

Bay of Green Bay National Estuarine Research Reserve Designation Process

Public Scoping Meeting
March 19, 2024



UNIVERSITY of WISCONSIN
GREEN BAY

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 Community Band of Mohican Indians, and the Brothertown Indian Nation.

We acknowledge the First Nations Peoples of Wisconsin.

AGENDA

- Welcome and Introductions - **State**
- Overview of the Research Reserve System - **NOAA**
- Overview of Progress To Date - **State**
- What comes next –
 - Draft Environmental Impact Statement (DEIS) – **NOAA**
 - Draft Management Plan - **State**
- Questions and Answers - **NOAA**

UW-Green Bay State Lead

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Dean
Austin E. Cofrin School of Business
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**GREEN BAY
NATIONAL ESTUARINE
RESEARCH RESERVE**



Regional enthusiasm

- **128 presentations with 2400 community members**
- **9 resolutions of support**

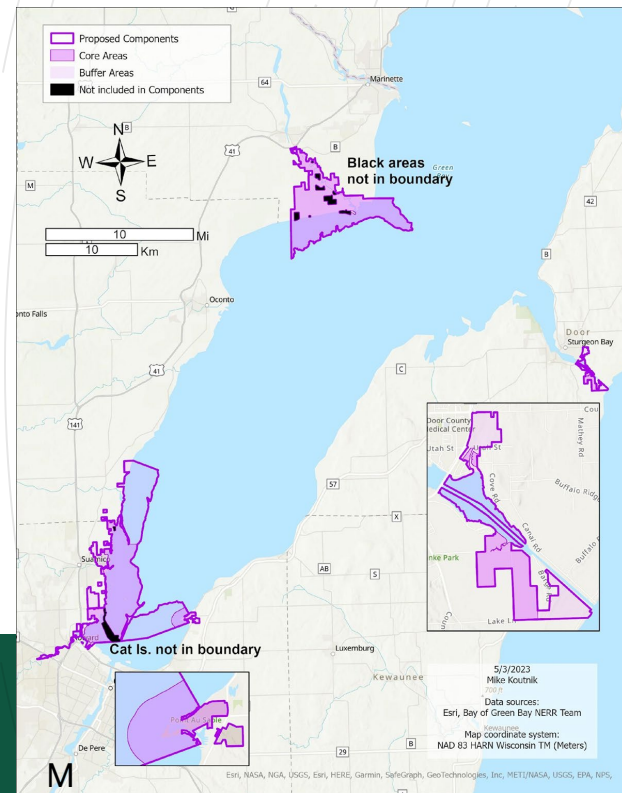
What will comprise the Bay of Green Bay NERR?

Natural Areas

Programs

Visitor & Education Center

~Post designation





Draft mission: To celebrate and advance community interests, opportunities, investments, and connections to the region's globally significant and unique freshwater resource through innovative and collaborative research, education, stewardship, and outreach activities that restore and sustain healthy, resilient, and working estuaries.

What is a public scoping meeting?



Meeting Objectives

Participants understand . . .

1. What a research reserve is, designation process, and where we are in that process.
2. Nominated site, why it was selected, and what makes it representative.
3. Next steps in designation process, why it matters, and how to engage.

NOAA and the University of Wisconsin-Green Bay understand . . .

1. How nominated site is being used, designation-related concerns, and alternatives to consider in the environmental impact statement.
2. What proposed reserve should focus on and who wants to be involved.

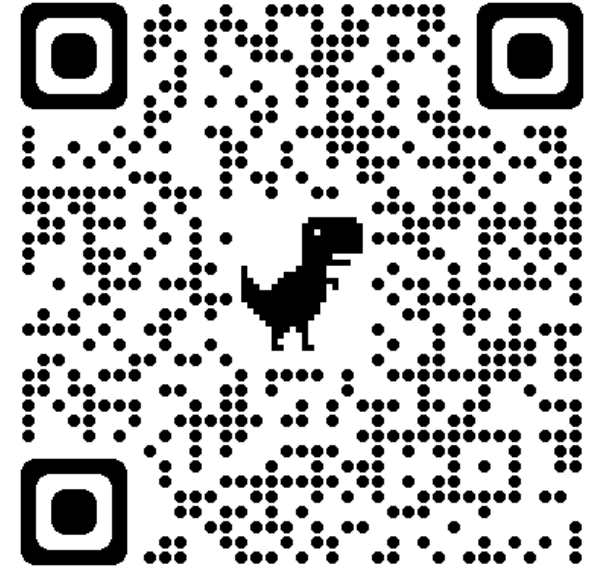


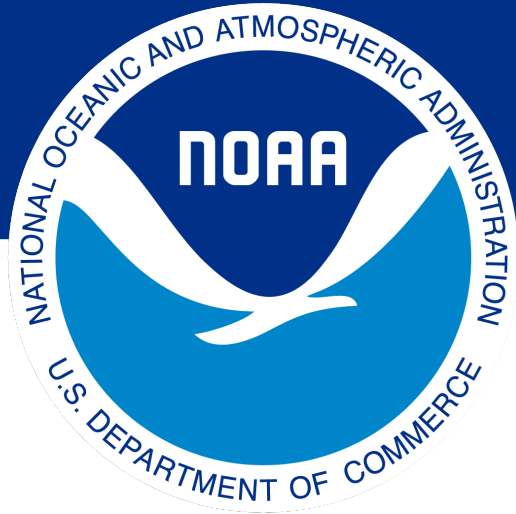
How to Submit a Public Comment

1. Submit a comment during this meeting
2. Submit via *Regulations.gov* (link or QR code):
[regulations.gov/document/NOAA-NOS-2024-0006-0001](https://www.regulations.gov/document/NOAA-NOS-2024-0006-0001)
3. Submit by mail:

Bridget Faust-Accola
Office for Coastal Management
1735 Lake Drive West
Chanhassen, MN 55317
ATTN: Bay of Green Bay Research Reserve

**Written comments must be submitted or postmarked
no later than 11:59 p.m. Eastern on April 19, 2024**





NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM

Erica Seiden

Bridget Faust-Accola

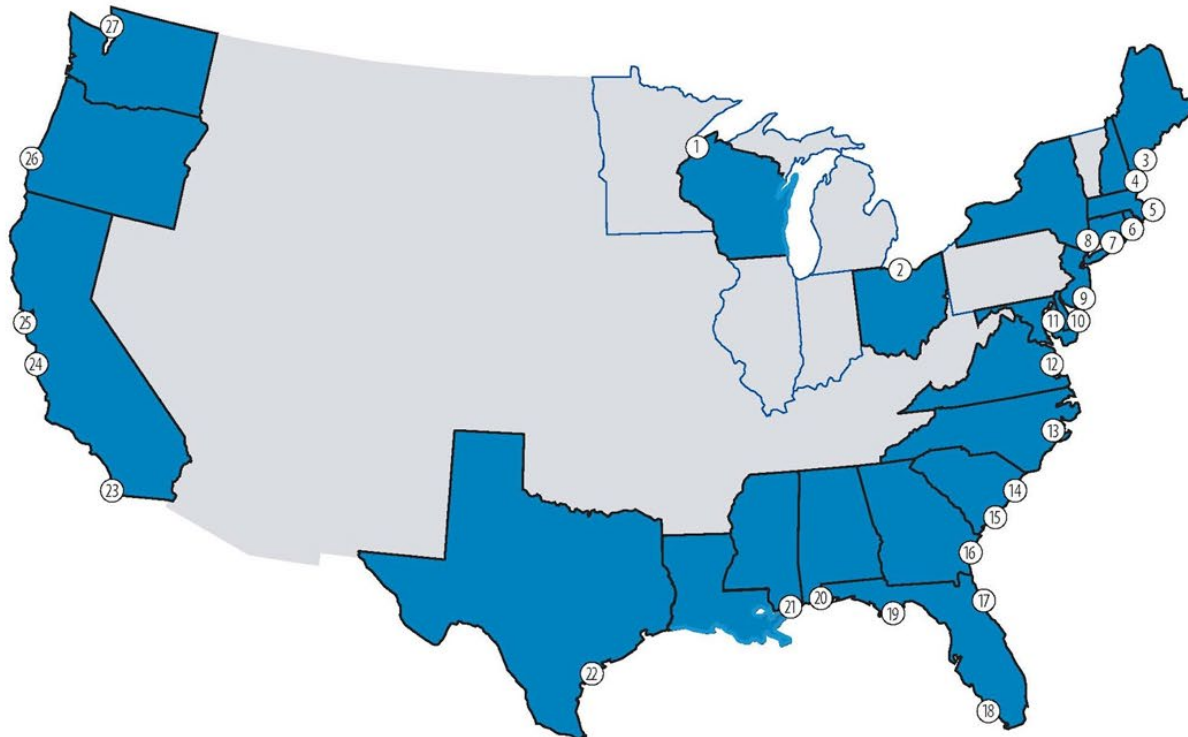
Chiara Zuccarino-Crowe

Public Scoping to Develop a Draft Environmental Impact Statement for Proposed
Bay of Green Bay National Estuarine Research Reserve



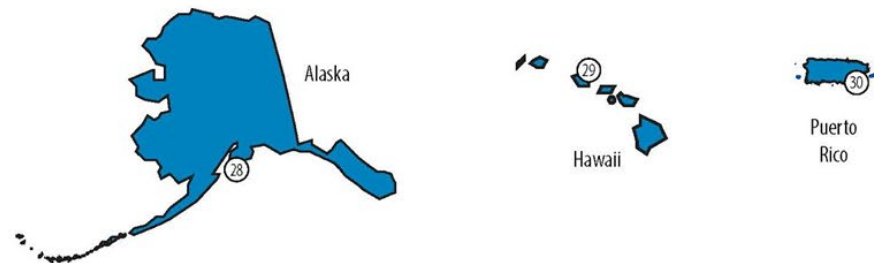
NATIONAL ESTUARINE RESEARCH RESERVES

A Network of 30 Protected Places



- Great Lakes
 - 1. Lake Superior, Wisconsin
 - 2. Old Woman Creek, Ohio
- Northeast
 - 3. Wells, Maine
 - 4. Great Bay, New Hampshire
 - 5. Waquoit Bay, Massachusetts
 - 6. Narragansett Bay, Rhode Island
 - 7. Connecticut
- Mid-Atlantic
 - 8. Hudson River, New York
 - 9. Jacques Cousteau, New Jersey
 - 10. Delaware
 - 11. Chesapeake Bay, Maryland
 - 12. Chesapeake Bay, Virginia
- Southeast
 - 13. North Carolina
 - 14. North Inlet-Winyah Bay, South Carolina
 - 15. ACE Basin, South Carolina
 - 16. Sapelo Island, Georgia
 - 17. Guana Tolomato Matanzas, Florida
- Gulf of Mexico
 - 18. Rookery Bay, Florida
 - 19. Apalachicola, Florida
 - 20. Weeks Bay, Alabama
 - 21. Grand Bay, Mississippi
 - 22. Mission-Aransas, Texas
- West
 - 23. Tijuana River, California
 - 24. Elkhorn Slough, California
 - 25. San Francisco Bay, California
 - 26. South Slough, Oregon
 - 27. Padilla Bay, Washington
 - 28. Kachemak Bay, Alaska
- Pacific
 - 29. He'eia, Hawai'i
- Caribbean
 - 30. Jobos Bay, Puerto Rico

PROPOSED
 Bay of Green Bay, Wisconsin
 Louisiana



Over 1.4 Million Acres Protected

Vision: Resilient estuaries and coastal watersheds where human and natural communities thrive.



Mission: To practice and promote stewardship of coasts and estuaries through innovative research, education, and training using a place-based system of protected areas.



Locally Relevant, Nationally Significant



People



Science



Protected Places



System-Wide and National Programs

Research

- System-Wide Monitoring Program
- Science Collaborative Program
- Margaret A. Davidson Fellowship

Stewardship

- *Stewardship, conservation, restoration*

Training

- Coastal Training Program

Education

- K through 12 Estuarine Program
- Teachers on the Estuary



A Partnership Program

State role

- Land protection and stewardship
- Staffing and partnerships
- Program coordination and implementation
- Funding (30 percent)

Federal role

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



Fiscal Year 2024 Funding

Reserve Operations: \$33.3 Million

- Operations and management: ~\$880,967 per reserve
- Davidson Fellowship: \$1.8 million
- Science Collaborative: \$3.9 million

Construction and Land Acquisition: \$8.5 Million

- Construction planning and infrastructure
- Land acquisition
- Vessels and vehicles



Bay of Green Bay NERR Designation Timeline

2016	Fall 2020	2021		2022		2023
Explore opportunity for a Green Bay NERR	Establish NERR Steering Committee	Establish Site Development and Site Evaluation Committees. Begin natural area site selection.		Select Natural Area Sites - submit to NOAA December 2022		NERR public outreach
<p>Steering Committee - Provide leadership and oversight to state designation; oversee activities of all committees; build state-wide regional support for the Bay of Green Bay NERR</p>						
		<p>Site Development Committee - Draft site selection criteria; pre-screening to evaluate suitable geography for natural area sites; identify optimal candidate sites</p>		<p>Site Evaluation Committee - Evaluate and recommend natural area sites to the Steering Committee; delineate boundaries and core/buffer areas of proposed natural area sites</p>		

The main focus to-date was to propose the Bay of Green Bay NERR natural areas

Committees were formed to:

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

Regional enthusiasm

- **128 presentations with 2400 community members**
- **9 resolutions of support**

Members include representation from:

Oneida Nation

Wisconsin Sea Grant

Ducks Unlimited

Microsoft TechSpark Wisconsin

Calumet County Dept. of Administration

Marinette School District

Friends of Gibraltar Schools

University of Wisconsin- Madison

Menominee Indian Tribe of Wisconsin

Department of Natural Resources

University of Wisconsin-Milwaukee

Wisconsin Coastal Management Program

Door County Soil & Water Conservation

University of Wisconsin-Green Bay

WI Tribal Conservation Advisory Council

Wisconsin Wetland Association

UW-Extension

US Fish and Wildlife Service

The Nature Conservancy

NEW Water

Fincanterri Marine Group

NOAA Great Lakes Environmental Research Lab

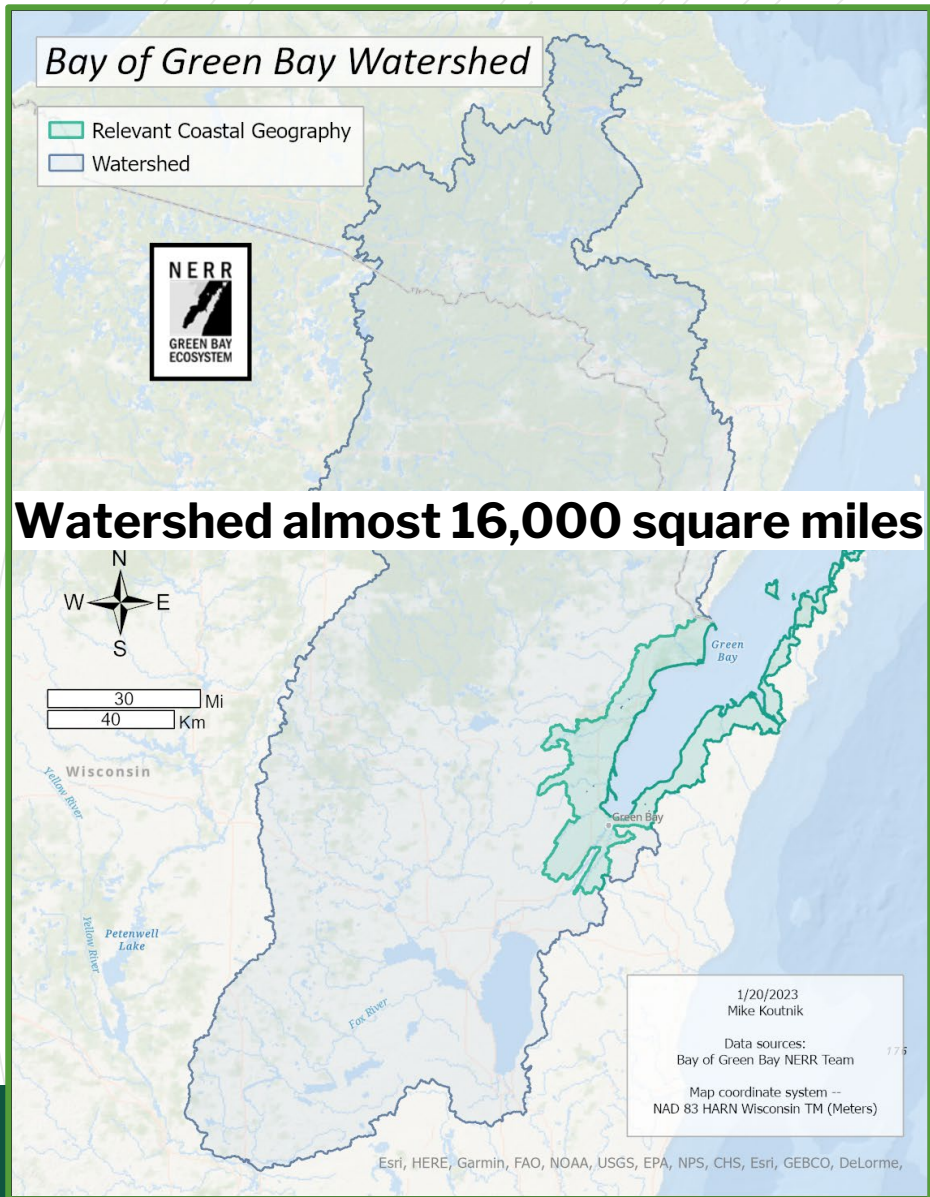
Brown County Port & Resource Recovery

Committees represent NE Wisconsin



UNIVERSITY of WISCONSIN
GREEN BAY

THE PROCESS TO SELECT THE NATURAL AREAS



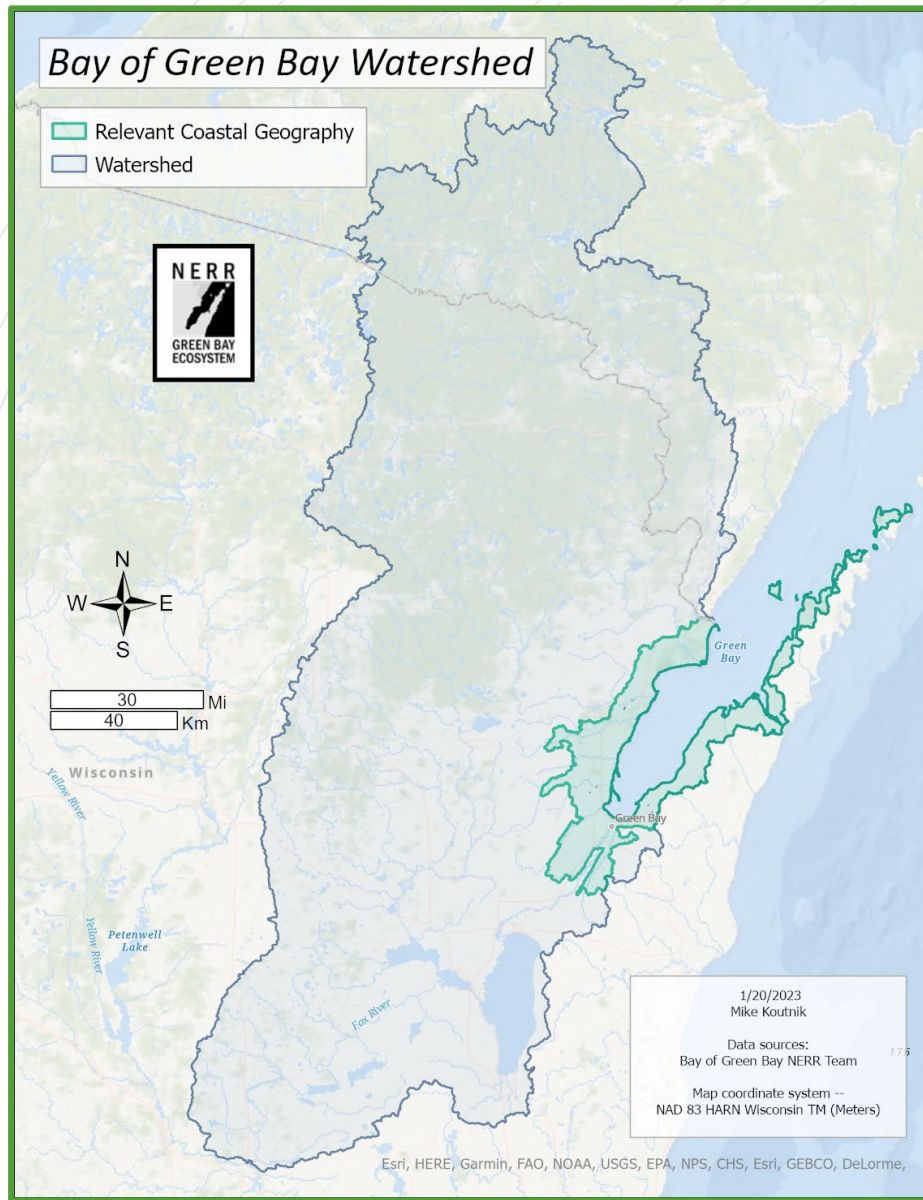
The goal of pre-screening was to narrow the universe of the possible to a subset of most likely natural area sites to represent the Bay of Green Bay Estuary

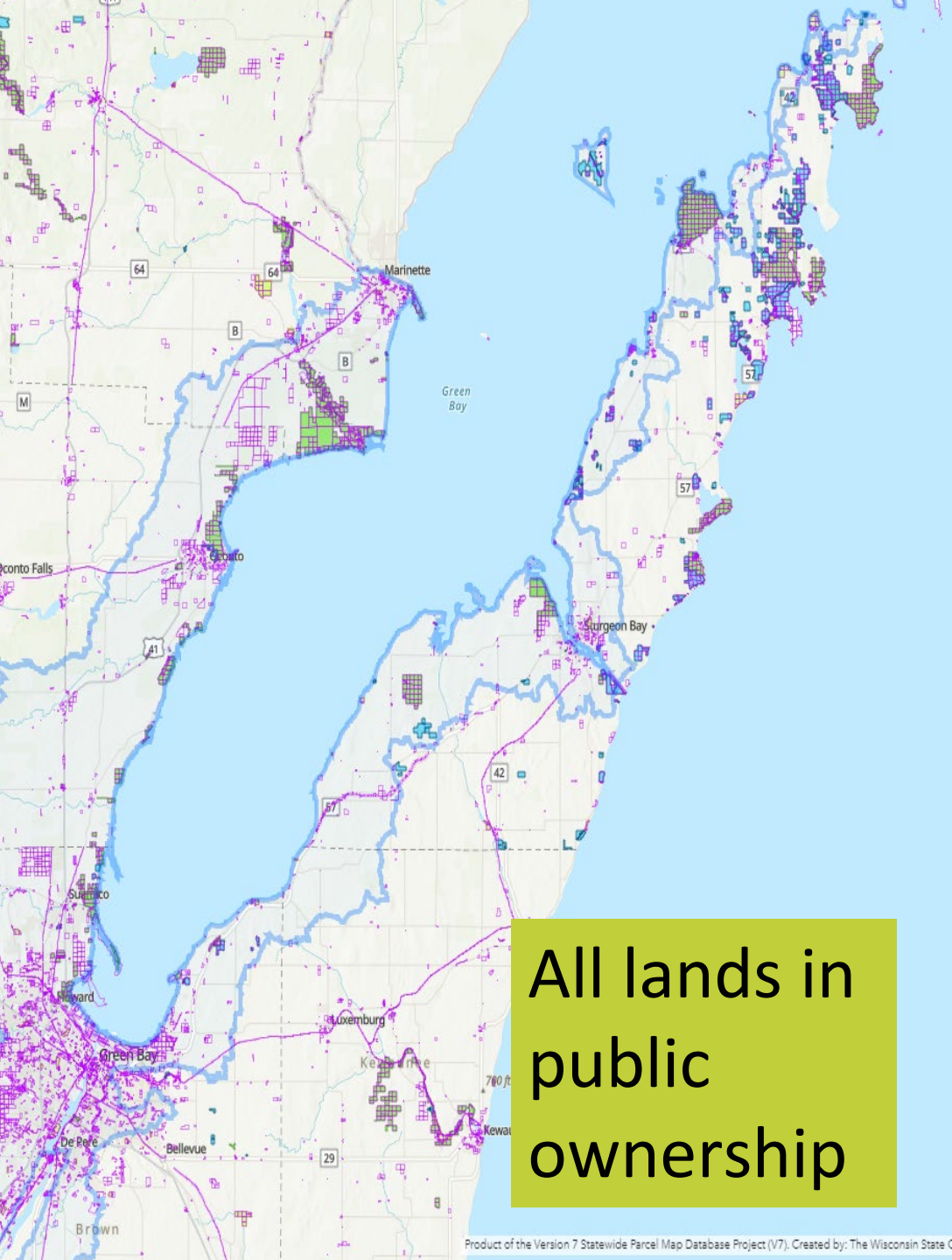


The Bay of Green Bay Estuary is a large, dynamic, and complex system

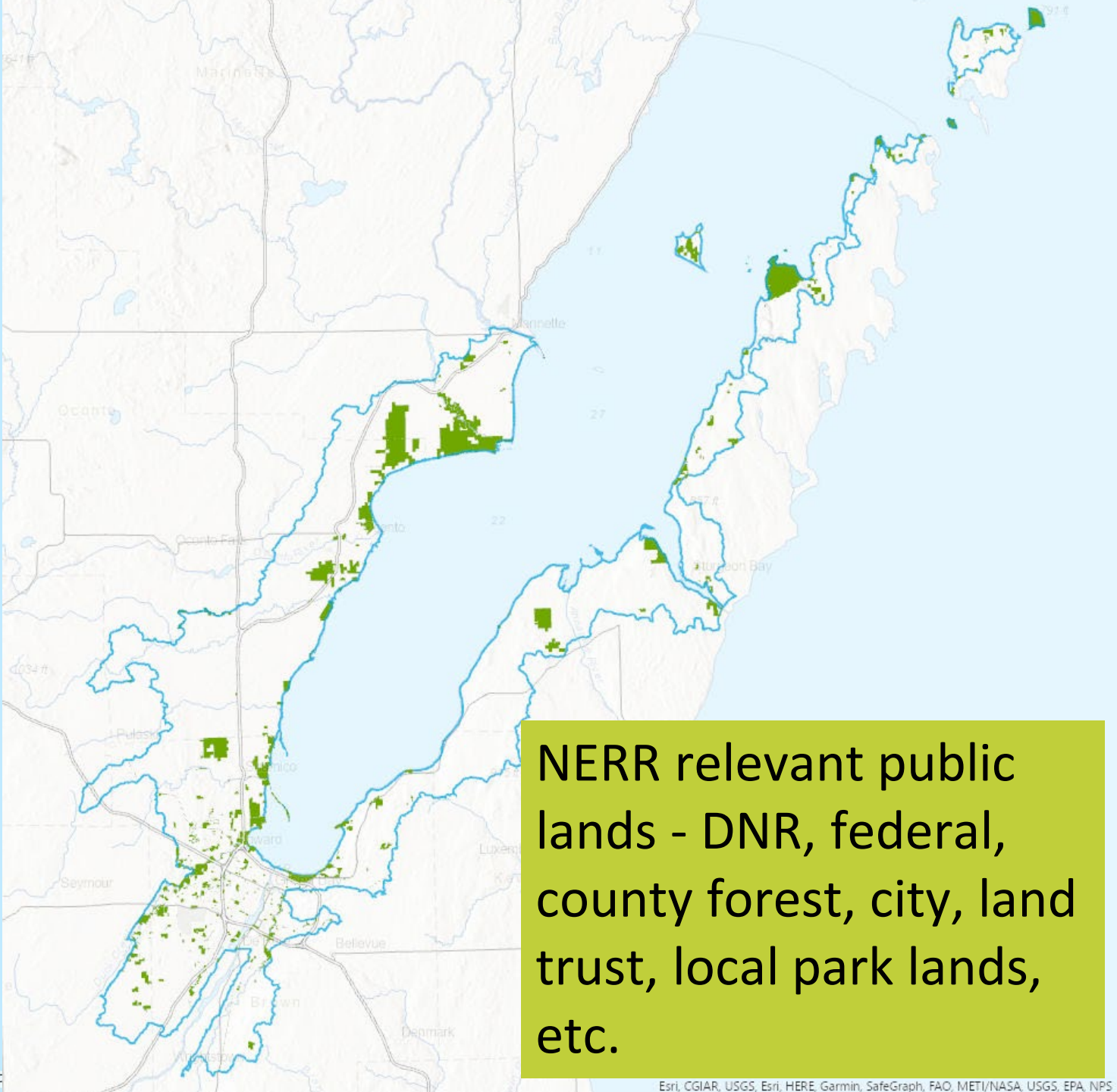
Site selection of natural areas must capture two important gradients:

1. The disturbance gradient from minimally impacted habitats to areas recently restored
2. The south-to-north gradient capturing the nutrient-rich waters of the Fox-Wolf watershed in the south meeting the nutrient-poor waters entering the bay from Lake Michigan

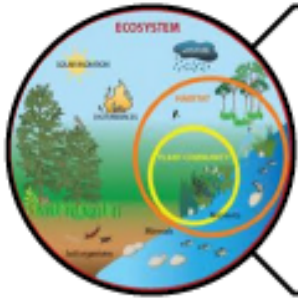




All lands in public ownership



NERR relevant public lands - DNR, federal, county forest, city, land trust, local park lands, etc.



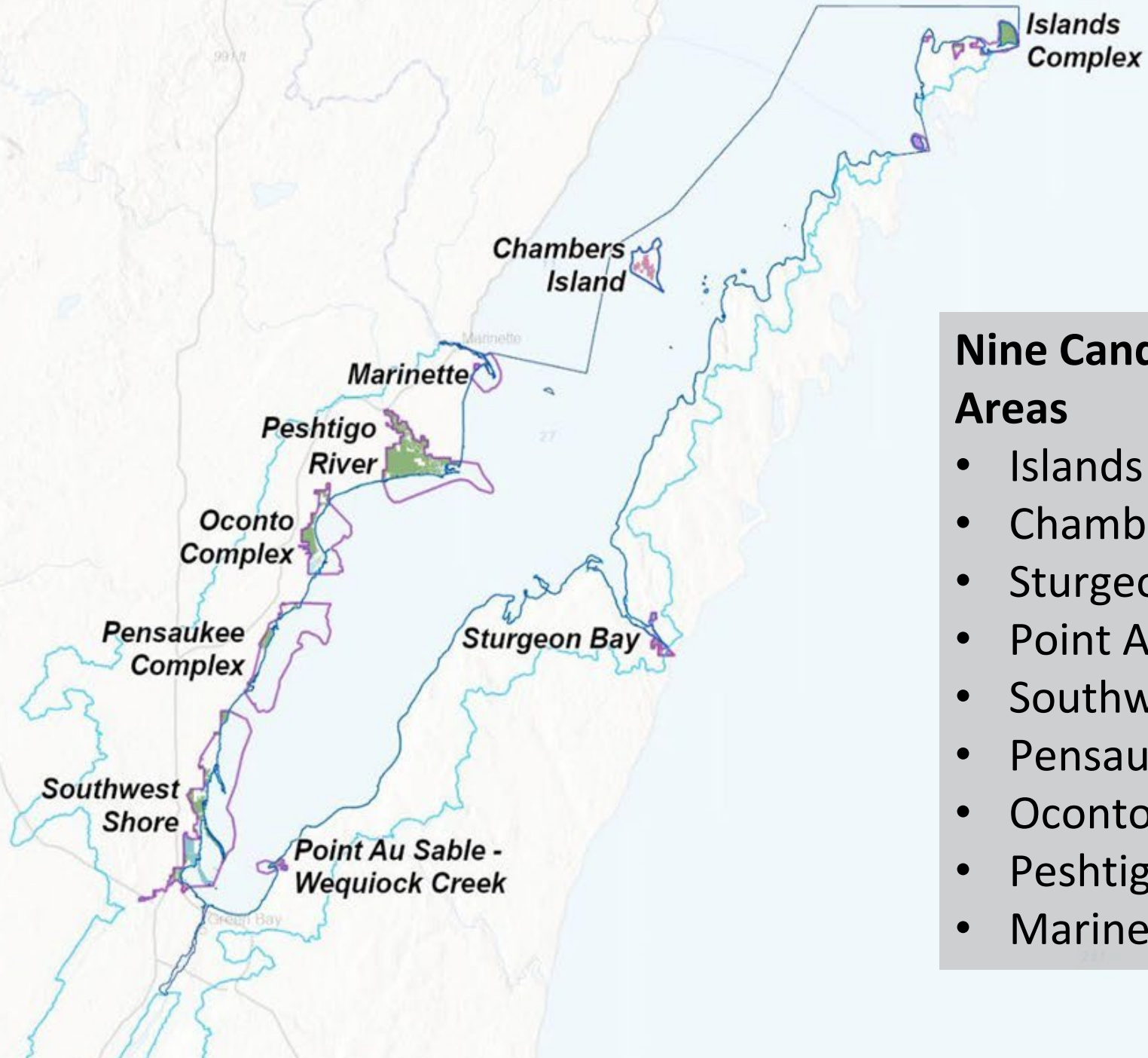
IDENTIFICATION OF POTENTIAL SITES THAT ARE REPRESENTATIVE
of the biogeography, suitable for long-term research and education, compatible with existing uses, and containing key land and waters to approximate an ecological unit. Look at potential sites within the entire biogeographic sub-region of the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

Pre-screening

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

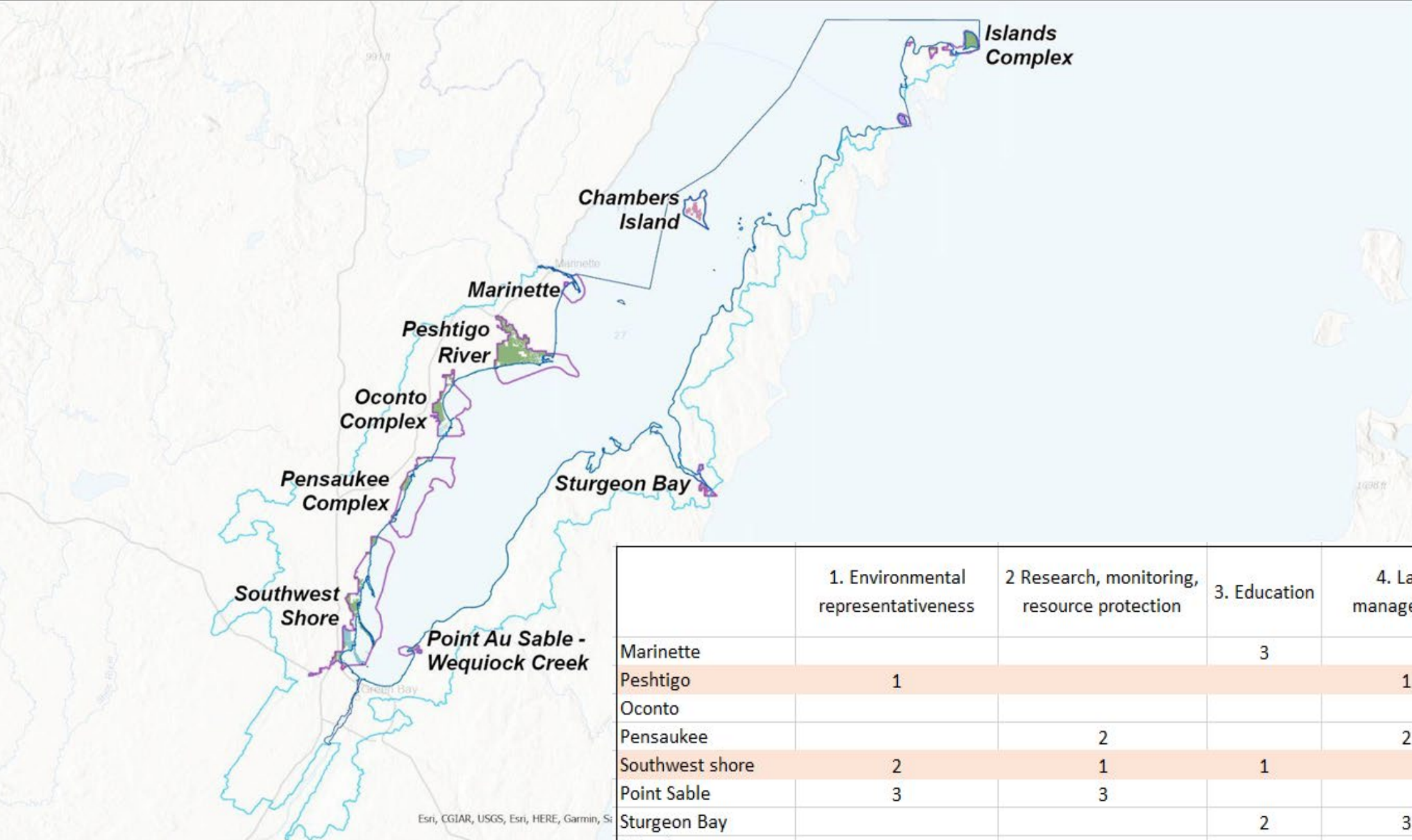
Four Pre-screening Criteria for the natural area sites:

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)



Nine Candidate Site Areas

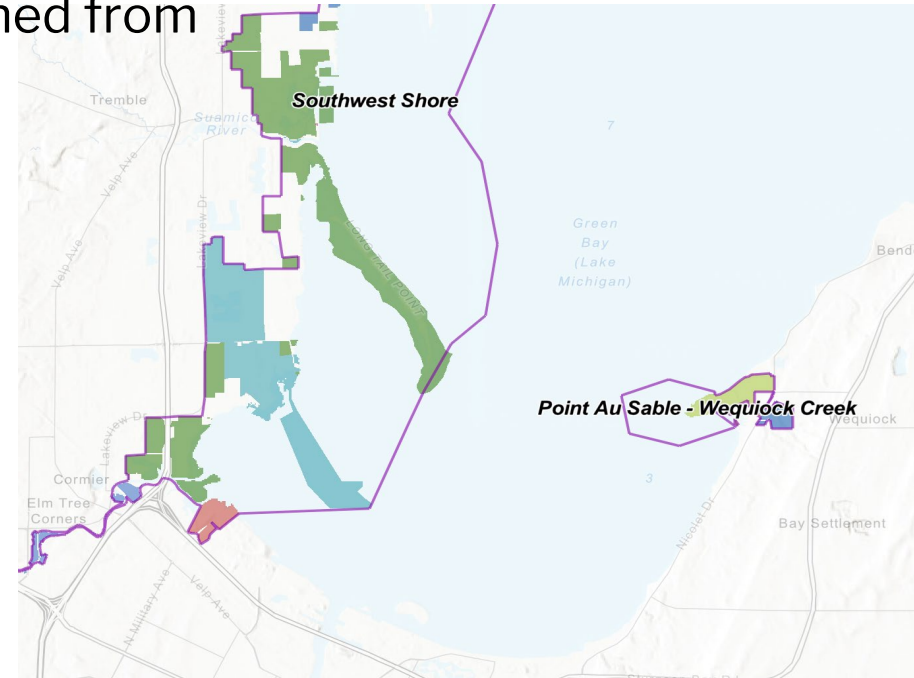
- Islands Complex
- Chambers Island
- Sturgeon Bay
- Point Au Sable
- Southwest Shore
- Pensaukee Complex
- Oconto Complex
- Peshtigo River
- Marinette



	1. Environmental representativeness	2 Research, monitoring, resource protection	3. Education	4. Land management	5. Resilience to Climate Change
Marinette			3		
Peshtigo	1			1	2
Oconto					3
Pensaukee		2		2	
Southwest shore	2	1	1		1
Point Sable	3	3			
Sturgeon Bay			2	3	
Islands					
Chambers Island					

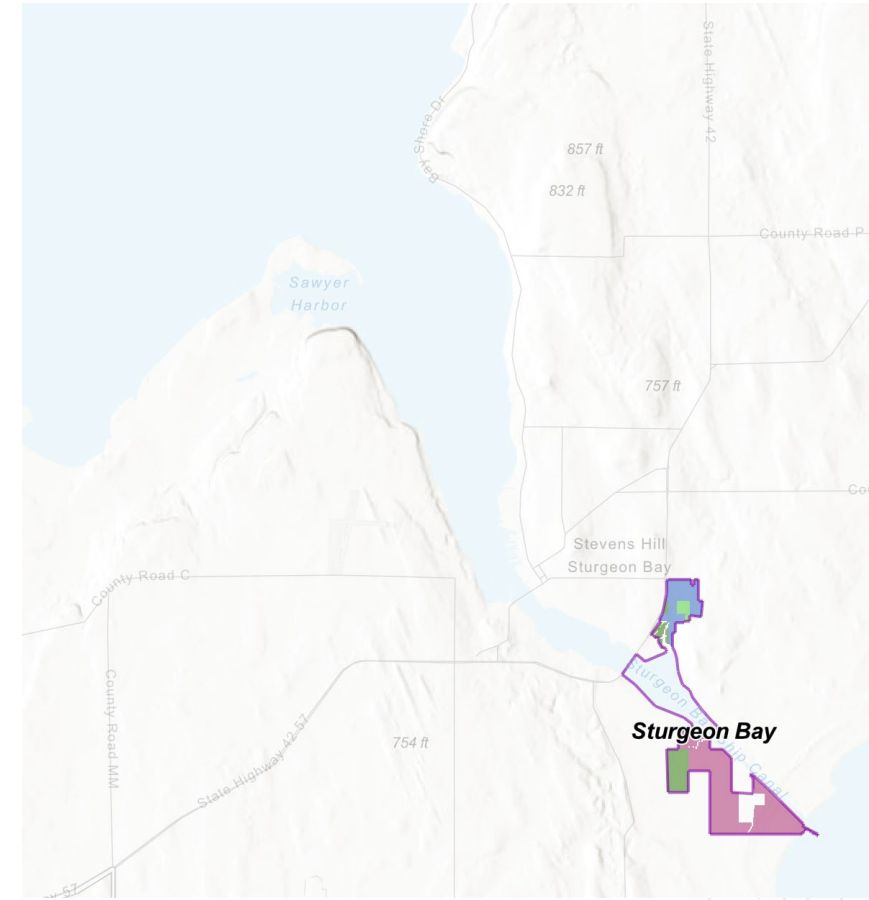
SWOT analysis: Point au Sable and Wequiock Creek

- Adds East shore representation of the estuary, adds different geology
- Adds some water circulation up the east shore
- Was historically part of the lower bay complex that stretched from southwest shore to Point au Sable
- Includes UW-Green Bay as a land manager
- Site has important Tribal history and involvement
- Close to university students and resources



SWOT analysis: Sturgeon Bay

- Adds more complete water circulation patterns up the east shore
- Opportunity for outreach, education, stewardship to Door County tourists, citizens, students
- Captures additional unique habitats and species
- Strawberry Creek and Big Creek add shorter river systems with different geology

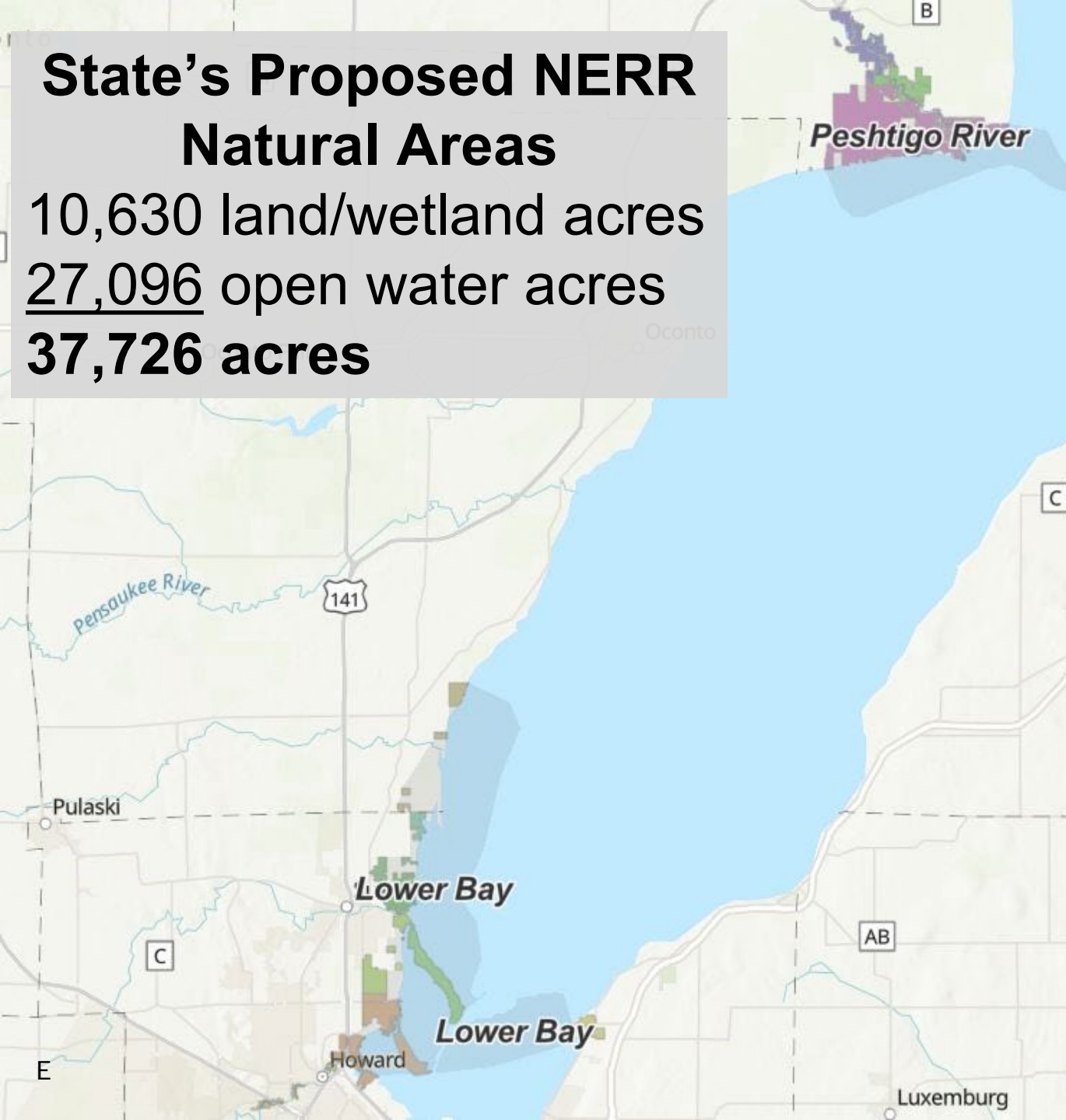


State's Proposed NERR Natural Areas

10,630 land/wetland acres

27,096 open water acres

37,726 acres



Land-holding partner	Acres
WI DNR	8,800 (81% of lands)
Brown County	1,430 (12%)
Door County Land Trust	425 (4%)
University of Wisconsin System	191 (2%)
City of Green Bay	129 (1%)
Crossroads at Big Creek	108 (1%)
Northeast Wisconsin Land Trust	107 (1%)
Sturgeon Bay School District, Village of Howard, Suamico, Scott	≤90 acres each

Bay of Green Bay NERR Designation Timeline

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Explore opportunity for a Green Bay NERR	Establish NERR Steering Committee	Establish Site Development and Site Evaluation Committees. Begin natural area site selection	Select Natural Area Sites - submit to NOAA December 2022	NERR public outreach	NOAA accepts nomination from the State of Wisconsin

LOCAL

Bay of Green Bay one step closer to being federally protected. Here's what that means



Danielle DuClos

Green Bay Press-Gazette

Published 5:07 a.m. CT Feb. 1, 2024 | Updated 5:07 a.m. CT Feb. 1, 2024

ENVIRONMENT, NEWS, WATERS

Bay of Green Bay is one step closer to being designated as a research reserve

Bay of Green Bay could join a network of 30 coastal sites that protect and study estuaries

BY DANIELLE KAEDING • FEBRUARY 2, 2024

NOAA Accepts Bay Of Green Bay NERR Natural Areas

By Door County Pulse, February 1st, 2024

National estuarine nomination for Bay of Green Bay accepted





**Programmatic
partnerships not
restricted by
designation
boundaries**

Designation Process and Milestones



Draft Environmental Impact Statement

CHAPTER 1: National context

CHAPTER 2: Purpose of and need for action

CHAPTER 3: State context

CHAPTER 4: Alternatives, including the proposed action

CHAPTER 5: Affected environment

CHAPTER 6: Environmental consequences

CHAPTER 7: Compliance with other environmental review requirements

CHAPTER 8: List of preparers

Literature cited

Appendices



Chapter 4: Impact Statement Alternatives

Potential Alternatives

- No action
- Nominated site
- Boundary alternatives
 - Additions or subtractions to extent of site
 - Different core and buffer areas
- Other sites previously considered but eliminated

Key Considerations

- Representative of Green Bay estuary
- Publicly held or accessible lands
- Within Wisconsin lands and waters
- Reserve size is manageable given available state and federal resources



Reserve System Core and Buffer Concepts

Core Areas

- Key land and water areas representing diversity of estuarine ecosystem
- Core must be under a level of control sufficient to ensure long-term viability of reserve

Buffer Areas

- Areas adjacent to or surrounding core areas
- Protect core area's integrity and provide additional protection for estuarine-dependent species
- Areas where facilities may be located



NOAA Team for Drafting Environmental Impact Statement

- Office for Coastal Management Designation Lead
- Office for Coastal Management National Estuarine Research Reserve System Program Manager
- Office for Coastal Management NEPA and Environmental Compliance Team
- Office for Coastal Management Communications Team
- Office of General Council for Oceans and Coasts Team

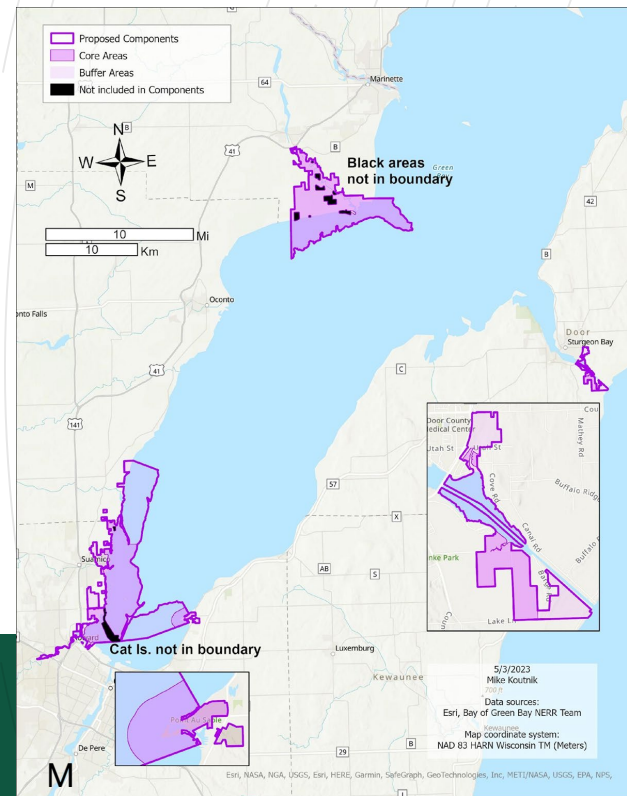


What will comprise the Bay of Green Bay NERR?

Natural Areas

Programs

Visitor & Education Center




~ Post designation

GB NERR 5-year Management Plan

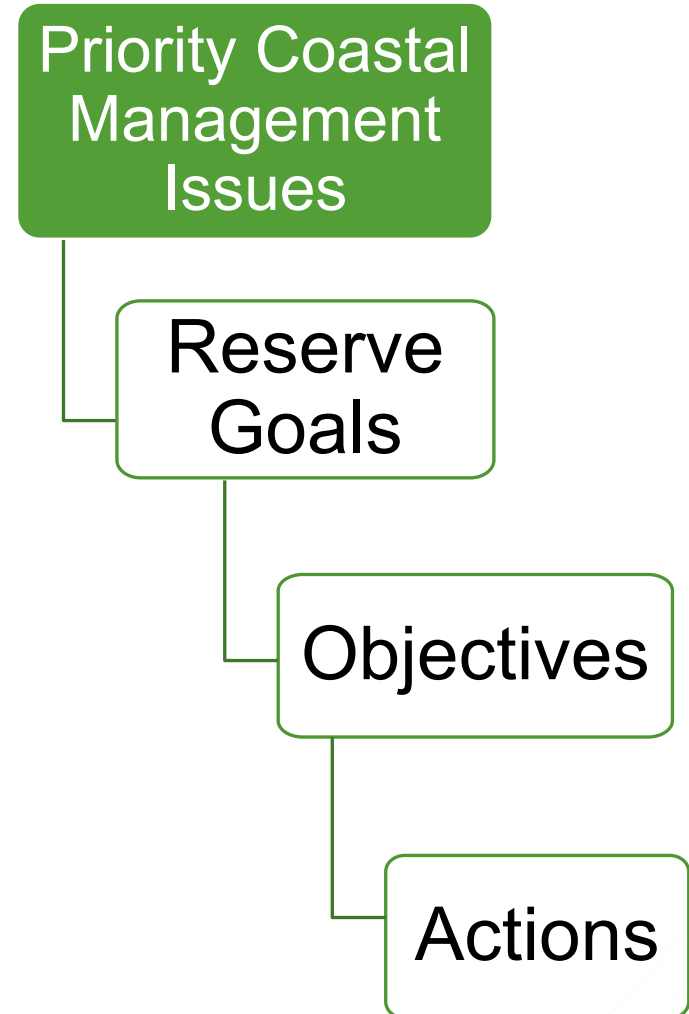
Components required by NOAA:

Focus of partner and public feedback

- The Strategic Plan 
 - Vision, mission, priority coastal management issues
- Reserve System Program Foundations
 - Research – Capacities and delivery; needs and opportunities
 - Education
 - Coastal Training Program
 - Stewardship
- Administrative Plan
 - Staffing, strategic partnerships, advisory committees
- Facility Development and Improvement Plan
- Resource Protection Plan
 - Management authorities; allowable uses
- Public Access and Visitor Use Plan
 - Current public access; public access challenges
- Land Acquisition Plan
 - Priority acquisition areas

DRAFT PRIORITY COASTAL MANAGEMENT ISSUES

- Preparing Great Lakes communities for long-term ecosystem change and variability.
- Restoring sustainable land-water connections.
- Preserving biodiversity through improved ecological integrity and ecosystem resiliency.
- Enhancing the bay of Green Bay's connection to quality of life and sense of place.



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Green Bay National Estuarine Research Reserve



NERR in the News

Program Updates & Info

Site Selection & Timeline >

Get Involved

FAQs

Fact Sheets & Videos

What is a National Estuarine Research Reserve?

The National Estuarine Research Reserve System (NERR) is a national network of 30 sites across the coastal US, including the Great Lakes, designed to protect and study estuaries and their coastal wetlands. The mission of the NERR System is, "To practice and promote stewardship of coasts and estuaries through innovative research, education, and training using a place-based system of protected areas." Established through the Coastal Zone Management Act, the reserves represent a partnership program between NOAA and the coastal states. NOAA provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners. For the Green Bay NERR, the University of Wisconsin-Green Bay is leading the designation process to protect the Green Bay ecosystem, with a program

Thank you for joining us at the Site-Selection Public Meeting. The presentation slides shared at the meetings are available when formally nominating a site or sites to NOAA.

uwgb.edu/nerr

Emily Tyner tynere@uwgb.edu

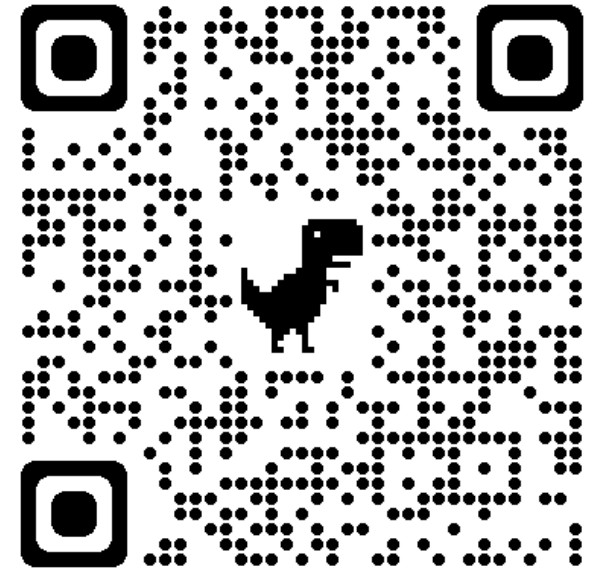


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Bridget Faust-Accola
Office for Coastal Management
1735 Lake Drive West
Chanhassen, MN 55317
ATTN: Bay of Green Bay Research Reserve

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Thoughts on what you heard today!

1. What do you think about the nominated site?
2. Are there any alternatives that NOAA should consider in the environmental impact statement?
3. What should NOAA know about nominated site or region more broadly as we begin to work on the environmental impact statement?
4. What issues or topics would you like the research reserve to focus on, if designated?



NOAA Contact Information

- Bridget Faust-Accola, Bay of Green Bay Reserve
Designation Lead
Bridget.Faust@noaa.gov
- Erica Seiden, National Estuarine Research Reserve
Program Manager
Erica.Seiden@noaa.gov

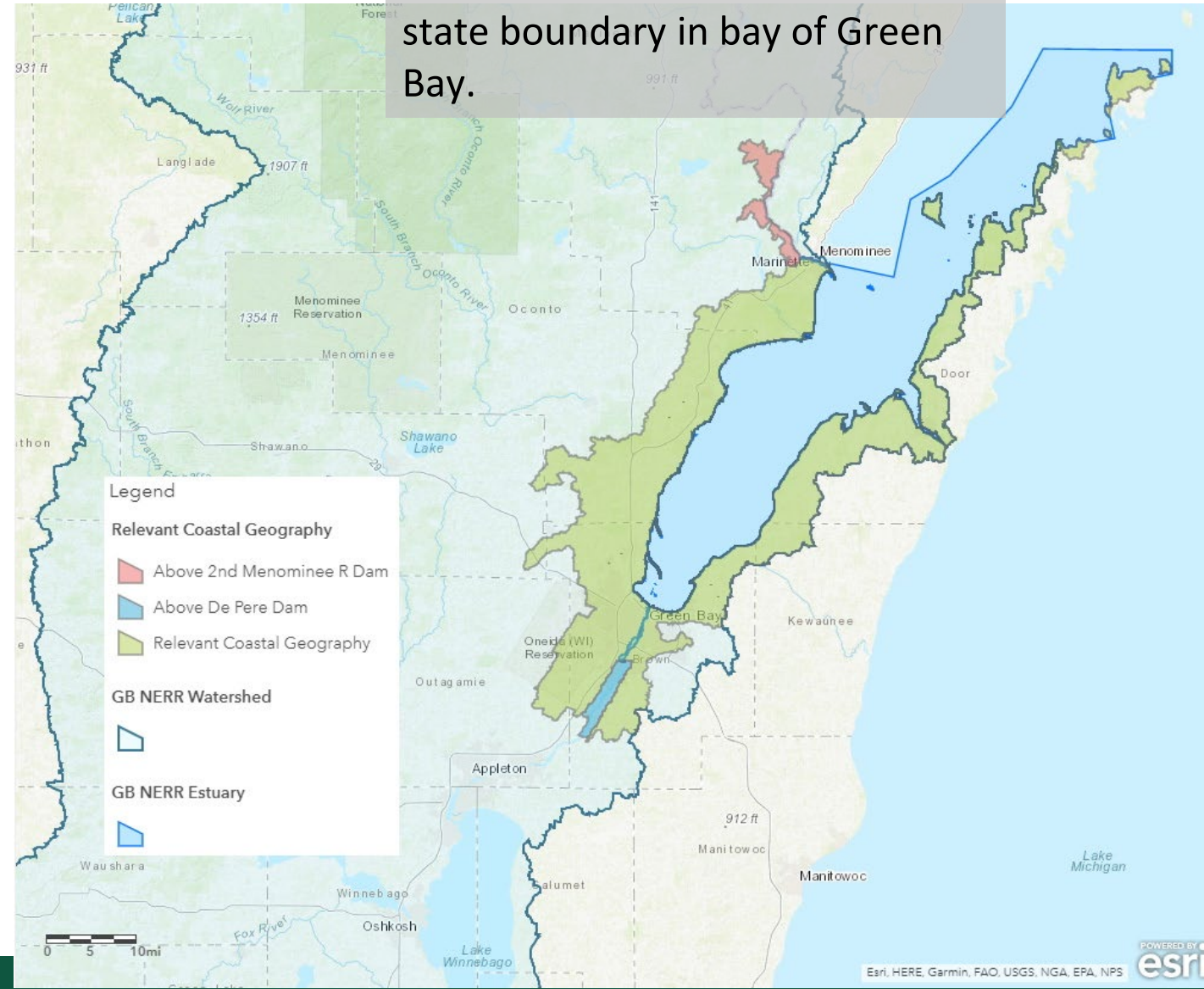




Watershed area that directly contributes surface runoff to Wisconsin waters of Green Bay.



Coastal HUC 12 watersheds and state boundary in bay of Green Bay.



Powered by Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS



I. Environmental Representativeness



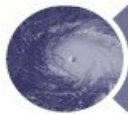
II. Value of the Site for Research, Monitoring, and Resource Protection



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



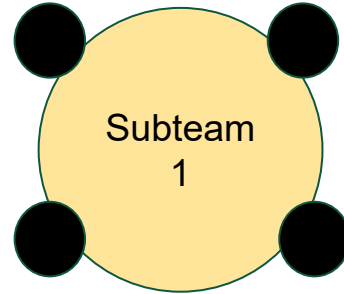
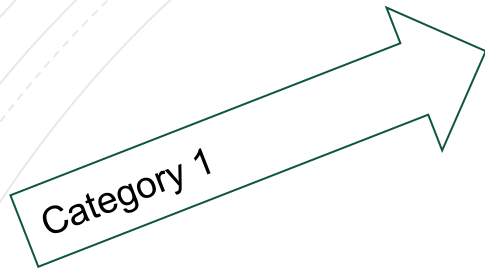
VI. Partnership Building



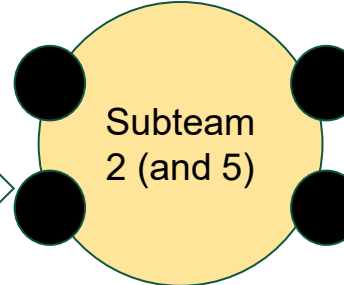
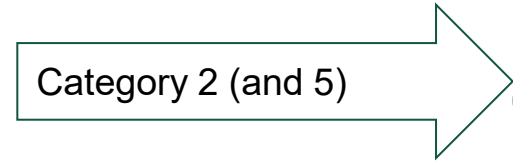
VII. Institutional Commitment

SITE SELECTION CATEGORIES – NATURAL AREAS

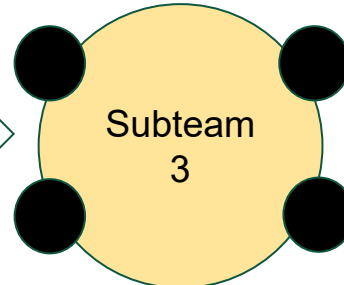
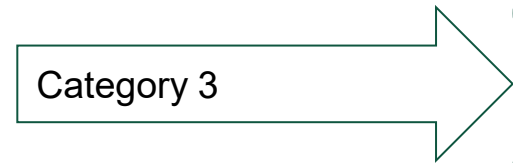
Bay of Green Bay
Site-Selection Criteria



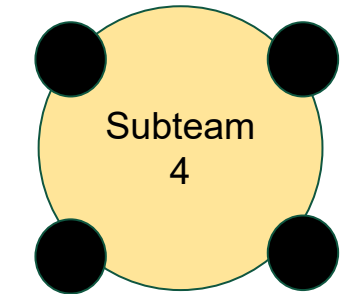
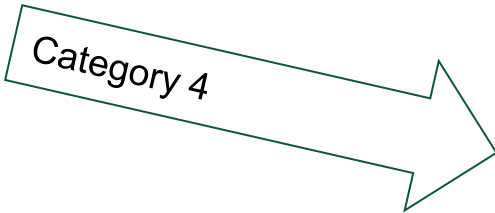
Scores
and Top
3



Scores and "Top 3"
for subteam's
specific category



Scores
and Top
3

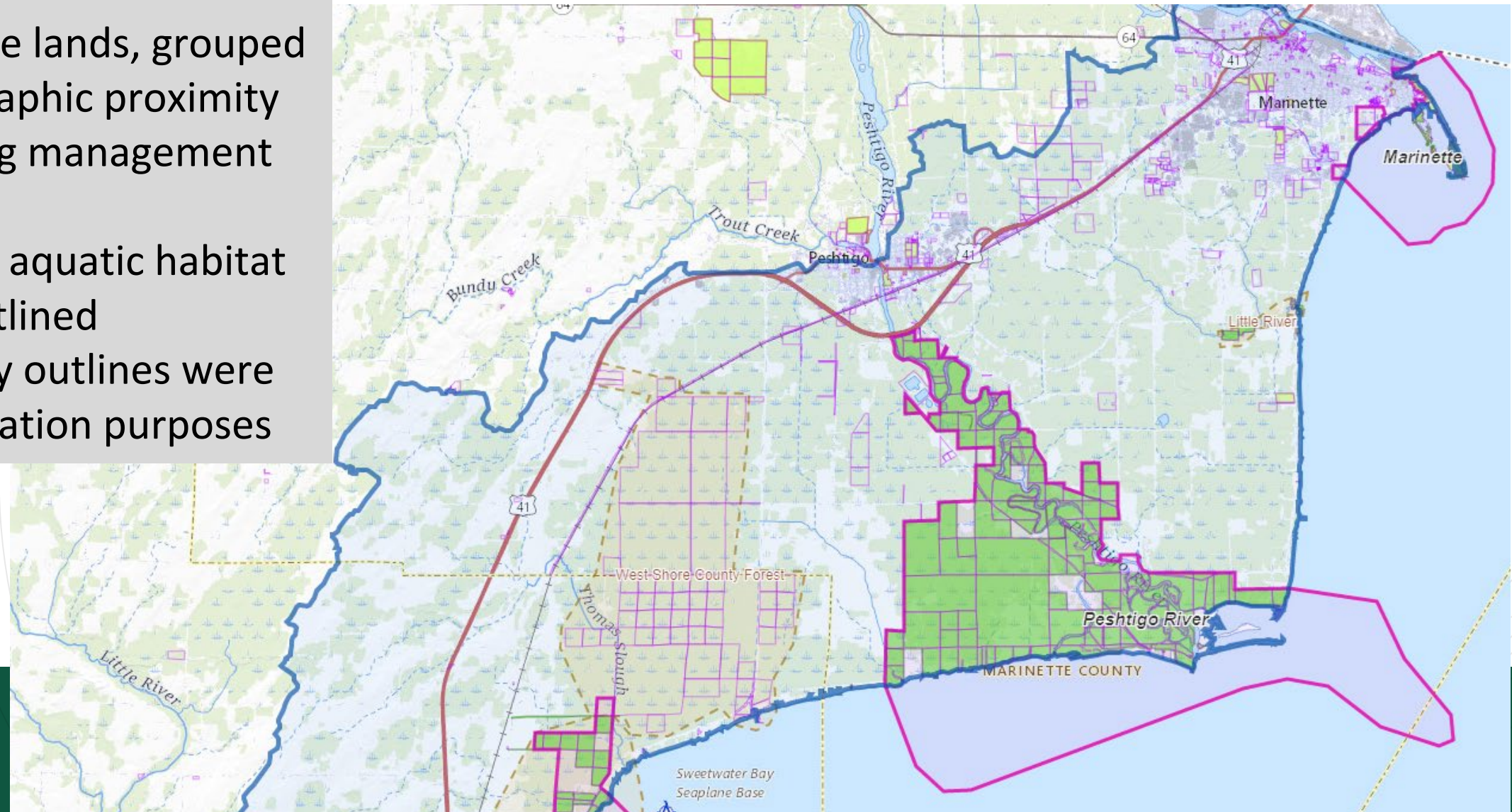


Scores
and Top
3

APPLYING CRITERIA

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



Why consider a third location?

What's Missing?

- East shore representation of the estuary
- Full water circulation patterns up the east shore
- Historical lower bay complex that stretched from west to (un-represented) east shore
- UW-Green Bay as a land manager
- Maximizing populations NERR is serving (e.g. opportunity for public engagement with large number of visitors through Door County)

Values

In living out the mission, the following values are fundamental:

- **Collaboration** – A recognition that the challenges and opportunities surrounding our waters are of a complexity and scale that necessitate strong partnerships and solutions embedded in community.
- **Holistic approaches** - A commitment to adopt multidisciplinary thinking and diverse perspectives to connect, know, and value the region's globally unique freshwater estuaries.
- **Generational perspectives** - Awareness that freshwater has shaped the history of the region's people, is shaping our lived experiences today, and will shape our future.
- **Learning** - A shared belief that membership in the National Estuarine Research Reserve System enables the Green Bay estuary to serve as a model system for testing new technologies, and for creating and contributing knowledge to restore and steward estuarine systems globally.

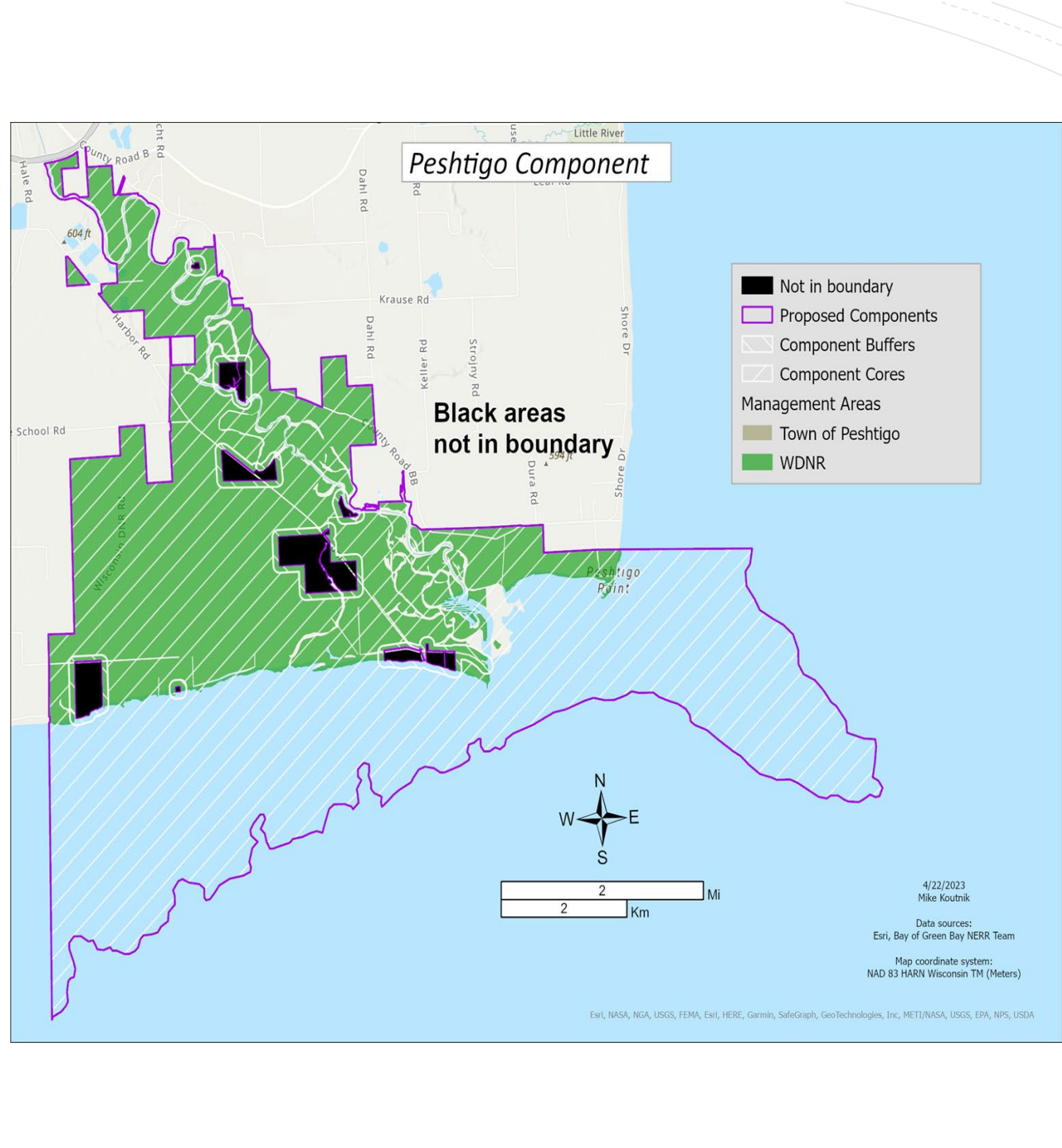
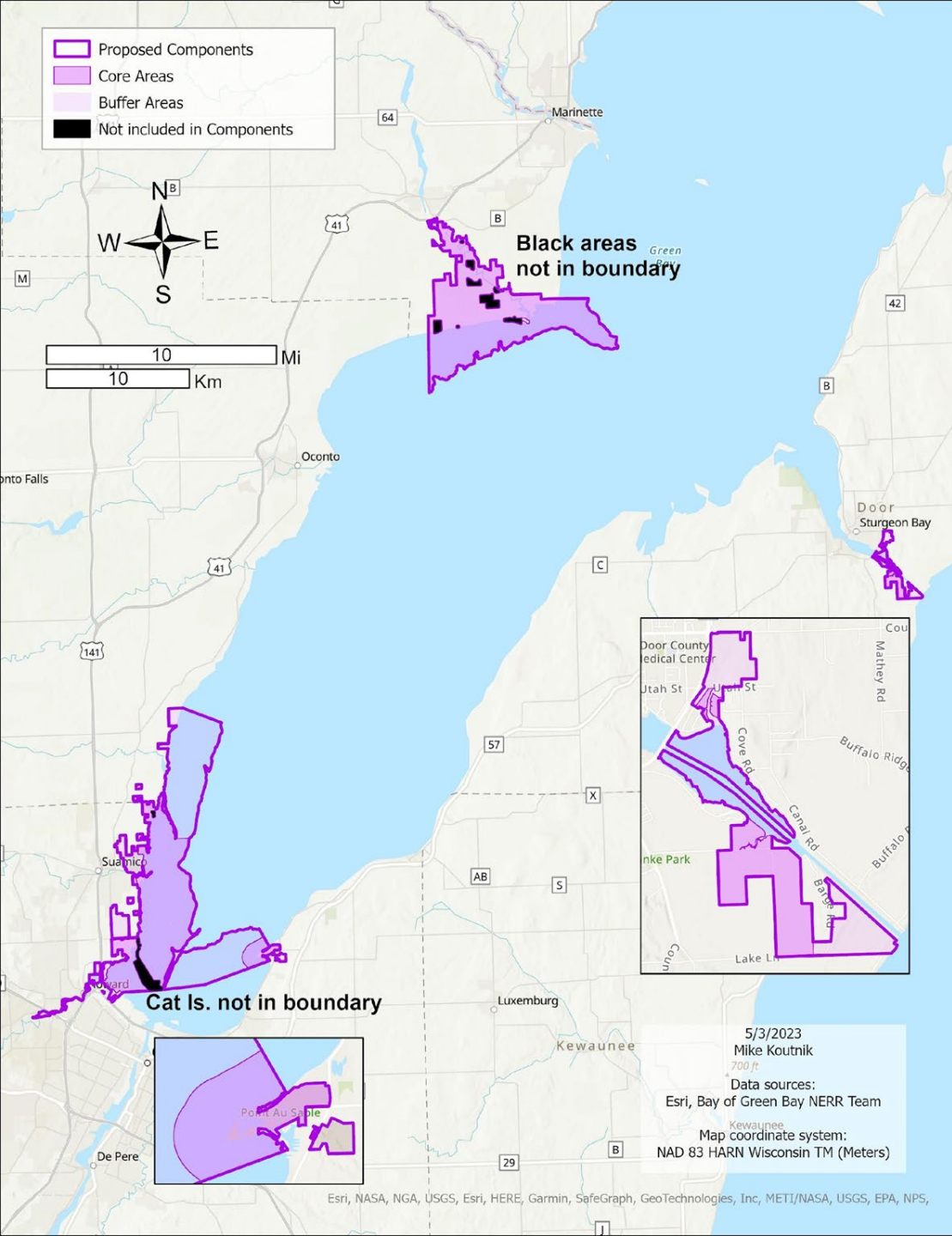
Vision

The Green Bay National Estuarine Research Reserve will gain national recognition as a hub for freshwater estuary research and large-scale restoration, as a testing ground for relevant, emerging technologies, and as a collaborative partner that integrates diverse perspectives and approaches for celebrating and learning about freshwater estuaries.



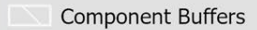

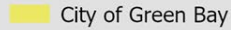

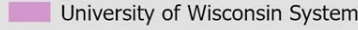

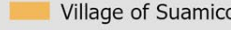



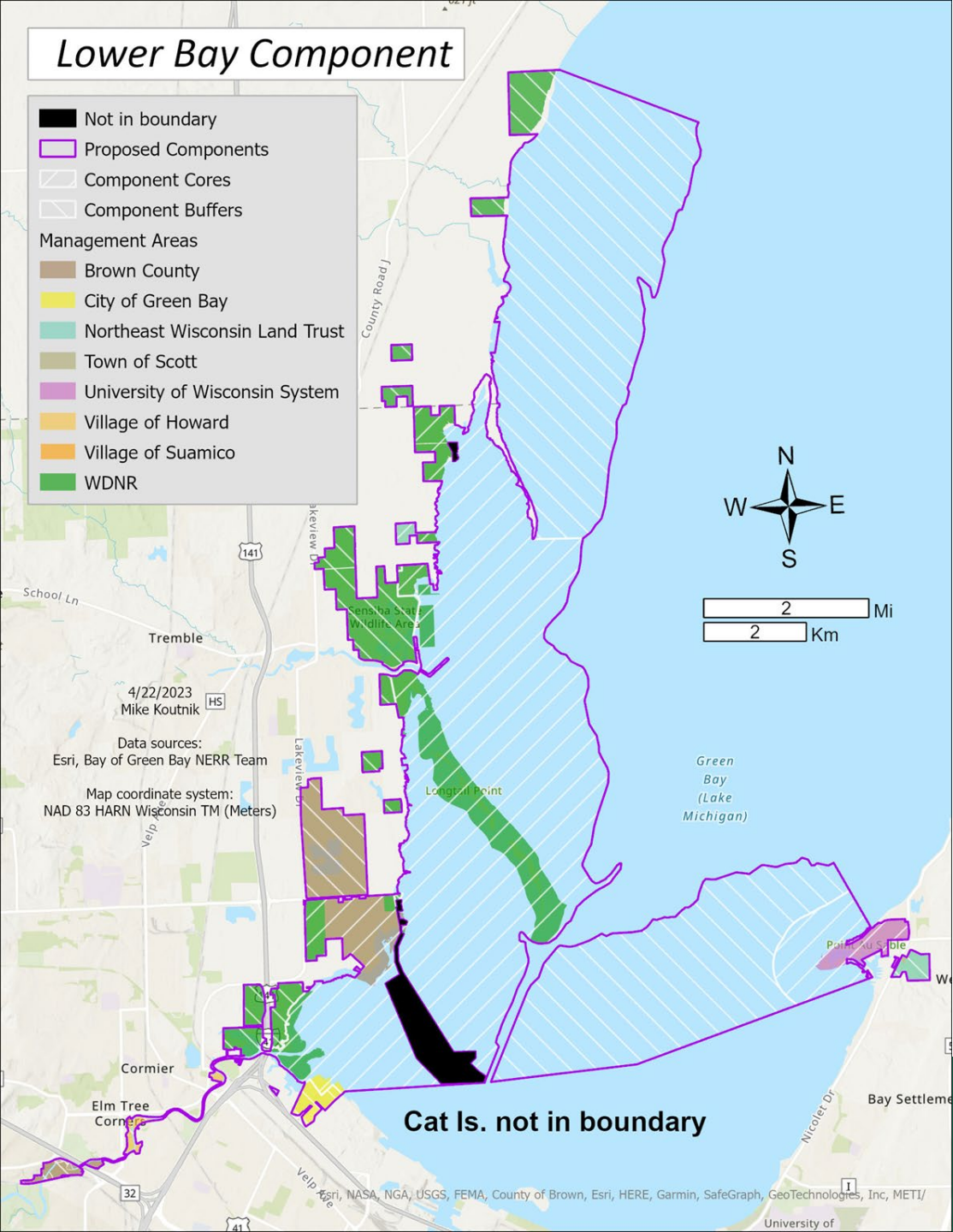
DRAFT GOALS

- **Preparing Great Lakes communities for long-term ecosystem change and variability.**
 - **Goal #1:** Improve coastal communities' preparation for projected impacts of climate change and fluctuating water levels.
- **Restoring sustainable land-water connections.**
 - **Goal #2:** Reduce unintended sediment, nutrient, and contaminant loading into the bay.
 - **Goal #3:** Strengthen the ability of non-invasive and native organisms to access terrestrial, wetland and aquatic habitats, and improve interconnectedness of ecosystem components.
- **Preserving biodiversity through improved ecological integrity and ecosystem resiliency.**
 - **Goal #4:** Restore healthy wetland, submerged aquatic and benthic habitats, and diverse species assemblages.
- **Enhancing the bay of Green Bay's connection to quality of life and sense of place.**
 - **Goal #5:** Foster historical awareness and contemporary connections between people and the bay of Green Bay.
 - **Goal #6:** Promote the sustainable, beneficial uses of the bay of Green Bay for regional communities.


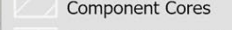

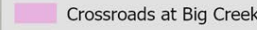

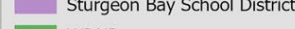
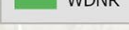


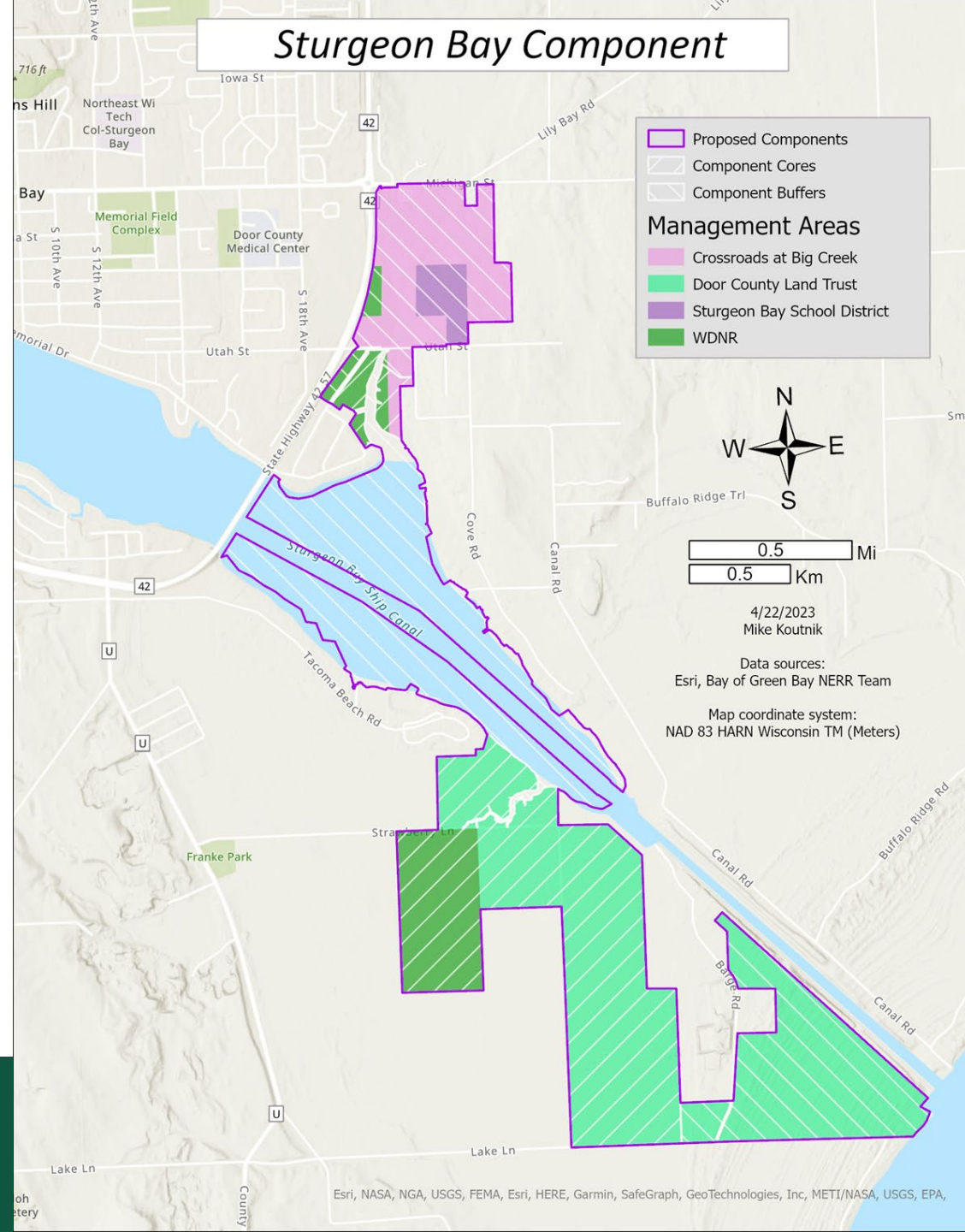
Lower Bay Component

-  Not in boundary
 -  Proposed Components
 -  Component Cores
 -  Component Buffers
- Management Areas**
-  Brown County
 -  City of Green Bay
 -  Northeast Wisconsin Land Trust
 -  Town of Scott
 -  University of Wisconsin System
 -  Village of Howard
 -  Village of Suamico
 -  WDNR

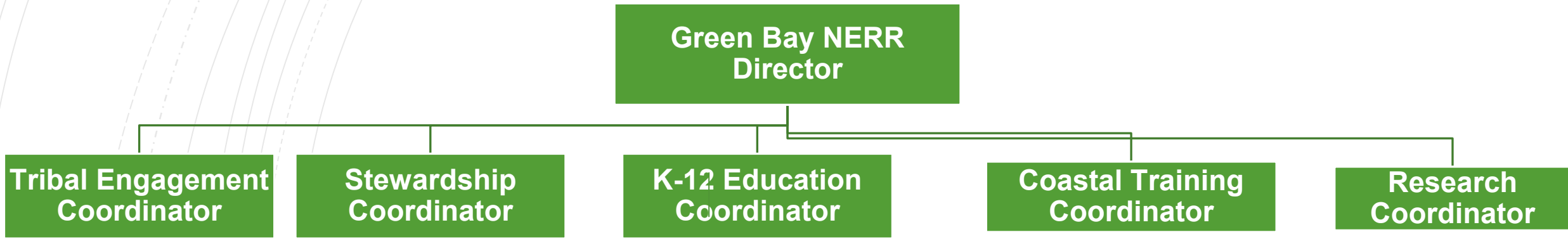


Sturgeon Bay Component

-  Proposed Components
 -  Component Cores
 -  Component Buffers
- Management Areas**
-  Crossroads at Big Creek
 -  Door County Land Trust
 -  Sturgeon Bay School District
 -  WDNR



INITIAL NERR STAFFING



POTENTIAL POSITIONS WITHIN THE BAY OF GREEN BAY NERR

- **Director of Art and Culture** – Celebrate holistic vision for the NERR.
- **Watershed Coordinator** – Collaborations with regional partners working in the watershed.
- **Director of Technology** – GIS, data-visualization, classrooms of the future, IOT, sensors.
- **Collaboration Coordinator** – Translate science into application and action through a large network of local and regional partners.