907.3 ac -- <i>Badger Gift Lands</i> WDNR
880.8 ac -- <i>Suamico River State Habitat Area</i> WDNR
809.7 ac -- <i>Chambers Island</i> Door County Land Trust
798.2 ac -- <i>Sensiba</i> WDNR
589.9 ac -- <i>Bloch Oxbow SNA</i> WDNR
551.1 ac -- <i>Peats Lake</i> WDNR
456.4 ac -- <i>Pensaukee</i> WDNR
449.5 ac -- <i>Suamico River State Habitat Area</i> Brown County
425.6 ac -- <i>Sturgeon Bay</i> Door County Land Trust
378.0 ac -- <i>Rush Point</i> WDNR
344.8 ac -- <i>Tibbet Suamico</i> WDNR
292.6 ac -- <i>Plum Island</i> USFWS
200.1 ac -- <i>Marinette</i> City of Marinette
193.0 ac -- <i>Little Tail</i> WDNR
191.4 ac -- <i>Point Au Sable - Wequiock Ck</i> University of Wisconsin System
190.6 ac -- <i>Coffee Swamp</i> WDNR
165.0 ac -- <i>Pecor Point</i> WDNR
150.6 ac -- <i>Oconto Marsh</i> Northeast Wisconsin Land Trust
128.6 ac -- <i>Peats Lake</i> City of Green Bay
108.7 ac -- <i>Sturgeon Bay</i> Crossroads at Big Creek

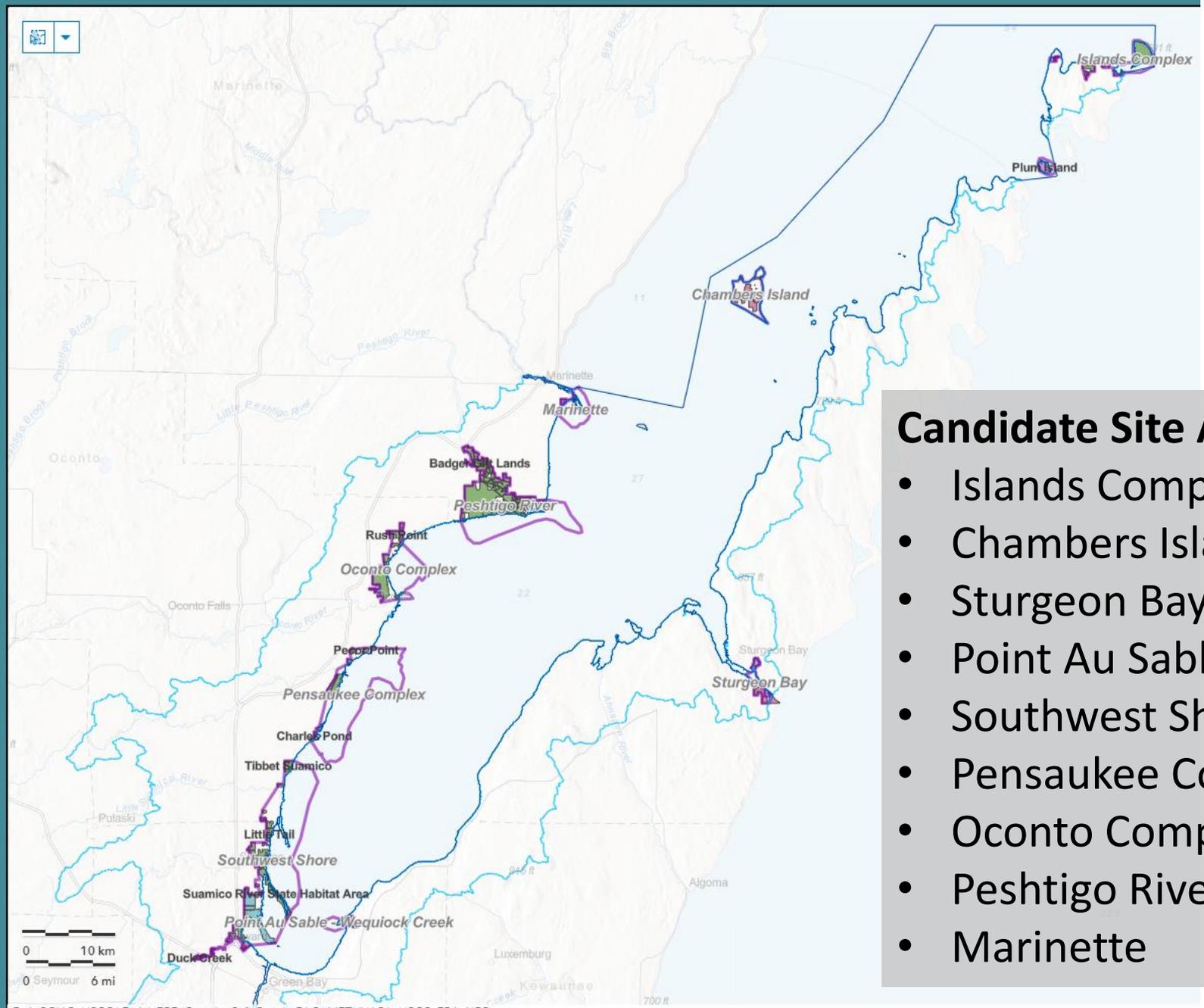
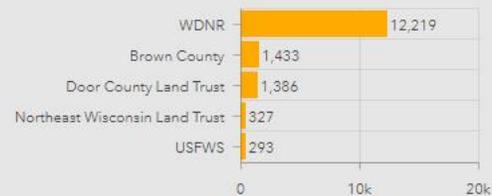
Selected CSAs

16,599 ac

Visible in map

16,599 ac

Acres mgd (in map extent)



- ## Candidate Site Areas
- Islands Complex
 - Chambers Island
 - Sturgeon Bay
 - Point Au Sable
 - Southwest Shore
 - Pensaukee Complex
 - Oconto Complex
 - Peshtigo River
 - Marinette

Candidate Areas Explorer

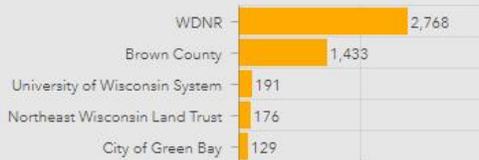
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449.5 ac -- Suamico River State Habitat Area Brown County
425.6 ac -- Sturgeon Bay Door County Land Trust
378.0 ac -- Rush Point WDNR
344.8 ac -- Tibbet Suamico WDNR
292.6 ac -- Plum Island USFWS
200.1 ac -- Marinette City of Marinette
193.0 ac -- Little Tail WDNR
191.4 ac -- Point Au Sable - Wequiock Ck University of Wisconsin System
190.6 ac -- Coffee Swamp WDNR
165.0 ac -- Pecor Point WDNR
150.6 ac -- Oconto Marsh Northeast Wisconsin Land Trust
128.6 ac -- Peats Lake City of Green Bay
108.7 ac -- Sturgeon Bay Crossroads at Big Creek

Selected CSAs
16,599 ac

Visible in map
4,790 ac

Acres mgd (in map extent)



Zoom to Pan

Candidate Site Area

Southwest Shore

Peats Lake Unit: 1,592.8 ac
 -- Brown County: 912.7 ac
 -- WDNR: 551.1 ac
 -- City of Green Bay: 128.6 ac
 -- Village of Howard: 0.4 ac

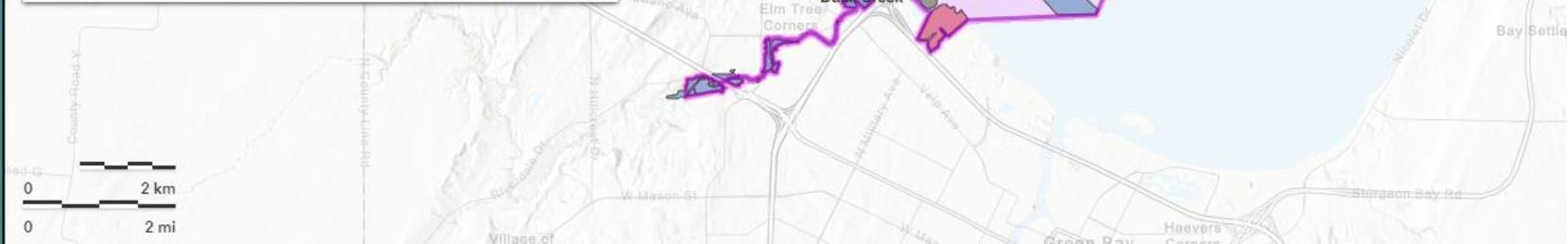
Suamico River State Habitat Area Unit: 1,330.3 ac
 -- WDNR: 880.8 ac
 -- Brown County: 449.5 ac

Sensiba Unit: 835.5 ac
 -- WDNR: 798.2 ac
 -- Northeast Wisconsin Land Trust: 34.1 ac
 -- Brown County: 2.8 ac
 -- Village of Suamico: 0.5 ac

Tibbet Suamico Unit: 344.8 ac
 -- WDNR: 344.8 ac

Little Tail Unit: 261.7 ac
 -- WDNR: 193.0 ac
 -- Northeast Wisconsin Land Trust: 68.7 ac

Duck Creek Unit: 157.5 ac
 -- Village of Howard: 90.2 ac
 -- Brown County: 67.3 ac



Candidate Areas Explorer

Bay of Green Bay NERR

- 4,550.9 ac -- *Peshigo Harbor* WDNR
- 1,044.2 ac -- *Oconto Marsh* WDNR
- 982.5 ac -- *Rock Island* WDNR
- 912.7 ac -- *Peats Lake* Brown County
- 907.3 ac -- *Badger Gift Lands* WDNR
- 880.8 ac -- *Suamico River State Habitat Area* WDNR
- 809.7 ac -- *Chambers Island* Door County Land Trust
- 798.2 ac -- *Sensiba* WDNR
- 589.9 ac -- *Bloch Oxbow SNA* WDNR
- 551.1 ac -- *Peats Lake* WDNR
- 456.4 ac -- *Pensaukee* WDNR
- 449.5 ac -- *Suamico River State Habitat Area* Brown County
- 425.6 ac -- *Sturgeon Bay* Door County Land Trust
- 378.0 ac -- *Rush Point* WDNR
- 344.8 ac -- *Tibbet Suamico* WDNR
- 292.6 ac -- *Plum Island* USFWS
- 200.1 ac -- *Marinette* City of Marinette
- 193.0 ac -- *Little Tail* WDNR
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- 165.0 ac -- *Pecor Point* WDNR
- 150.6 ac -- *Oconto Marsh* Northeast Wisconsin Land Trust
- 128.6 ac -- *Peats Lake* City of Green Bay
- 108.7 ac -- *Sturgeon Bay* Crossroads at Big Creek

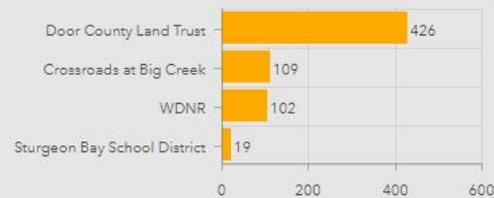
Selected CSAs

16,599 ac

Visible in map

656 ac

Acres mgd (in map extent)



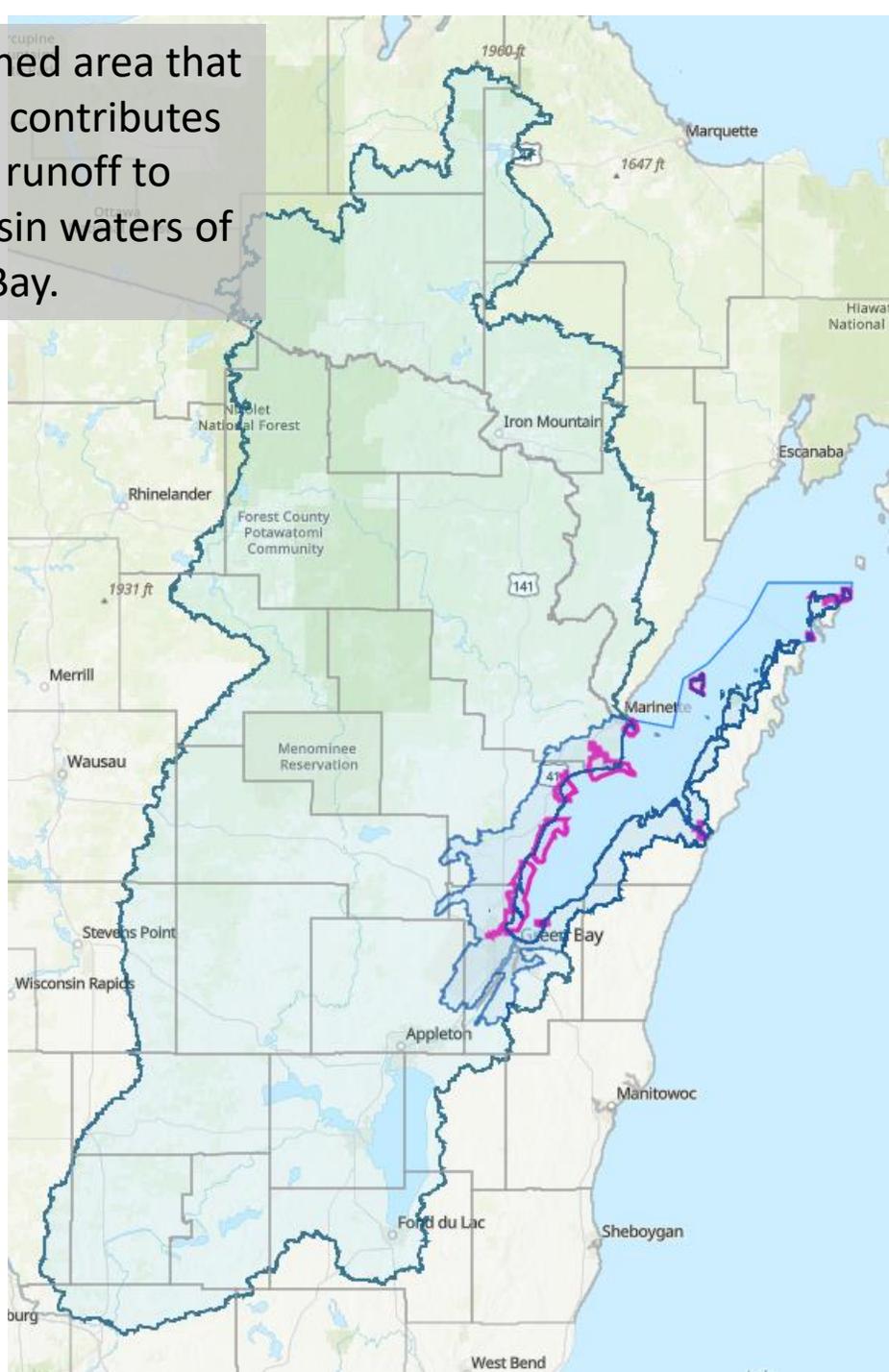
Zoom to
↕ Pan

Candidate Site Area ✕

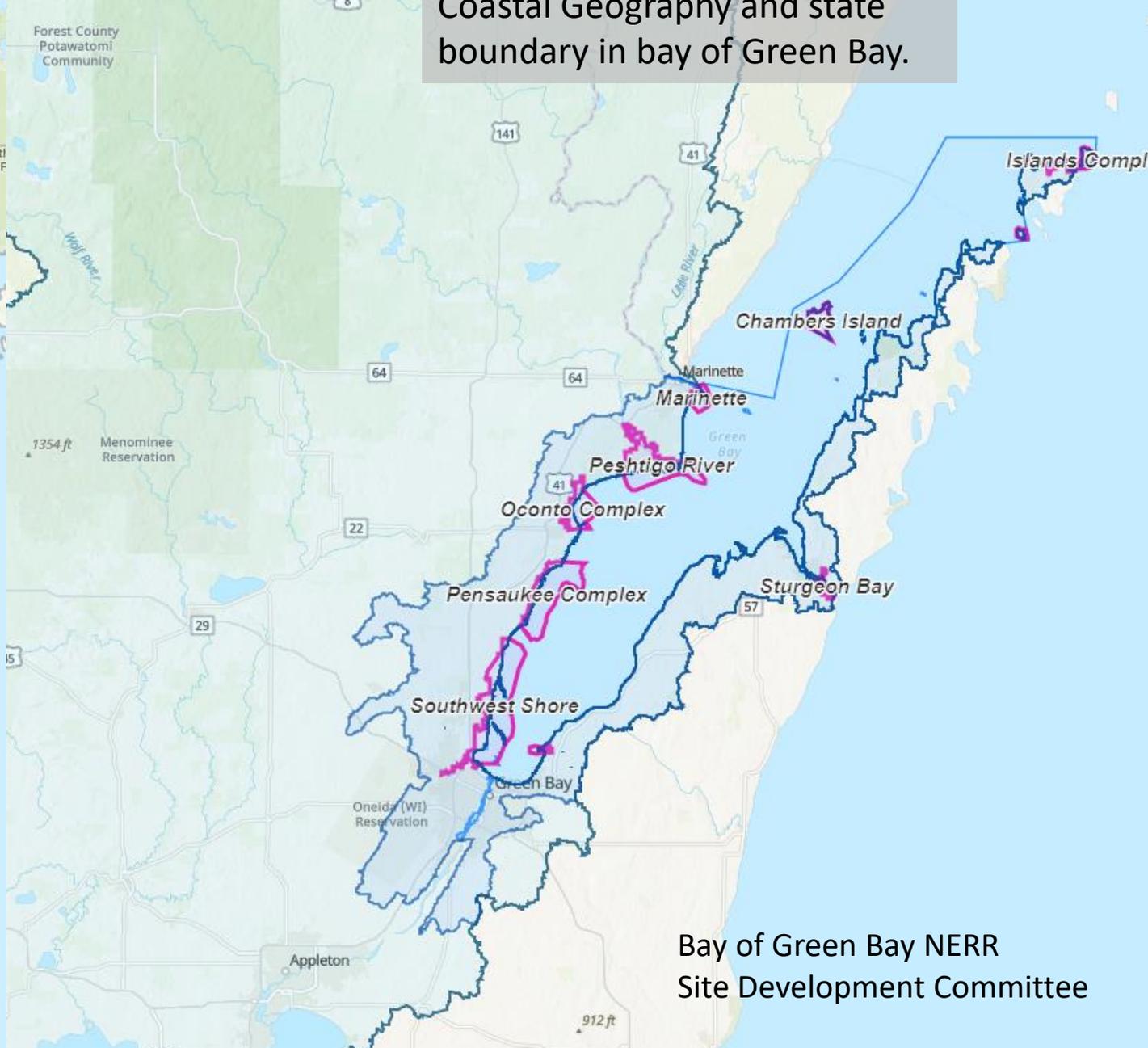
Sturgeon Bay

- Sturgeon Bay Unit: 655.8 ac
- Door County Land Trust: 425.6 ac
- Crossroads at Big Creek: 108.7 ac
- WDNR: 102.0 ac
- Sturgeon Bay School District: 19.5 ac

Watershed area that directly contributes surface runoff to Wisconsin waters of Green Bay.



Candidate Site Areas, Relevant Coastal Geography and state boundary in bay of Green Bay.



Bay of Green Bay NERR
Site Development Committee

National Estuarine Research Reserve Designation

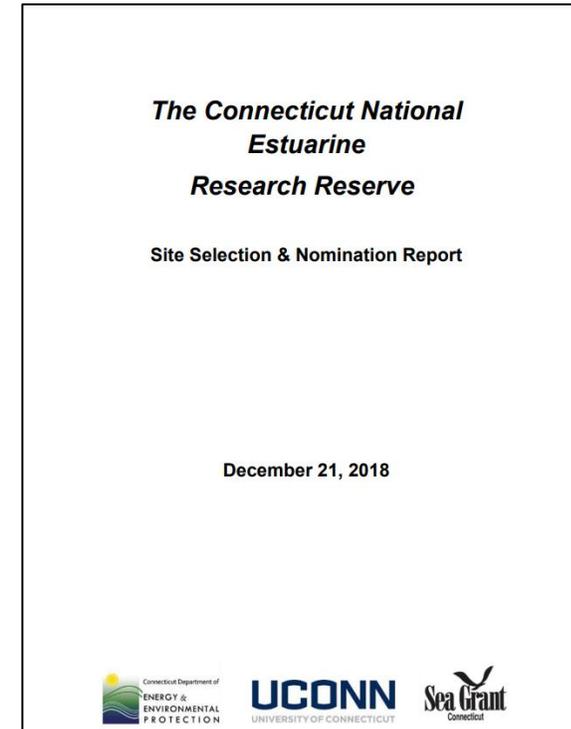
Key Steps and Roles

Bridget Faust-Accola

NOAA Office for Coastal Management

Next Steps in the Site Selection and Nomination Process

1. Site nomination document preparation (state designation team)
2. Submittal of site nomination document to NOAA (Office of Governor Evers)
3. Review of site nomination document (NOAA)
4. Acceptance or rejection of site nomination (NOAA)



Designation Process Milestones and Roles



Federal-State Partnership

State role

- Land ownership and management
- Reserve staff members
- Program implementation
- Funding (30 percent match)

Federal role

- National policy and program guidance
- Technical assistance
- Program coordination
- Funding (70 percent)



Questions?

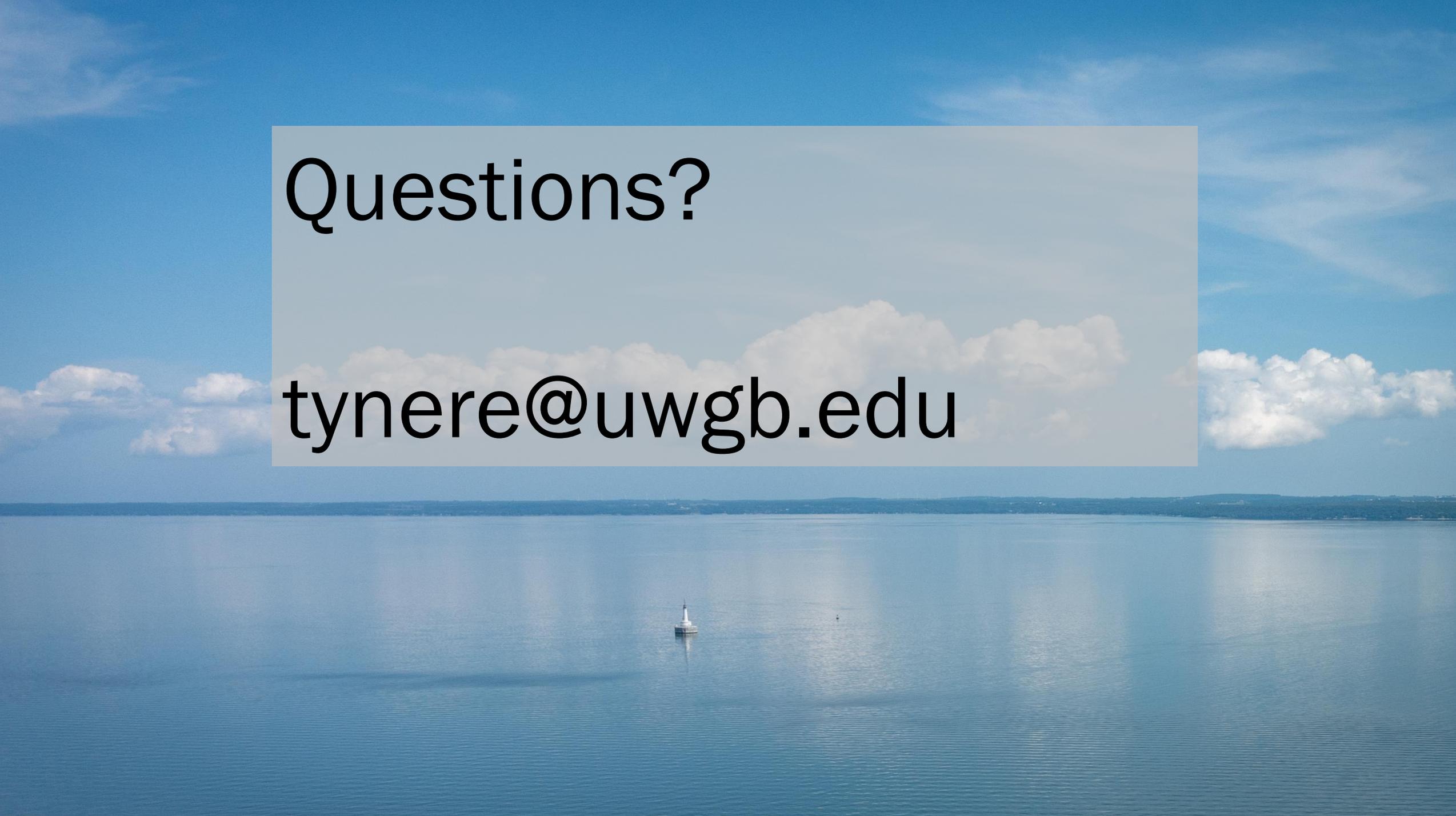
Bridget.Faust@noaa.gov

NEXT STEPS FOR CONTRIBUTING FEEDBACK

- **Tuesday, May 17th 2-3 pm (cst)** - Virtual question-and-answer session for more in-depth discussion of candidate natural areas
- Revisiting the candidate natural areas - email Emily Tyner (tynere@uwgb.edu)

Bay of Green Bay NERR Designation Timeline

2022	2023	2024	End of 2024	
Select NERR Sites - Natural Areas	Select NERR - Education and Visitor Center location		Finding and Record of Decision	Designation
	Write NERR Management Plan			
	Prepare Environmental Impact Statement (with NOAA)	Develop NOAA-State MOUs		



Questions?

tynere@uwgb.edu