# FALMOUTH FISHERMAN'S ASSOCIATION MEETING

OCTOBER 7, 2025

CHUCK MARTINSEN, MES DEPUTY DIRECTOR



### **About Me**

- Started working with the Town of Falmouth in 1993
- Held various positions since then
- Currently Deputy Director of the Marine & Environmental Services Department, as well as Game Warden, and Shellfish Warden

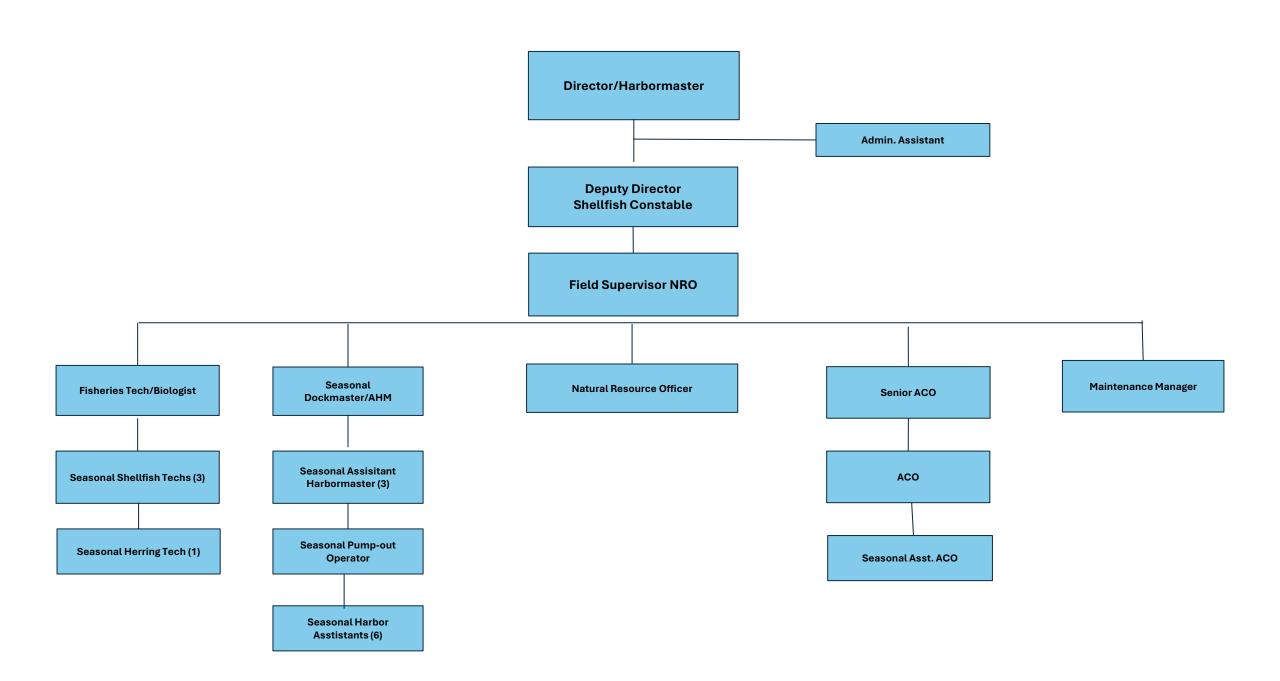
### Falmouth, MA



- 70 miles of coastline
- 51% of area covered in water
- Extending 3 miles out
- Covers multiple resource areas

### **Marine & Environmental Services**

- Provide for the protection, preservation, enhancement and healthy ecological function of the Town's natural resources
- Provide services intended to protect the safety of people and vessels who use our woodlands, waterways and waterside facilities
- Preserve, protect and enhance our shellfish and finfish populations
- Provide professional and responsive domestic and wildlife animal services







### **Shellfish Division**

### **Shellfish for Water Quality Benefits**

- The Falmouth Select Board tasked the Water Quality Management Committee to explore non-traditional ways to remove nitrogen from the estuaries in the least expensive and most environmentally-sensible ways possible.
- Over the last 12 years the Town has explored many non-traditional alternatives to sewering and found that shellfish aquaculture is an alternative that has been quantitively proven to work and has garnered community acceptance.
- In addition to nutrient removal benefits, the current municipal aquaculture design generates numerous positive economic benefits by creating jobs, creating a marketable product, and providing a revenue stream for municipal propagation of municipal shellfish.

### From the Hatcheries to the Upwellers





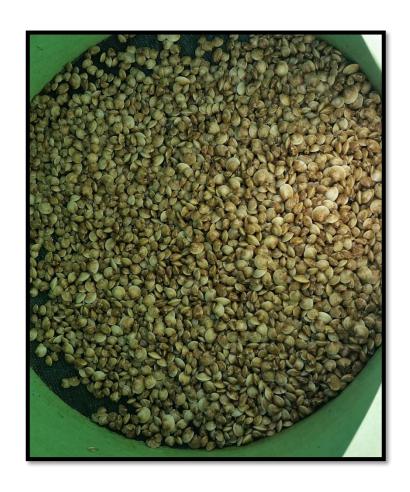
### **Oyster Seed**





### **Quahog Seed**





### **Bay Scallop Seed**





### **Bay Scallops From the Upweller**





### From the Upwellers to the Farm





### **Oyster Grow-Out Gear**





### **Quahog Grow-Out Gear**





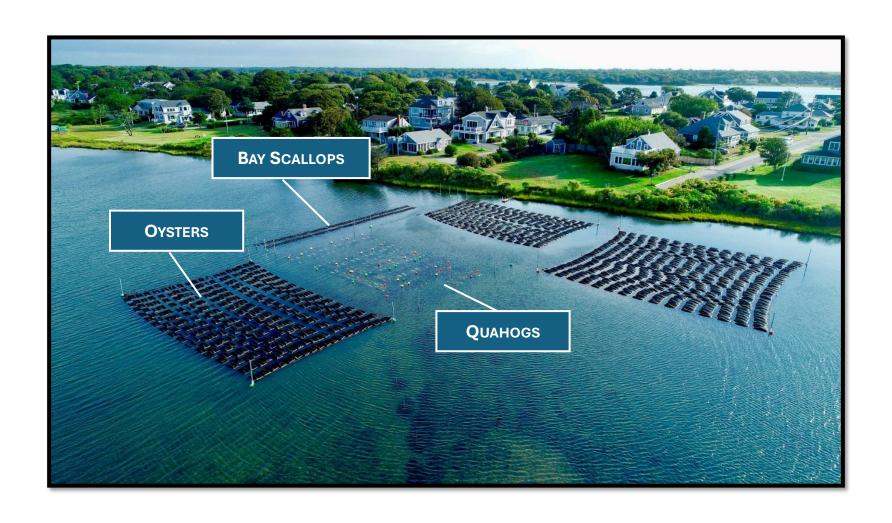


### **Bay Scallop Grow-Out Gear**





### **Multi-Species Farm**



### **Oysters Prior to Overwintering**





### From the Farm to Overwinter Storage







### **Quahogs Prior to Seeding / Overwintering**





### **Bay Scallops Prior to Overwintering**



### **Bay Scallops Second Year Growth**



### **Seeding the Harvest Areas**







### **Gear Development and Construction**

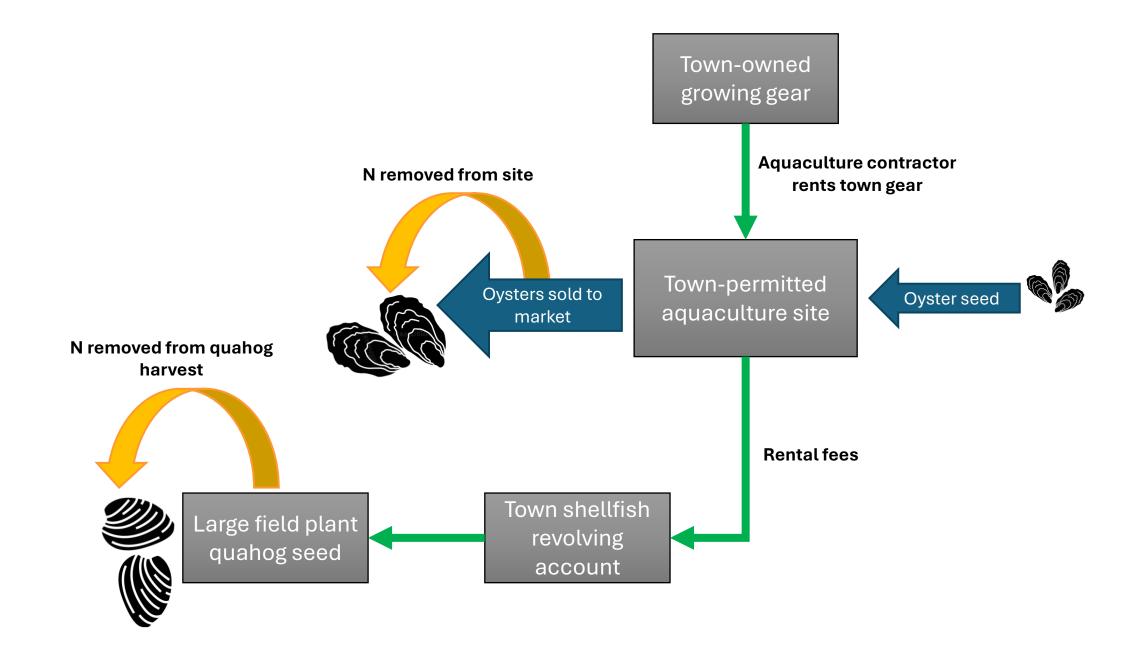






# **Eel River Aquaculture Pilot Project**

- Trial sites to identify how nitrogen reduction-based shellfish farming could work as part of a significant alternative to address nitrogen reduction in Falmouth's estuaries.
- Evaluate the feasibility of engaging commercial aquaculture contractors to grow and harvest oysters using highdensity floating gear.



### For Planning Purposes

- Nitrogen removal potentials of 130 kg N/acre for oysters in Falmouth are based on the specifications and targets set forth in the Eel River pilot which have been demonstrated to be achievable if the outlined growing strategy is followed.
- There have been no validation studies of the N removal rates for quahogs or scallops developed specifically for Falmouth.

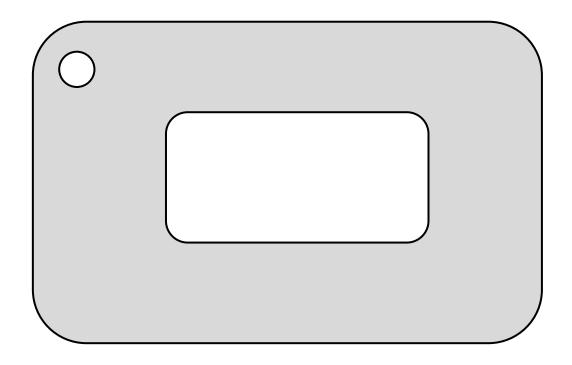
# Benefits of using Shellfish for Nutrient Management

- Even if shellfish did not show a measurable impact on water quality in the immediate vicinity:
  - Nutrient removal is significant (in terms of quantity as well as the fact that it is at the critical location of impairment) and can be documented quantitatively (equivalent to tens to potentially hundreds of sewer connections).
  - Implementation generates sustainable economic growth (repeatable business revenues, consistent jobs) instead of being a burden on taxpayers.
  - Environmental and economic impacts are virtually immediate.
  - The Town has developed a model that showcases that a competitive resource can be successfully shared.
  - Community perception that the Town is utilizing alternative actions to costly sewering.

### **Expansion: Expectations**

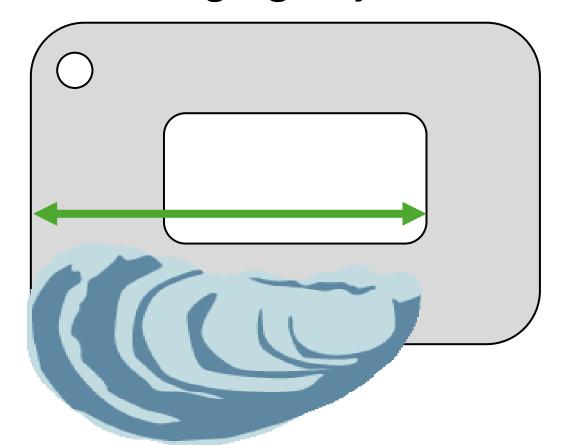
- Due to the success of the pilot aquaculture program, Falmouth is looking to expand the program and develop it in the Town's full scale water quality planning efforts.
- At the very upper end, the expansion has the potential for up to 70 new farms, to include both public (municipal resource areas) and private (aquaculture grant) farms.
- Realistically, the projected range is over 35 new farms, with 100-200 acres of production.

### **Shellfish Gauge**

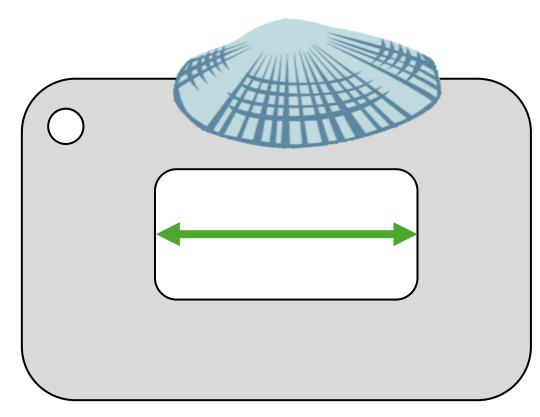


### **Minimum Oyster Size**

3 in. long legal oyster



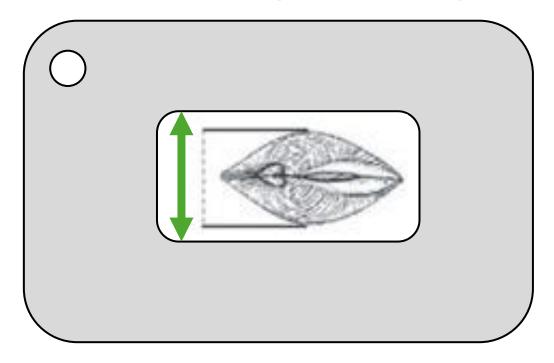
### Minimum Softshell Clam Size



2 in. long legal softshell clam

### Minimum Quahog Size

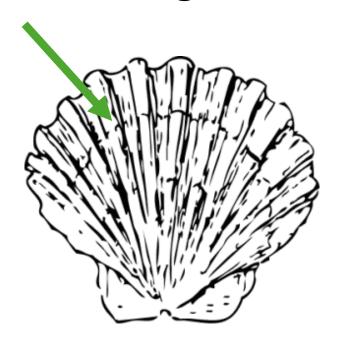
1 in. wide legal quahog



\*If the quahog slides through the opening, it is undersized.

### Minimum Bay Scallop Size

Well-defined growth ring



\*The shellfish gauge is not used for bay scallops.



### **OYSTERS**

RECREATIONAL LIMIT:

1/4 bushel (1 peck) per week



### BAY SCALLOPS

#### **RECREATIONAL LIMIT:**

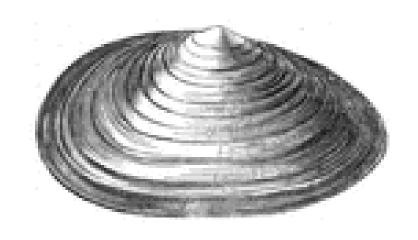
1 bushel per week between Oct. 1 − Mar. 31



# QUAHOGS

**RECREATIONAL LIMIT:** 

1 peck per day No more than 2 pecks per week



## SOFTSHELLS

RECREATIONAL LIMIT:

1/4 bushel (1 peck) per week

### Safe Handling & Storage of Shellfish

- Always keep shellfish cool or on ice.
- Refrigerate at 40°F. A wet paper towel placed over shellfish will keep a fresh catch alive.
  - **Do not wet store shellfish.** Refrigerate oysters with the cup facing upwards.
- Live shellfish close their shells when handled. Discard broken or gaping shells that do not close when tapped firmly a few times. Discard shellfish that do not open when cooked.
- When opening shellfish, always use a sterilized knife.

### **Discarding Oyster Shells**

It is the law to return oyster shells to the estuary or coastal pond that the oysters were collected from!

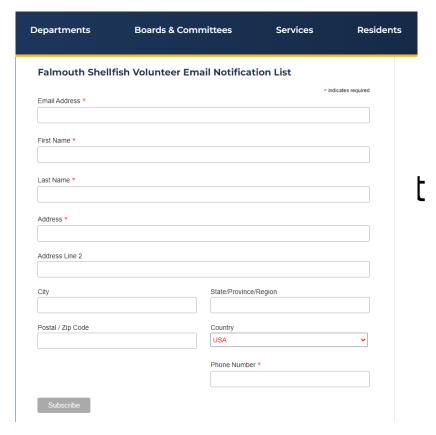
Alternatively, shells or unconsumed shellfish may be deposited to the cultch pile at the Falmouth DPW (drive into the DPW, go up the hill to the right).

### **MES Volunteer Program**



### If You Would Like to Volunteer:

- Go to: <u>https://www.falmouthma.gov/778/Get-Involved</u>
- Town website > Shellfish > Get Involved
- Fill out the volunteer form subscribe to volunteer opportunities





# Questions?