2020 Bay Scallop Fishery Management Plan Update
Scheduled Review

DEPARTMENT OF ENVIRONMENTAL QUALITY

Marine Fisheries MFC Business meeting

| Jeffrey Dobbs | August 20, 2020
Presentation Outline

• Management Strategy
• Fishery Overview
• Abundance Sampling
• Ongoing Efforts
• Research Needs
• DMF Recommendation
• Next Steps
Bay Scallop FMP Timeline

2007  ➔ Original FMP established a prohibited take
2010  ➔ Amendment 1 established opening triggers for fishery
2015  ➔ Amendment 2 defined harvest levels for all areas
2020  ➔ Scheduled review
Bay Scallops (*Argopecten irradians*)

- Short lived - 12-26 months
- Sensitive to environmental changes and predators
- 1987 Red tide event
  - Killed 21% of adults in hardest hit areas
  - 1988 recruitment only 2% of normal
  - Stock never fully recovered
- Relative abundance at historic lows over past 10 years
2020 Bay Scallop Fishery Management Plan Update
Fishery Overview

![Graph showing the relationship between Trigger Abundance and Harvest Moratorium from 1980 to 2018.](image-url)
2020 Bay Scallop Fishery Management Plan Update
Abundance Sampling

- Scallop dredge used in Back, Bogue, and Core sounds and southern area
- Quadrats for Pamlico Sound
- October and January sampling used for trigger
## Bay Scallop Management Triggers

<table>
<thead>
<tr>
<th></th>
<th>Pamlico Sound</th>
<th>Core Sound</th>
<th>Back Sound</th>
<th>Bogue Sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive trigger 50%</td>
<td>0.76</td>
<td>2.36</td>
<td>2.75</td>
<td>3.22</td>
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<tr>
<td>Progressive trigger 75%</td>
<td>0.79</td>
<td>3.63</td>
<td>4.57</td>
<td>5.75</td>
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<tr>
<td>Target relative abundance</td>
<td>0.84</td>
<td>5.58</td>
<td>7.54</td>
<td>10.28</td>
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<tr>
<td>Progressive trigger 125%</td>
<td>0.87</td>
<td>8.58</td>
<td>12.55</td>
<td>18.36</td>
</tr>
</tbody>
</table>
Bogue Sound

[Graph showing relative abundance of bay scallops in Bogue Sound from 1984 to 2019, with lines indicating target and various percentage indicators.]
Core Sound

![Graph showing relative abundance of scallops in Core Sound over years, with trends and targets indicated.](image-url)
Pamlico Sound

Graph showing the ln(CPUE) (Scallops/m²) from 2008 to 2020. The data shows a decline in scallop abundance from 2008 to 2010, with a recovery in 2011. The target abundance is indicated by a horizontal line.
Southern Region

-4.00
-3.00
-2.00
-1.00
0.00
1.00
2.00
3.00
4.00
lnCPUE (scallop/minute)

Southern region (South of Bogue Sound)
• Research Collaboration
• Aquaculture
• Investigating causes of reduced abundance
• Looking for new bay scallop beds
• CHPP efforts
• Florida stock enhancement
• Better quantify population and stock
• Identify viable stock enhancement techniques
• Identify and enhance strategic bay scallop habitat
• Develop surveys for juvenile recruitment and spat settlement
• Look into role nutrient loading plays in recruitment
The division recommends the Commission approve the 2020 Bay Scallop FMP annual update to fulfill the scheduled review

• Management strategies within Amendment 2 will remain in effect
• Trends will be monitored annually
• If conditions change, the schedule can be adjusted
Action Item
Vote on final approval of Kingfishes FMP Update
Questions?