

# ***Great South Channel Habitat Management Area Surfclam Exemption Program Review***

*Report Outline*

Habitat Plan Development Team

May 22, 2026



# ***Executive Summary***

## **Management Background**

Through Omnibus Habitat Amendment 2 (OHA2), the New England Fishery Management Council (Council) created, adjusted, or maintained a range of Habitat Management Areas (HMAs) throughout the New England Region, intended, in combination with one another and with other fishery management measures, to minimize the effects of fishing on essential fish habitats (EFH) to the extent practicable. One of the newly created areas was the Great South Channel HMA, implemented in April 2018 as a closure to mobile bottom tending gear (MBTG). The Great South Channel HMA encompasses a large portion of Nantucket Shoals, which is an important area for the Atlantic surfclam fishery managed by the Mid-Atlantic Council. Recognizing the value of these shoals and HMA to the fishery, OHA2 included a one-year exemption for clam dredges through April 2019 to allow time for the Council to establish an exemption program for this fishery ([OHA2 final rule](#)). The exemption program, developed through the Council's 2018 Clam Dredge Framework and implemented in June 2020, established three areas within the Great South Channel HMA where vessels may fish for Atlantic surfclams or blue mussels with dredge gear ([Clam Framework final rule](#)). The Clam Dredge Framework also established two habitat research areas within this HMA; these are informal and not established in federal regulations.

## **Objective and Scope of this Evaluation**

The objective of this evaluation is to assess the effectiveness of surfclam exemption areas in the HMA from both habitat conservation and fishery perspectives, considering recent data and information. Both perspectives are considered here because the areas were established to provide access to the surfclam resource while minimizing hydraulic dredge impacts to sensitive habitats. This report does not explicitly evaluate the effectiveness of the two research areas nor the habitat or surfclam resource conditions in portions of the HMA outside of the three exemption areas, but it does consider the research results to the extent that they inform our understanding of the relationship between habitat conditions and clam dredging.

The Council will not modify the surfclam exemption program in 2026; 2026 work is focused solely on the evaluation of the program and any proposed changes to the exemption program could be considered as a future Council work priority. Note that while some Council management programs have evaluation requirements established in federal fishery regulations, this exemption program does not; therefore, Council discussions, including those of Executive Committee and Habitat Committee, were used to establish the objective for this evaluation.

This report provides background on the exemption program, summarizes recent habitat and fishery data related to the Great South Channel HMA and exemption program, and examines tradeoffs that the Council could consider when discussing continuation or modification of the current exemption program. Key questions include:

- Is the exemption program minimizing, to the extent practicable, the effects of fishing on essential fish habitats in the Great South Channel HMA?
  - How do EFH designations revised in 2025, or being revised during 2026,

- contribute to our current understanding of the value of the HMA as habitat for managed fish and shellfish species?
- How much habitat disturbance is estimated to be occurring within the HMA now, as compared to pre-designation, based on the results of the Fishing Effects Model?
  - Is there any new information about cod spawning activities within or directly adjacent to the Great South Channel HMA and exemption areas? Are the area-based and seasonal restrictions on fishing within the Great South Channel HMA protective of potential cod spawning activity?
  - How has recent research impacted our understanding of habitats in the Great South Channel HMA, including characteristics, spatial distribution, and change over time because of fishing and/or natural disturbance?
- Is the exemption program effective in providing access to areas within the Great South Channel HMA to create fishing opportunities and support achievement of optimum yield in the surfclam fishery?
    - How much yield has been generated from the exemption areas and has that changed over the course of the exemption program?
    - How many vessels and fishing businesses are participating in the exemption program? Which ports and communities do these businesses support?
    - Are all exemption areas being used? What are the patterns of fishing effort within the three exemption areas? What is the relative importance of each exemption area to surfclam yield from the Great South Channel HMA?
    - Are the logistics of the program such as monitoring and declaration requirements workable and being complied with?
    - How has surfclam harvest from the research areas contributed to total yield from the Great South Channel HMA?

### **Why is the Council Doing this Evaluation?**

The Council voted in December 2025 to “conduct an evaluation of the Great South Channel HMA surfclam exemption areas” as a 2026 work priority, in response to surfclam industry and state of Massachusetts concerns with the fishing opportunities provided under the program (see correspondence [here](#)). The Massachusetts Division of Marine Fisheries noted that during 2023-2024, 30% of surfclam landings came from state vs. federal waters, an increase over earlier periods. They expressed concerns that this shift in effort from federal to state waters could be impacting inshore habitats. Their correspondence highlighted the forthcoming availability of results from Coonamessett Farm Foundation’s exempted fishing permit-based research project in the Great South Channel HMA and suggested that analysis of these and prior results could inform an evaluation of surfclam and mussel harvest locations that would have minimal fish habitat impacts.

The Council was also provided with correspondence between Nantucket Sound Seafood and Massachusetts Division of Marine Fisheries. Nantucket Sound Seafood noted their (and Intershell Seafood’s) participation in EFP-based research since 2019. They emphasized current poor conditions in the Massachusetts surfclam industry, including large declines in surfclam revenues, production, and employment that affect multiple companies. They noted that catches per unit of effort are lower in inshore areas and expressed concerns about overexploiting

available clam beds due to their inability to access portions of the surfclam resource occurring within the Great South Channel HMA outside of the three exemption areas.

### **Possible Next Steps After the Evaluation is Completed**

After receiving this report, should the Council determine that changes to the clam and mussel dredge exemption program are warranted, the Council could prioritize development of a management action. This information in this evaluation report can be used by the Council to discuss tradeoffs between fishery access and habitat conservation should a future action be developed (see evaluation objectives section below). Any action by the Council to change the program would include further analyses of specific alternatives considered and consultation with the Mid-Atlantic Council. Changes to fishing restrictions within HMAs can be developed through a framework to the New England Council's fishery management plans, as was done with the Clam Dredge Framework.

### **Key Findings of This Evaluation**

To be completed.

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## **Acronyms**

CFR	Code of Federal Regulations
DHRA	Dedicated Habitat Research Area
EFH	Essential Fish Habitat
HMA	Habitat Management Area
LOA	Letter of Authorization
MBTG	Mobile Bottom Tending Gear
OHA2	Omnibus Habitat Amendment 2
VMS	Vessel Monitoring System

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# ***Background Information***

## **Omnibus Habitat Amendment 2**

OHA2 reviewed and updated all EFH designations for New England Council-managed species, provided information and analyses to support all EFH technical review components required of Councils under federal regulations, reviewed and updated groundfish and habitat management areas including spawning areas, established a system of Dedicated Habitat Research Areas (DHRAs), and created provisions for future updates of these measures using framework actions. Broadly speaking, the HMAs created or revised through OHA2 are intended to minimize the effects of fishing on EFH to the extent practicable. OHA2 was developed over a twelve-year period between 2004-2016 and became effective following publication of final regulations in April 2018.

OHA2 provided a one-year exemption for clam dredges in the Great South Channel HMA, which was otherwise closed to mobile bottom-tending gears (MBTG) in April 2018. MBTG are defined in the fishery regulations for the northeastern United States as “gear in contact with the ocean bottom, and towed from a vessel, which is moved through the water during fishing in order to capture fish, and includes otter trawls, beam trawls, hydraulic dredges, non-hydraulic dredges, and seines (with the exception of a purse seine)” (50 CFR 648.2)

Rationale for creation of the Great South Channel HMA and subsequent Council action was specified in the Omnibus Habitat Amendment 2 Final Environmental Impact Statement (linked [here](#), see Volume 3 for HMAs and other spatial management measures), the NMFS Record of Decision (NMFS 2018a), and the [OHA2 Final Rule](#).

## **Objectives of the Clam and Mussel Dredge Exemption Program**

Following completion of OHA2, the Council began to develop a framework to establish an exemption program for surfclam fishing within the Great South Channel HMA. The framework was finalized by the Council in December 2018, roughly eight months after OHA2 went into effect. The Council specified a problem statement and purpose and need for the Clam Dredge Framework as follows:

***Problem statement:*** The surfclam/ocean quahog fishery will be granted a one-year exemption for the Great South Channel HMA following implementation of OHA2, which will allow the Council to consider development of an access program for this fishery. The Council intends through this action to identify areas within the HMA that are currently fished or contain high energy sand and gravel that could be suitable for a hydraulic clam dredging exemption that balances achieving optimum yield for the fishery with the requirement to minimize adverse fishing effects on habitat to the extent practicable and is consistent with the underlying objectives of OHA2.

***Purpose and need for action:*** The Council developed this framework to evaluate and possibly designate areas where hydraulic clam dredging might continue in the Great South Channel Habitat Management Area. The purpose of the HMA is to minimize, to the extent practicable, the adverse effects of regional fisheries on essential fish habitat. This action is needed to identify

areas where fishing for surfclams with hydraulic dredges would have only minimal and temporary impacts on the habitats in the HMA. The purpose of this action is to evaluate potential suitable areas within the Great South Channel HMA using metrics related to habitat and fishing characteristics, for example sediment type, area swept, and fishery revenues.

**Objectives:** Objectives for the exemption program were not specifically articulated in the Clam Designation Framework. Based on the problem statement and purpose and need from the Council's framework that developed the exemption program, the implied objectives of the clam and mussel dredge exemption include:

1. Minimize, to the extent practicable, the impacts of fishing on essential fish habitats within the Great South Channel HMA.
2. Provide access to areas within the Great South Channel HMA to create fishing opportunities and support achievement of optimum yield in the surfclam fishery.

### **Description of the Clam and Mussel Dredge Exemption Program**

As described above, the Great South Channel HMA was designated via OHA2 as a closure to all MBTG<sup>1</sup>. The exemption program establishes specific conditions under which the MBTG restrictions do not apply. A summary of the program is available from NOAA, [here](#). The gear and monitoring program requirements are described here because the report will evaluate patterns of effort under the program including any issues or challenges encountered with reporting. The 5-minute VMS polling rate differs from that used on non-exemption surfclam trips but was deemed necessary to enforce these relatively small exemption areas sited near one another.

**Fishing areas:** The exemption program allows fishing in two year-round areas and one seasonal area, which are all within the Great South Channel HMA (Map 1). These areas are McBlair (year-round), Old South (closed November 1-April 30, open May 1-October 31), and Fishing Rip (year-round).

**Monitoring requirements:** All vessels fishing in the exemption areas are required to use clam or mussel dredges and to request an annual letter of authorization (LOA) to fish under the exemption program. The purpose of the LOA is to identify the vessels interested in accessing the HMA to ensure that vessels have the necessary permits and a type-approved Vessel Monitoring System (VMS) unit capable of being triggered remotely by the NOAA Office of Law Enforcement to send location positions every 5 minutes beginning when the vessel approaches the GSC HMA boundary. The VMS units for vessels participating in the program automatically send the vessel's location every 5 minutes any time the vessel crosses the 3-nm boundary line. Before leaving the dock, vessel operators must use their VMS system to declare into the Great South Channel HMA fishery for any trip where they anticipate fishing within the exemption areas. A trip-level declaration via VMS alerts NOAA Office of Law Enforcement to monitor vessel speed and position in real time.

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<sup>1</sup> These gear restrictions apply to any vessels using these gears within the HMAs, regardless of which fishery they are used in or which Council manages that fishery. The Clam Dredge Framework updated the New England Council's Atlantic Herring, Atlantic Sea Scallop, Monkfish, Northeast Multispecies, Red Crab, and Skate Complex Fishery Management Plans.

Vessels are allowed to fish within multiple sub-areas per trip, accounting for any open and closed seasons, but clam or mussel dredges need to be on deck while transiting between areas. Hydraulic hoses used with clam dredges can remain in the water during transit between areas. There are no speed requirements when fishing or transiting. Vessels are encouraged to transit the closed portions of the HMA at higher speeds and report extended low-speed, non-fishing activities along the boundaries of the exemption areas to NOAA Office of Law Enforcement.

**Mussel dredging requirements:** Any mussel dredge vessel fishing in the exemption areas within the Great South Channel HMA is required to have a surfclam permit, because there is no federal mussel permit. The surfclam permit triggers VMS<sup>2</sup> and VTR requirements.

**Research areas within the Great South Channel HMA and recent EFP-based projects**

The Clam Framework considered additional areas as potential exemption areas; two of these, Rose and Crown and Davis Bank East, were adopted as research areas when the Council took final action on the framework in December 2018. The intent was to work towards a research program for these areas where fishing activity would only be allowed under an exempted fishing permit. The Council’s intent was that this research could support the potential development of additional exemptions in the future. Information from projects conducted in these research areas is summarized and evaluated in this report to the extent that it informs evaluation of the exemption program.

This section will briefly describe research that has occurred in the Great South Channel HMA and how the research relates to an evaluation of the exemption program.

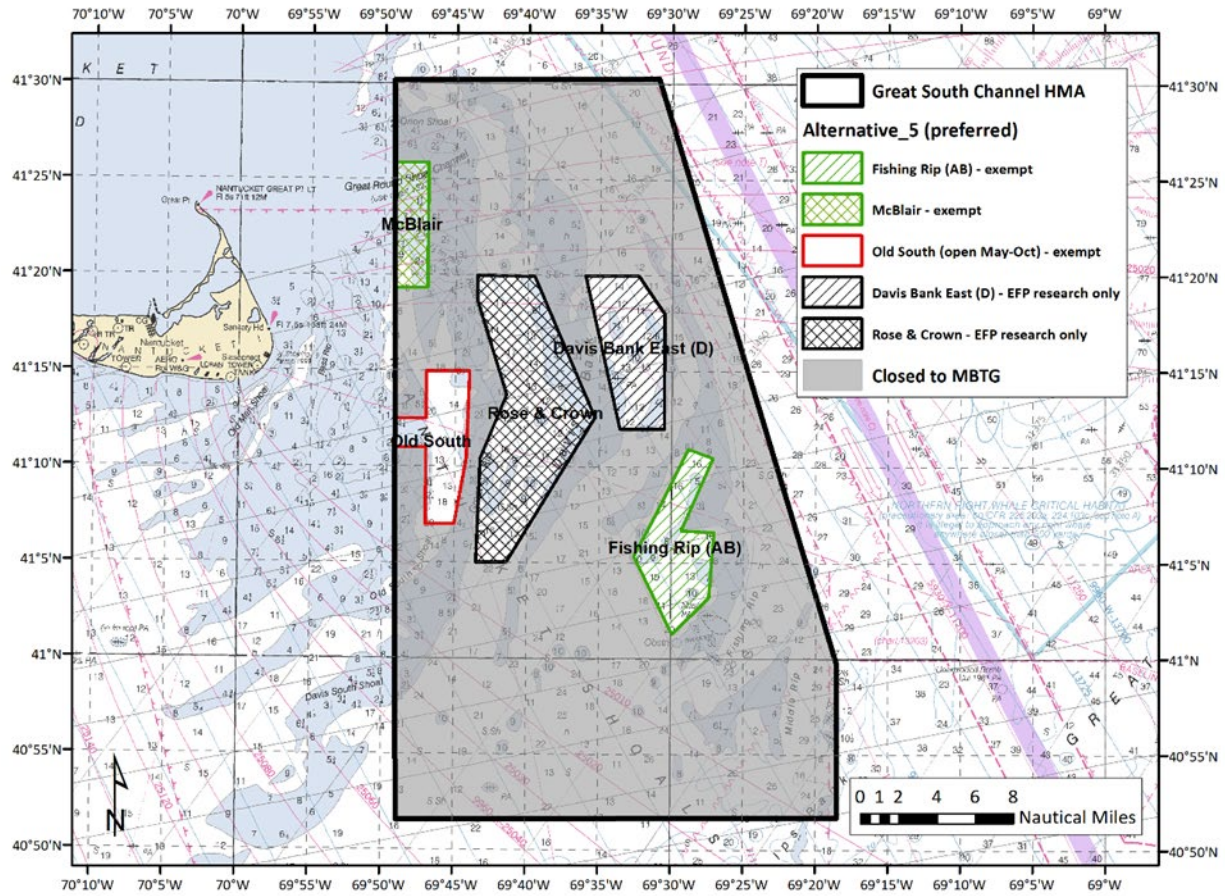
EFP #	Location	Purpose of project	Type and resolution of data collected	Main findings of study

**Exemption and research area maps and coordinates**

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<sup>2</sup> A separate VMS declaration has been established for fishing in the exemption areas with mussel dredge gear. Additional requirements include: 1) mussel dredges may be no wider than 8 ft (2.4 m) measured at the widest point in the bail of the dredge; 2) vessels are not permitted to fish for, harvest, possess, or land any species other than mussels and sea urchins; and 3) vessels may not fish for, harvest, possess, or land any species other than mussels when on a declared mussel exemption trip. These requirements are consistent with the existing regulations associated with the Nantucket Shoals Mussel and Sea Urchin Dredge Exemption Area, which fully encompasses the clam and mussel dredge exemption areas.

**Map 1. Great South Channel Habitat Management Area, Clam and Mussel Dredge Exemption Areas (outlined in green and red), and Research Areas (outlined in black).**



**Table . Coordinates for research areas. Exemption area coordinates are available at 50 CFR 648.370(h)(2).**

Area name	Point	Longitude	Latitude
Davis Bank East (research)	1	-69° 35.999' W	41° 20' N
	2	-69° 32.311' W	41° 19.988' N
	3	-69° 30.493' W	41° 18.009' N
	4	-69° 30.508' W	41° 11.997' N
	5	-69° 33.561' W	41° 12' N
Rose and Crown (research)	1	-69° 43.5' W	41° 20' N
	2	-69° 39.54' W	41° 19.949' N
	3	-69° 35.324' W	41° 12.601' N
	4	-69° 41.388' W	41° 5.009' N
	5	-69° 43.5' W	41° 5' N
	6	-69° 43.254' W	41° 10.431' N
	7	-69° 41.436' W	41° 13.773' N
	8	-69° 43.5' W	41° 18.711' N

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# ***Habitat and Managed Species Information***

This section will provide information about habitats and managed species that became available or was published following completion of the Clam Dredge Framework (late 2018 to present).

## **Habitat conditions on Nantucket Shoals**

- Sediment, depth, epifauna, water temperature, etc., including trends or fluctuations over time, particularly any information available for the exemption areas.

## **Species-specific habitat use within the HMA**

- The following species were identified as occurring in the HMA in the Clam Dredge Framework: Atlantic cod, winter flounder, windowpane flounder, yellowtail flounder, little skate, winter skate, sea scallop.
- What do species distribution models and updated EFH information tell us about these species use of the Nantucket Shoals?
- Have there been shifts in species distribution onto/away from the shoals in the last ~10 years?
- Are there seasonal differences in habitat use between fall and spring (the species distribution models are developed using data from these seasons)?
- Based on updated information, do exemption areas have stronger overlap with species vs. other parts of the HMA?

## **Cod spawning on Nantucket Shoals**

- Historic cod spawning areas were denoted within the Great South Channel HMA based on a fisheries ecological knowledge study.
- Do we have any recent evidence for cod spawning on the shoals, within or outside the exemption areas?
- Has our understanding of the timing of cod spawning on or near Nantucket Shoals changed?

## **Effects of fishing gear on habitats within the HMA**

- Summarize Fishing Effects model results with respect to the Great South Channel HMA (last updated in 2025 for EFH review)
- Consider any recently published literature on hydraulic clam dredge gear effects

## **Surfclam resource conditions on Nantucket Shoals**

- The Northeast Fisheries Science Center dredge survey and the clam survey strata do not overlap Nantucket Shoals.
- Powell et al surveyed the Nantucket Shoals in 2017 using a smaller commercial vessel and a stratified random hub and spoke survey design. They documented the size classes and abundance of clams in different locations within and just west of the GSC HMA. Multiple papers were published based on this survey following completion of the framework.

# ***Nantucket Shoals Surfclam Fishery Information***

This section will provide information about the Nantucket Shoals surfclam fishery.

## **Surfclam effort, landings, and revenues from the HMA and Exemption Areas**

- Based on logbook / vessel trip report and vessel monitoring system
- Compare period prior to April 2019 vs. after June 2020 when exemptions went into effect
- Surfclam effort, landings, and revenues

## **Nantucket Shoals surfclam fleet characterization**

- Number of vessels, landing port, home port
- How has this changed from the period before April 2019?

## **Trends in the regional surfclam fishery in both federal and state waters**

- Briefly provide overall context about the fishery, coast-wide

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## ***Discussion***

- How does all this information fit together to help us understand tradeoffs between habitat protection and fishery access in the Great South Channel HMA?
- Are there additional analyses that could be completed in support of a potential future Council action, given additional time/resources?

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# ***Appendices***

## **Research Objectives for the Great South Channel HMA**

In June 2019, the Council approved four objectives for focused habitat research, which it envisioned would be addressed through study of the Rose and Crown and Davis Bank East research areas. These questions are indicative of the Council's habitat conservation objectives for the HMA.

1. Improve the Council's understanding of the distribution of living and non-living habitat features within the GSC HMA, including topography, substrate, epifauna, and infauna (i.e., develop habitat maps).
2. Improve the Council's understanding of habitat stability including epifaunal persistence in relation to substrate type, tidal flows and storm events.
3. Improve the Council's understanding of habitat vulnerability to mussel and clam dredges. Vulnerability includes both the nature of habitat/gear interactions (susceptibility) and recovery rates.
4. Improve the Council's understanding of why the GSC HMA is important to managed species, such as Atlantic cod.

Additional overarching objectives noted in the June 2019 research agenda are related to sampling design, scope of sampling, and rationale for research:

- Research should be designed in a manner that is statistically rigorous and effectively supports decision making. For any before-after-control-impact (BACI) or similar studies, observations should be made in both experimental and reference sites, with power analyses conducted ahead of time to ensure that sufficient numbers of replicates are obtained.
- Studies should include plans to revisit stations at intervals following initial sampling/impact to reassess habitat condition changes over time. Where possible, habitat mapping efforts as well as BACI-type studies should catalog structural habitat features so that previous data can be compared to new data.
- For research activities expected to have negative impacts on EFH, there should be a clear explanation of why the proposed research needs to be conducted within the closed portion of the HMA. Specifically, if sites outside the HMA, or within the three existing exemption areas, would be suitable for addressing the objectives above, the use of these alternative locations should be explored as part of EFP development.

## **Research Project Details**

- Any additional details about research projects occurring in the Rose and Crown or Davis Bank East research areas

## **Summary of public comments received by the Council**

- Council has received comments over the past few years encouraging examination of this

exemption program and prioritization of work, summarize key points as needed.

## **Management history**

<b>Date</b>	<b>Action</b>
2004	The Council began work on Omnibus Essential Fish Habitat Amendment 2 (OHA2)
December 2014	Mid-Atlantic Council submitted comments to the New England Council requesting that, “sub-areas comprised predominantly of sand substrate be identified as clam management areas within the broader proposed habitat closure areas encompassing Nantucket Shoals, Georges Shoals, and Cultivator Shoals.” These areas were intended for clam dredge fishing access.
April 2015	The Council took final action to recommend the Great South Channel Habitat Management Area (GSCHMA) for habitat protection. The Council recommended the Northeast corner of the area be closed to all dredges and bottom trawls, and the remainder of the area be closed to bottom trawls and scallop dredges with a 1-year exemption for clam dredges. That year would allow for consideration of a different program for clam dredges to access portions of GSCHMA.
June 2015	The Council took final action on remaining portions of OHA2
January 2016	The Council submitted the OHA2 FEIS to NOAA Fisheries
September 2015	The Council initiated a framework to identify clam dredge fishery access areas within the GSCHMA. The Council considered multiple sources of information about habitats, managed resources, and fisheries during framework development, including a Science Center for Marine Fisheries analysis of clam dredge survey data.
October 2017	OHA2 FEIS was finalized
November 2017	OHA2 proposed rule was published
January 2018	NOAA Fisheries approved most of the recommendations contained in OHA2 including the designation of the GSCHMA and one-year exemption for clam dredges
April 9, 2018	OHA2 was implemented by NOAA Fisheries, which prohibited the use of mobile bottom-tending gear within the GSCHMA, except for the surfclam fishery which was granted a 1- year exemption, with the exception of the northeast corner.
December 4, 2018	The Council completed work on the Clam Dredge Framework which identified three exemption areas inside the Great South Channel HMA. The Council also recommended designation of two research areas in the GSCHMA, with the following commitment: “The Council will develop a prioritized list of research needs concerning Rose and Crown and Davis Bank East. The intent is to work towards an exempted fishing permit program for these areas, which will support the potential development of additional exemptions in the future.”
February 28, 2019	The Council submitted the draft Clam Dredge Framework and environmental assessment to NOAA Fisheries.
April 9, 2019	The one-year clam dredge fishery exemption in the GSCHMA expired. Clam dredges were unable to operate in the GSCHMA until rulemaking occurred on the Clam Dredge Framework.
June 12, 2019	New England Council approved a research plan for the GSCHMA.

<b>Date</b>	<b>Action</b>
July 23, 2019	The Council submitted the final version of the Clam Dredge Framework to NOAA Fisheries.
June 18, 2020	NOAA Fisheries published the final rule for the clam dredge framework, allowing surfclam and mussel dredging in the three exemption areas in the GSCHMA.
December 2021	The Mid-Atlantic Council recommended that the Councils prioritize a leadership level discussion about the Great South Channel Habitat Management Area.
January 13, 2022	The New England Council was contacted to provide support for an emergency action request made to the Secretary of Commerce.
January 2022	Meeting between chairs, executive directors, and staff of MAFMC and NEFMC.
January 2022	New England Council declined to provide support for emergency action request, but asked the Habitat Committee to review the final report on EFP 19066 when available.
2025	Petition in response to Executive Order
November 2025	The Council received a request from Monte Rome to reevaluate the science used to support the closure of the GSC HMA and identification of clam exemption areas. MADMF requested Council support for a 2026 management priority to evaluate revisions to the Atlantic surfclam exemption fishery in the GSC HMA.

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