



Shellfish Lease User Conflict Reduction Update

NC DEPARTMENT OF ENVIRONMENTAL QUALITY

Jacob Boyd | NC Division of Marine Fisheries

NC Marine Fisheries Commission Meeting | Feb. 25, 2021



Overview

- Issue and Action Needed
- Timeline
- Memo - *Shellfish Lease User Conflict Reduction Update*
- Next Steps



Issue and Action Needed

Issue

- DMF will present user conflict reduction information based on the concentration of shellfish leases in the state's waterbodies that are identified as high use areas (HUA)

Action Needed

- DMF is seeking input from the MFC about whether to proceed with the development of caps to further limit shellfish lease acreage in identified HUAs



Timeline

Aug
2020

- MFC motion asking DMF staff to study the concentration of shellfish leases in given water bodies and bring recommendations based on potential user conflicts in Feb. 2021

Fall
2020

- Staff developed methodologies for mapping and area calculations

Dec
2020

- Staff determined a memo is most appropriate to provide
- Recent legislative studies provide ample background information on shellfish leases and resulting user conflicts (User Conflict Study, SEA Moratorium Area Study)

Feb
2021

- MFC - Present user conflict reduction information based on the concentration of shellfish leases identified as high use areas (HUA)

Authority

Governing Authorities and Regulation



NC General Assembly

Shellfish Bottom and Water Column Lease Minimum Standards
(N.C.G.S. § 113-202, 202.1)



NC Marine Fisheries Commission

Shellfish Leases and Franchises (MFC Rules 15A NCAC 03O .0200)



US Army Corps of Engineers

Nationwide Permit #48 Regional Conditions



NC General Assembly Authority

N.C.G.S. § 113-201 - Legislative findings and declaration of policy

❖ N.C.G.S. § 113-201(a)

- Shellfish cultivation provides economic and ecological benefits to North Carolina
- Policy is to encourage the development of private shellfish cultivation in ways that are *compatible* with other public uses

❖ N.C.G.S. § 113-201(b)

- MFC may limit the number of shellfish lease acres in any area to assure the public that some waters will remain open and free from shellfish cultivation activities



MFC Authority

Law	Title
N.C.G.S. § 113-201	NCGA findings/declaration of policy; authority of MFC
N.C.G.S. § 113-202	New and renewal leases for shellfish cultivation
N.C.G.S. § 143B-289.52	MFC – powers and duties
S.L. 2019-37	Provide further support to shellfish aquaculture industry

User Conflicts

- Substantial increase in user conflicts coinciding with the recent expansion (five years) of the shellfish aquaculture industry
- Increase in the number of contested cases and other legal challenges
- Many user conflict cases brought by riparian owners driven by concern for impairment of view, also known as “viewshed”
- Viewshed is not a public trust right acknowledged under North Carolina common law



Current/Ongoing Efforts



July 2019

- Shellfish Aquaculture Bill becomes law
- DMF prepares User Conflict Study in collaboration with MFC

November 2019

- MFC approves User Conflict Study, completing the statutory requirement
- DMF begins developing language for rulemaking based on User Conflict Study

February 2020

- MFC approves proposed language for rulemaking to address user conflicts
- DMF begins fiscal analysis for approved language

June-July 2020

- DMF completes Shellfish Aquaculture Tool to increase transparency and improve public input/knowledge of shellfish leases
- OSBM approves fiscal analysis of proposed rules

August 2020

- MFC votes to begin rulemaking process
- MFC asks DMF staff to study the concentration of shellfish leases

Current/Ongoing Efforts

Shellfish Aquaculture Bill studies/mandates

1. User Conflict Study – recommendations
2. Shellfish Aquaculture Enterprise Areas (SEAs)
 - a. SEAs Moratorium Areas Study
3. Assess Pamlico Sound Shellfish Aquaculture Pilot Project
4. Shellfish Cultivation Lease Review Committee
5. Further recommendations for rule and/or statute changes are under development



Current/Ongoing Efforts

#1: Regulatory Reform

- MFC cumulative impact to limit total acres (*Potential*)
- 250 ft. buffer between shellfish leases (*Potential*)
- 250 ft. buffer from developed shoreline (*Potential*)
- Marking/Training requirements (*Potential*)
- Riparian owner notification

#2: Program Evaluation

- Best management practices for industry
- Utilize best available science
- Stakeholders work together to address user conflict issues

#3: Collaboration

- Interstate Aquaculture Workgroup
- Inventory aquaculture information from all states
- Shellfish Aquaculture Training Program

#4: Resource Assessment

- Evaluate staff and funding levels to implement recommendations

Current/Ongoing Efforts

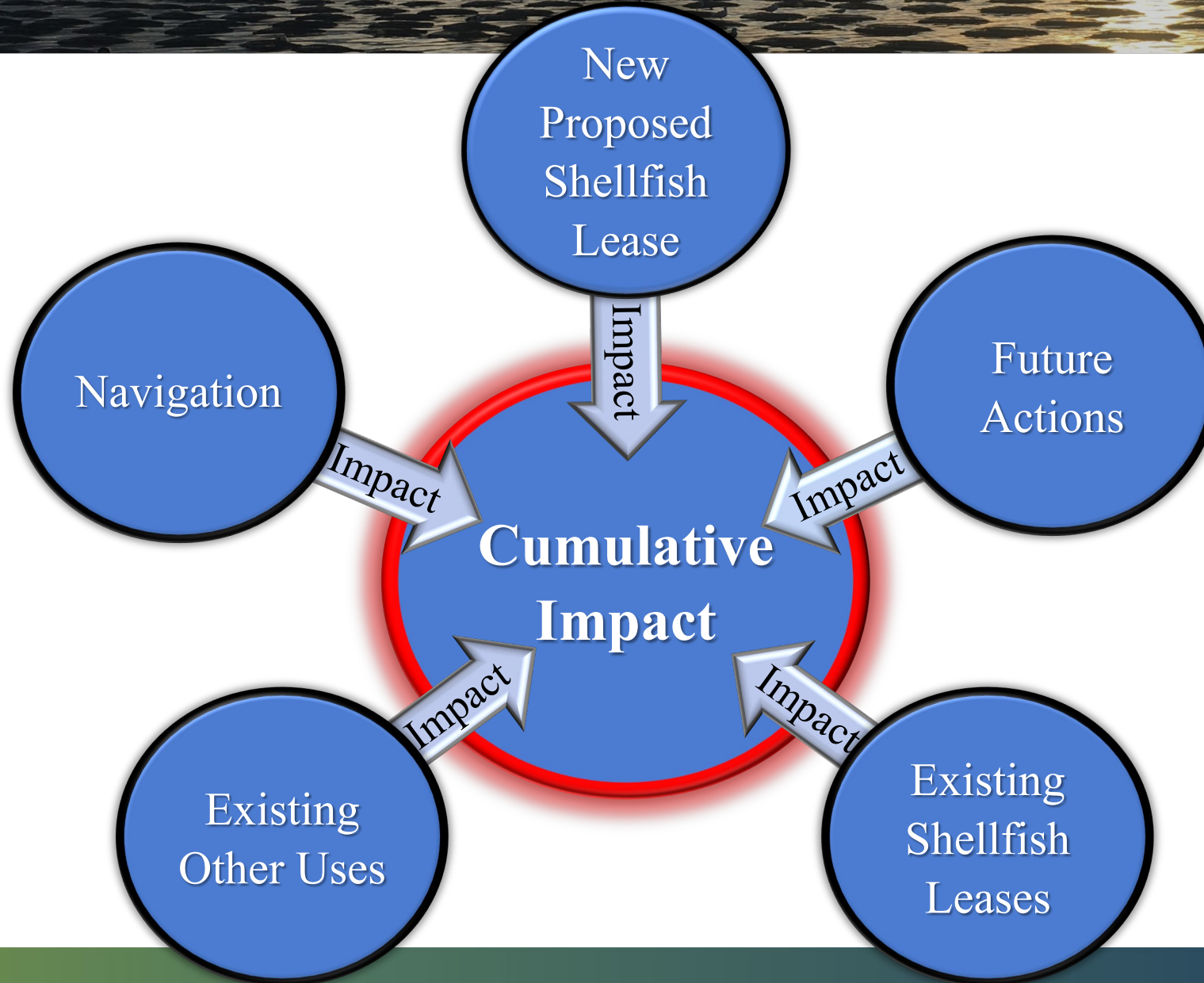
User Conflict Study rule changes to reduce user conflicts (*Potential*)

1. Add shellfish lease cumulative impact language ★
2. Add 250-foot buffer between shellfish leases ★
3. Increase 100-foot buffer from developed shorelines to 250 feet ★
4. Enhance training requirements to include user conflict information
5. Modify marking requirements for visibility/navigation concerns:
 - a. Max of eight corner markers from 3-inch to 12-inch diameter
 - b. Yellow light reflective tape

★ Denotes rule changes that essentially limit shellfish lease acreage



Current/Ongoing Efforts



Findings

- Shellfish leases often conflict with public trust uses, making balancing issues and determining compatibility challenging
- A multifaceted approach is required to address user conflict issues
- Multiple sources of authority govern the responsibilities of the MFC and the Department of Environmental Quality for managing shellfish leases in ways that are compatible with other public uses (i.e., navigation, fishing, recreation)



Findings

- MFC may adopt rules to limit the number of shellfish lease acres in any area – N.C.G.S. § 113-201(b)
- Other states developed acreage limits, in consultation with the fishing industry and other regulatory agencies and stakeholders, as a management tool for shellfish leases
- Available GIS data, such as current acreage of leased waters and closed shellfish growing areas, can inform decisions about limiting shellfish lease acreage



Methodologies to Calculate Available Acres

- Shellfish leases are divided into two types: bottom and water column
- Must have a shellfish bottom lease to have a shellfish water column lease which can be granted over the entire footprint or portion of the bottom lease
- Main objective when calculating total acres leased in a waterbody is to determine the amount of bottom leased for shellfish aquaculture
- Shellfish water column lease acres are not included in calculating total acres leased in a waterbody to avoid inflation



Methodologies to Calculate Available Acres

Identified high use areas (HUAs)

County	Waterbody
Onslow County	New River
	Stump Sound (Mainland Areas, Permuda Island Bay, Seaside Areas)
	Topsail Sound (Mainland Areas)
Pender County	Topsail Sound (Mainland Areas, Waters Bay, Banks Channel, Seaside Areas, Green Channel)
Carteret County	Newport River

Methodologies to Calculate Available Acres

Data Layers

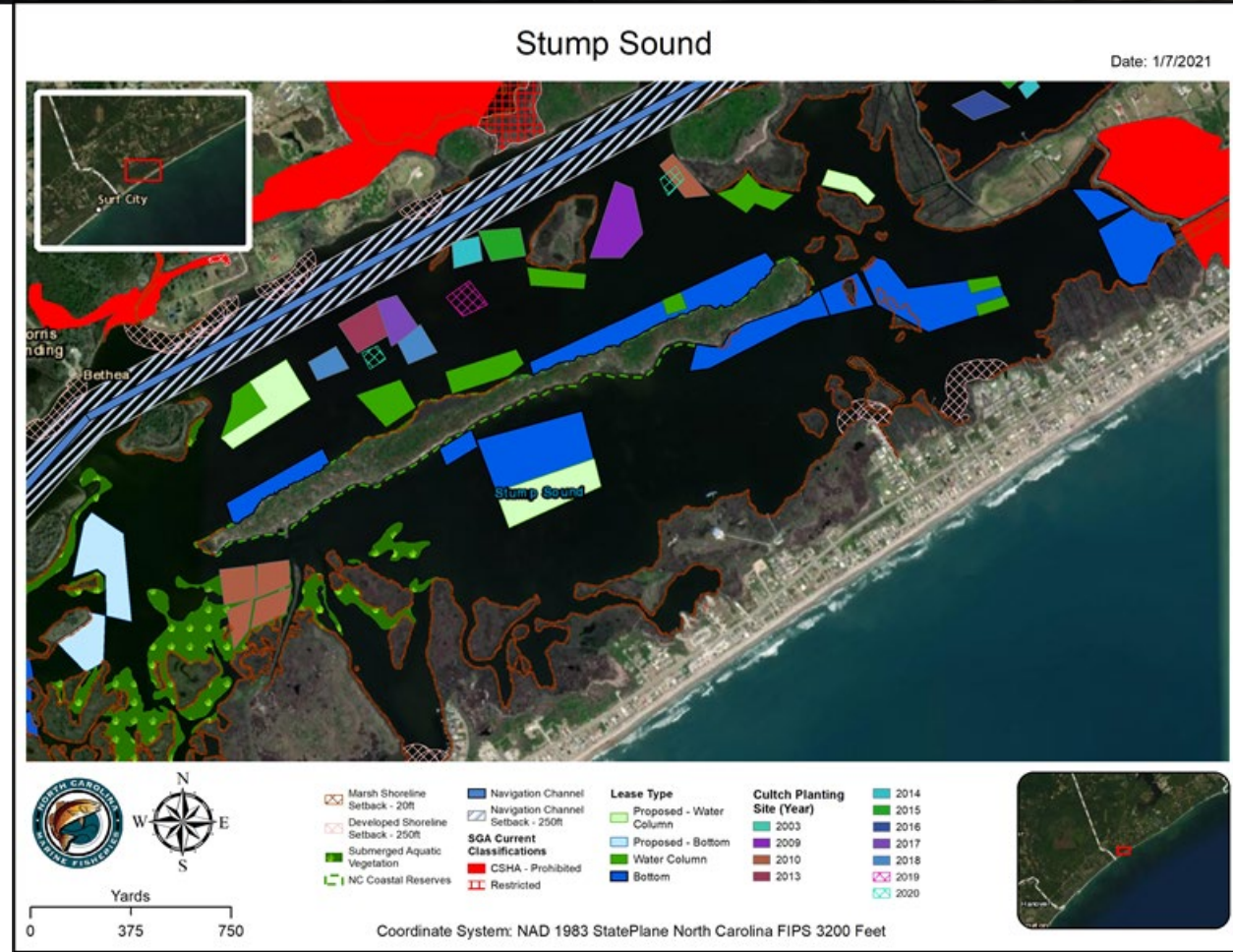
- Current and proposed shellfish leases and franchises
- Research sanctuaries
- 250' from developed shoreline
- 20' from undeveloped
- Submerged aquatic vegetation
- Cultch planting sites
- Oyster Sanctuaries
- Seed Oyster Management Areas
- Shellfish Growing Areas – closed
- Military Restricted Area/Danger Zones
- Submerged Lands Claims
- Moratoriums
- Pound nets
- Intracoastal Waterway - 250' buffer
- National Estuarine Research Reserve Coastal Reserve Boundary
- National Park Service
- US Fish and Wildlife Service Lands
- Other permitted restoration areas

Methodologies to Calculate Available Acres

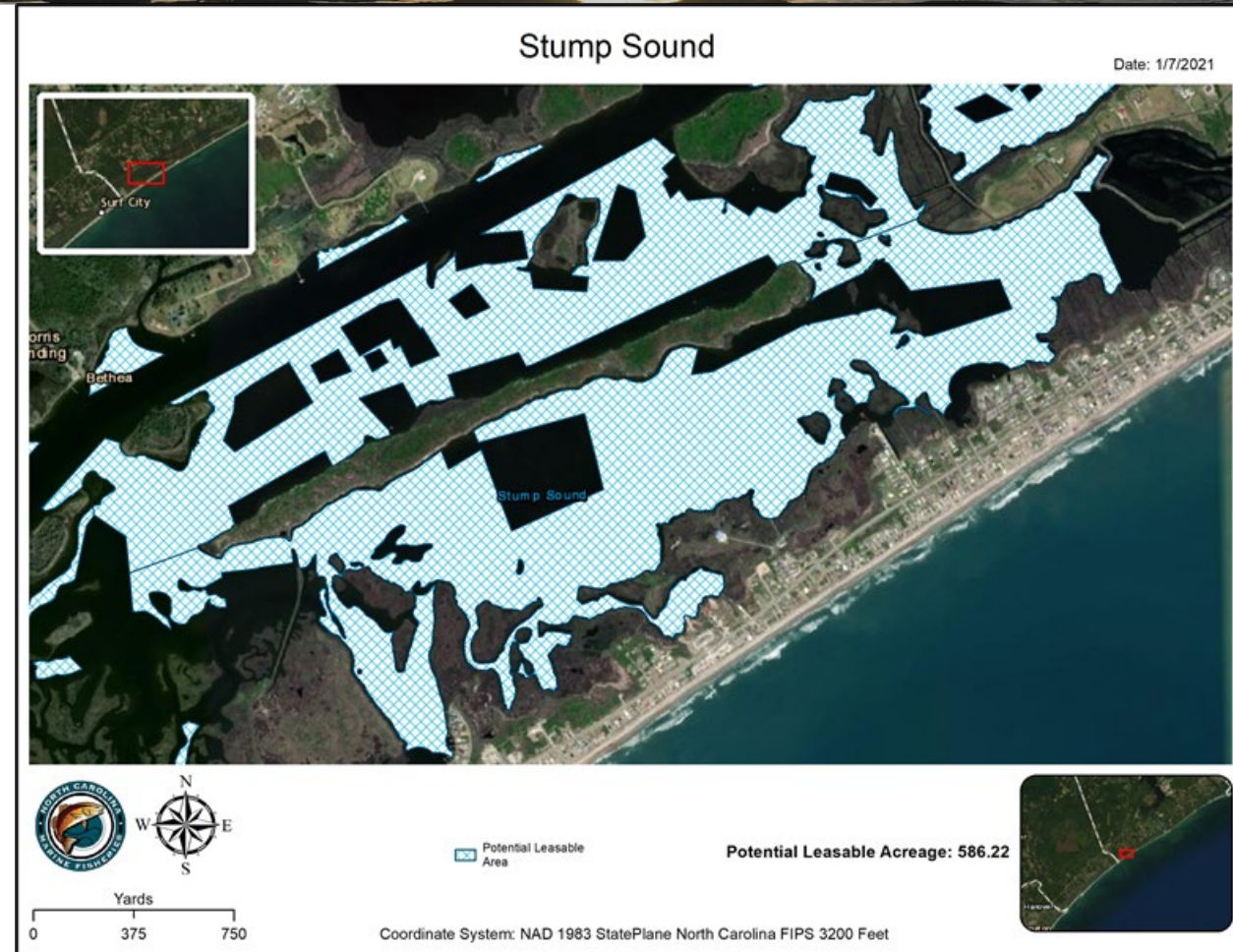
Other Factors

- Natural shellfish in area (shellfish bottom mapping)
- Proposed 250' buffer between shellfish leases
- USACE NWP No. 48: Regional Conditions - 1/3 waterbody, 250' navigational aids, not in setbacks or marked/unmarked channels
- User conflicts
- Shellfish Enterprise Areas (SEAs)

Methodologies to Calculate Available Acres

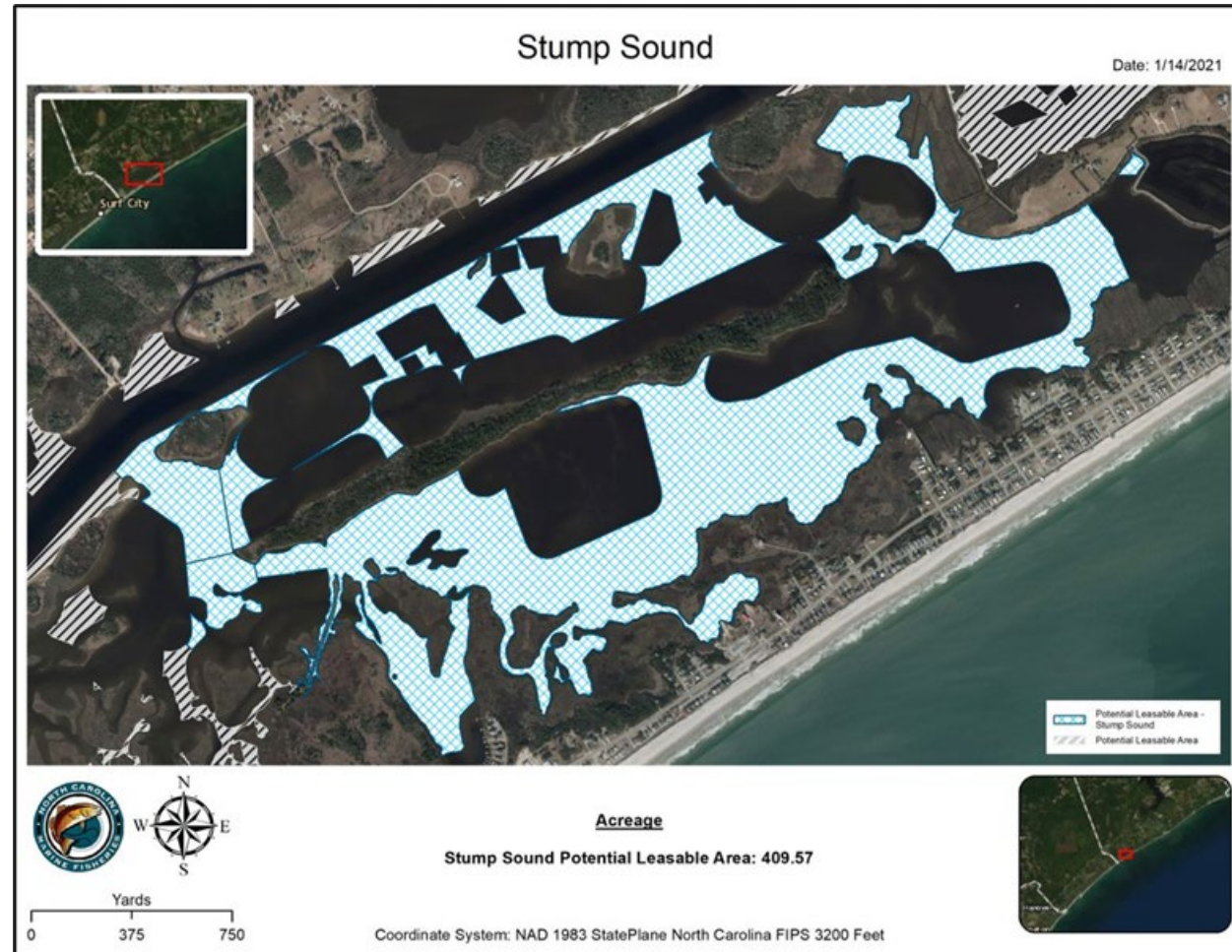
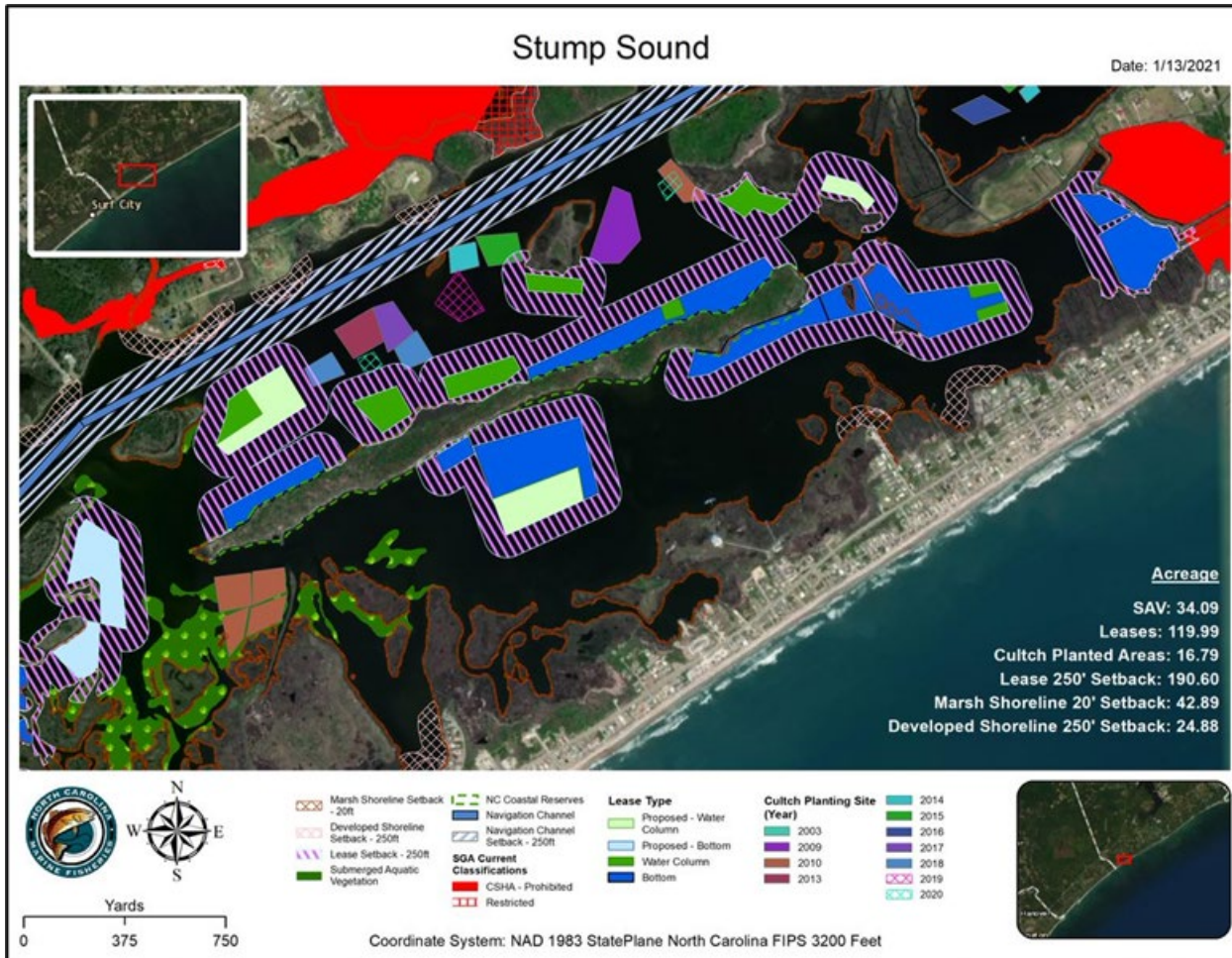


Total Shellfish Leases = **14%**



Potential Leasable Area = **69%**

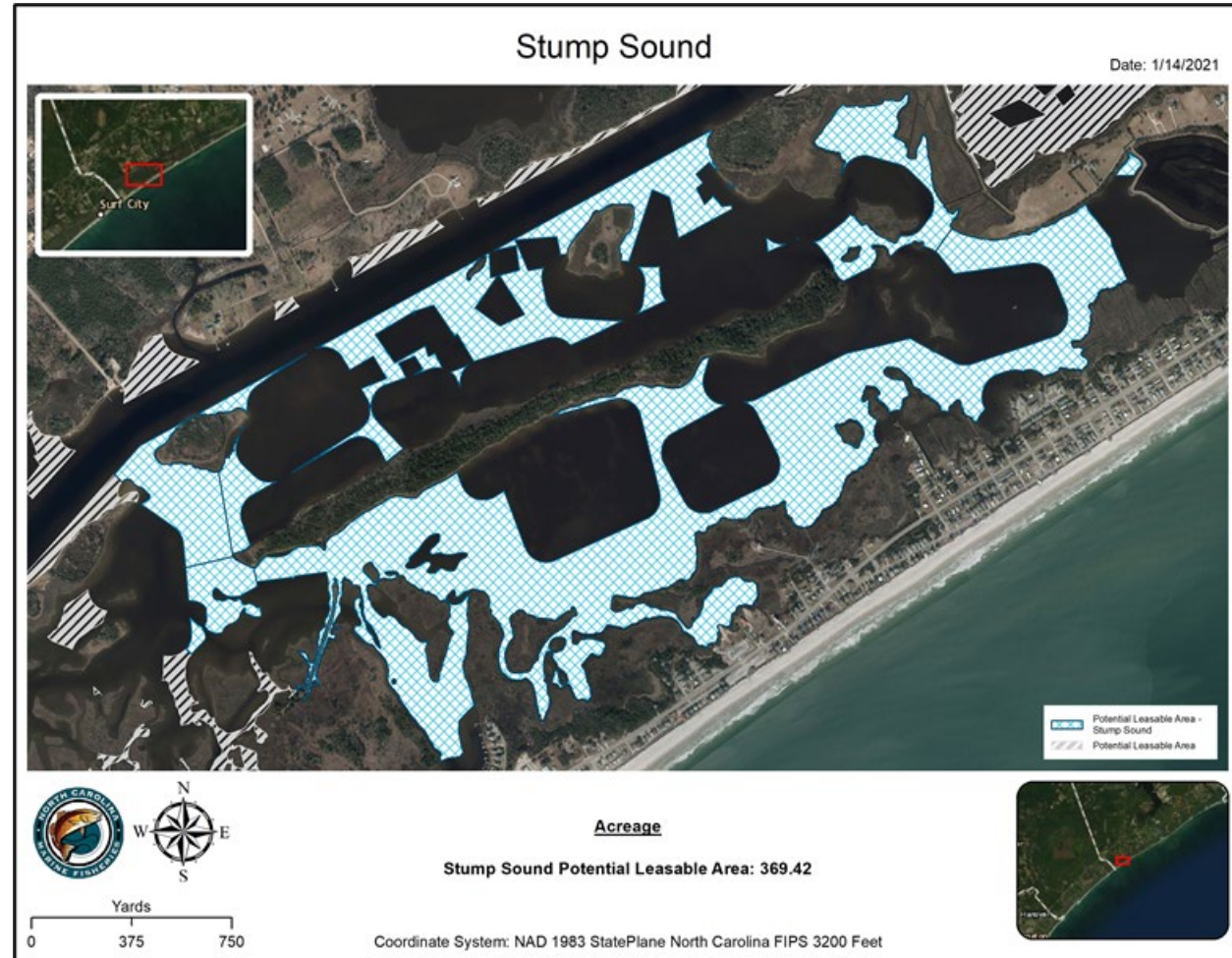
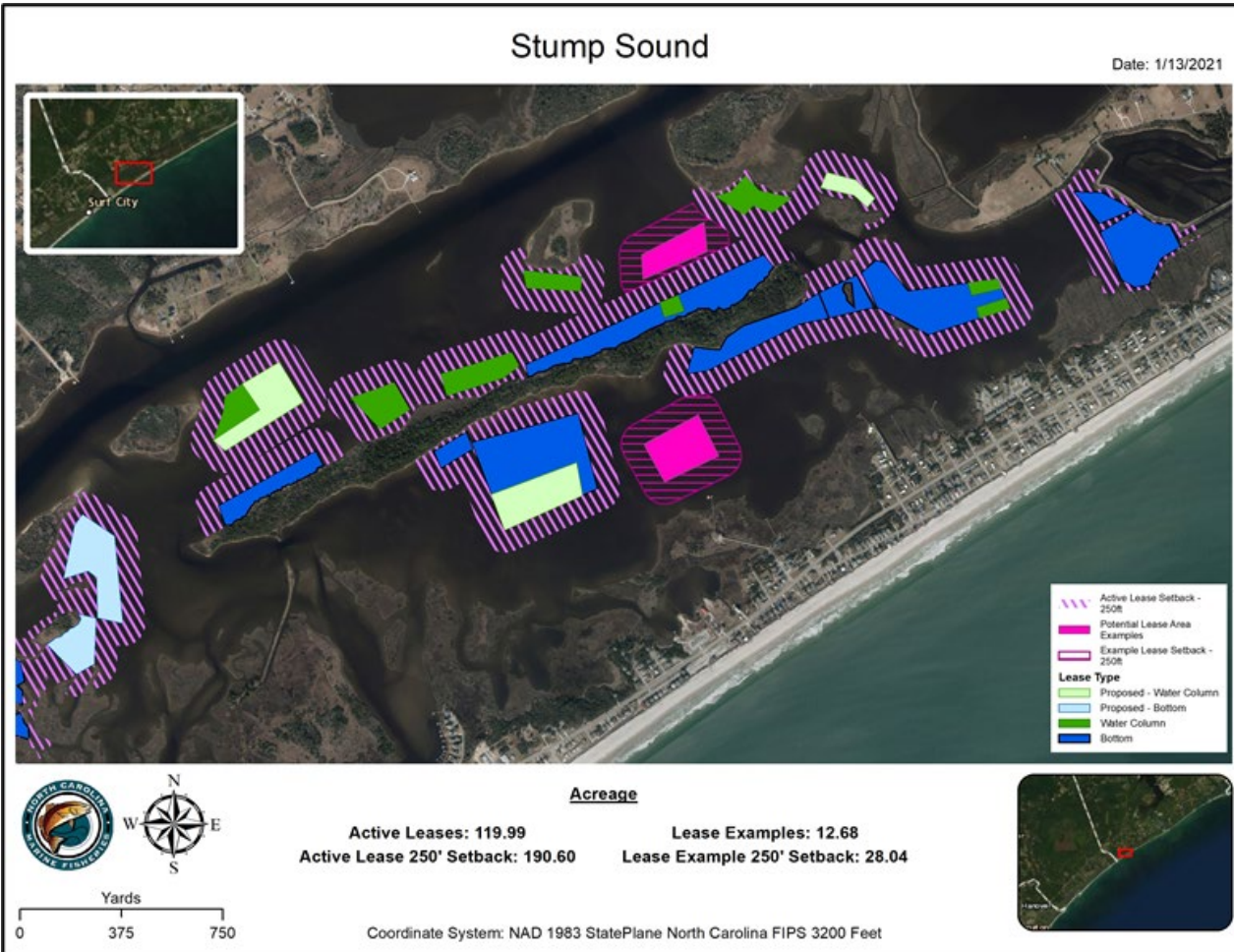
Methodologies to Calculate Available Acres



Total Shellfish Leases w/ Buffer = **37%**

Potential Leasable Area = **48%**

Methodologies to Calculate Available Acres



Total Shellfish Leases w/ Buffer (*Example*) = **40%**

Potential Leaseable Area = **44%**

Methodologies to Calculate Available Acres

Shellfish Leases

	Without 250' Buffer			With 250' Buffer			
<i>Total number of acres and percent of waterbody for Stump Sound</i>	Stump Sound	Current	Potential	Current	Potential	Simulated New	Remaining Potential
Total Acres	847	120	586	311	410	339	369
Percent Waterbody	N/A	14%	69%	37%	48%	40%	44%

Methodologies to Calculate Available Acres

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23%

Important Considerations

- Limiting shellfish acres in HUAs could shift effort away to other areas that could become HUAs
- In some HUAs, shellfish leases may be self-limiting and acreage caps may not yield the intended effect (i.e., Stump Sound)
- Intersection with Shellfish Enterprise Areas development
- How to handle new applications within a HUA that has already met its acreage cap? (*Statutory changes required*)



Recommendations



If the MFC wants to proceed with developing additional rules:

DMF *recommends*:

- ❖ Involve the public and other stakeholders from the beginning
- ❖ Include automatic review period for opportunity to reevaluate

DMF *requests*:

- ❖ Feedback on areas identified as HUAs
- ❖ Other areas of concern to examine further as potential HUAs
- ❖ Entities to include for soliciting stakeholder input

Next Steps

Proceed with additional rulemaking:

Yes

- ❖ Develop other identified HUAs
- ❖ Develop issue paper with proposed rules
- ❖ Identify and meet with stakeholders, advisory committees, industry groups, and other stakeholder groups
- ❖ Provide feedback to MFC and finalize proposed rule language
- ❖ Draft fiscal analysis and begin rulemaking

**Large investment of time and resources: >1 year*

***Earliest approximate effective date June 2024*

No

- ❖ Continue numerous measures to address shellfish lease user conflicts and limit acres
- ❖ Allow time for previous studies and mandates to be fully implemented and benefits to be realized
- ❖ Vote to approve rules tomorrow that limit shellfish lease acres

***Earliest approximate effective date June 2022*

Issue and Action Needed

Issue

- DMF will present user conflict reduction information based on the concentration of shellfish leases in the state's waterbodies that are identified as HUAs

Action Needed

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Questions?

Jacob Boyd

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Shellfish Lease and Aquaculture Program:

<http://portal.ncdenr.org/web/mf/habitat/enhancement/shellfish-leases>

Shellfish Aquaculture Tool:

<https://arcg.is/0LD5zS>