Program Description

The Town of Wellfleet's Shellfish Department is responsible for ensuring the success of the productive, healthy and sustainable \$8M shellfishing industry in the Town of Wellfleet where more than 300 residents (10 percent of the population) make their livelihoods. Given its oversight of food production and food safety for the public health and because it is a "first responder" on the intertidal areas used for wild harvest and farming of shellfish, the Shellfish Department is considered essential personnel by both federal and state government.

The Shellfish Department provides enforcement like the Police Department, emergency services like the Fire Department and works outside in all kinds of weather, often operating machinery like the DPW. We work to ensure sustainable fisheries for future generations by:

- enforcing town, state and federal policies and regulations governing shellfishing activities,
- propagating commercial and recreational shellfishing areas,
- protecting Wellfleet Harbor's environment and the general public's safety, and
- conducting public outreach and education.

To achieve our above responsibilities, we are operational 364 days a year (taking only Christmas Day off), with three full-time personnel and two seasonal deputies. We utilize three trucks, a boat and a barge. Hours of operation change daily due to low tide cycles when presence on patrol is required for oversight and enforcement of the shellfishery. With an active dragger boat fishery and propagation efforts, coverage is also needed during high tide. The department is on call 24/7 and is responsible for responding and engaging at any time, even on days off and holidays. Its work is performed outdoors in all kinds of weather on intertidal bottom areas and on the water, supervising and interacting with commercial and recreational shellfishermen and grant holders (farmers).

Its personnel liaise with federal, state and county governments, other town departments and committees, and independent agencies, academic institutions and nonprofits. It works closely with the Harbormaster Dept. and other harbor user groups. It coordinates communications and collaborates with the media, the public, scientists, and other shellfish departments from around the state and the country. It engages in many forms of public education.

Budget Statement

Adequate staffing for administrative duties year-round has become an issue given an increasing delegation of public health responsibilities from the state due to shellfish sanitation program changes at the federal level and the required involvement of the department in many crucial developing areas for the Town, such as Clean Water, Conservation Commission, Hazard Mitigation, Natural Resources, Rights of Public Access and climate change. First and foremost, it is of utmost importance that we ensure a safe, healthy product reaches the market, especially during the five-month vibrio season. In addition, for close to seven months a year, we only have one person on patrol on weekends, which is typically the busiest time for shellfishing.

In 2023, we had about 170 commercially permitted shellfishermen, including shellfish harvesting boats. With more than 100 farms, Wellfleet has more than double the number of shellfish farms and nearly double the amount of acreage under cultivation than any other coastal community in the state.

Recreational shellfishing has increased exponentially, both in permits sold and in usage over the past several years. In 2022, we sold more than 1,000 recreational shellfishing permits – a first in Shellfish Constable Nancy Civetta's five-year tenure. People are harvesting their weekly shellfish limits more frequently, which creates demands on both patrol and propagation activities, as we need to oversee harvest and make sure that there are abundant shellfish available for harvest. We have seen an 77% increase in annual recreational shellfishing from 2019 (pre-pandemic) to 2022. We have documented a nearly 60% increase in oyster harvest and a 96% increase in quahog harvest between 2019 and 2022. The department's propagation efforts utilizing the state-run contaminated quahog relay has been a wonderful contributor to the increase in quahog harvest. With the addition of the part-time, seasonal deputy to assist with recreational shellfishery oversight, we believe we now have good coverage during the busiest June to September time period.

We are putting forth a level-funded *operations* expense budget for FY23 with the exception of fuel cost increases of 76% from FY22. However, regarding *personnel*, we have an additional request: We believe that the addition of a part-time, winter month deputy shellfish constable is needed (equal to an additional \$17,075) and have included this in our proposed budget. This would allow the department to more closely monitor the recreational shellfishery during the winter months and provide for much-needed administrative support in the office. There have been increasing demands placed on the department for participation in Town bodies, for reporting requirements by the State and for grant oversight and Town of Wellfleet regulation enforcement. Having extra support year-round would allow us to meet these needs and train someone to perhaps take over the full-time deputy position when Chris Manulla retires in five years.

FY24 Objectives

- 1) Further streamline grant oversight operations and continue inspections and monitoring to raise the level of compliance.
- 2) Continue educational and enforcement procedures to ensure accountability and compliance with regulations in the recreational shellfishery.
- 3) Hire and train a new recreational Deputy Shellfish Constable with year-round responsibilities.
- 4) Continue to track wild shellfish landings by category (farmed, wild intertidal, wild dragged) to ensure that no segment of our industry gets regulated out of the industry.

Major Accomplishments for FY23

- 1) Thorough enforcement of Town of Wellfleet regulation 7.12 Evidence of Productivity: Use it or Lose It resulted in three grants being forfeited and coming back to the Town for a lottery. By the end of the year, two of them will be awarded to local shellfishermen who meet the eligibility requirements.
- 2) While still encountering many seed violations, our educational enforcement efforts in the recreational shellfishery are developing compliant users, who better understand how the regulations translate into the long-term success of our shellfish resources.

- 3) The federal Food and Drug Administration and the state Division of Marine Fisheries conducted an inspection of the shellfishery in Wellfleet Harbor. Deputy Shellfish Constable Chris Manulla accompanied them, showing them our wild and farm areas, introducing them to farmers and answering questions. His efforts resulted in good grades for our work and that of our shellfish farmers.
- 4) We conducted inspections for all 150 grants in Wellfleet (totaling 107 shellfish farms), including quite a few return visits to ensure rectifications for compliance were implemented.
- 5) We began preparing documents for grant holders to assist them when applying for new grants and extensions and coordinated with the Mass. Division of Marine Fisheries for new required paperwork. We are putting together a "cheat sheet" to assist grant holders through this process.

Personnel					
Line	Account	Description (specify basis for calculation)			
#					
A-1	Full-time S&W	\$233,600.01 - three full-time staff with WEA 3.5% increase			
A-2	Full-time, seasonal	\$52,435 (7% increase: \$35,416 – seasonal recreational patrol and			
	S&W	propagation deputies from FY23, plus addition of part-time, winter			
		deputy for rec patrol and admin assistance = \$17,075)			
A-3	Overtime	\$3,603 - Asst. & Deputy Constables for cultching and other			
		necessities			
A-5	Longevity	\$3,925 – Constable (6 yrs.) Asst. Constable (18 yrs.) and Deputy			
		Constable (23 yrs.)			
A-6	Holiday	\$8000 – 364 day/year department; always need staff on patrol			

Operating Expenses					
Line	Account	Amount	Description (specify basis for calculation) SAME AS		
#			FY23-NO CHANGE except fuel cost increase and better		
			allocation of how money spent		
B-2	Rep. & Maint.	\$5,250			
	Services				
B-3	Contract Services	\$3,450			
B-4	Education &	\$670			
	Training				
B-5	Telephone	\$2,200			
B-6	Postage	\$400			
B-7	Printing	\$1,200			
B-9	Office Supplies	\$600			
B-	Rep & Maint.	\$800			
10	Supplies				
B-	Vehicle Supplies	\$400			
11					
B-	Gas/Diesel	\$15,300	*a 76% increase due to increase in fuel cost from Eastham		
12			DPW		
B-	Other Supplies	\$2,120			
13					

B-	Uniform	\$2,120	
14			
B-	Travel	\$350	
15			
B-	Dues &	\$200	
16	Memberships		
B-	Other Fees	\$100	
17			
B-	Small Equipment	\$0	
18	_ 1		

180 Shellfish Conservation & Propagation

Program Description

The Town of Wellfleet's Shellfish Department works to ensure sustainable fisheries for future generations by:

- enforcing town, state and federal policies and regulations governing shellfishing activities,
- propagating commercial and recreational shellfishing areas,
- protecting Wellfleet Harbor's environment and the general public's safety, and
- conducting public outreach and education.

Propagation means undertaking initiatives to add more oysters and quahog clams to the estuaries and flats of Wellfleet Harbor so they are available for harvesting by commercial and recreational permit holders. The department conducts multi-pronged propagation efforts, including:

- paying for trucking sea clam shells, called cultch, to the transfer station and operating a barge to spread cultch around the harbor in the spring to create juvenile oyster habitat;
- buying shellfish seed, harvesting juvenile oysters (*spat*) from spat collecting devices and running an intertidal farm operation much like town grant holders. On the town farm, however, the product is not grown to market size; instead, it is grown to a predator-resistant size and is distributed to different harvesting areas in the harbor to finish growing into a wild Wellfleet oyster or clam. Because recreational shellfishermen often have trouble measuring shellfish to ensure they are legal size, it is imperative to have good monitoring of the recreational shellfishing area with our two seasonal deputies dedicated to that oversight in order to make sure that our shellfishery is sustainable into the future.
- undertaking a variety of relay initiatives, meaning that we buy (or move) shellfish from one area and transplant it to another area to provide better harvesting opportunities for both commercial and recreational shellfishing permit holders.

Budget Statement

Assistant Constable "Johnny Clam" Mankevetch is dedicated to overseeing all of our propagation efforts, and it is a full-time job, with potentially six-eight weeks of down time when the oysters are pitted. During that time, in late January to early March, Johnny goes back on patrol as well as spending time planning for the next growing season, such as putting in gear and seed orders, arranging cultch deliveries and timelines, and monitoring our pits full of oysters. For ten months out of the year, he is overseeing, managing, and running the farm and implementing our other propagation efforts, such as placing cultch around the harbor and participating in the state-run quahog relay. He is also always speaking with shellfishermen to gather feedback on our efforts and insights and input for future ideas. We are proud to say that many of our propagation directions are born out of these conversations.

The propagation responsibilities of the department continue to grow as we strive to build the necessary infrastructure and shellfish resources to enhance our commercial and recreational harvests. We will keep our propagation budget level funded for FY24. As previously, we propose using the Shellfish Revolving Fund for Propagation to cover \$40,000 of this budget, taking only \$6,000 from the General Fund. We may request additional monies from our Revolving Fund to undertake specific needed or opportunistic propagation initiatives. These will be brought forth in advance for public discussion at both Shellfish Advisory Board and the Selectboard.

Given the quahog disease, neoplasia, affecting local farmed clams, our current planning doesn't include the purchase of hatchery clams, but rather we're doubling down on the state-run contaminated relay as our source of quahogs. To put this in context, we spent \$0.04 per relay clam, most of which were ready to harvest in the same calendar year, whereas a field plant (the largest size available) hatchery seed clam costs \$0.07 per clam, and they will take four years to reach harvestable size, during which we will suffer some mortality. We feel this is a good trade-off for now, even though the relay clams are mixed in size, while hatchery clams provide littleneck sizes that are more valuable to commercial shellfishermen. We have also decided to cut down on the number of oyster seed ordered from hatcheries, focusing instead on increasing the amount of local, wild oyster seed we can collect on our hats. We will use the state and county funds equal to more than \$5,000 given to us to purchase more than 100,000 oyster seed, because it costs us nothing!

FY24 Objectives

- 1) Continue our investments into the state-run quahog relay, which in addition to providing quasiimmediate harvest benefits to both commercial and recreational shellfishermen, is also providing a notable increase in *wild* quahog seed due to increased spawning stock.
- 2) Return to limited hatchery/bottom plant quahog production contingent on the results of the multiagency neoplasia study currently taking place in Wellfleet Harbor.
- 3) We will increase our oyster spat collecting activities by purchasing more spat collecting devices.
- 4) Explore the possibility of using rotational closures to create harvestable shellfish populations in underperforming areas.

Major Accomplishments for FY23

- 1) We doubled our participation in the state-run contaminated quahog relay. We distributed more than 345,000 quahogs to Chipman's Cove, 170,000 to the Indian Neck recreational only area and 120,000 to the Herring River. Feedback from commercial shellfishermen had informed us that the areas where we had placed these clams in the past few years were showing solid recruitment of juvenile quahogs, and they encouraged us to up the ante. The return on investment can't be beat as the cost is a mere \$0.04 a clam.
- 2) We deployed about 70 stacks of "hats" (spat collecting devices) that we dipped in a mixture of concrete, lime and sand to create a substrate for oyster spat to adhere to and settle ("to catch a set"). We did this with the help of a dedicated group of recreational shellfishermen volunteers that we call "Johnny Clam's Crew." We put 50 stacks on our propagation bed and 16 in Chipman's Cove. We lent four to the Center for Coastal Studies for a study they are doing about spat recruitment and sedimentation, so we have a baseline before the Herring River project is completed. We break down the hats and put the (free) wild oyster seed into grow bags on our propagation bed, then overwinter them in our pits at the transfer station, and eventually will distribute them around the harbor next summer. This effort resulted in roughly 130,000 large juvenile oysters for our propagation efforts.
- 3) Johnny Clam got a new bull rake and began digging littleneck clams from our 2018 clam runs, which we distributed to the Indian Neck Recreational Only area. We made sure that there were plenty of shellfish for recreational shellfishermen to harvest for holiday weekends.

- 4) We worked with the DPW to distribute whole sea clam shells (called cultch) to different areas of the harbor to provide preferred habitat where oyster larvae can settle, thereby increasing our wild oyster populations. This year, we focused on Blackfish Creek, the Herring River and Chipman's Cove. We also laid a strip of oyster and quahog shells that were recycled last year as part of Mass. Oyster Project's (MOP) restaurant recycling program. MOP will conduct a study to see which "catches a set" better, sea clam shell or the oyster/quahog shells.
- 5) We had three significant TV and film pieces feature the work of our department this year: CBS
 WCVB-TV's Chronicle and a film called "From Tide to Table: The Remarkable Journey of Oysters." These focused mostly on the propagation efforts of Johnny Clam Mankevetch, and we congratulate him on his hard work to keep our shellfishery vibrant and sustainable.
- 6) We participated in three studies with different nonprofits and academic institutions: one on clam neoplasia with Roger Williams University and Cape Cod Cooperative Extension, one on spat recruitment and sediment with the Center for Coastal Studies, and one comparing the efficacy of sea clam versus oyster shell on recruiting wild oyster spat with the Mass. Oyster Project.
- 7) We worked with the Health and Conservation Department to add shellfish as a nitrogen mitigation tool to the Town's Watershed Permit Application. This was included as an addendum. Our goal in participation was to continue the shellfish industry's five percent growth over the last fifteen years by increasing our propagation budget and activities to enhance wild shellfish populations throughout the harbor through a series of heavily propagated rotating closure areas. We look forward to working with the Clean Water Committee to identify areas of funding for these efforts.

Operating Expenses					
Line	Account	Amount	Description (specify basis for calculation)		
#					
B-1	Aquaculture Supplies	11,000	Propagation equipment, e.g. spat collecting devices, condos,		
			racks, oyster grow bags, clam nets, rebar, U-hooks, etc.		
B-2	Cultch	\$10,000	10 loads of sea clam cultch trucked to transfer station		
			(\$1,000/trip)		
B-3	Seed	\$25,000	Purchase of juvenile oysters and clams, state-run quahog		
			relay, purchases from farmers or other relay efforts		

Only \$6,000 will come from the General Fund's budget 180. The remaining \$40,000 will come from the department's Revolving Fund for Propagation.