

SHELLFISH ADVISORY PANEL 2:00PM

Wednesday November 6, 2024 Hanover Public Library 534 Hanover Street (Route 139), Hanover, MA

AGENDA

- 1. Introductions and Remarks (2:00 2:15)
 - a. Deputy Director's Remarks
 - b. Overview of Agenda
 - c. Review and Approval of March 18, 2024 Draft Business Meeting Minutes
- 2. SAP Work Group Reports & Updates (2:15-2:45)
 - a. Aquaculture License Transfer Work Group
 - b. Hatchery Seed Work Group
 - c. Other Work Group Needs
- 3. Reclassification of Growing Areas due to Wastewater Discharges (2:45 3:00)
- 4. New Statewide Coastal Habitat Restoration Program & Shellfish (3:00-3:15)
- 5. Media Coverage of Shellfish Recalls: next steps (3:15-3:30)
- 6. ISSC: Committee updates and preparation for 2025 Conference (3:30-3:15)
- 7. MSOA Update (315-3:30)
- 8. Agency Reports (3:30-3:45)
- 9. DMF Shellfish Program Updates (3:45 4:15)
 - a. DMF Personnel
 - b. 2023 Shellfish Landings
 - c. Status of Depuration Fishery & Plant
 - d. Off-site Culling at Wholesale Dealers
 - e. Surf Clam Geofencing Update
 - f. 2024 FDA RARM & PEER Results
- 10. Other Business (4:15-4:30)
 - a. Upcoming Meeting Dates
 - b. Panel Member Comments
 - c. Public Comments
 - d. Adjourn

All times provided are approximate and the meeting agenda is subject to change. The Shellfish Advisory Panel may amend the agenda at the start of the business meeting.

Future Meeting Dates

TBD

SHELLFISH ADVISORY PANEL March 18, 2024, 4:30PM Via Zoom

In attendance:

Shellfish Advisory Panel: Daniel McKiernan, Chair (DMF); Alex Hay; Amy Croteau; Sean Bowen (DAR-Proxy); Bill Doyle; Lisa Rhodes (DEP-Proxy); Dale Leavitt; Jim Peters; Josh Reitsma; Todd Callaghan (CZM-Proxy); Renee Gagne; Ron Bergstrom; Seth Garfield; Mike DeVasto; Michael Moore (DPH); Steve Kirk (TNC); and Jess Katon (Rep. Schmid Proxy)

Absent: Allen Rencurrel; Jim Abbot; Mike Trupiano; and Rebecca Rausch

Division of Marine Fisheries: Story Reed, Bob Glenn, Chrissy Petitpas, Anna Webb, Wayne Castonguay, Jared Silva, Alex Boeri, Gabe Lundgren, and Ryan Joyce

Department of Public Health: Eric Hickey

Members of the Public: Danny Badger, Christopher Flanagan, Chloe Starr, Steve Wolf, Mark Begley, Becca Selden, John Algird, Kurt Bornheim, Andrew Rosenberg, Jordan Halloran, Ben Wigren, Bill McHugh, Laminaria Jones, Beth Gibbons, Liv Woods, Jason, Lara Philips, Dave Ryan, Chris Miller, Amanda Cutler, and Tom Shields

INTRODUCTIONS AND ANNOUNCEMENTS

DMF Director Daniel McKiernan chairs the Shellfish Advisory Panel (SAP) and called the meeting to order. He stated there is a new member of the SAP, John Townes, who will be replacing Bob Colby. He provided the Panel with some background on John and welcomed him to the Panel. Chairman McKiernan briefly went over the various subcommittees that have stemmed from the SAP and stated that work on the subcommittees has been paused due to staffing challenges, and ongoing enforcement issues with tagging of shellfish.

REVIEW OF MARCH 18, 2024 BUSINESS MEETING AGENDA

No changes to the agenda were requested.

REVIEW AND APPROVAL OF NOVEMBER 20, 2023 DRAFT BUSINESS MEETING MINUTES

There were no amendments to the November 20th business meeting minutes.

Chairman McKiernan requested a motion to approve the November 20, 2023 business meeting minutes. Ron Bergstrom made a motion to approve the meeting minutes. Dale Leavitt seconded the motion. A roll call vote was taken, and the motion passed 16-0-1 with Chairman McKiernan abstaining.

RE-CLASSIFICATION OF BUZZARDS BAY GROWING AREAS

Dan McKiernan turned the floor over to Chrissy Petitpas who provided the Panel with a presentation regarding the re-classification of Buzzards Bay Growing Areas. The re-classification of the areas was required to meet the NSSP requirements for a minimal permanently closed (prohibited) safety zone around Wastewater Plant outfalls and other wastewater discharges, regardless of treatment quality to protect against deleterious substances in sewage. The current zone which has been in place is too small. NSSP criteria calls for a minimum 1000:1 dilution zone around all outfalls unless other data can justify a smaller area and that area must be classified as conditional based on plant performance. In no instance can the dilution zone be less than 320:1 which is the EPA minimum mixing zone requirement. This is required for all types of sewage discharges.

DMF has contracted with SMAST to conduct a hydrodynamic modeling of the New Bedford & Fairhaven outfalls and conducted additional sampling to provide sufficient data to satisfy the NSSP requirements to get below the 1000:1 line. Chrissy then showed the new mandatory prohibited zone in Buzzards Bay which is much larger than the prior zone. Fortunately, the new zone is primarily in deeper water areas of the Bay and will affect primarily two wild quahogers. Of more concern perhaps is the much larger conditional area which will require closures following rain due to the outfalls, as well as the many CSO's in the area. The new conditional area will require closure following rainfall-induced CSO and plant disruption discharges that will extend into Apponagansett and Nasketucket Bay's which are areas of significant shellfishing, including aquaculture.

The minimum mandatory closure time in the NSSP for conditional closures due to sewage discharges is 21 days. Fortunately, a new test for human sewage has been approved which can reduce mandatory minimum to as low as 7 days if the shellfish sampling can demonstrate that the shellfish are safe following a sewage discharge. The test is a viral indicator of sewage called male-specific coliphage (MSC) and DMF is investing heavily in getting its New Bedford and Gloucester laboratories certified by the FDA for this new indicator to increase its capacity to reduce the length of these closures. Currently, only one lab in Massachusetts is certified to run this test, DMF's shellfish purification plant lab in Newburyport. DMF will need more staff and funding to increase its capacity to minimize the length and breadth of these closures Statewide as the test and sampling is labor intensive.

This issue has been and will continue to happen at plants and CSO's around the state as all of the buffer zones have been deemed too small. This first happened in Scituate and Marshfield a couple years ago. The Ipswich & Dartmouth plants are currently being modeled which will be followed by additional plants & CSO's. Chrissy estimated that there are approximately 12 wastewater systems that discharge near active shellfishing areas that will need to have their buffer zones increased.

Chrissy Petitpas welcomed questions or comments from the Panel.

Mike DeVasto stated he was surprised the state allows effluent to be released into the water when large storms occur. He expressed concern over the opening and closing of areas due to the discharge of effluent. Chrissy stated the discharge is a violation of their NPDES permit, and added it is not an easy issue to fix but recognized the concern surrounding the issue. Mike followed up by asking if an outfall pipe would be feasible. Chrissy stated an outfall pipe would just be moving the problem to a different area.

Seth Garfield thanked Chrissy for the presentation and asked what the impact from the Marion, Wareham, and Taylor Point sewage treatment plants will have. Chrissy stated there are likely going to be increased closures around those plants. Chrissy then explained differences between CSOs and sewer outflows.

Dale Leavitt stated some of his concerns. He expressed his concern about the model and requested formal peer review. He added that there are millions of oysters harvested from this area into open markets with no public health issues. He encouraged pushback on FDA regarding generic closures that may not be appropriate for Massachusetts' various systems.

Ron Bergstrom asked if there is an emergency closure how quickly can the areas be reopened. Chrissy explained required protocols that go into emergency closures and how DMF handles re-opening areas. There was further discussion amongst Seth Garfield and Chrissy regarding protocols for closing and opening areas and dilution based on tidal factors.

DMF SHELLFISH PROGRAM UPDATES

Status of Newburyport Depuration Plant

Dan McKiernan introduced Wayne Castonguay who is the new supervisor for the North Shore Shellfish Program. Wayne stated he is happy to be working with members of the SAP and is looking forward to future collaboration. He then presented a few slides to the Panel regarding the Newburyport Depuration Plant. He described how the plant typically works, and stated that in November of 2023, DMF had to suspend operations when the plant wellheads were inundated and compromised by severe erosion from a coastal storm which exposed electrical apparatus. He stated that due to other coastal storms that have occurred since November, the erosion has gotten worse and one storm even caused ocean water to flood the plant itself. Wayne then discussed the productivity of the plant which has primarily been in decline for several years. He mentioned there are only three master diggers remaining and there has been an 82% decline in subordinate diggers as well. He then went over the fishery value which has rapidly declined over the past several years as well. He then briefly described challenges associated with reopening the plant which include the location of the plant and replacing the wellheads which are both extremely costly fixes. Wayne described some additional options and went into detail regarding each option. These options included retrofitting the plant, contaminated relay, converting the Cat Cove lab for depuration, and utilizing a different depuration plant. The most favored option would be transitioning depuration to a private depuration plant in Eliot, Maine. He concluded his presentation by discussing next steps

which included short and long-term options. These options included relief packages to impacted diggers and continue to subsidize utilization of the private depuration plant in Maine. He welcomed questions from the Panel.

Seth Garfield asked about the decline in the number of harvesters. Wayne Castonguay stated the Boston Harbor fishery has been in decline for many years following a big neploasia outbreak in the 2010's and has still not come back. DMF is unsure if the fishery will come back since the softshell clam is the listed as one of the most at-risk species due to climate change and noted they are in decline region-wide.

Mike DeVasto asked about other diseases that may be affecting softshell clams besides neoplasia. Wayne Castonguay stated that ocean acidification also may be impacting the clam populations. He stated it is an area of active research and he is hoping for more answers soon.

Ron Bergstrom stated the fishery is cyclical and expressed concern over the feasibility of rebuilding the plant.

Inquiry from Hingham/Hull to Upgrade Certain Areas for Harvest
Wayne Castonguay highlighted two areas that are currently classified as restricted in
Hingham and Hull. He stated that DMF was asked to reconsider this classification due
to water quality improving. Wayne stated that a lot of the clams that went through the
depuration plant in recent years were harvested from Hull and Hingham. Wayne stated
that due to improvements in water quality, there is potential that some of these clams
could go direct to market. Dan McKiernan stated thanked Wayne for the presentation
and welcomed questions from the Panel.

Discussion of Media Coverage of Shellfish Recalls

Dan stated that the FDA has a communications branch that puts out health-advice/information for consumers. These notifications sometime include minor shellfish recalls which have been picked up by media. The media attention is creating a negative impact to the reputation of Massachusetts seafood and causing some concern from shellfish dealers. Dan clarified that the shellfish recalls get pulled back quickly and are likely out of the market by the time the media picks up the story such that the notifications have no benefit to public health. Dan asked Mike Moore or Eric Hickey to speak to the issue.

Eric Hickey provided the Panel with the background as to how the advisories are posted by the FDA. He stated he advised the concerned dealers to contact the ISSC and noted an upcoming ISSC board meeting where these concerns will be discussed. Dan McKiernan asked if a letter from the Panel and DMF to the ISSC Executive Board would help. Eric stated that a letter would potentially help. Dan stated that he will work with staff to draft a letter.

Alex Hay stated that support from Massachusetts is well warranted, the more support the better.

Shellfish Sanitation Regulatory Updates

Dan McKiernan highlighted an MFAC meeting occurring tomorrow that will approve or reject these proposed regulatory updates. Jared Silva provided a brief presentation on various shellfish sanitation regulatory updates for the Panel. These regulatory updates included *Vp* icing, shellfish tagging, shellstock icing, night closures, and primary sale locations. Jared provided an in-depth background for each of the proposed regulatory updates and welcomed questions from the Panel.

Emerging Issues of Off-Site Culling at Wholesale Dealers

Dan stated there is a long-standing regulation that prohibits off-site culling at wholesale dealers, but DMF has been petitioned by some dealers to re-consider the regulation. Chrissy provided the Panel with an overview of the regulations regarding culling at wholesale dealers. Chrissy asked Dave Ryan to speak regarding culling at his facility. He gave an overview of how his plant is set up. He then highlighted various issues that have occurred since noticing discrepancies in some regulations in regard to culling at wholesale dealers. There was further discussion amongst Dave and DMF regarding possible solutions to the emerging issues regarding off site culling. Dan McKiernan stated that he would like to have a further discussion with DPH as it will likely affect the *Vp* Control Plan. Dan welcomed questions.

Mike DeVasto stated he thinks non-market bound shellfish should be allowed to be returned to the growing area.

Alex Hay asked for clarification on the emerging issues if Dave is a grower and dealer. Chrissy provided clarification for Alex, the issues highlighted were receiving other growers products. Chrissy clarified that this shouldn't be a heavy lift.

There was further discussion amongst Chrissy and Dave regarding icing techniques.

PLANTING OYSTER REEFS IN PROHIBITED AREAS

Dan McKiernan welcomed Steve Kirk to speak to a project he is hoping to proceed with which will involve planting oysters in prohibited areas. Steve spoke to the ecosystem services provided by oysters and explained the potential benefits of planting oysters in prohibited areas. He stated that he would like DMF to review the policy surrounding oysters being planted in prohibited areas to allow for this work to be done. He discussed the workings of the project and described how similar projects were accomplished. He discussed potential concerns such as enforcement issues, but acknowledged the potential issues could be mitigated.

Dan McKiernan clarified that these reefs would be planted in municipalities where there is clear oversight to avoid potential poaching issues. Steve confirmed that is the idea he would like the Panel to consider.

Bill Doyle stated that he would like to find a way to make this project happen as it is a water quality project.

Seth Garfield supported this project idea and stated it would provide water quality improvements.

Mike DeVasto expressed his support for this project as well, he noted concern over public health but stated if they can be addressed through enforcement and management then it would be a worthwhile venture. The benefits outweigh any risks.

John Townes stated he is in favor of oyster reefs.

OTHER BUSINESS

Surf Clam Management Update

Dan McKiernan provided the Panel with a brief update regarding surf clam management. He stated that trackers have been given to certain vessels as a pilot program. He discussed mapping efforts that are designed to protect sensitive areas and stated that the vessel operators will be notified if they get close to the protected areas.

Quahog Statistics

Story Reed presented the Panel with a Quahog Price Update. He presented average ex-vessel price of quahogs from 2019 to 2023. He presented a graph as well that compared the quahog categories and stated he will do a full update at a future meeting that has all species for 2023. Dan welcomed questions from the Panel.

Steve Kirk asked if trends and price looked the same several years ago. Story stated they can dig back into the 2000s as a future meeting update.

Meetina Schedule

Dan stated there usually are no SAP meetings during the summer due to schedules. Dan highlighted some of the work DMF plans to get done over the summer, and noted he plans to meet with the Panel again in October. He welcomed thoughts from the Commission. A consensus was reached that October would work.

Chrissy stated the goal would be to have the sub-committees meet prior to the October meeting. Dan emphasized the need for the seed and aquaculture license transfer sub-committees to meet.

Personnel Changes

Chrissy Petitpas presented a slide on staffing changes and discussed some staffing shortages in the shellfish program. She stated that there will be two new shellfish classification biologists starting soon and Alex Boeri is the new aquaculture coordinator. Dan stated he is working diligently to retain the staff DMF has.

Panel Member Comments

Seth Garfield commended the Panel for their continued work and noted it makes a difference.

Dale Leavitt discussed some homework he has done regarding a shellfish pathologist since the last SAP meeting. He highlighted various pathologists that have been hired in surrounding states. Dan thanked Dale for this insight as he has been trying to figure out what DMF could do as a state agency.

Public Comments

Liv Woods from Mass Oyster Project stated they would like to help in any way they can regarding the oyster reef projects.

ADJOURN

Chairman McKiernan adjourned the meeting and wished everyone well.

MEETING DOCUMENTS

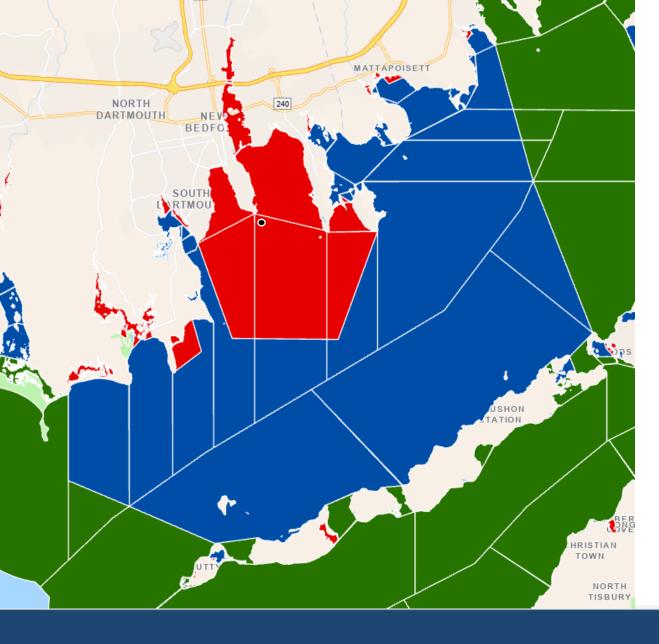
- March 18, 2024 SAP Business Meeting Agenda
- November 20, 2023 SAP Draft Business Meeting Minutes
- Shellfish Growing Area Reclassification Around New Bedford/ Fairhaven WWTP Outfalls Presentation
- Recommendations on Changes to Shellfish Regulations Memo
- Shellfish Statistics Update Presentation

UPCOMING MEETINGS

TBD

	nshore Shellfi	SII Alliludi	Live Pound	s Lanueu, Z	017-2023			
Species	2017	2018	2019	2020	2021	2022	2023	Trendline
Bay Scallop	949,980	666,416	561,469	548,705	379,019	441,686	418,939	
Blood Ark	61,050	62,345	122,958	96,642	46,528	20,959	24,046	
Blue Mussel	10,475,228	5,643,323	879,608	1,486,976	3,363,404	5,276,377	4,085,655	
Eastern Oyster (in pieces)	50,628,367	51,132,958	54,241,784	35,176,508	55,785,295	56,731,357	50,708,842	
Quahog	4,155,130	4,478,310	4,728,756	3,458,704	3,724,530	4,085,678	4,026,520	
Razor Clam	547,120	728,322	505,068	267,396	291,540	280,304	175,233	_
Softshell Clam	3,717,418	3,664,873	3,413,032	3,269,866	3,226,960	3,450,873	2,192,270	
Data Source: SAFIS eDR, Octo	ber 2024							

Inshore Shellfish Annual Ex-Vessel Value, 2017-2023									
Species	2017	2018	2019	2020	2021	2022	2023	Trendline	
Bay Scallop	4,215,222	2,432,678	2,102,751	1,835,439	1,396,462	1,630,816	1,356,408		
Blood Ark	123,120	137,318	251,794	186,002	100,466	61,096	69,732		
Blue Mussel	31,910,447	1,595,823	167,404	284,572	434,885	632,234	992,207		
Eastern Oyster (in pieces)	24,757,322	25,713,120	26,926,031	16,062,113	27,622,592	31,865,571	29,446,657		
Quahog	7,906,831	6,908,604	5,488,569	4,056,190	5,024,183	5,534,127	5,569,014		
Razor Clam	2,410,466	3,226,279	2,537,636	1,270,606	1,698,643	1,680,351	1,071,709		
Softshell Clam	6,427,453	6,201,456	6,541,836	7,201,512	8,741,533	8,074,470	4,656,739		
Data Source: SAFIS eDR, Octo	ber 2024								



Division of Marine Fisheries Update

Reclassification around Wastewater Treatment Plants

CSO Closures

Matthew Camisa

Regional Shellfish Supervisor – New Bedford



National Shellfish Sanitation Program (NSSP)

FDA Cooperative Program
 w/Federal Agencies-States-Industry

 A Public Health document for the sanitary control of the harvest and handling of bivalve molluscan shellfish in the US

 Ensures shellfish will be safe and sanitary if produced in accordance with NSSP guidelines



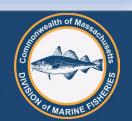


National Shellfish Sanitation Program (NSSP)

Guide for the Control of Molluscan Shellfish 2023 Revision

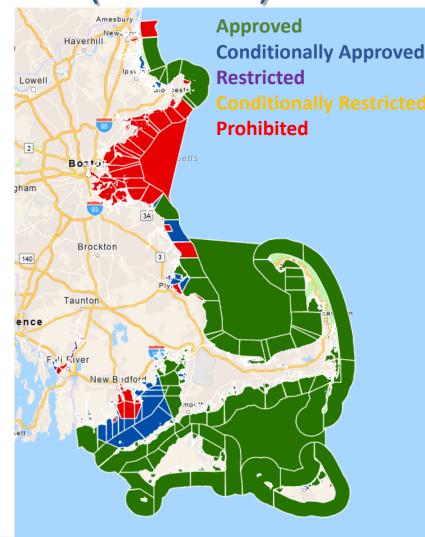


From the U.S. Food and Drug Administration website https://www.fda.gov/nssp



Designated Shellfish Growing Areas (DSGAs)

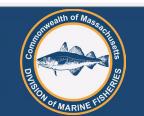
- 1,500 miles of Coastline
- >1.7 million acres
- 295 DSGAs
- 783 sub areas
- 1,550 active classification stations
- Sampled 5 times per year while in the open status



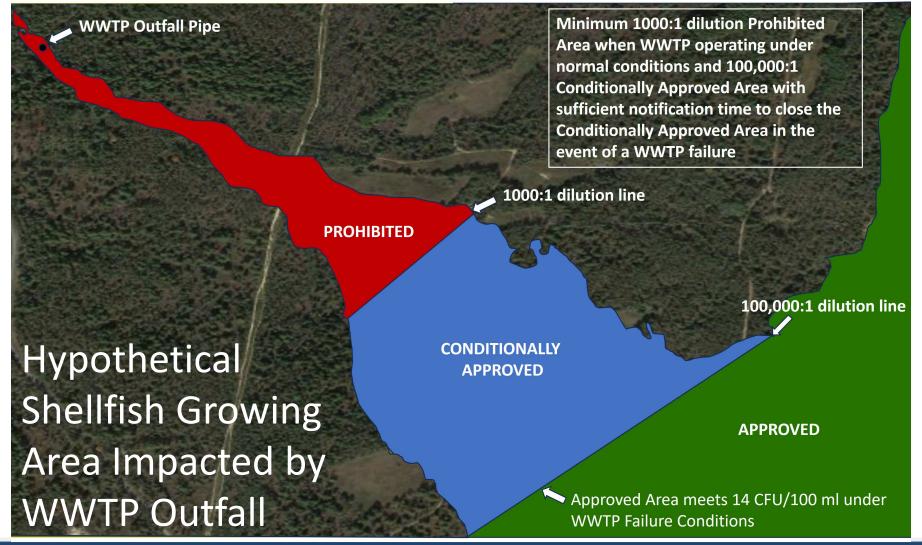
2023 Model Ordinance Mandates

Ch IV @.03 Growing Area Classification E. Prohibited Classification.

- (5) Wastewater Discharges.
 - (a) An area classified as prohibited shall be established adjacent to each sewage treatment plant outfall or any other point source outfall of public health significance.
 - (b) The determination of the size of the area to be classified as prohibited adjacent to each outfall shall include the following minimum criteria:
 - (i) The volume flow rate, location of discharge, performance of the wastewater treatment plant and the microbiological quality of the effluent. The Authority may utilize MSC wastewater sample data in the determination of the performance of the sewage treatment plant;
 - (ii) The decay rate of the contaminants of public health significance in the wastewater discharged;
 - (iii) The wastewater's dispersion and dilution, and the time of waste transport to the area where shellstock may be harvested; and
 - (iv) The location of the shellfish resources, classification of adjacent waters and identifiable landmarks or boundaries

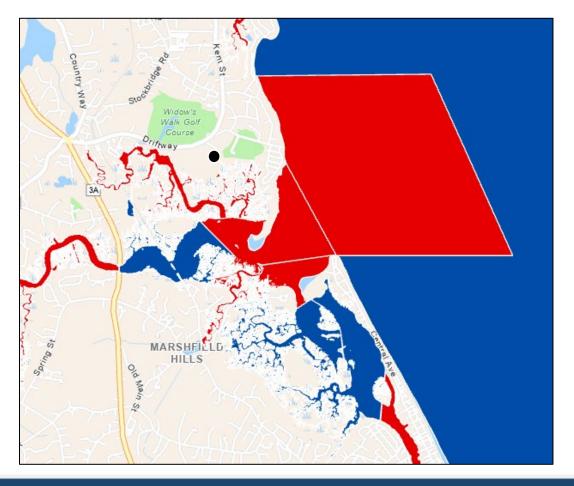


NSSP Guidance on Classification Adjacent to WWTP

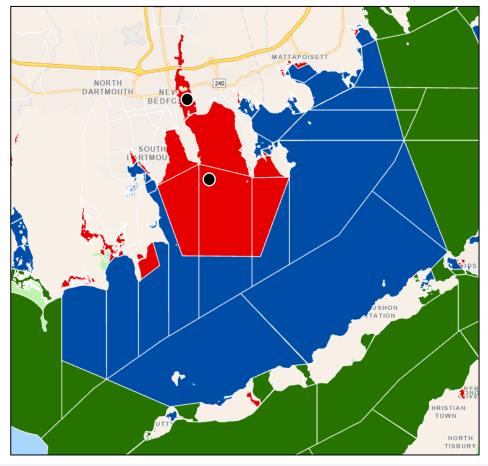


Previous WWTP Modeling

Scituate/Marshfield WWTP Reclassification

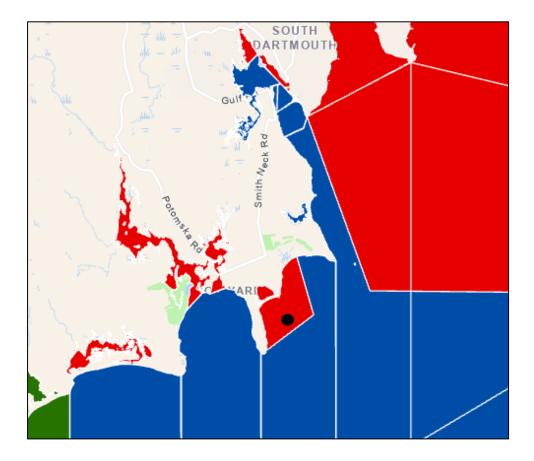


New Bedford/Fairhaven WWTP Reclassification

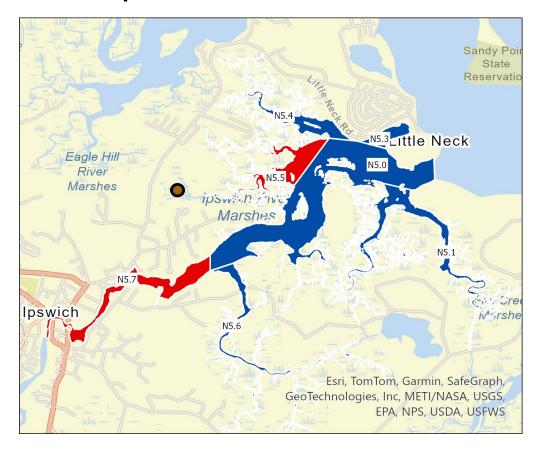


Current Modeling and Peer Review

Dartmouth WWTP Reclassification

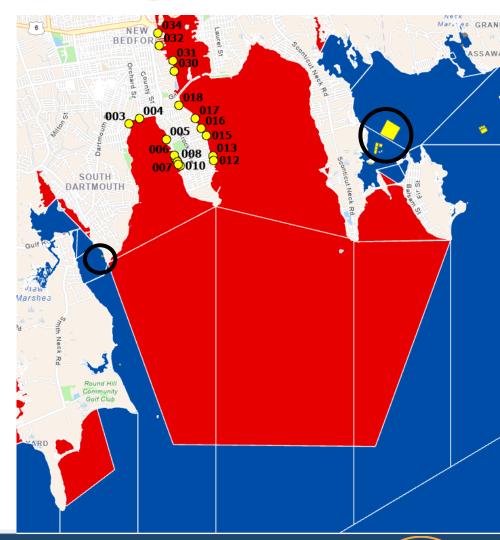


Ipswich WWTP Reclassification

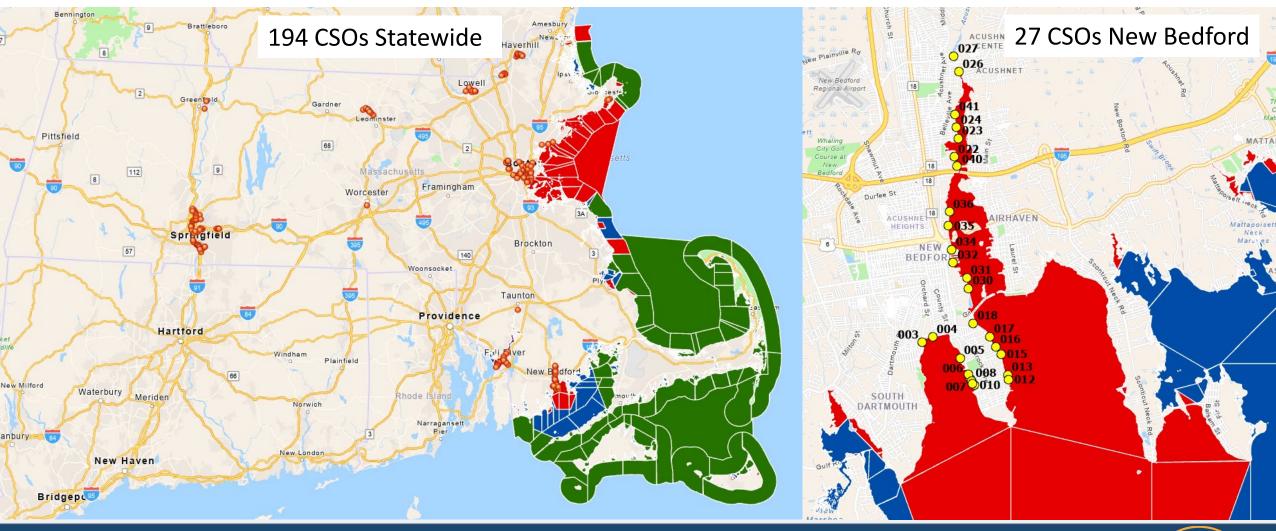


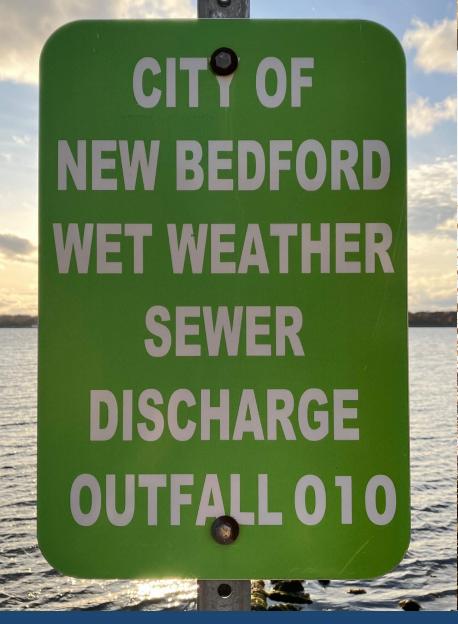
Effects of WWTP Modeling

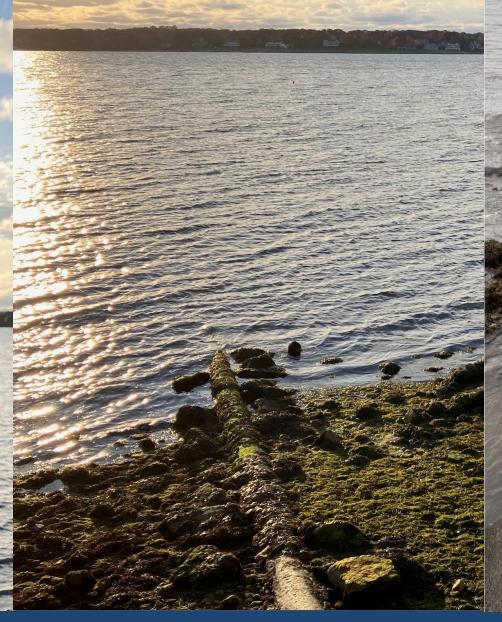
- Expanded Prohibited Areas
- Expanded Conditionally Approved Areas
- Monthly Sampling Requirement
- Limits EU sales from CA Areas
- No closures for Aquaculture Industry

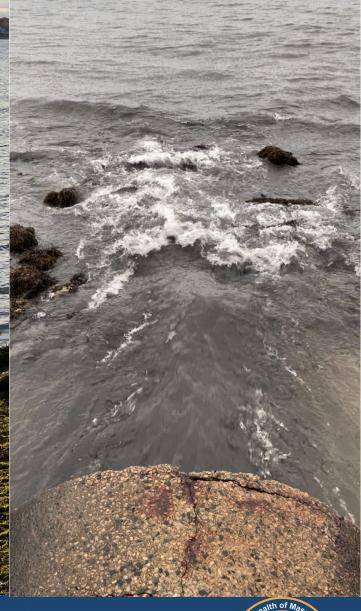


Combined Sewer Overflows









Massachusetts Division of Marine Fisheries



2024 New Bedford CSO Activations

Rain events with CSO activations 57

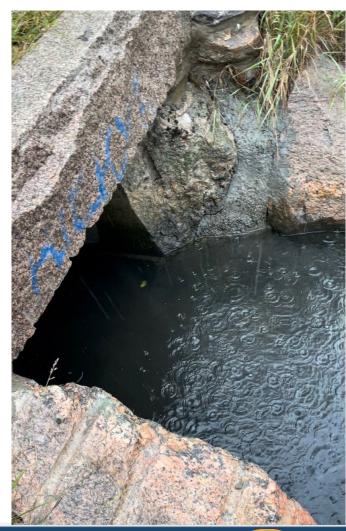
Total number of CSO activations 384

Largest individual CSO discharge 28.46 million gallons

Largest discharge by rain event 69.71 million gallons

Total volume of CSO discharges 547.01 million gallons

Total days closed by CSOs in BB 170



DMF Actions

- ✓ Heavily investing in Male Specific Coliphage (MSC) testing
 - 1. Shellfish MSC samples
 - 2. Water MSC samples
 - MSC testing in all labs
- ✓ MSC sampling can reduce 21 day closure to as low as 8 days
- ✓ Increased communications with industry and municipalities
- ✓ Closures are mandatory after CSO discharges but may be able to avoid closing certain areas with new data
- ✓ Working with legislature for increased funding





88% 📟

CSOs were flowing last night and this morning. The existing closure stands and the 7 day clock resets.

AT&T 5G+

If no additional CSO events earliest possible test date (considering no weekend testing?) 10/7? Though I understand it won't count towward reopening, I advocate for earlier testing this coming Monday 9/30.

Thu, Oct 3 at 10:28 AM

Matt Loo

Are we eligible to test Monday

Dale Leavitt

Working in it Matt. Better idea around lunchtime.















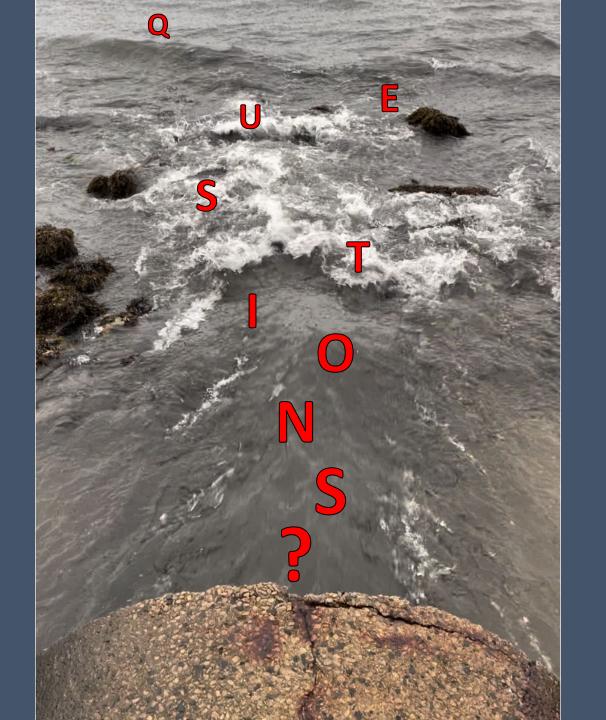












Massachusetts Municipal Aquaculture Survey Summary of Key Findings Relative to License Transfer

- Survey conducted in 2023
- All 34 towns with at least one aquaculture license responded
- Copies of individual municipal regulations provided by ~30% of respondents
- Results placed into 3 categories based on size and longevity of local aquaculture industry for comparison purposes as follows:
 - Tier 1: Mature and robust aquaculture industry
 - Tier 2: Aquaculture industry >5 years w/low-moderate production
 - Tier 3: Emerging aquaculture industry <5 years

Tier 1: N=10

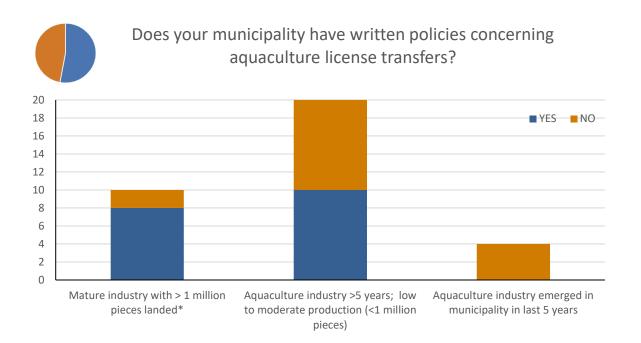
Tier 2: N=20

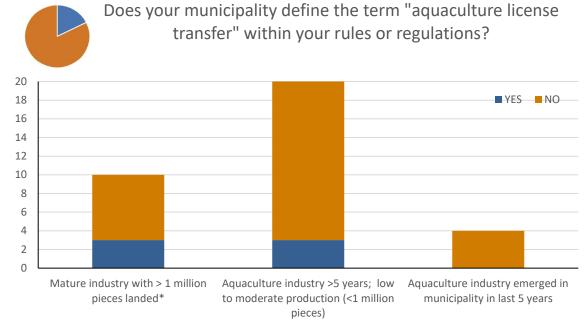
Tier 3: N=4

Barnstable
Orleans
Dennis
Eastham
Plymouth
Duxbury
Edgartown
Wareham
Falmouth
Wellfleet

Nantucket	Chatham
Bourne	Essex
Chilmark	Provincetown
Mashpee	Brewster
Oak Bluffs	Westport
Kingston	Mattapoisett
Gosnold	Truro
Fairhaven	Aquinnah
Dartmouth	Marion
Yarmouth	Ipswich

Harwich
Tisbury
Rowley
Gloucester





Pie chart inset = all data aggregated



Division of Marine Fisheries Shellfish Program Update

Christian Petitpas, Shellfish Program Leader

Wayne Castonguay, Regional Shellfish Supervisor, Gloucester

Matthew Camisa, Regional Shellfish Supervisor New Bedford

Alex Boeri, Aquaculture Project

Ryan Joyce, Classification Supervisor – GLO

Terry O'Neil, Classification Supervisor – NB



Personnel Changes

- Mitchell Parizek Shellfish Area Biologist
- Emma Gallagher Shellfish Area Biologist
- Amber Woolfenden Bacteriologist
- John Mendes Shellfish Area Biologist
- Jake Madden Lab Supervisor
- Matt Camisa Regional Shellfish Supervisor
- Allie Myers Shellfish Area Biologist
- John Mendes Shellfish Area Biologist
- Terry O'Neil Classification Supervisor

hired/March	New Bedford
hired/March	New Bedford
full-time/April	Gloucester
retired/April	New Bedford
promoted/June	Gloucester
promoted/June	New Bedford

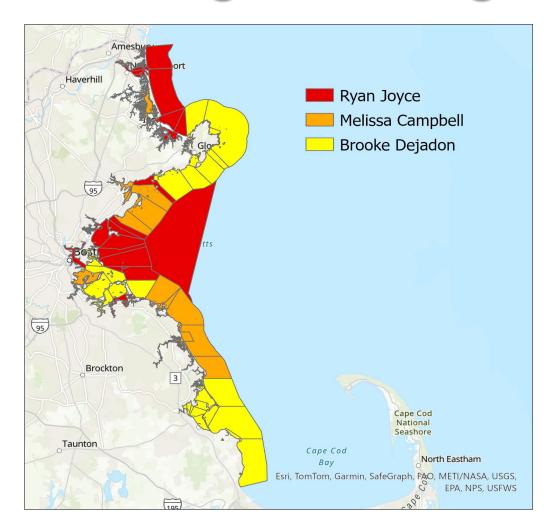
hired/June

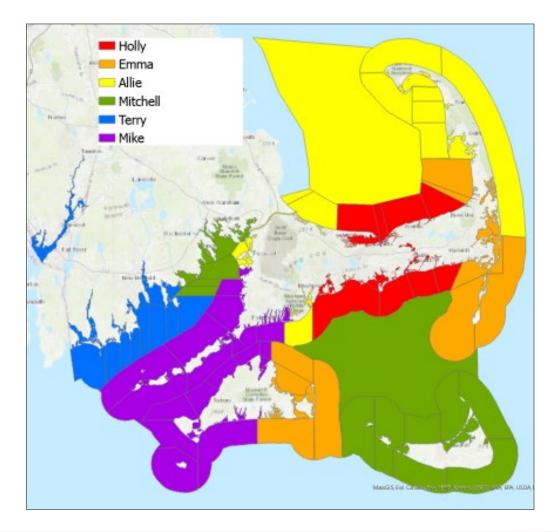
contract/July

New Bedford

New Bedford

Growing Area Assignments





Commercial Shellfish Landings 2017-2023

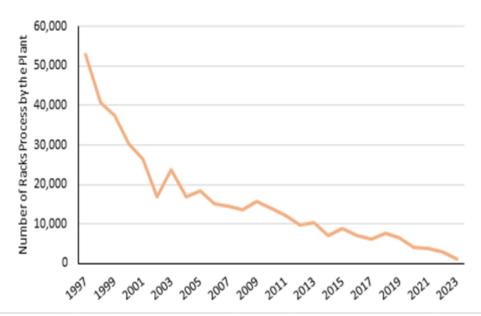
Species	2017	2018	2019	2020	2021	2022	2023	Trendline
species	2017	2010	2015	2020	2021	2022	2023	Trendinie
Bay Scallop	949,980	666,416	561,469	548,705	379,019	441,686	418,939	
Blood Ark	61,050	62,345	122,958	96,642	46,528	20,959	24,046	
Blue Mussel	10,475,228	5,643,323	879,608	1,486,976	3,363,404	5,276,377	4,085,655	
Eastern Oyster (in pieces)	50,628,367	51,132,958	54,241,784	35,176,508	55,785,295	56,731,357	50,708,842	
Quahog	4,155,130	4,478,310	4,728,756	3,458,704	3,724,530	4,085,678	4,026,520	
Razor Clam	547,120	728,322	505,068	267,396	291,540	280,304	175,233	_
Softshell Clam	3,717,418	3,664,873	3,413,032	3,269,866	3,226,960	3,450,873	2,192,270	

Commercial Shellfish Landings 2017-2023

Species	2017	2018	2019	2020	2021	2022	2023	Trendline
Bay Scallop	4,215,222	2,432,678	2,102,751	1,835,439	1,396,462	1,630,816	1,356,408	
Blood Ark	123,120	137,318	251,794	186,002	100,466	61,096	69,732	_
Blue Mussel	31,910,447	1,595,823	167,404	284,572	434,885	632,234	992,207	
Eastern Oyster (in pieces)	24,757,322	25,713,120	26,926,031	16,062,113	27,622,592	31,865,571	29,446,657	~
Quahog	7,906,831	6,908,604	5,488,569	4,056,190	5,024,183	5,534,127	5,569,014	
Razor Clam	2,410,466	3,226,279	2,537,636	1,270,606	1,698,643	1,680,351	1,071,709	\
Softshell Clam	6,427,453	6,201,456	6,541,836	7,201,512	8,741,533	8,074,470	4,656,739	

Depuration Fishery Updates

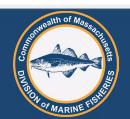
Depuration Plant Production 1997 - 2023



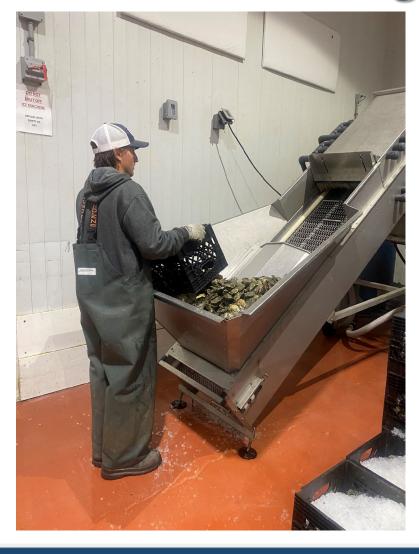
Depuration Areas With Potential to be Reclassified to C. Approved



Cost Estimates to Restore Operations at Depuration Plant Including Critical Deferred Mainten	ance
Item	Cost
Critical deferred maintenance (life/safety): electrical, plumbing	\$12,067
Immediate capital improvements to re-open: wells, tank systems, flood resiliency	\$585,000
Near term capital improvements: exterior & interior repairs, parking lot, drainage	\$61,834
Other scheduled DMF capital improvement needs over next 1-3 years: *	55,000
Total:	713,901



"Off-site Culling" at Wholesale Dealer Facilities



- Operations observed by FDA not viewed as off-site culling which is a harvester activity, but rather grading which is more of a dealer activity
- Because product already cooled dealer subject to HACCP controls
- Dealer must track and keep records of time out of refrigeration and if cumulative time out of refrigeration (from receipt from harvester to transfer to secondary buyer) has potential to exceed 2 hours then must have a DPH approved intermediate processing plan
- Need to address documentation of product returned to harvester/farm



FDA Risk Assessment and Risk Management (RARM)

- FDA conducted in-field compliance evaluation On June 26-28, 2024
- Visited 7 harvesters, 3 harvester/dealers, and 5 dealers
- No issues observed with Vibrio compliance
- FDA witnessed major noncompliance with one quahog harvester
- FDA recommended DMF monitor ice being used from private residences possible inspects
- During FDA growing area evaluation, FDA witnessed one farm with significant bird activity on floating gear – listed as new or emerging concern

Campylobacter in SC28

- Outbreak due to oysters consumed from one restaurant
- Oysters sent to RI lab for testing 4 times
- Tested positive for Campylobacter lari
- Lewis Bay (SC28) closed for nearly a month
- FDA issued advisory on August 5th due to recall issues



FDA Growing Area Program Element Evaluation Report (PEER)

• 8/5/22024 through 8/12/2024

North Shore — Plum Island Sound, Ipswich River,

Essex Bay, Annisquam River

Gloucester Harbor

Cape Cod Bay — Sesuit Harbor, Plymouth North Coastal

Buzzards Bay — Westport River East Branch, Brandt

Island Cove, Hiller Cove, Quissett

Harbor

South Cape — Little Harbor, Great Pond, Green Pond,

Bournes Pond

Action Items

- Reopening criteria for CONDITIONAL rainfall areas
- Interagency MOA

New or Emerging Concerns

- Pollution source assessments
- Floating aquaculture gear assessments
- Ipswich WWTP dilution analysis
- Marina and Mooring Area assessments
- Remote area evaluations
- Rainfall area enforcement authority



Statutory Amendment Resolving WPA and Fisheries Management

FY 2025 Budget amends G.L. c. 130, s. 1A:

The division of marine fisheries shall be within the department in the executive office of environmental affairs and shall be under the administrative supervision of a director who shall be called the director of marine fisheries. The director of the division of marine fisheries shall be appointed and may be removed by the commissioner of the department of fish and game with the approval of the marine fisheries advisory commission. The said division of marine fisheries shall administer all the laws relating to marine fisheries as appearing in chapter one hundred and thirty and any other general or special laws, except as pertain to the enforcement thereof. It shall be responsible for the biological development of marine fish and fisheries. Said division shall co-operate with all departments, boards, officials and institutions of the commonwealth or its subdivisions that may be concerned in any way with matters under its supervision. It shall co-operate with adjoining states and with the United States of America, or any agency thereof, with foreign countries, and any other agency, as may be authorized by the general court, and receive and dispense such funds from any of such agencies, states or governments as may be authorized by the general court. Notwithstanding any general or special law to the contrary, the division of marine fisheries shall have the sole authority and jurisdiction to regulate the harvest of marine fish and the effect of such activities on marine fish species and marine fisheries resources. No person authorized to engage in fishing activities by the division pursuant to this chapter shall be required to file a notice of intent pursuant to section 40 of chapter 131 or pursuant to a local wetlands by-law or regulation and no person shall be required to obtain a permit or license pursuant to chapter 91 or a water quality certification pursuant to chapter 21 in relation to any such fishing activities.

Current Inshore Surf Clam Fishery Trends

Inshore SC/OQ Dredge Endorsement Holders and Surf Clam Participation, 2021-2024										
	2021		2021 2022		2023		2024	ŀ		
Issued Endorsements	34	ļ	33		32		32			
	Dual	State	Dual	State	Dual	State	Dual	State		
	Fed/State	Only	Fed/State	Only	Fed/State	Only	Fed/State	Only		
Active Vessels Reporting	Permit	Permit	Permit	Permit	Permit	Permit	Permit	Permit		
State Waters Fishing	8	5	8	4	9	3	N/A	N/A		

Distribution of Inshore SC/OQ Dredge Endorsement Holders Surf Clam Landings an
Participation, 2021-2023

	2	021	2	022	2023		
	ACTIVE		ACTIVE		ACTIVE		
REGION ¹	VESSELS	LBS	VESSELS	LBS	VESSELS	LBS	
CCB (SRAs 5-7)	8	885,990	6	112,981	4	884,829	
PTOWN (SRA 8)	9	1,382,546	7	1,452,867	9	2,049,885	
OUTER CAPE (SRA 9)	2	*	3	*	3	272,590	
ISLANDS (SRAs 10-13)	8	881,831	5	53,299	6	713,003	

Data Source: MA Permitting data & MA trip-level harvester reports and GARFO VTRs, as of 9/9/24, does not adjust for missing federal or state reports

1Excludes small amounts of data reported from other regions

*Confidential



Surf Clam Spatial Management Pilot Program

- Tested the ability of cellular vessel tracking technology to improve the spatial monitoring of state waters surf clam vessels since November 2023.
- The vessel tracking units gather time and position reports every minute while the vessel is in motion.
- Geofences integrated into the tracking device platform establish virtual perimeters around specific geographic areas. If a vessel crosses into or exits one of these virtual areas, the vessel operator or management agency is notified via text and/or email alerts.
- Data collected on a vessel level is confidential and cannot be released. Data are transmitted for final storage, monitoring, and review at ACCSP. Only users with confidential data agreements are given access.
- The goal of the pilot program was to test the use of the technology to delineate exclusions areas and provide notification when those areas are breached by vessels.



Viatrax Boat Command Cost and Installation

Viatrax Boat Command- GPS Data Logger

- The Viatrax BOAT COMMAND is a vessel tracking device that records positional data and transmits those data via cellular network
- Allows vessel/device owner to create an account and view vessel activity in an online web application.

Instal	llation
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- The device must be installed near a window with a view of the sky
- Connect the red wire to the vessel battery (12v or 24v DC) or an un-switched power source on the vessel. More information: www.boatcommand.com
- Connect the black Wire to the negative side of the battery or the vessel ground
- The device has LED indicators that shows the status of the device
- Sign and return affidavit certifying installation of tracking device.

Cost Information (as of 9/12/2024 Boatcommand.com)	
Device + 1 year of service	\$398
Device + 7 years of service	\$1488





Updating Management Area Boundaries

- Adopt tracker and geofencing requirements.
- Replace contour line management with GPS coordinates.
- Revisit existing management area closures.
- Protect sensitive inshore habitats, specifically eelgrass.
- Provide access to resource.
- Address local concerns and user group conflicts.

