



NCDMF Shellfish Programs Funding

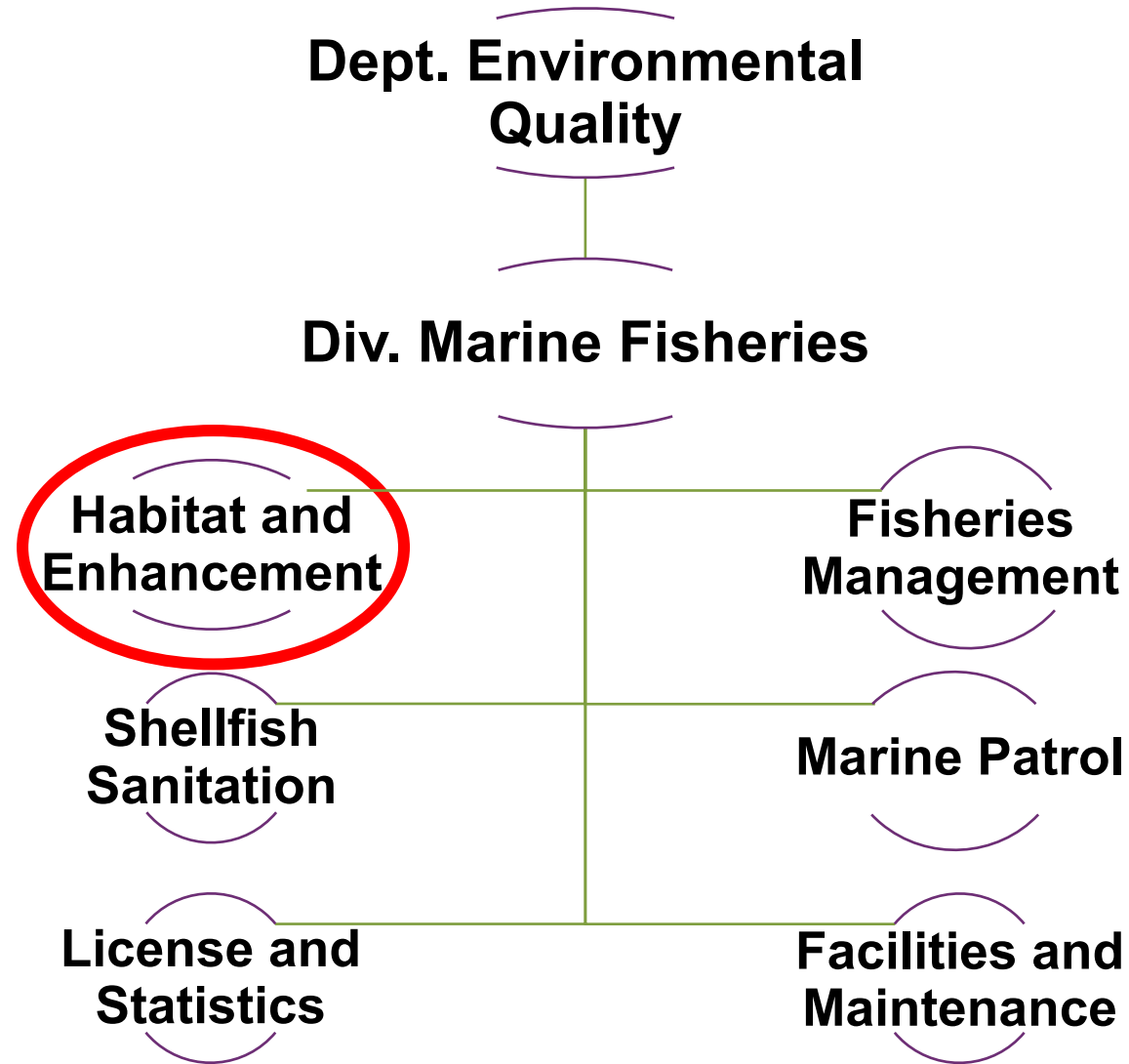
Department of Environmental Quality

Division of Marine Fisheries

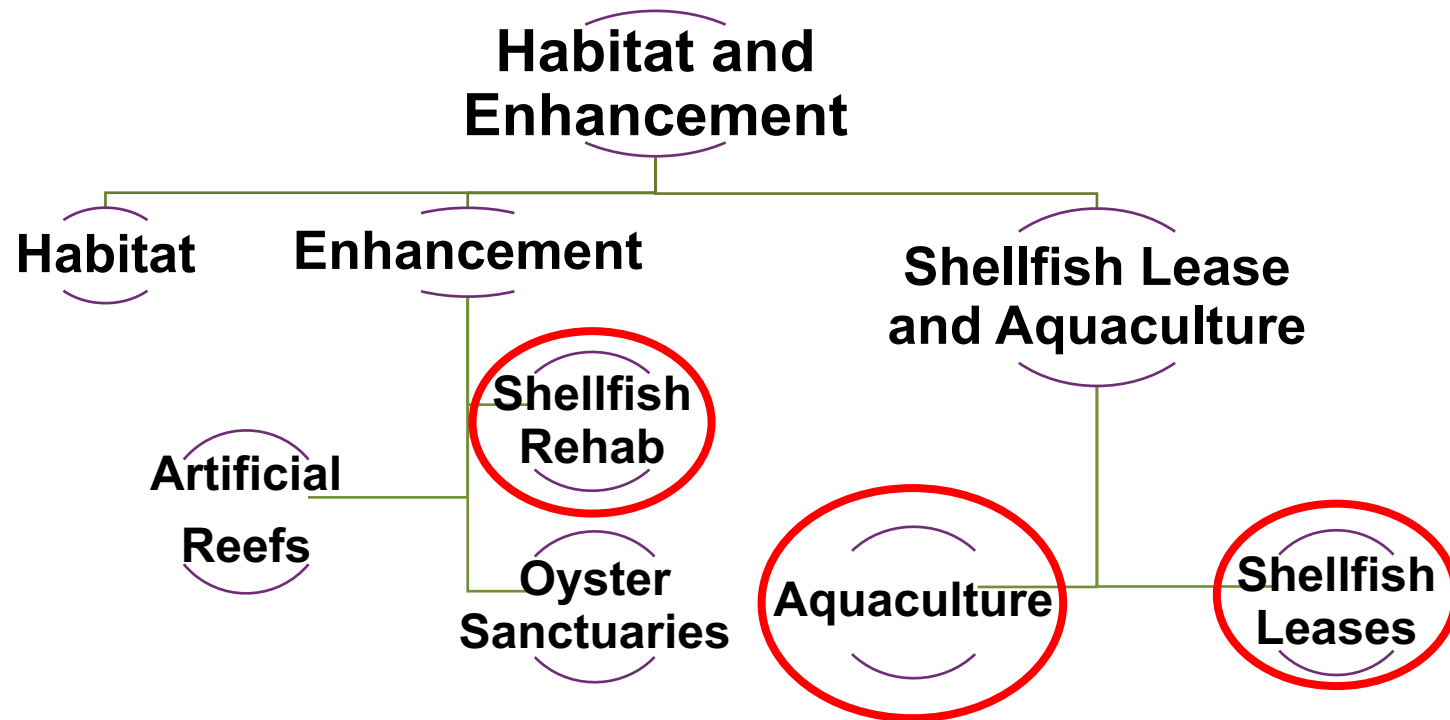
Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources | March 7, 2024



Habitat and Enhancement Section



H&E Shellfish Programs



Total Funding = \$2,913,705

Shellfish Rehabilitation Program – Cultch Planting



Shellfish Rehabilitation Program

Staff

- 12 FTEs
 - 2 Biologist II (NC18)
 - 4 R/V Captains (NC11)
 - 2 R/V Engineers (NC08)
 - 4 Environmental Technician I (NC04)
- 3 Split Time Fisheries Management Staff
 - 2 Environmental Technician II (NC07)
 - 1 Environmental Technician I (NC04)

Funding

- Appropriations
 - \$883,139 Personnel Costs
 - \$798,054 Operating Costs
 - Additional \$250,000 for R/V OC
 - Includes 2 New FTEs
 - **\$1,931,193 Total Funding**
- R/V Oyster Creek Purchase
 - Appropriated \$1.5 Million
 - Purchase \$1 Million
 - Additional Retrofits ~\$1.5 Million
 - Total ~\$2.5 Million

Aquaculture Permits Program



Aquaculture Permits Program

Staff

- 2 FTE
 - 2 Environmental Specialist II (NC14)

Funding

- Appropriations
 - **\$178,796 Personnel Costs**
 - Does Not Have Devoted Operational Funding

Shellfish Leasing Program



Shellfish Leasing Program

Staff

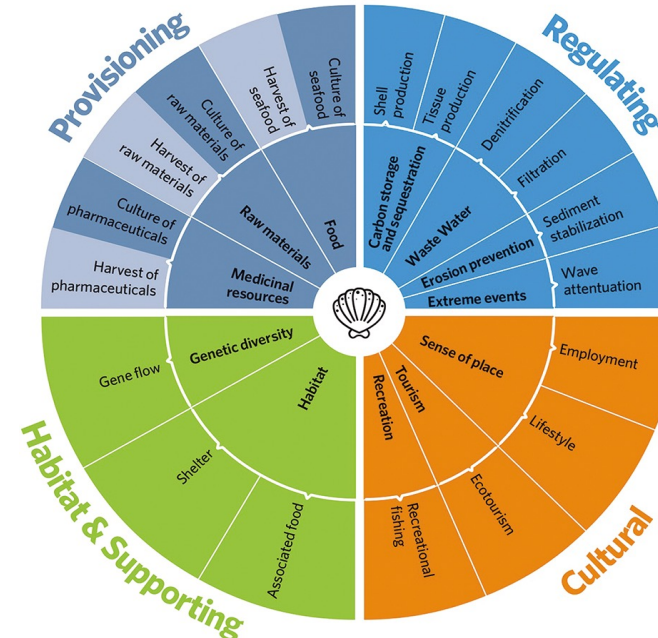
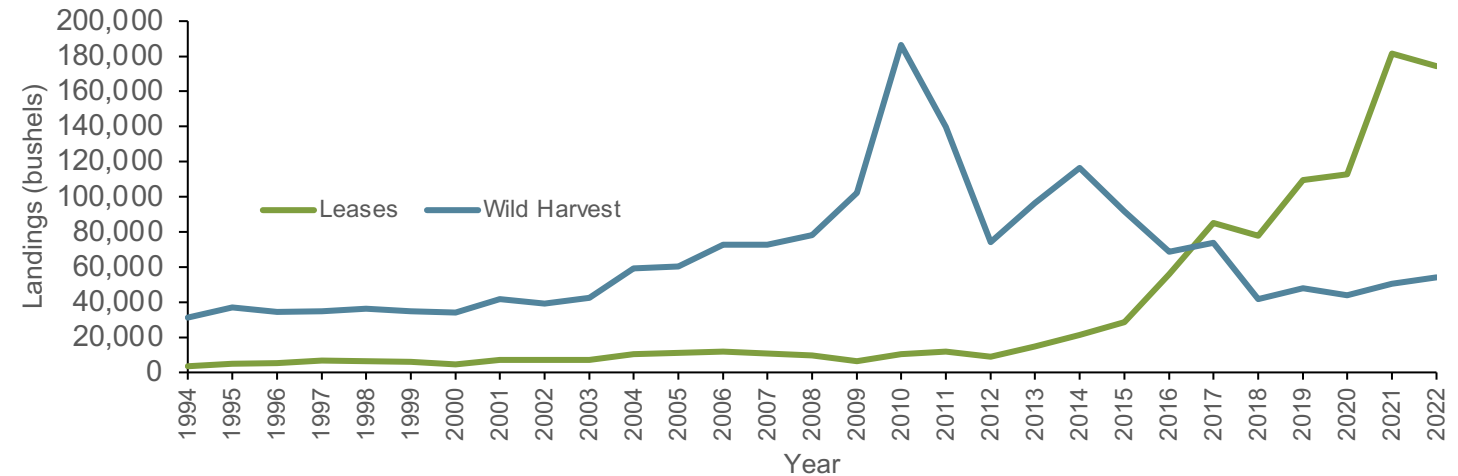
- 9 FTEs
 - Administrative Officer II (NC13)
 - 2 Conservation Biologist I (NC14)
 - Administrative Specialist I (NC08)
 - 2 Environmental Technician II (NC07)
 - 3 Environmental Technician I (NC04)

Funding

- Appropriations
 - \$619,715 Personnel Costs
 - \$184,000 Operational Costs
 - **\$803,715 Total Funding**

Aquaculture Economics

- Leases vs. Wild Harvest
- Ecosystem Services
- Direct Economic Stimulus
- Indirect Economic Benefits



Shellfish ecosystems

Shellfish ecosystems are productive reefs, "beds" and populations that provide a wide range of important ecosystem services in marine, coastal and estuarine areas. Globally, more than 85% of shellfish ecosystems have been impacted by human activity and their capacity to naturally support a range of goods and services has been greatly reduced. Protection of shellfish ecosystems is critical (for example, harvesting from these areas should be limited or not occur), and restoration can be effective but require substantial time and cost.



Shellfish mariculture

Ideally shellfish mariculture would support many of the goods and services provided by shellfish ecosystems. Because of widespread human impacts on shellfish ecosystems there may be instances in which mariculture is an effective method for supporting and restoring these functions, such as the provision of shellfish for food or the introduction of a large mass of filter feeders to increase water filtration. More research is needed to understand how shellfish mariculture can be best designed, to maximise positive ecosystem effects.

Questions



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