



Coastal Habitat Protection Plan 2019 Commission Update

*NC Marine Fisheries Commission
February 22, 2019*



Coastal Habitat Protection Plan

Origin and Purpose

G.S. 143B-279.8

- Required DEQ (formerly DENR) to draft the plan
 - Division of Marine Fisheries (DMF)
 - Division of Coastal Management (DCM)
 - Division of Water Resources (DWR)
 - Division of Energy, Mineral, and Land Resources (DEMLR)
- Required the Environmental Management (EMC), Coastal Resources (CRC), and Marine Fisheries (MFC) commissions to approve and implement recommendations

Purpose

- Long-term enhancement of coastal fisheries by addressing habitat and water quality needs of fishery species.
- Recommend actions to protect and restore fish habitats

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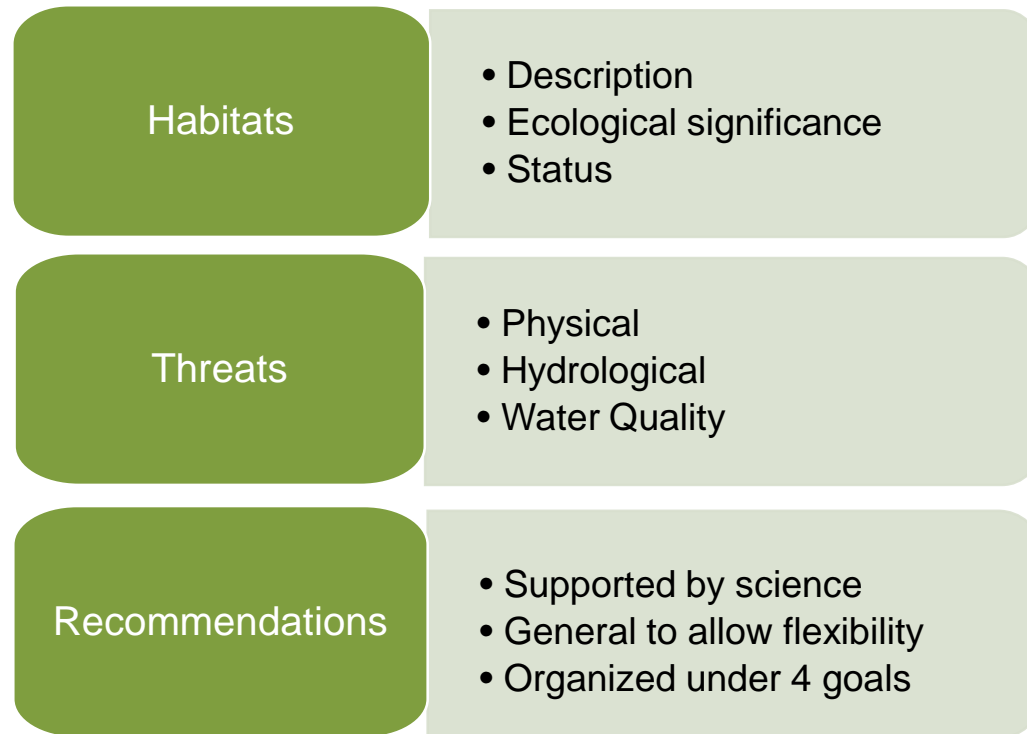


Coastal Habitat Protection Plan

What Is It?

A resource and guidance document to aid DEQ divisions and commissions in management of fish habitat and water quality.

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Implementation Plans (for CHPP recommendations)

- Developed by DEQ staff
- Two year plans
- Reviewed by the CHPP Steering Committee
- Adopted by the commissions

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1) WETLANDS: border vital nursery areas, export food, remove pollutants and are a buffer between water and land-based impacts.



2) SOFT BOTTOM: stores and regulates nutrients, and chemicals, and provides crucial foraging areas for fish.



3) SHELL BOTTOM: fish spawning and nursery area, improve water quality, and protect nearby shorelines from erosion.



4) SUBMERGED AQUATIC VEGETATION: provides refuge and food for small fish and invertebrates, improves water quality.



5) HARD BOTTOM: complex structure, often covered by living organisms, supports a temperate-subtropical reef fish community and snapper–grouper fishery.



6) WATER COLUMN: the basic habitat and the medium through which all other fish habitats are connected.

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Recommendations

Goal 1. Improve effectiveness of existing rules and programs protecting coastal fish habitats.

- 5 recommendations - compliance, monitoring, outreach, coordination, and invasive species.

Goal 2. Identify and delineate strategic coastal habitats.

- 2 recommendations – mapping, monitoring, and assessing fish habitat, and identifying priority areas for fish species.

Goal 3. Enhance and protect habitats from adverse physical impacts.

- 8 recommendations - habitat restoration, managing ocean and estuarine shorelines, protecting habitat from fishing gear and dredging and filling impacts.

Goal 4. Enhance and protect water quality.

- 8 recommendations - reduce point and non-point sources of pollution through BMPs, assistance, outreach, and coordination. Applies to not only DEQ activities, but for all land use activities, including forestry, agriculture and road construction.

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Implementation Highlights: MFC/DMF



Goal 2. Identify strategic coastal habitats

Recommendation: Identify and field groundtruth strategic habitat areas

- Region 4 (Cape Fear River) assessment completed
- Grant received to conduct field sampling to validate ecological condition – starting Year 2

Recommendation: Classify habitat condition by coordinating and conducting habitat mapping

- Working with APNEP to conduct aerial survey/mapping of SAV in summer 2019
- Developing oyster monitoring protocols for subtidal and intertidal oysters.

Goal 3. Enhance and protect habitats from adverse physical impacts

Recommendation: Expand habitat restoration to increase subtidal and intertidal oyster habitat

- Significant progress in oyster restoration– Swan Island Oyster Sanctuary, Year 3

Recommendation: Restore fish passage through elimination or modification of stream obstructions

- Assessing effectiveness of fish passage on Cape Fear River – tagging surveys

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2016 Key Focus Areas-

Something Different in 2016

- 1) Oyster Restoration** – *Cultch, Hatchery, Sanctuaries*
- 2) Living Shorelines** - *Outreach, Research, Permitting*
- 3) Sedimentation** - *Rates, Sources, Best Management Practice's, Low Impact Development*
- 4) Developing Metrics** - *Status and Trends*



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Water Quality Degradation

- Fishermen voicing increasing concern about water quality
- Algal blooms in Chowan and Cape Fear Rivers with toxic blue-green algae is repeatedly occurring
- Blue crab mortality associated with hypoxic events and pesticide runoff
- Several species that occur in the upper estuary continue to have low population, despite reduced effort –southern flounder, striped bass, river herring
- Hurricane Florence - severe impacts to oysters in Pamlico Sound and fish in coastal river systems

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- The updated CHPP was adopted in the first half of 2016.
- The 2018-2020 Implementation Plan was presented to the three commissions and approved.
- The Implementation Plan includes specific actions DEQ agencies will take in the short term to implement the CHPP's recommendations.



Questions?



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