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Mississippi Advisory Commission on Marine Resources

February 18, 2025



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Employment, Contracts and Procurement Updates February 18, 2025

Employment Updates

Promotions:

- Jennifer Cumbest – Promoted January 16, 2025 – Environmental/Natural Resources Specialist Supervisor – Grand Bay Nerr
- Alicia Carron – Promoted February 1, 2025 – Environmental/Natural Resources Specialist III – Office of Coastal Resources Management

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Actions Update for February 18, 2025 Commission Meeting

Discussed at the January 2025 meeting:

The Commission recommended and the Director approved:

- Motion to recommend approval of the following State Saltwater Finfish Records:
 - a. Conventional Tackle:
 1. Common Snook (*Centropomus undecimalis*) – 0 lbs. 15.16 oz.
– Vince Wray
 - b. Youth Conventional Tackle:
 1. Common Snook (*Centropomus undecimalis*) – 0 lbs. 8.96 oz.
– Zachary Broussard



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NO WAKE ZONE PROPOSAL

Wolf River @ Menge Ave



Affects to boaters

- Boaters would be operating at idle speed for approximately 3 minutes
- SPECIAL CONSIDERATIONS**
- Including the bridge in the no wake zone would ensure higher safety precautions transitting between bridge pilings and around the blindspot where boaters would be launching and recovering vessels
 - The no wake zone proposal is an extension of the already existing no wake zone that is required by state law 100 feet adjacent to all public launching facilities
 - Total length of the no wake zone is 992 feet at centerline of the river

Staff Recommendation

- The Office of Marine Patrol requests that the Commission recommend to the Director, approval of the establishment of a No Wake Zone for the proposed Wolf river bridge and boat launch at Menge avenue based on normal operation and vessel speed in relation to the public access areas in which people fish, boat and socialize.



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Wetland Permitting Actions 2024

| | |
|---|------------|
| Total Actions | 813 |
| | |
| Regulated Activities/ CZ Consistency Determinations | 663 |
| Reviews/ Pre-Application Meetings | 103 |
| Violations | 47 |

Wetland Permitting Actions Comparison

| | 2022 | 2023 | 2024 |
|---|------|------|------|
| Total Actions | 836 | 810 | 813 |
| | | | |
| Regulated Activities/ CZ Consistency Determinations | 708 | 667 | 663 |
| Reviews/ Pre-Application Meetings | 84 | 95 | 103 |
| Violations | 41 | 48 | 47 |

Violation Details

| Year | 2022 | 2023 | 2024 |
|----------------------|------|--------|------|
| | | | |
| Total Reported/Found | 41 | 48 | 47* |
| Actual | 22 | 26 | 22 |
| Presented to MACMR | 0 | 1 | 0 |
| Fines Assessed | \$0 | \$1500 | \$0 |

*Only 16 were within the last half of 2024



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**Request for Permit by:
Mississippi Department of Marine Resources
DMR24-000589**

- **Location:** approximately two miles north of Petit Bois Island in the MS Sound, Jackson County
- **Use District:** (G) General Use District
- **Project Purpose/Need:** To create and enhance valuable reef habitat that will support and sustain healthy populations of estuarine fish and other invertebrates

Project Description

- **Filling of Coastal Wetlands for the Construction of a Submerged Artificial Reef**
- **15-acres of Ecosystem discs, secondary use concrete culverts, and other materials of opportunity and design**
- **Maintain a minimum clearance of 12 feet Mean Low Water (MLW)**

Reef Material

Northwest corner

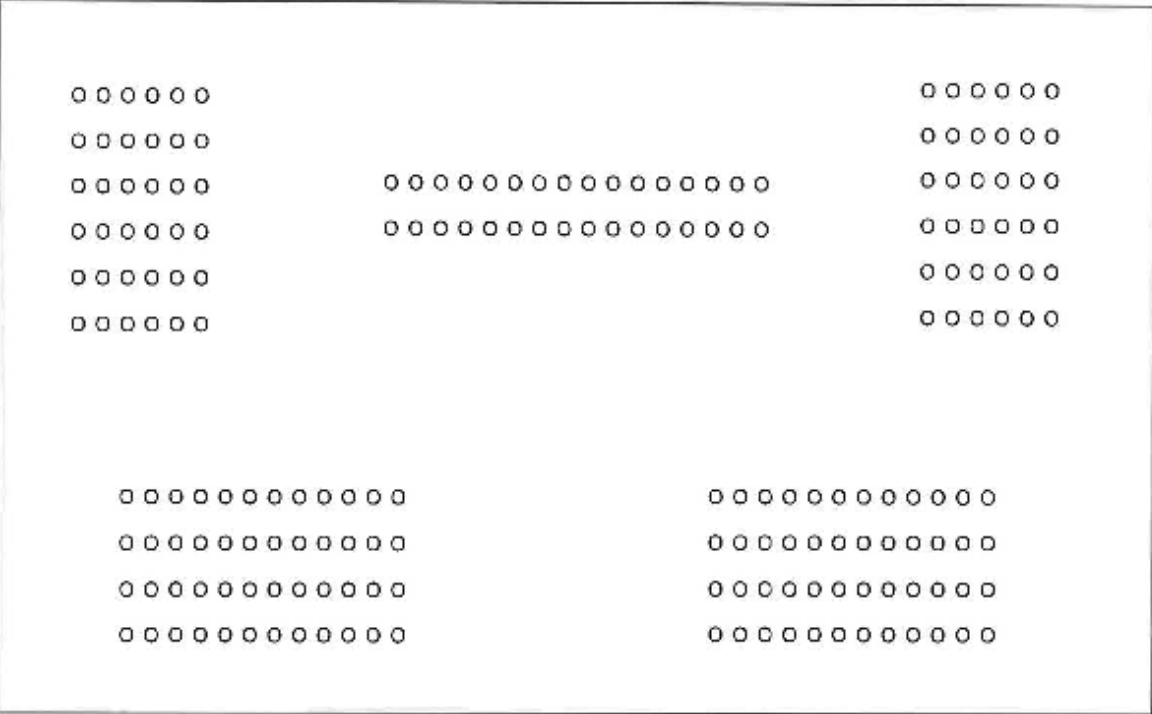
30.239709° -88.471011°

Petit Bois Island Reef with Eco Disc layout

(approximately 200 units)

Northeast corner

30.239790° -88.467767°



Southwest corner

30.237915° -88.470935°

Southeast corner

30.237995° -88.467707°



Project Location



| Latitude and Longitude | | |
|------------------------|-------------|--------------|
| NorthWest | 30.239709 ° | -88.471011 ° |
| NorthEast | 30.239790 ° | -88.467767 ° |
| SouthEast | 30.237995 ° | -88.467707 ° |
| SouthWest | 30.237915 ° | -88.470935 ° |

Variance Requests

- **Title 22, Part 23 (MS Coastal Program):**
 - **Ch. 8, Sect. 114.01** “Permanent filling of coastal wetlands below the mean high tide line because of potential adverse and cumulative environmental impacts is not authorized.”
- **Justification:**
 - **Ch. 8, Sect. 118.01** “Impacts to Coastal Wetlands would be no worse than if the guidelines were followed”
 - The location of the proposed artificial reef site avoids coastal vegetation, adds habitat for the flora and fauna, and adds a positive overall effect for fishermen and the ecosystem.

Public and Agency Notice and Comments

- **Public Notice**

- Notification of the proposed project appeared in The Sun Herald on January 11, 19, & 26, 2025.
- Notification of the proposed project appeared on the MDMR website from January 10, 2025 to February 3, 2025.
- No public comments were received
- **MDEQ: No comments received**
- **MDAH: No comments received**
- **MS SOS: states “no comment on this application”**

Public and Agency Notice and Comments

- **Public Notice**

- **USACE Public Notice:**

- **US Coast Guard:** requested 12-foot minimum clearance and the reef must be marked on all corners with private ATON (Aid to Navigation)
 - **US EPA:** is there a more recent version of the 1999 Artificial Reef Development Plan and is the purpose of the reef for mitigation or restoration to improve habitat
 - **Gulf Intracoastal Waterway:** there is a concern the structures may pose a navigation threat if they are dislodged by a hurricane and deposit into the federal channel. Has the design and location taken this risk into consideration and if so, how will it be mitigated?

Staff Recommendation

- The staff of the Department of Marine Resources has conducted a thorough evaluation of the project and has made findings on the decision factors in accordance with Title 22, Part 23 (Mississippi Coastal Program). The project would serve a higher public interest by:
 - Enhancing the fishing opportunities and provide a quality fishing site
 - Providing a quality habitat to promote successful species transitions from juvenile to maturity
 - Avoiding biologically sensitive areas
- Therefore, staff requests a motion that the Commission recommend to the Executive Director:
 - Approve the requested Variance
 - Approve the Permit as requested
 - Condition the Permit to contain the following:
 - Coordination with US Coast Guard for necessary navigational aids at project location



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2024 - 2025 Oyster Season Update

Jason Rider
Shellfish Bureau Director

K.1.

2024 – 2025 Season

- **Season Dates**

- Season opened on January 15th

- **Location**

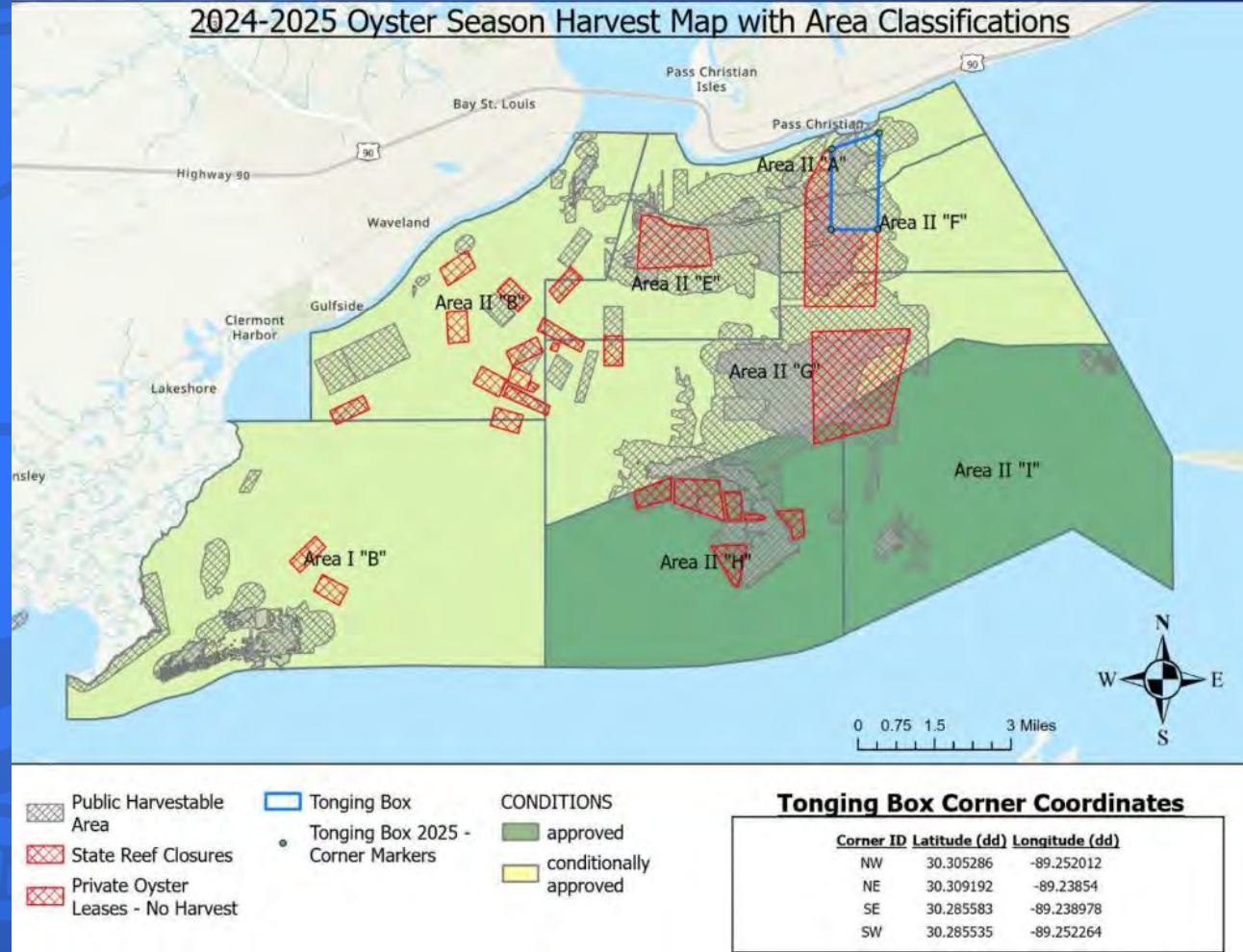
- Western Reefs
- All Permitted Areas in the Western MS Sound

- **Gear Type**

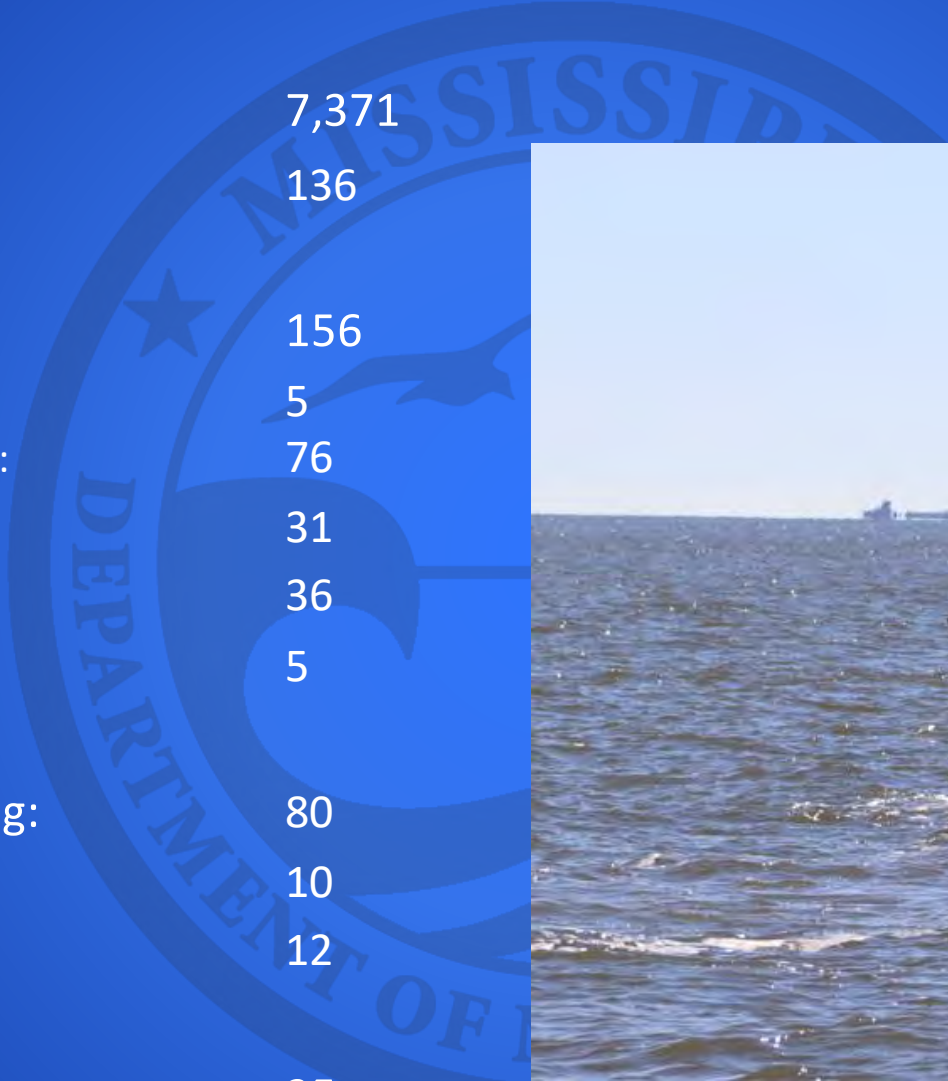
- Tongs
- Dredges

- **Daily Harvest Quota:**

- Tongs 10 sacks per boat/per day
- Dredge 15 sacks per boat/per day



2024 – 2025 Summary



- Season Sack Harvested: 7,371
- Average Sacks per Day: 136

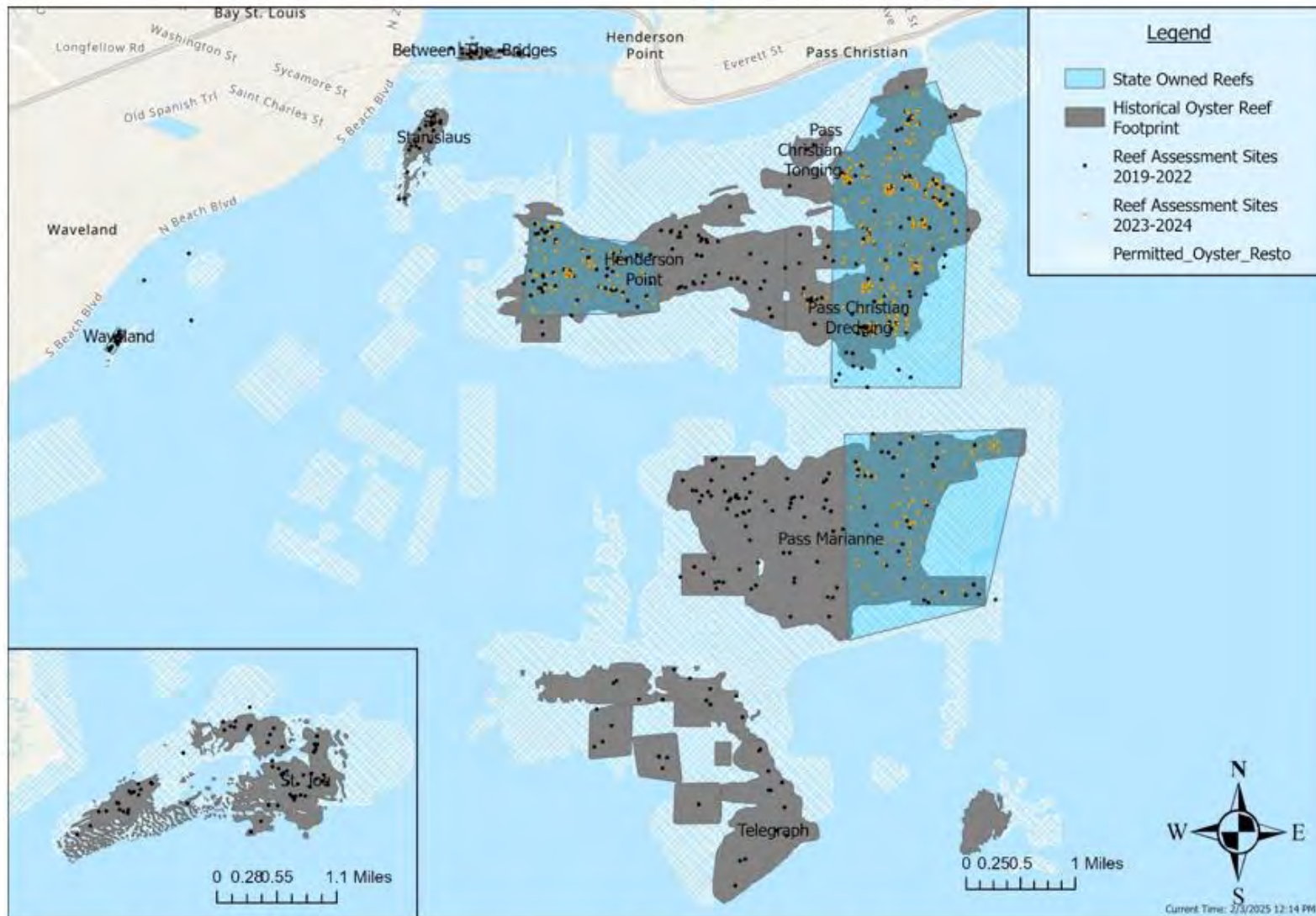
- Total Licenses sold to date: 156
 - Recreational 5
 - In State Commercial Dredge: 76
 - In State Commercial Tong: 31
 - Out of State Tong: 36
 - Out of State Dredge: 5

- Number of Licenses harvesting: 80
 - Approx Tongers per Day: 10
 - Approx Dredgers per Day: 12

- Main Area Fished: 2F

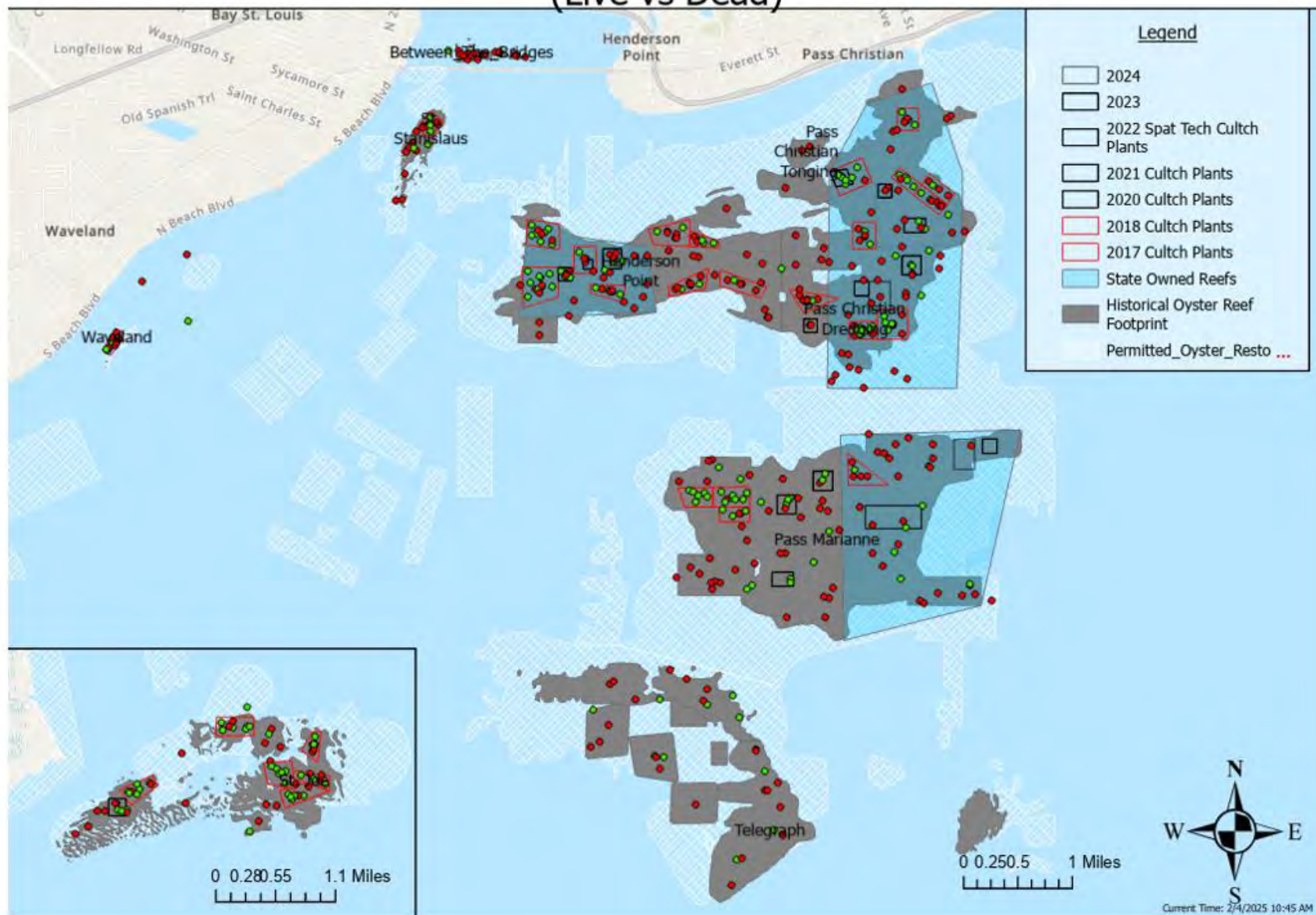


MDMR Western Sound Sampling Effort: 2019 - 2024

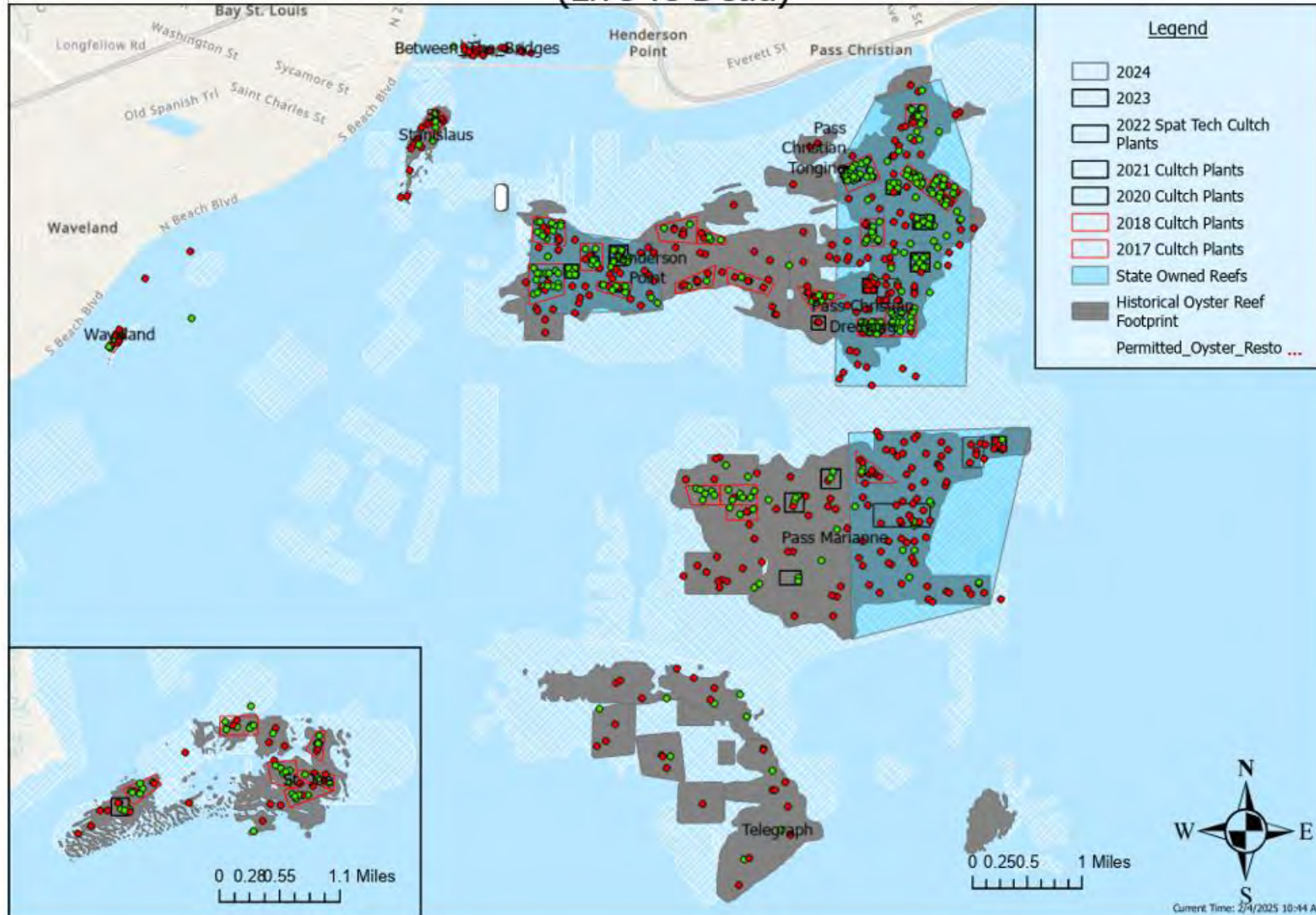


| | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | Total |
|------------------------------|-----------|------------|------------|------------|------------|------------|-------------|
| Dredge Tows | 60 | 52 | 124 | 70 | 88 | 120 | 514 |
| Square Meter Dives | 0 | 292 | 280 | 406 | 230 | 576 | 1784 |
| Total Samples by Year | 60 | 344 | 404 | 476 | 318 | 696 | 2298 |

MDMR Western Sound Sampling Effort: 2019 - 2022 (Live vs Dead)

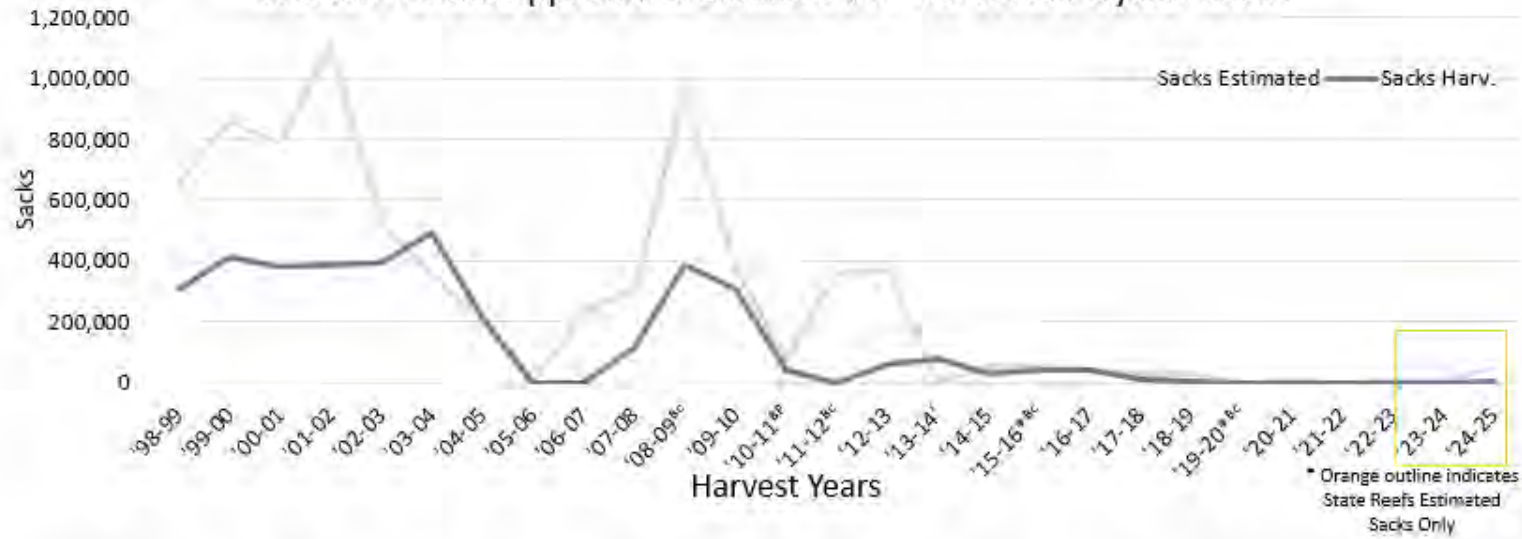


MDMR Western Sound Sampling Effort: 2019 - 2024 (Live vs Dead)

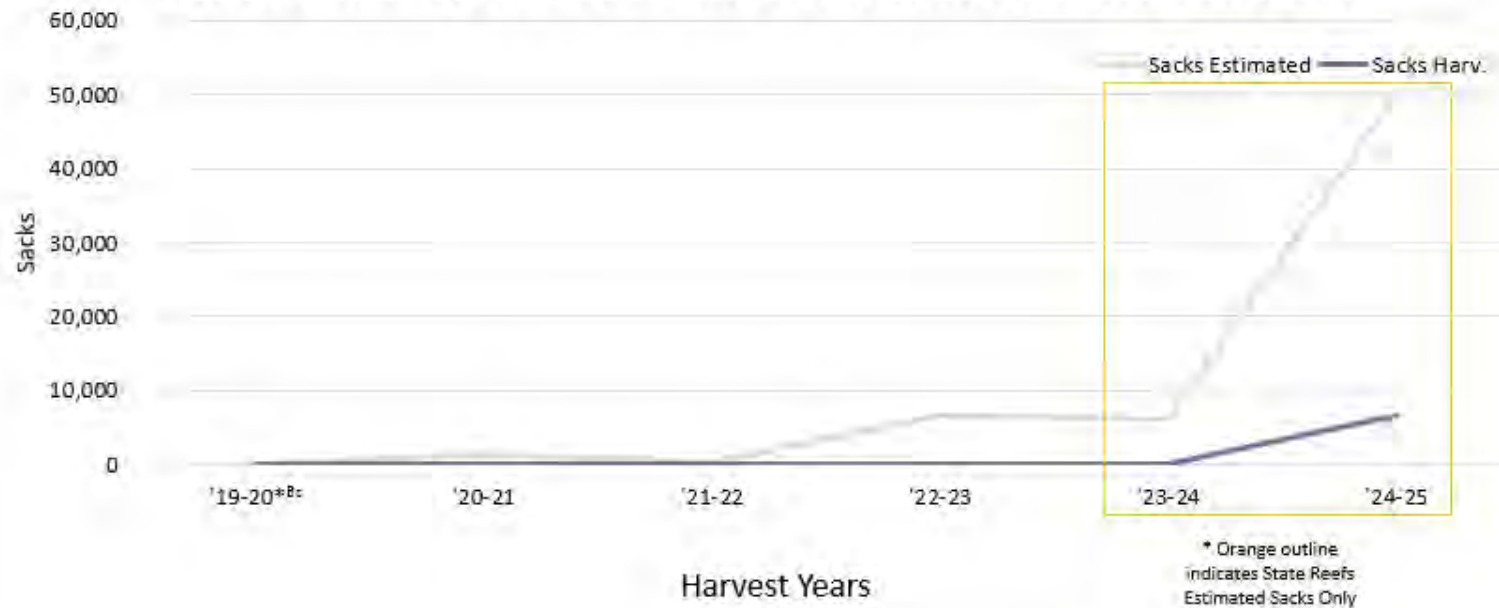


Only State-Owned Reefs were sampled in 2023 and 2024. Sample points from non-state reefs were from 2019-2022 (pre SB2544)

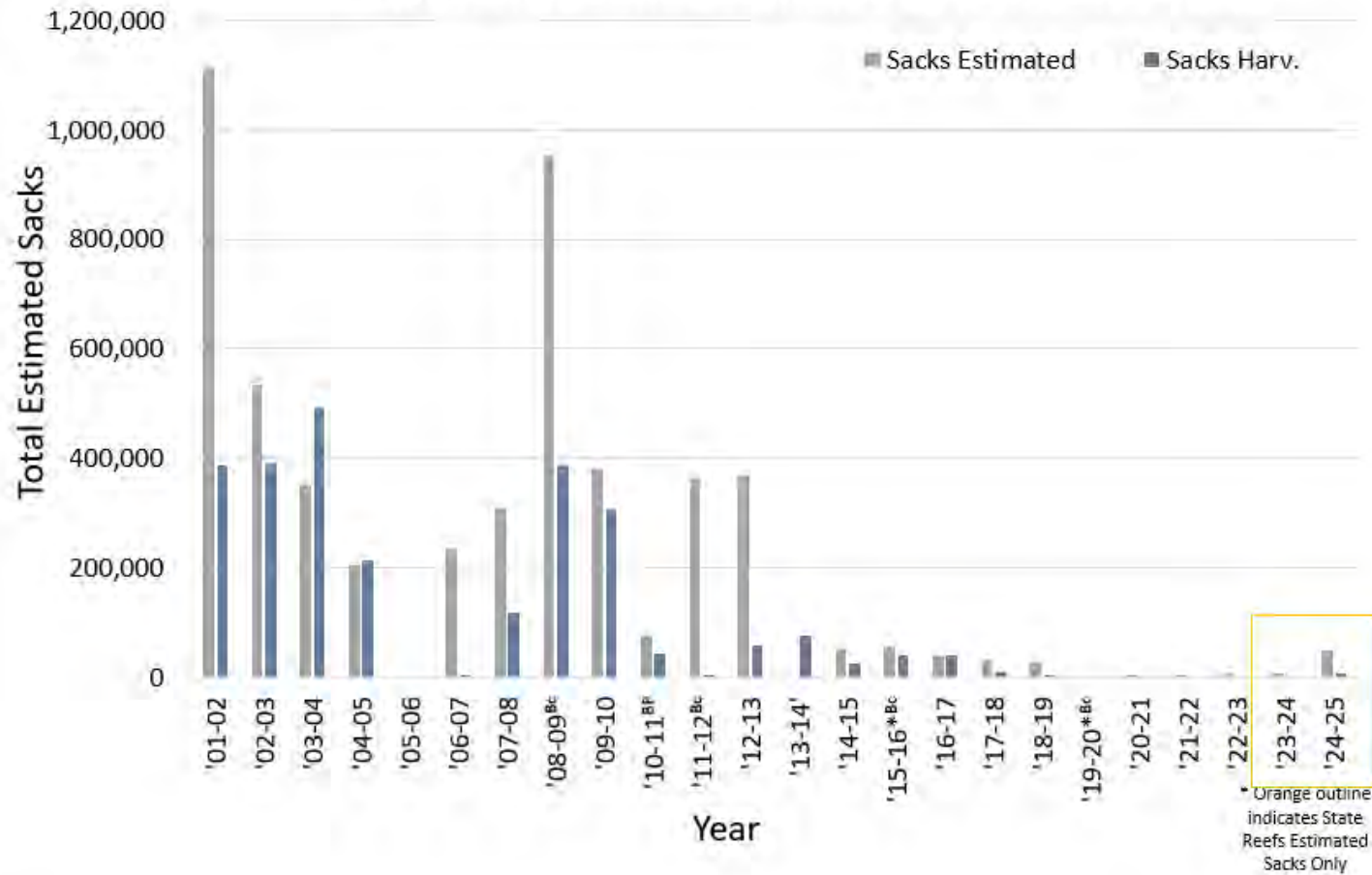
Western Mississippi Sound Estimated vs Harvested Oyster Sacks



Western Mississippi Sound Estimated vs Harvested Oyster Sacks 2019-2025

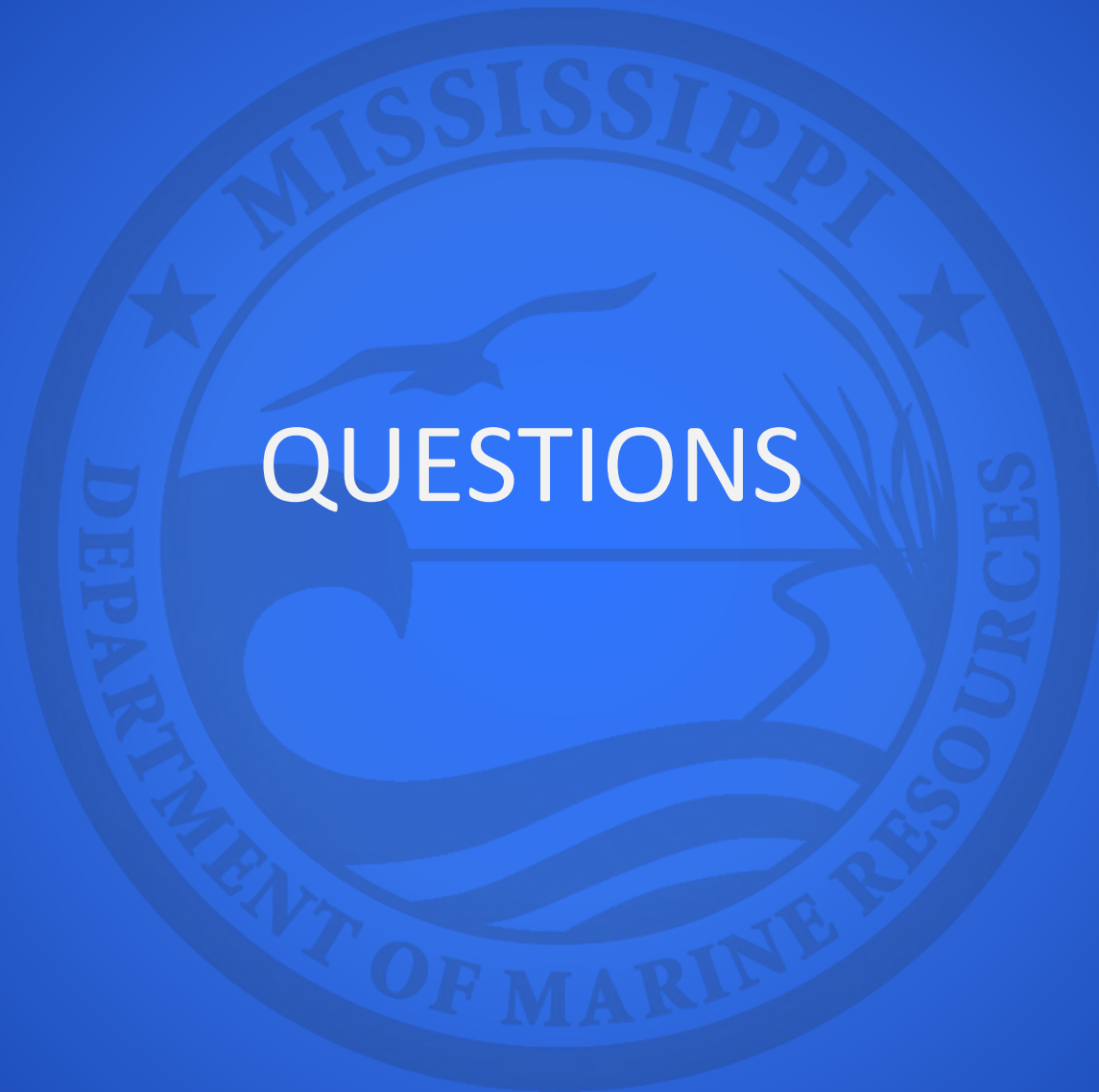


Western Sound Estimated vs Harvested Sacks



| Western Sound Total Sacks | | | | | | | | |
|---------------------------|--------|--------|------|-------|------|-------|-------|--------|
| Year | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Total Sacks | 31,198 | 27,232 | - | 1,372 | 204 | 6,595 | 6,063 | 50,061 |

^{*}State Reefs Only



QUESTIONS

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Spotted Seatrout and Cold Kill Update

Trevor Moncrief
February 17, 2025

K.2.

SST Update Background

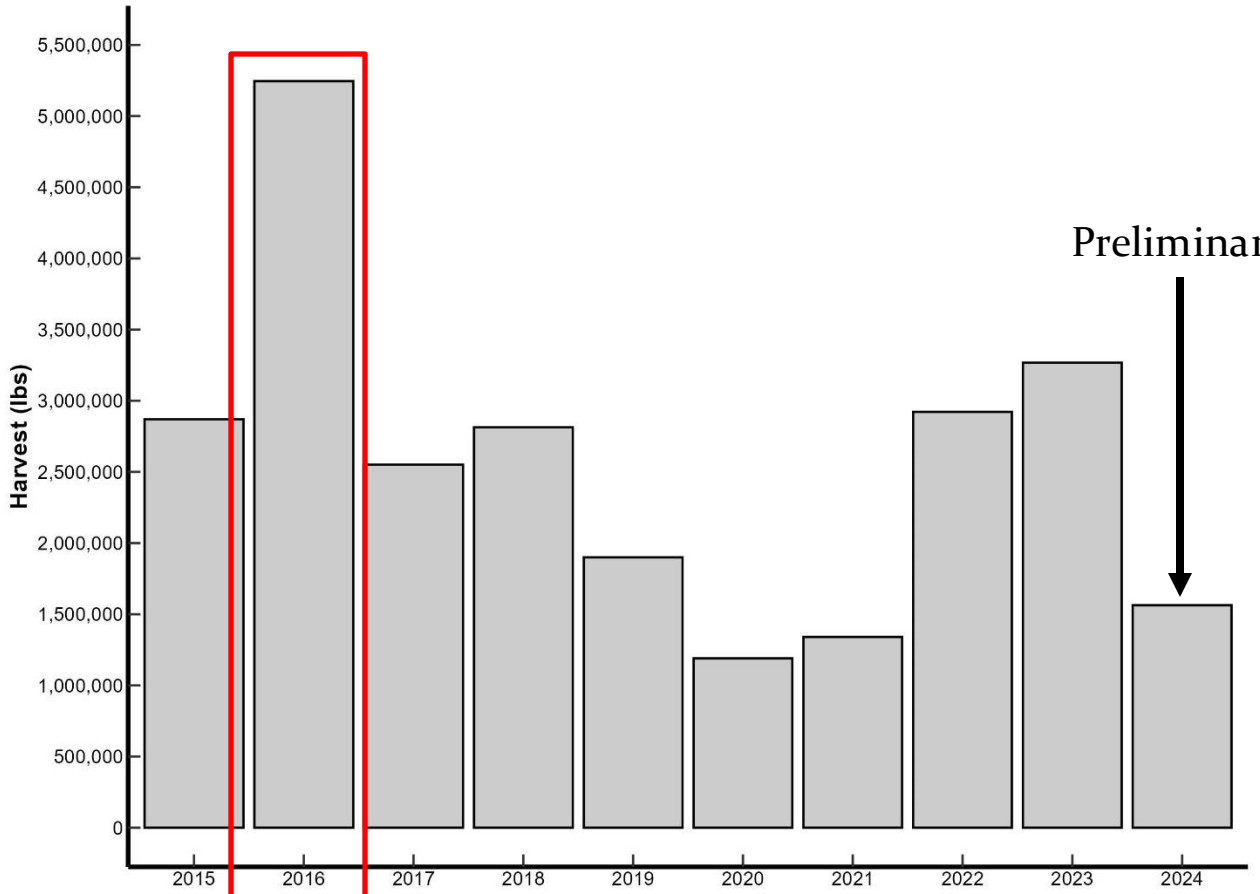
- Previous stock assessments
 - 2016-2019 annually
 - Improvements to stock resilience and abundance observed
 - Preliminary assessment attempted post Bonnet Carre in 2021
 - Impacts from BC Spillway and subsequent rainfall
 - Reduction in IOA and continued catches of SST during the time period
- Removal examination and transition to MS Creel
 - Similar to Red Snapper, MRIP landings for SST were highly volatile
- Index-based monitoring determined as the path forward until landings time series is corrected

Spotted Seatrout Regulatory History

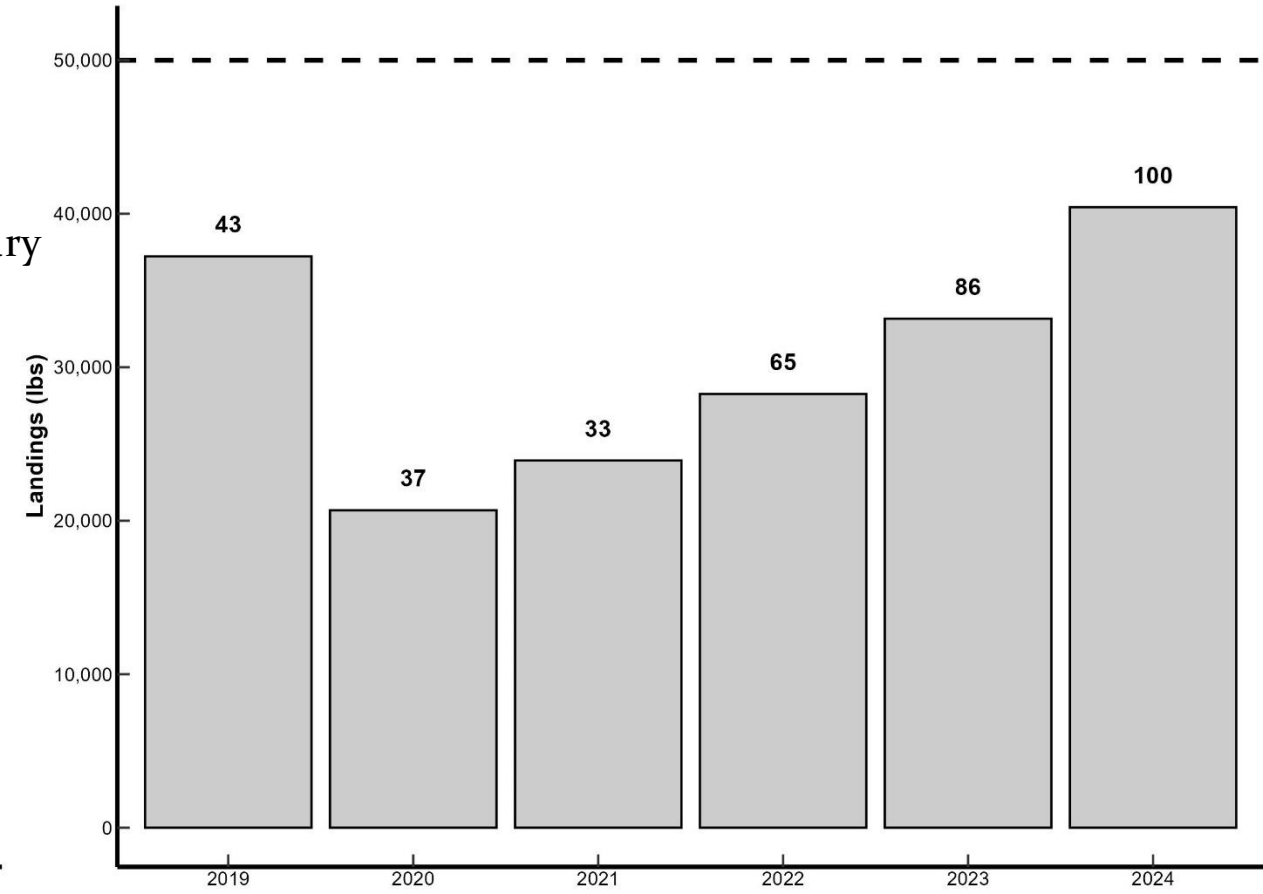
| Year | Recreational | Commercial |
|------|--|--|
| 1978 | 50 Fish Bag, 3 Day Possession | 12-inch Minimum |
| 1986 | 25 Fish Bag, 14-inch Minimum, 3 Day Possession (5< Size Minimum May Be Retained) | 14-inch Minimum |
| 1991 | 14-inch Minimum Bag Limit 25 Per Person | |
| 1992 | 5< Size Minimum May Be Retained But No Below 12-inches Bag Limit 25 Per Person (14 inches) | |
| 1995 | Bag limit 10 Fish Per Person No Fish Below The Minimum (14-inches) | 40,000 lb. Commercial Quota |
| 1996 | Bag limit 15 Fish Per Person No Fish Below The Minimum (14-inches) | |
| 2008 | 13-inch Minimum | 14-inch Minimum |
| 2012 | | 50,000 lb. Commercial Quota |
| 2014 | | Spotted Seatrout Endorsement |
| 2017 | 15-inch Minimum | |
| 2018 | | Endorsement Requirements (20%) |
| 2022 | | Endorsement Requirements (\$1,000/\$5,000) |

Recreational and Commercial Removals

Spotted Seatrout Recreational Catch Estimates

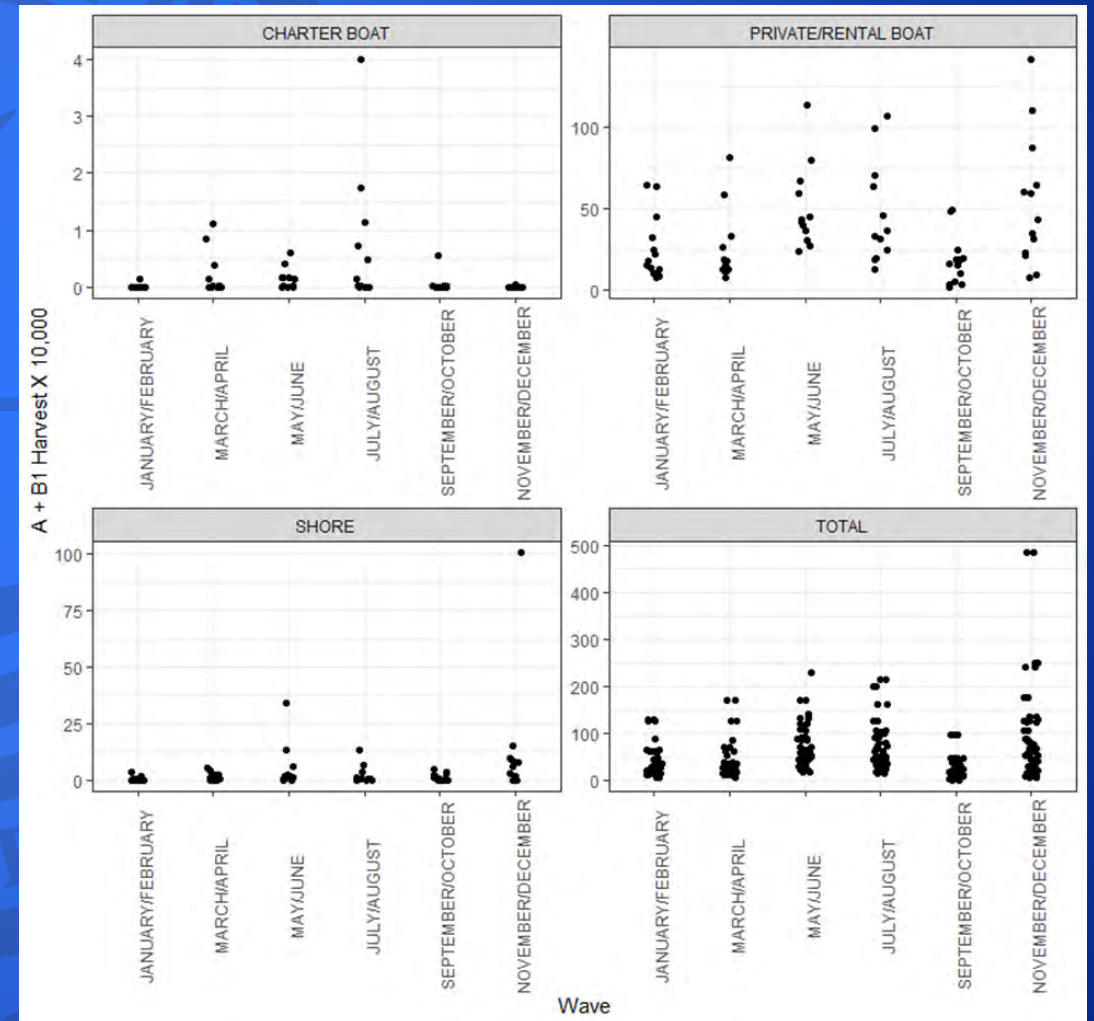


Spotted Seatrout Commercial Landings

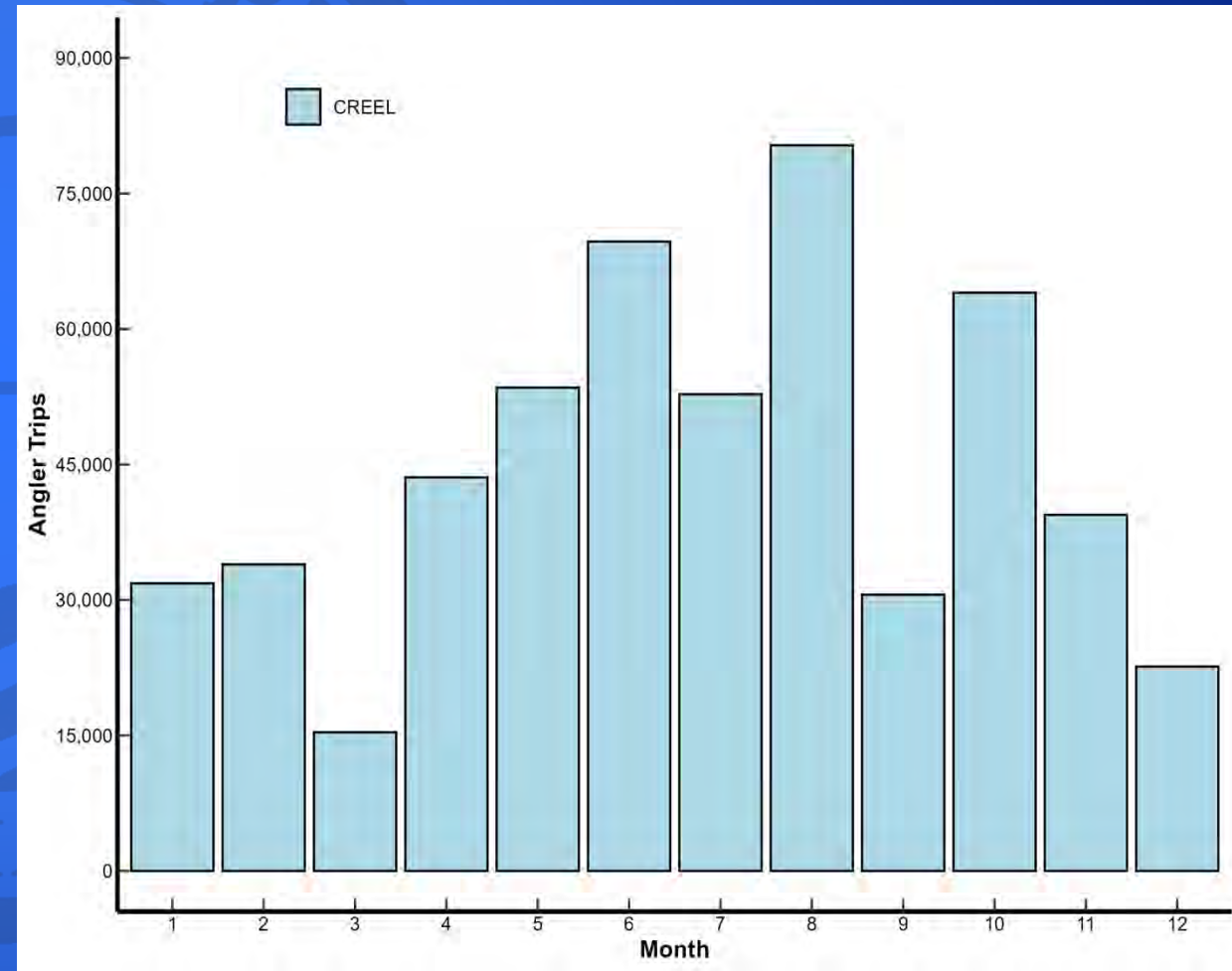
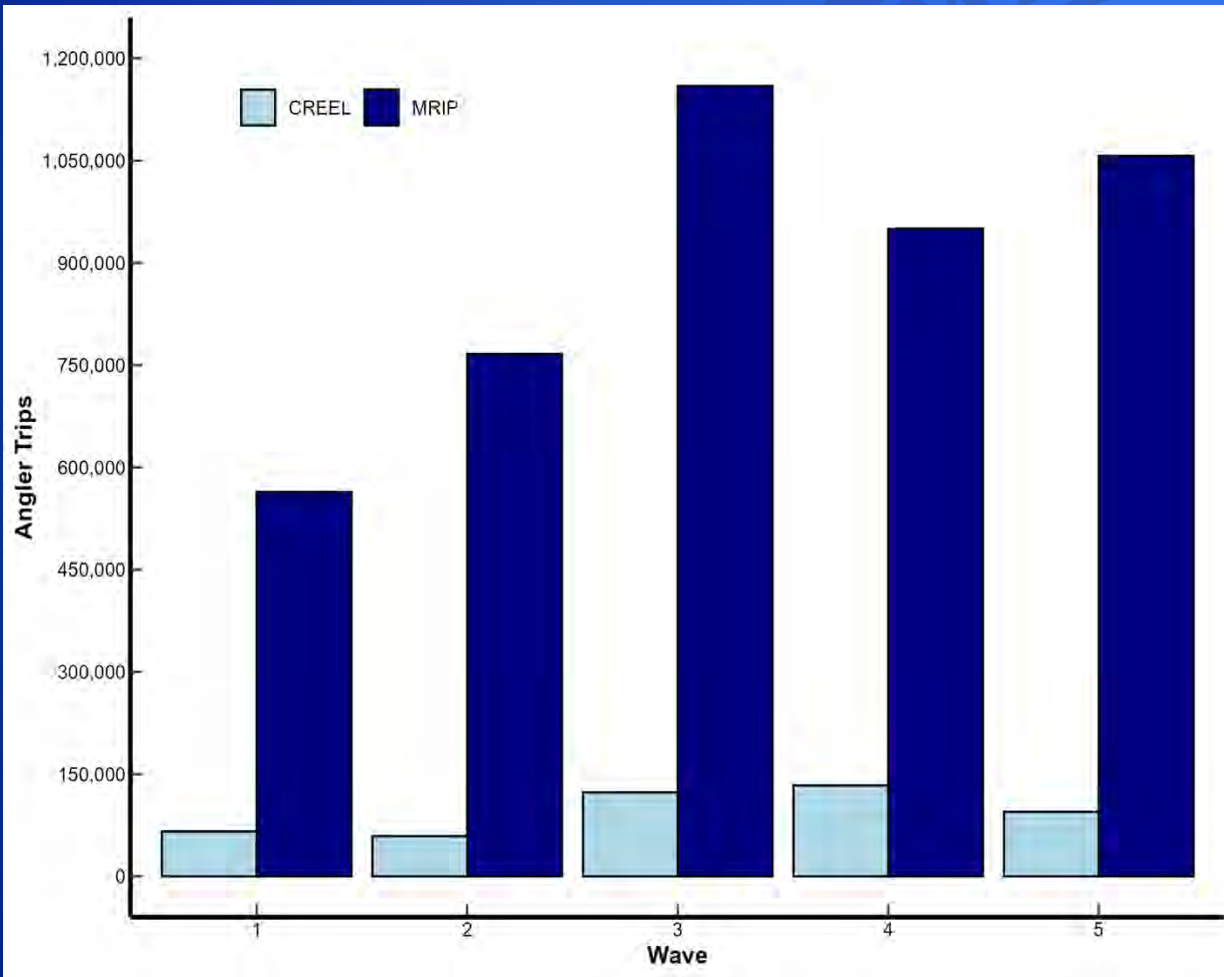


Evaluation of MRIP Landings

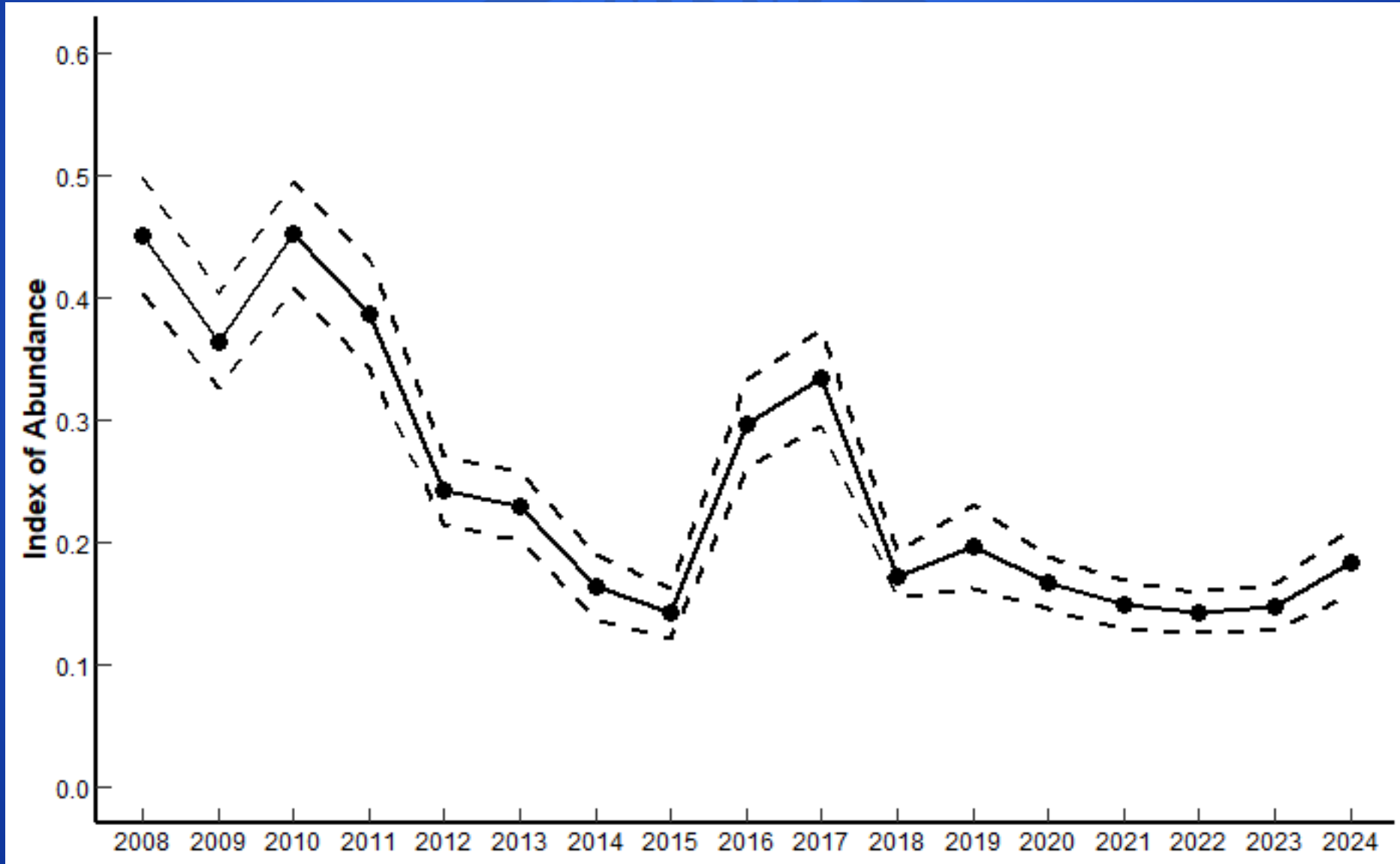
- Distribution of wave-specific landings for Spotted Seatrout
- Variability associated with each wave
- Wave 6 anomalies
 - Shore and Private/Rental Boat estimates over 1 million lbs
- Need for reconciliation of time series



Comparison of MS Creel and MRIP Effort



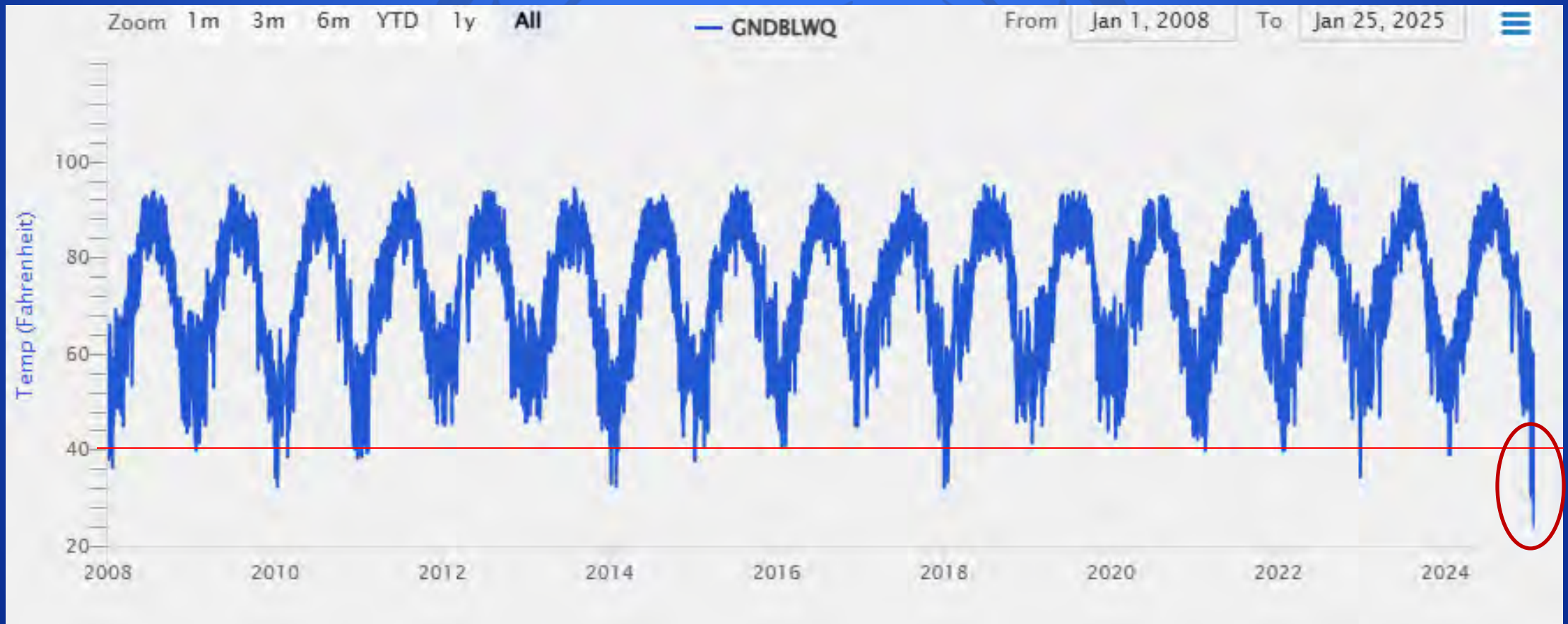
Current Spotted Seatrout Index of Abundance



Cold Kill Update

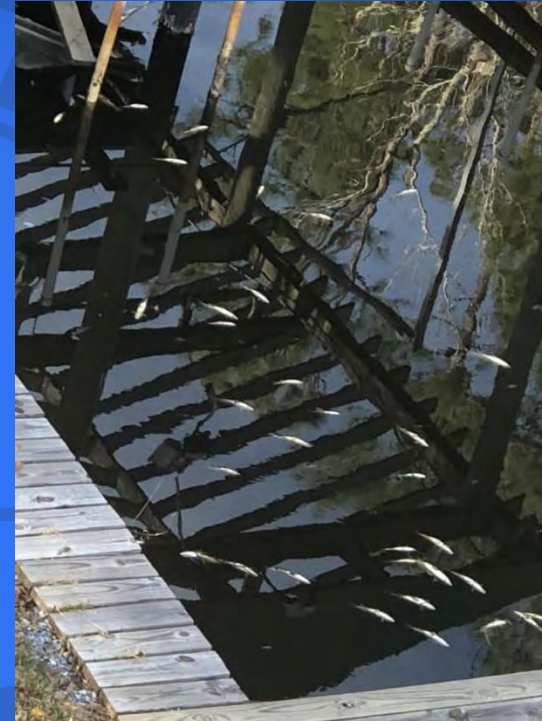
- Background
 - Multi-day freeze event coupled with ~8 inches of snow
 - Frozen precipitation directly into the system and frozen runoff
 - Impacts observed when temps reach 40 degrees F and below
- Solicitation of public reports
 - Put out notice on social media
 - 50+ observations of kills provided to the department over the following week
 - Staff began direct observations the Friday after the kill

Bangs Lake Weather Station Data January 1, 2008 – February 11, 2025



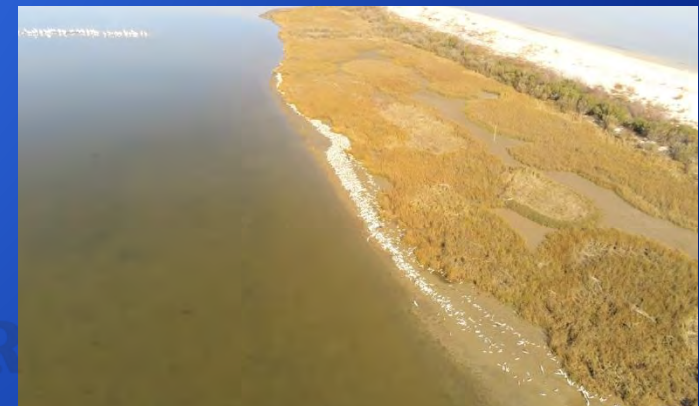
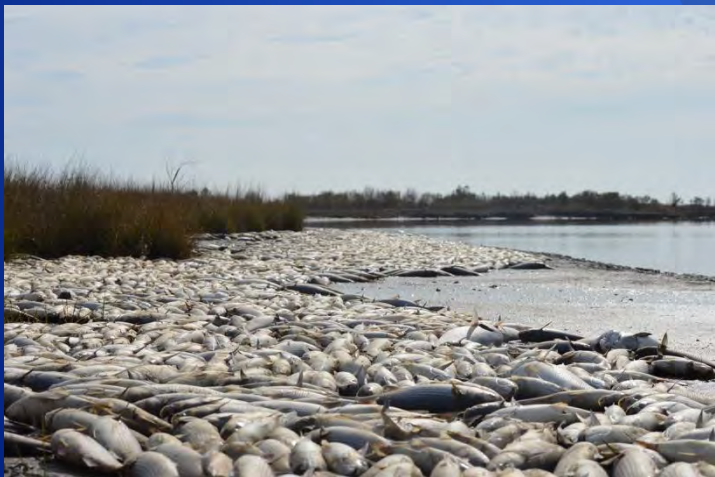
Public Observations

- Reports from across the coast
 - Largely restricted to mullet
 - Small tributaries and bayous
 - Two distinct reporting peaks
 - Right after the event
 - Beginning of decomposition
- Reports of larger fish
 - Began immediately post event
 - Pattern of observations recognized
 - Staff used initial reports as guide

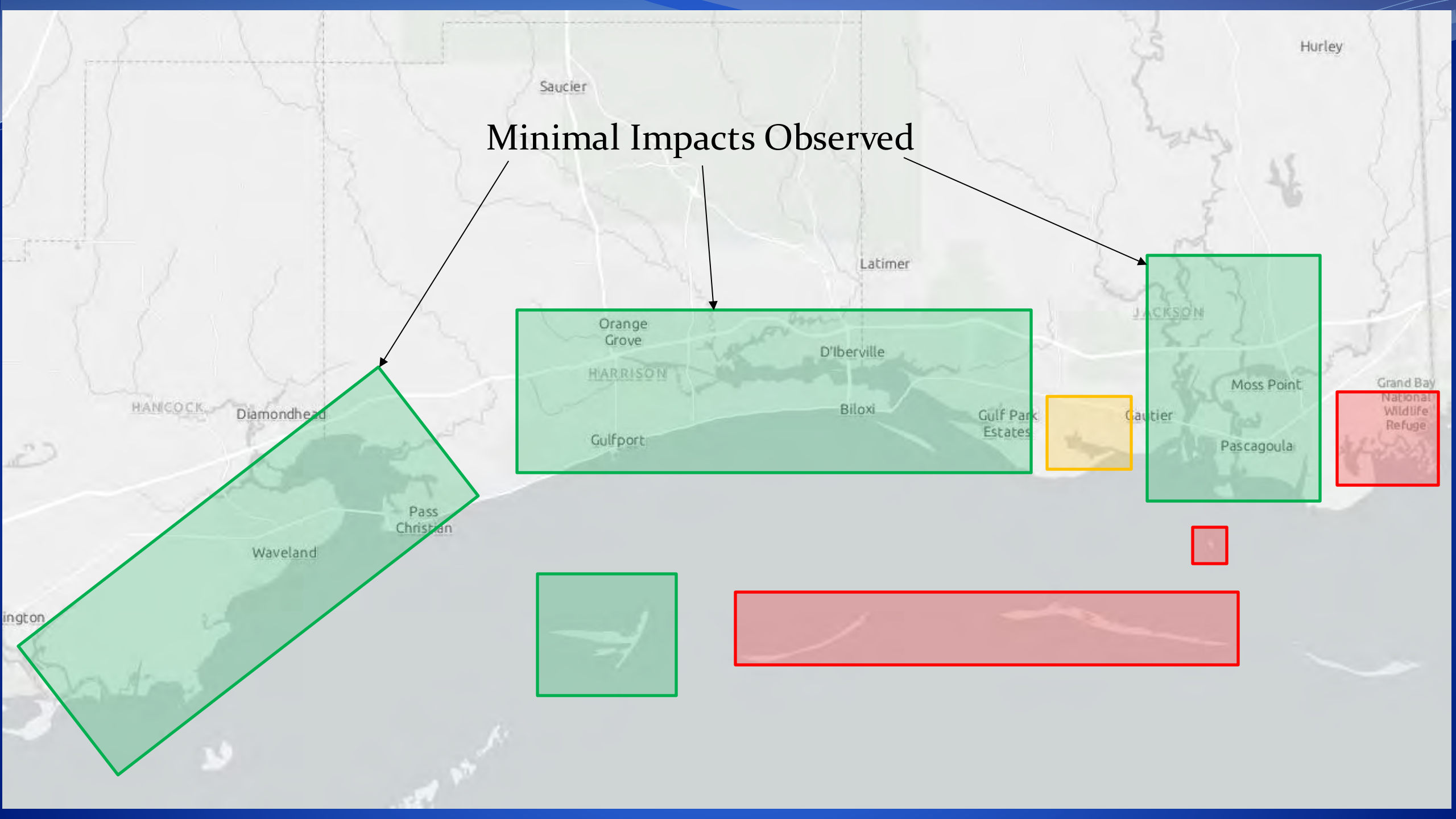


Staff Observations

- Round, Ship and Horn Island
 - Kills restricted to semi-enclosed bays
 - Multiple species observed
 - Mullet, Spotted Seatrout, Red Drum, Black Drum, Sheephead
 - Concentrations varied across systems



Minimal Impacts Observed



Hurley

Saucier

Latimer

Orange Grove

D'Iberville

Gulfport

Biloxi

Gulf Park Estates

Moss Point

Pascagoula

Grand Bay National Wildlife Refuge

HANCOCK

Diamondhead

Pass Christian

Waveland

JACKSON

Gautier

ington



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Grand Bay

- Largest impacts observed
 - Multi-species kill
 - More than 100k mullet observed
 - Multiple large Spotted Seatrout
 - Under and slot-sized Redfish
 - Upper reaches of every tributary





Bayou Cumbest Weather Station Data
January 1, 2025 – February 11, 2025

Bangs Lake Weather Station Data
January 1, 2025 – February 11, 2025



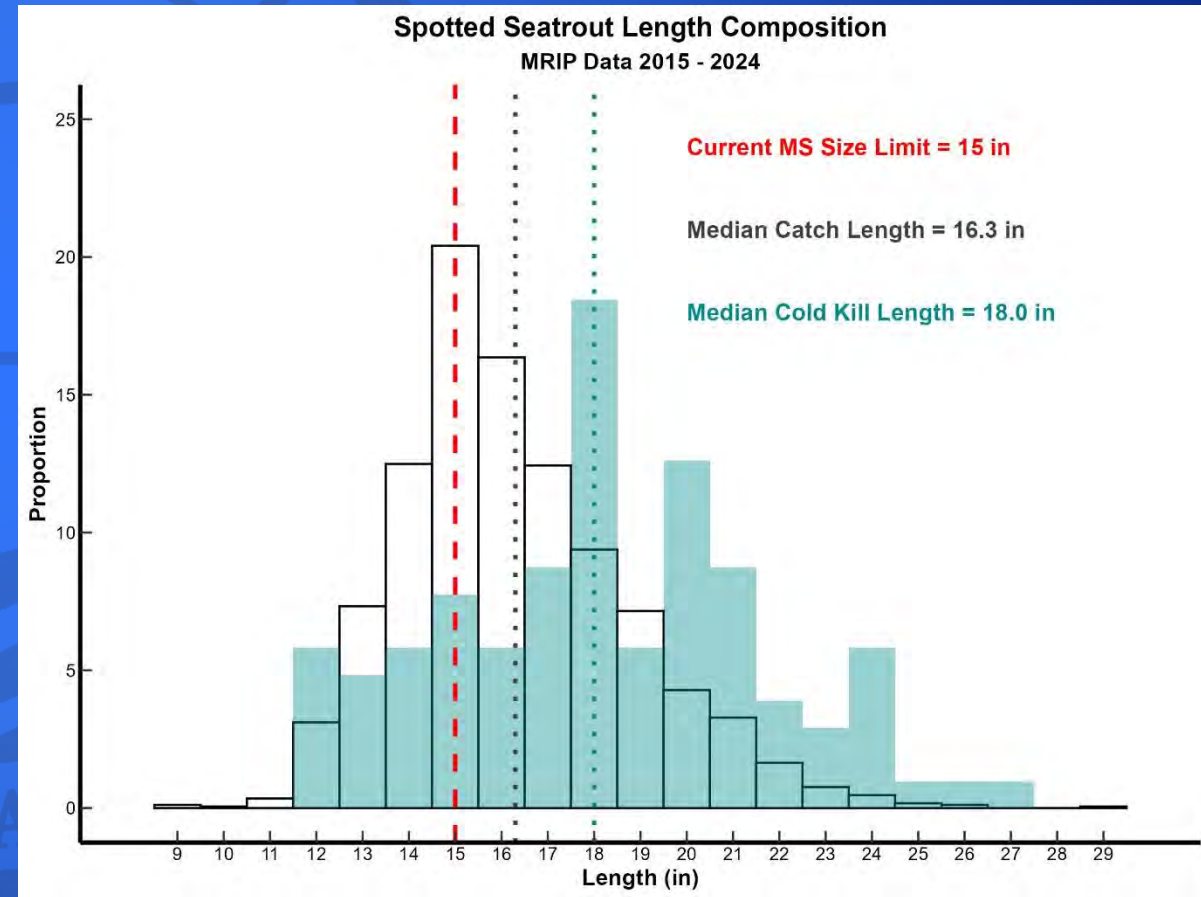
Bayou Heron Weather Station Data
January 1, 2025 – February 11, 2025

Estimated Totals

| Species | Islands | Interior | Grand Bay | Estimated Totals |
|------------------|---------|----------|-----------|------------------|
| Striped Mullet | 25,000 | 10,000 | 100,000 | 135,000 |
| Spotted Seatrout | 650 | 25 | 500 | 1,175 |
| Red Drum | 500 | 30 | 600 | 1,130 |
| Black Drum | 300 | 0 | 250 | 550 |
| Sheepshead | 250 | 0 | 150 | 400 |

Cold Kill Conclusions

- Observations occurred across the Sound
- Interior of the fishery relatively unaffected
- Multi-species kills observed in shallow, semi-enclosed waterbodies
- Length composition of Spotted Seatrout in the kill shows impact to larger size classes



Next Steps

- Continue monitoring the fishery through independent and dependent monitoring to observe any shifts in catches/lengths
- Monitor recruitment into the fishery over the next two years to determine if any impacts occurred to YOY
- Developing a project to monitor the repopulation of affected areas to inform how future events may impact the fishery



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Grand Bay NERR

Updates from Research, Stewardship,
Training, and Education Sectors



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Research Sector Update

Movement and remobilization of phosphate contamination in Grand Bay NERR

- Our Margaret A. Davidson Fellow, Jeneil Patel, has been using flow meters/sensors in Bangs Lake and Bangs Bayou, as part of his graduate research investigation into the dynamics of the contaminant phosphorus movement and resuspension.





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Research Sector Update

- We are collaborating with University of Florida to map PFAS (poly-fluoro-alkyl substances) in MS coast waters.
- Collecting water and sediment samples for baseline data to help us understand history, flow dynamics and potential sources of PFAS in our waterways.





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Research Sector Update

- The System-wide Monitoring Program (SWMP) team continued water quality monitoring despite cold weather.
- The SWMP team helped with dead fish counts and a dead manatee extraction this past month. Another manatee was found over the weekend.





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Stewardship Sector Update

- We hosted regional livestock producers as part of the Grazing Advisory Team
- Looking at grazing as a tool for vegetation management in several state parcels.
- We are developing a Conservation Grazing Plan
- Pineywoods cattle used historically, were discussed as a good fit for Grand Bay's grassland restoration





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Stewardship Sector Update

- The NERR monitoring team is doing winter bird surveys to assess the effectiveness grassland restoration efforts.
- From 2019 to present, 90 species of birds have been detected.
- There are 48 Area Search surveys across 16 long-term sites.
- Among many others, Henslow's Sparrows, indicators of high-quality savanna habitat, and Sedge Wrens have been found.





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Training Sector Update

Stormwater Systems Resilience Through Green Infrastructure

- Funding EPA Grant
- Partners – MSU Gulf Coast Community Design Studio, MDMR Coastal Resources, Moss Point School District
- Worked together to create a plan for installation of ‘green infrastructure’ components to reduce roadway and parking lot flooding



Kreole Elementary School on Martin Luther King Drive, Moss Point, MS



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Training Sector Update

Stormwater Systems Resilience Through Green Infrastructure

- Mastodonte LLC was contracted to construct project features
- Includes 1,170' of bioswales for stormwater storage, five rain gardens to collect and store water and native plantings, including trees
- Weather delays with heavy rains and 7" of snow!





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Training Sector Update

Stormwater Systems Resilience Through Green Infrastructure

- Perforated piping placed and covered with gravel
- Stormwater flows slowly back into stormwater system reducing pressure flooding.





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Training Sector Update

Stormwater Systems Resilience Through Green Infrastructure

- Next steps, add soil, partner with the school district to get kids, young and old, involved with plantings.
- Completion to be mid-February





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Education Sector Update

- Jennifer Cumbest was hired as our new Education Coordinator on January 16.
- Continuing planning for the Celebrate the Gulf Marine Education Festival coming up on April 5.
- Held two batik art workshops in January for 24 participants to meet the demand from our non-traditional, artist programs.





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Education Sector Update

- We host a community event (Adventure Quencher) on a Saturday each month.
- In February, we held the Sparrow Sweep in partnership with Dr. Mark Woodrey of MSU and MS Coast Audubon Society that had 26 participants.
- We also had an outreach booth at this weekend's Biloxi Boat Show.





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