Research Areas in the Great South Channel Habitat Management Area
Northeast United States
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Prepared for*:*
Northeast Regional Ocean Council (NROC)
Northeast Ocean Data
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1. INTRODUCTION

Since implementation of the New England Fishery Management Council's Omnibus Habitat Amendment 2 on April 9, 2018, the Great South Channel Habitat Management Area (HMA) has been closed to all mobile bottom-tending gear. The Council developed the Clam Dredge Framework that identified three clam access areas (which include exemptions for mussel dredges), plus two other areas that would be prioritized for research (Rose and Crown and Davis Bank East). In June 2019, the Council adopted Research Objectives for the Great South Channel Habitat Management Area that includes a framework for addressing research priorities in the Rose and Crown and Davis Bank East areas. The Council's intent was that both fishermen and scientists will work toward obtaining better information to define where Atlantic surfclams and mussels can be harvested without impacting sensitive fish habitat in those areas.

2. PURPOSE

To show the research areas in the Great South Channel Habitat Management Area identified by the New England Fishery Management Council. These areas are a part of the New England Fishery Management Council's Clam Dredge Framework. Rose and Crown and Davis Bank East were identified by the Council as two areas where exemptions might be identified through a future action and research could be conducted. Both areas have Atlantic surfclams in harvestable quantities, and the Rose and Crown area is known to have mussel beds. Overall, little is known about the mussel resource in the HMA, and beds may be present in the Davis Bank East area as well. Both areas have structured benthic habitats of interest from a conservation perspective. Four objectives, management applications, and a research framework for these areas are described in the Council's Research Objectives for the Great South Channel Habitat Management Area document.

3. SOURCES AND AUTHORITIES

- New England Fishery Management Council, July 2020.
- For questions, contact Michelle Bachman (mbachman@nefmc.org)

4. DATABASE DESIGN AND CONTENT

Native storage format: ArcGIS File Geodatabase – simple feature class

Feature Types: Polygons

Data Dictionary:

Line	Name	Definition	Type	Size
1	ID	Name of the discrete area	Text	*
2	Area	Area, in square kilometers	Float	*
3	Label	Label of the discrete area	Text	*
4	Season	Year-round for research	Text	*
5	Status	Research only	Text	*

Feature Class Name: Research_Areas_GSCHMA

Total Number of Unique Features: 2

Dataset Status: Final

5. SPATIAL REPRESENTATION

Geometry Type: vector polygon
Reference System: GCS North American 1983
Horizontal Datum: North American Datum 1983
Ellipsoid: Geodetic Reference System 1980

XY Resolution: XY Scale is 1000000000.0000001
Tolerance: 0.000000008983152841195211 7

Geographic extent: -69.822 to -69.344, 41.4333 to 40.9896

IS0 19115 Topic Category: biology, environment, oceans

Place Names:

Atlantic Ocean, Nantucket Sound, Gulf of Maine, Great South Channel

Recommended Cartographic Properties:

Simple Fill Symbol. Outline width: 1.5, outline color: 255–170–0, Fill color: transparent

Scale range for optimal visualization: 5,000,000

6. DATA PROCESSING

Processing environment: ArcGIS 10.3, Windows 10 Professional, Intel Core i5 CPU

	Process Steps Description
1	Nine candidate areas were drawn by the surfclam industry to encompass areas of higher fishing effort (hours fished). Fishing effort was mapped with speed-filtered and gridded Vessel Monitoring System data from 2010-summer 2018. Coordinates were provided to the Council and a shapefile of the nine areas was created in ArcGIS.
2	The Council's selected a subset of these areas for potential year-round and seasonal exemptions and modified area boundaries to facilitate fisheries enforcement.

7. QUALITY PROCESS

Attribute Accuracy: Attribute information is based upon source material and is accurate as such.

Logical Consistency: These data are believed to be logically consistent.

Completeness: These areas are final.

Positional Accuracy: These zones were delineated based on 2010-2018 Vessel Monitoring System data. Accuracy based on the correct location of the source layer.

Timeliness: Data up to date as of July 2020.

Use restrictions: Not for navigation

Distribution Liability: Data provided as is. Northeast Ocean Data and NEFMC are not liable for any interpretations, assumptions, or conclusions based on these data