How does IMMP compile oyster maps?

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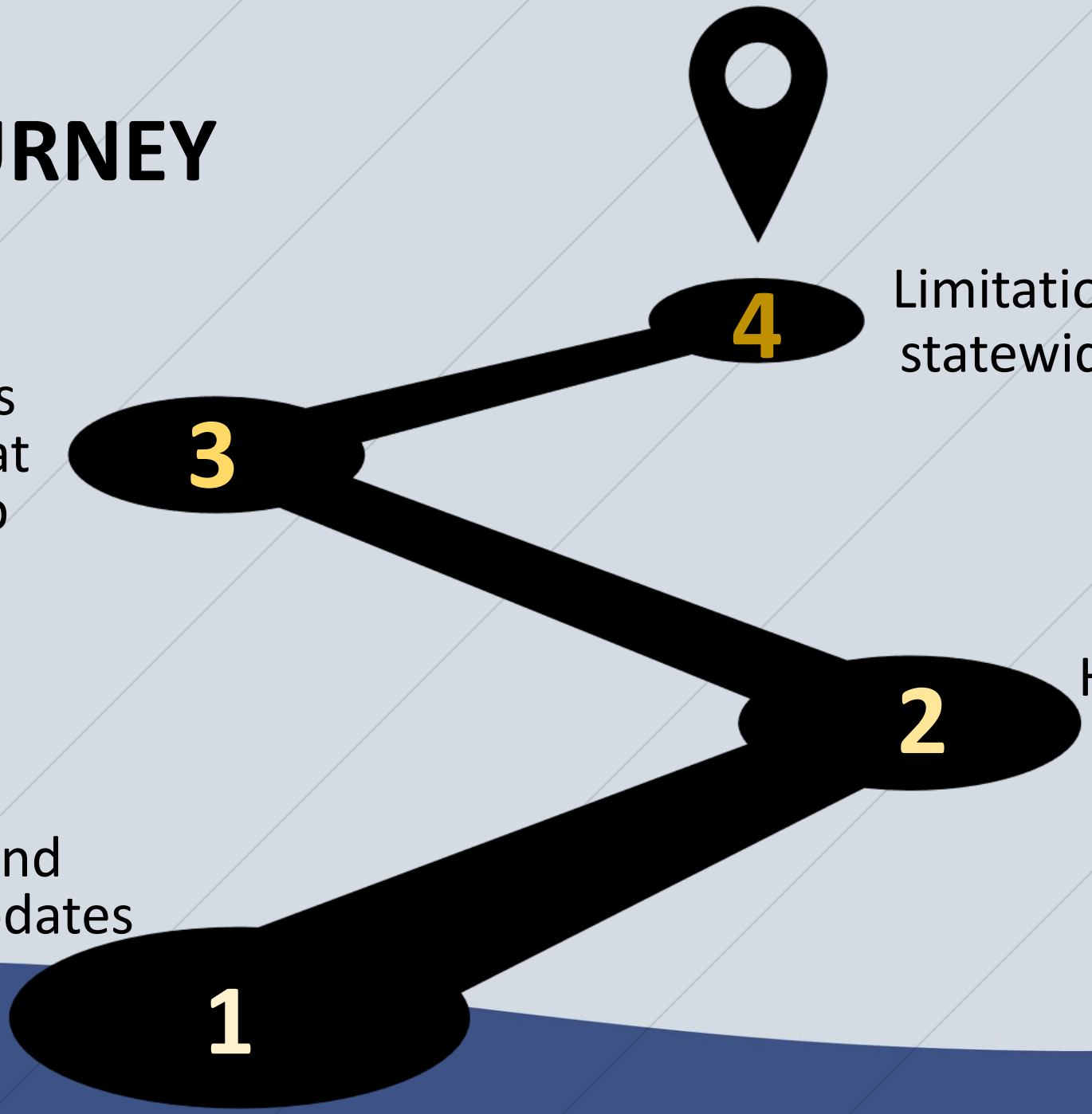
2026 Oyster Workshop
GTMNERR
April 14-15, 2026

THE JOURNEY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High-level overview of oyster mapping procedures
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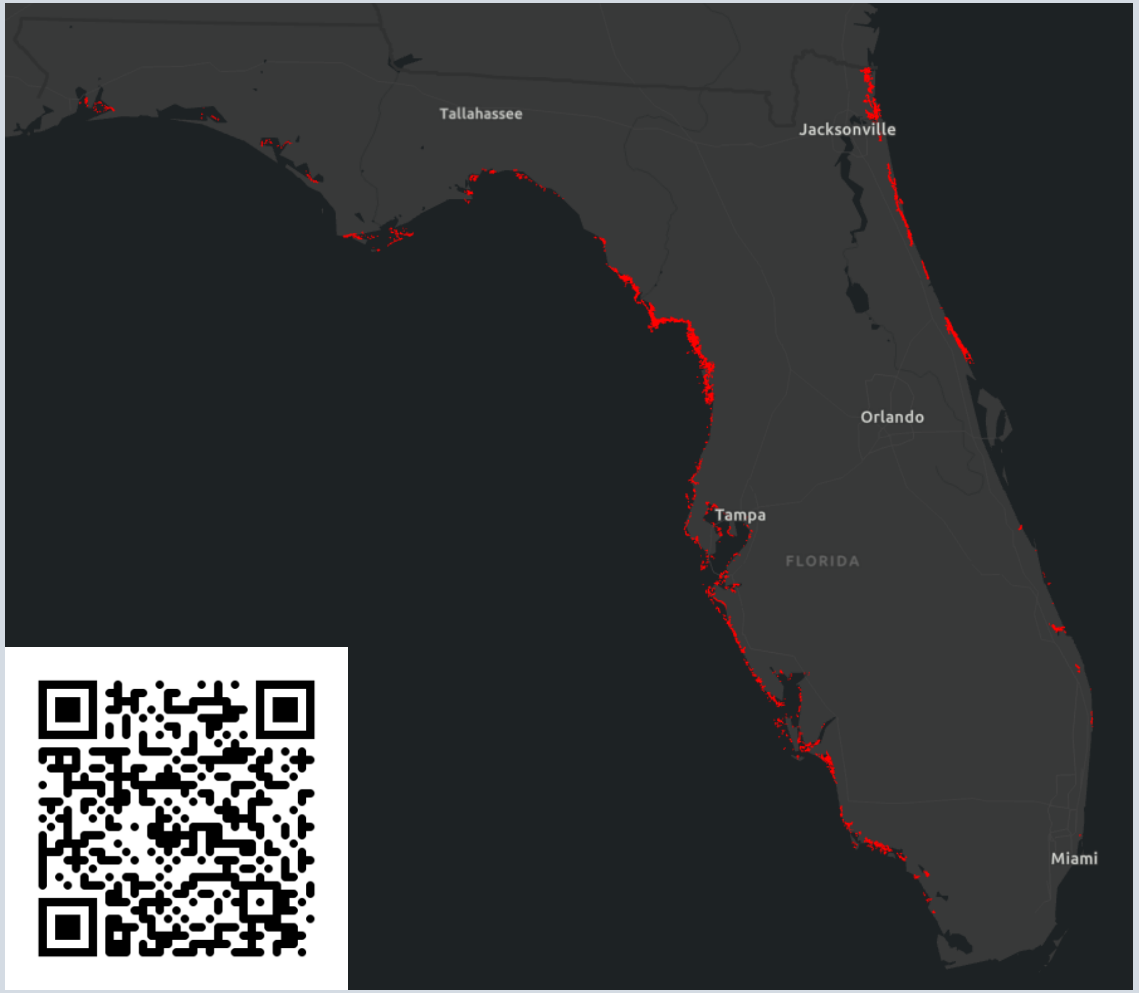
OBIF and recent updates

Oyster Beds in Florida

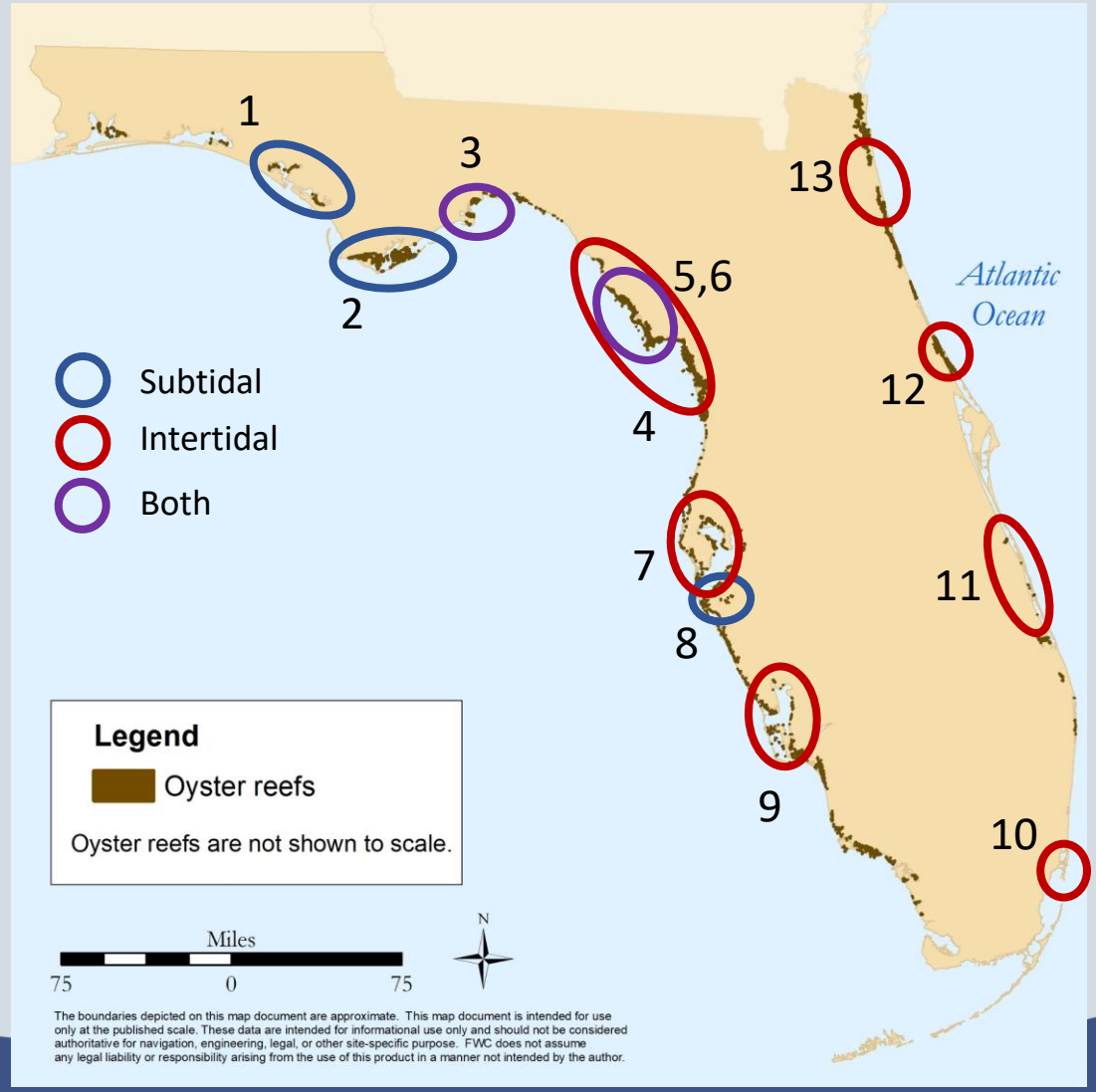
- The most recent maps of *live* oyster reef coverage across Florida
- Periodically updated as new maps become available
- Should not be considered entirely comprehensive, but a compilation of the most recent available data
  - *Mapping gaps exist*



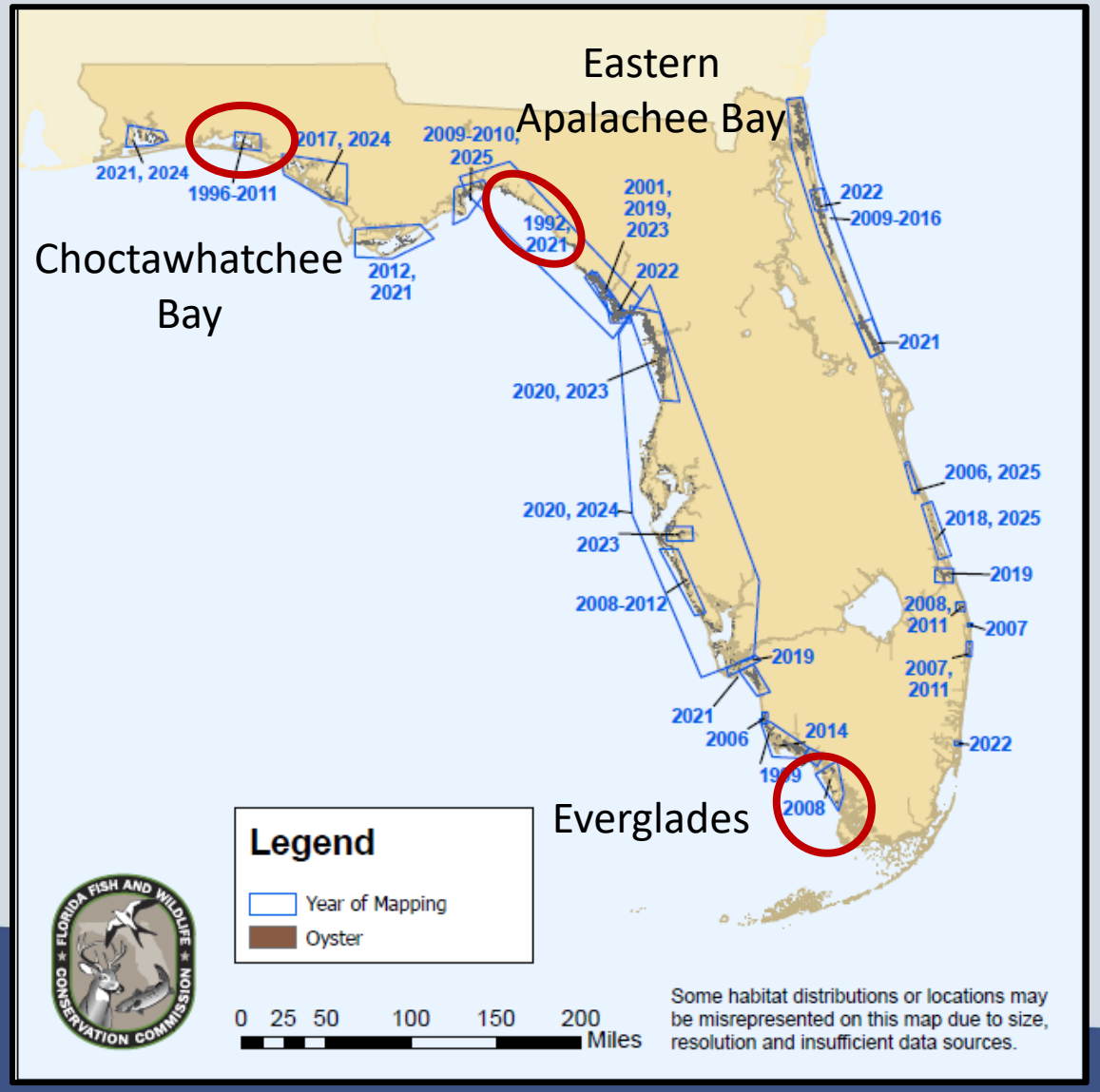

2021, 2024
1996-2011
2017, 2024
2009-2010, 2025
2012, 2021
1992, 2021
2001, 2019, 2023
2022
2020, 2023
2022
2009-2016
2021
2006, 2025
2018, 2025
2019
2020, 2024
2023
2008-2012
2008, 2011
2007
2019
2007, 2011
2021
2006
2014
1999
2008
2022
Legend
Year of Mapping
Oyster
0 25 50 100 150 200
Miles
Some habitat distributions or locations may be misrepresented on this map due to size, resolution and insufficient data sources.

Mapping efforts since 2022

1. St Andrew Bay (FWC 2024)
2. Apalachicola Bay (FWC 2023)
3. Western Apalachee Bay (FWC 2025)
4. Suwannee Sound and Springs Coast intertidal (FWC 2023)
5. Suwannee Sound intertidal (FWC 2022)
6. Suwannee Sound subtidal (FWC 2025)
7. Refined SWFWMD Suncoast intertidal (FWC 2024)
8. Manatee River (FWC 2023)
9. Charlotte Harbor (FWC 2024)
10. Oleta River (FWC 2022)
11. Indian River (FWC 2025)
12. Mosquito Lagoon (Benson et al. 2023)
13. GTMNERR (UF/GTMNERR 2023)



Potential future FWC mapping efforts



Mapping

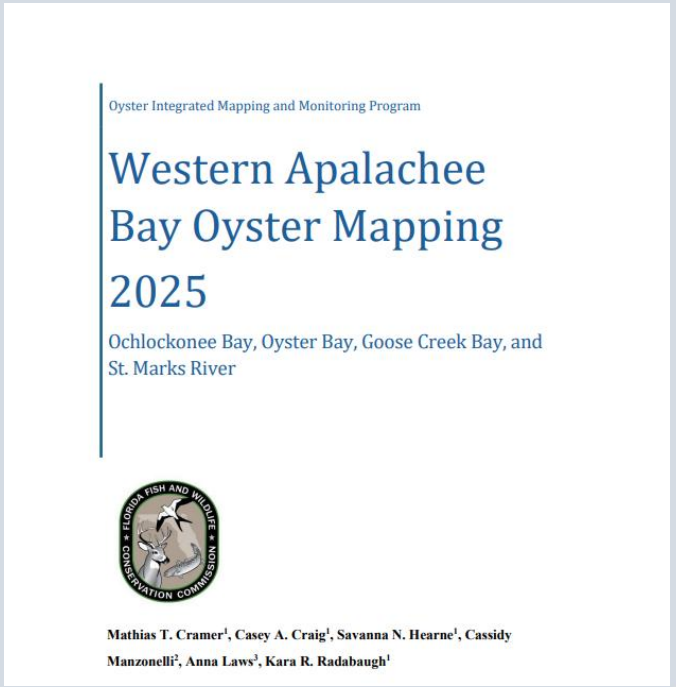
Habitat believed to be oyster reef is identified and digitized

Ground-truthing

A subset of potential reefs are visited *in situ* to verify oyster reef is present

Data Products

A georeferenced map, and accompanying report are published



Oyster Integrated Mapping and Monitoring Program

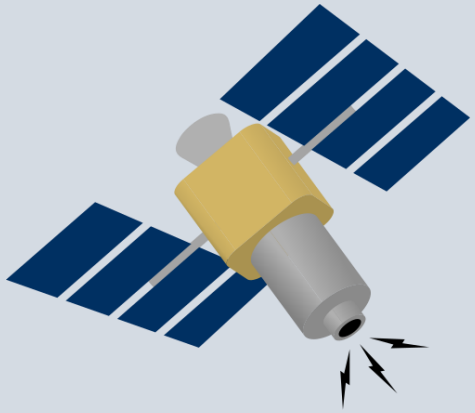
Western Apalachee Bay Oyster Mapping 2025

Ochlockonee Bay, Oyster Bay, Goose Creek Bay, and St. Marks River

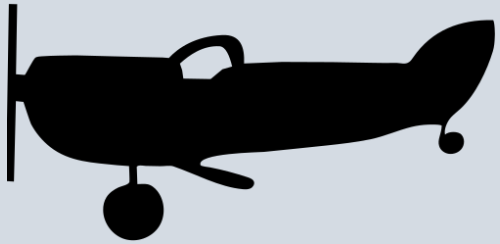
Mathias T. Cramer[1], Casey A. Craig[1], Savanna N. Hearne[1], Cassidy Manzonelli[2], Anna Laws[3], Kara R. Radabaugh[1]

Intertidal

Unmanned aircraft systems (drone)

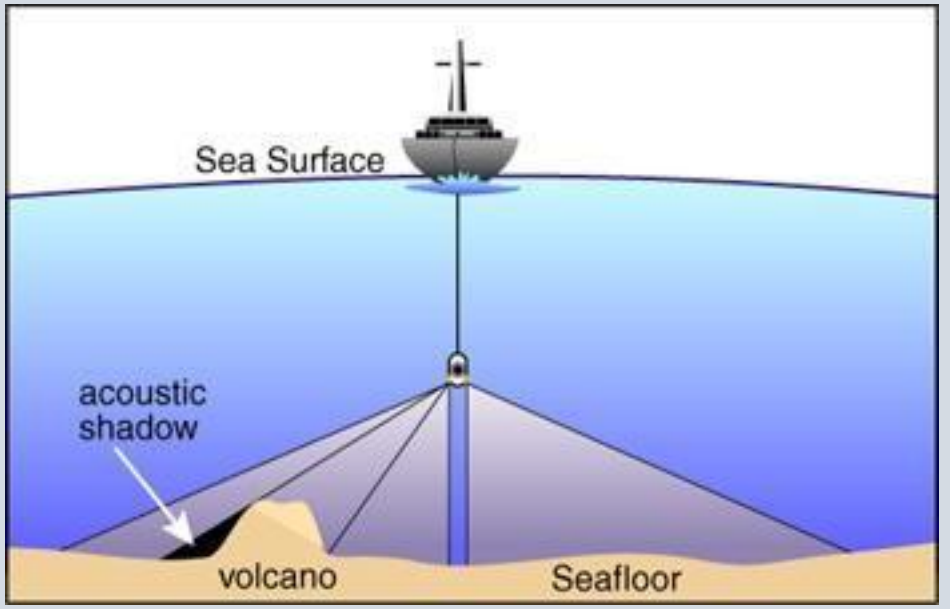


Satellite imagery



Aerial imagery

Subtidal



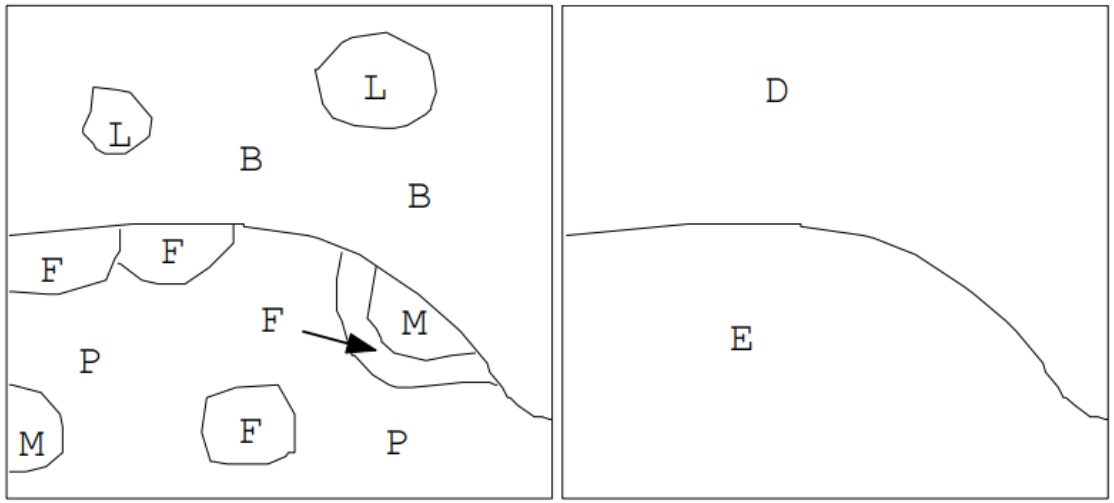
Side-scan Sonar

Minimum mapping unit matters when working with map products

Minimum mapping unit (ESRI)

In imagery: The smallest area identified as an object or class in the output dataset, expressed in ground units.

In map design: The size, in map units, below which a narrow feature can be reasonably represented by a line/point/polygon.



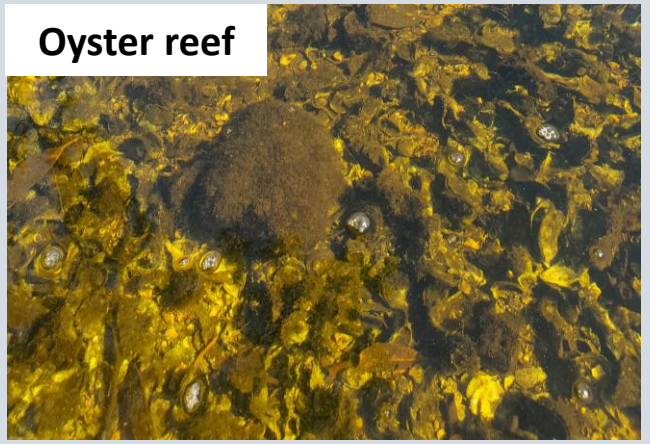
(a, Scale 1:5000) *(b, Scale 1:50000)*

Figure 1: Influence of minimum mapping unit size on interpretation of vegetation. (a): Forest types mapped using a small MMU: B=Birch; L=Larch; F=Fir; M=Macrocarpa; P=Pine. (b): Forest mapped with large MMU: D=Deciduous; E=Evergreen.

Arbuckle et al. 1998

Considerations when looking at a map product

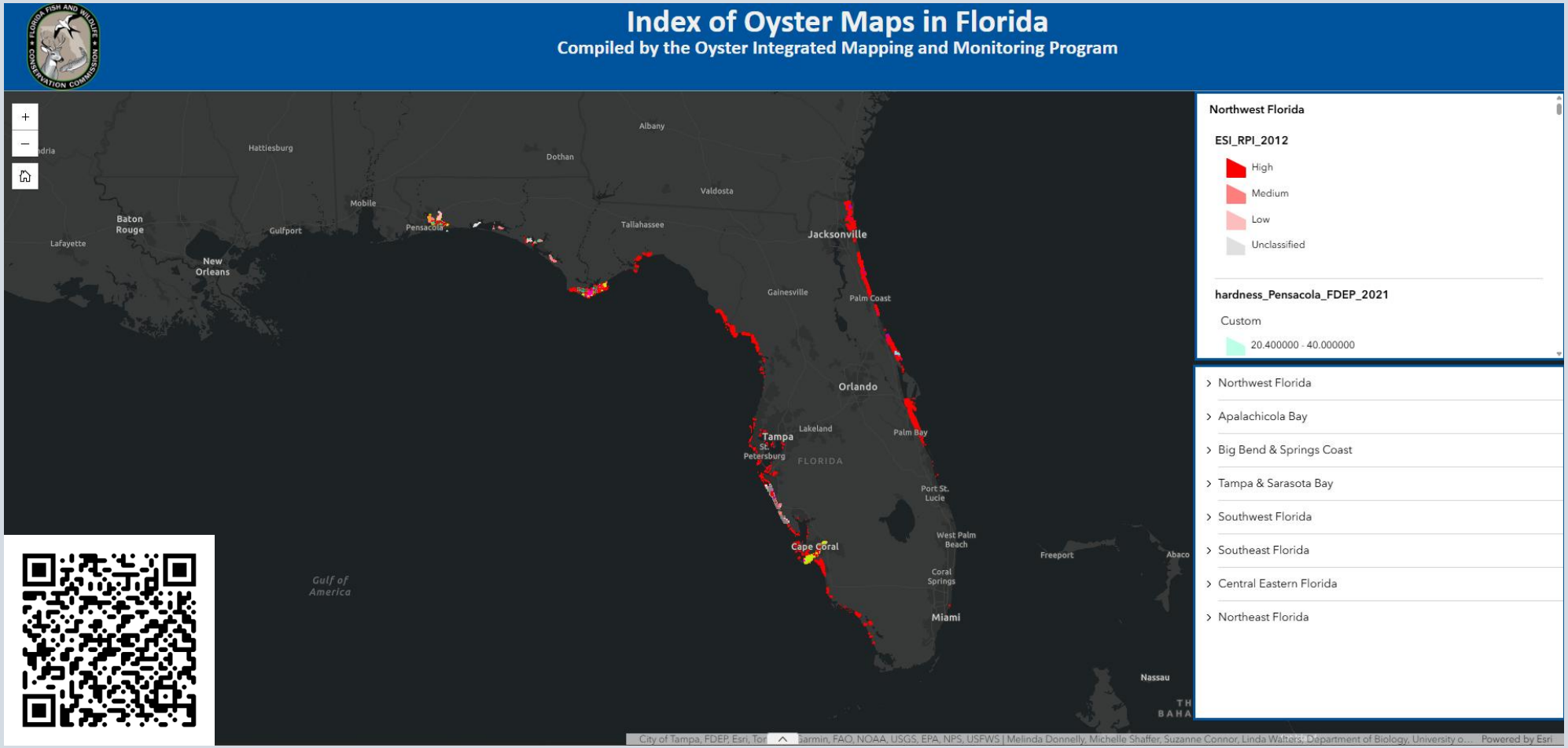
- What is a reef?
  - Live vs. dead
  - Abundance threshold?
  - Size threshold? (MMU)
  - Restored reefs
  - Living shorelines
- Area that was mapped vs where oysters were found
- Overlap with other maps



Limitations of a statewide map

- Restored oyster reefs
- Living shorelines
- Only includes live oyster reefs
- Maps are clipped if they overlap with adjacent mapping efforts
  - Area mapped vs area from map shown in OBIF
- Once maps become outdated, they are not as readily available

Index of Oyster Maps in Florida



Questions?

OIMMP, though hosted through FWC, is a large collaborative effort among oyster practitioners in the state. **THANK YOU** to all for your contributions to the program. We couldn't do it without your knowledge and support.

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