

Prevention of Marine Debris from Shellfish Mariculture

Best Management Practices for North Carolina Producers

The shellfish mariculture industry relies heavily on synthetic materials for oyster growout within the estuarine system. If these materials are lost from the farm, they become marine debris which can be detrimental to habitat, aquatic species and the people who work and play on the water. The North Carolina Coastal Federation worked with partners and shellfish growers to produce voluntary best management practices for the prevention of marine debris from shellfish leases.

SITING

The first step to establishing a successful shellfish farm is proper siting. There are many aspects that contribute to a farm's viability including frequency of closures, survivability of oysters, salinity, wave energy and other physical factors.

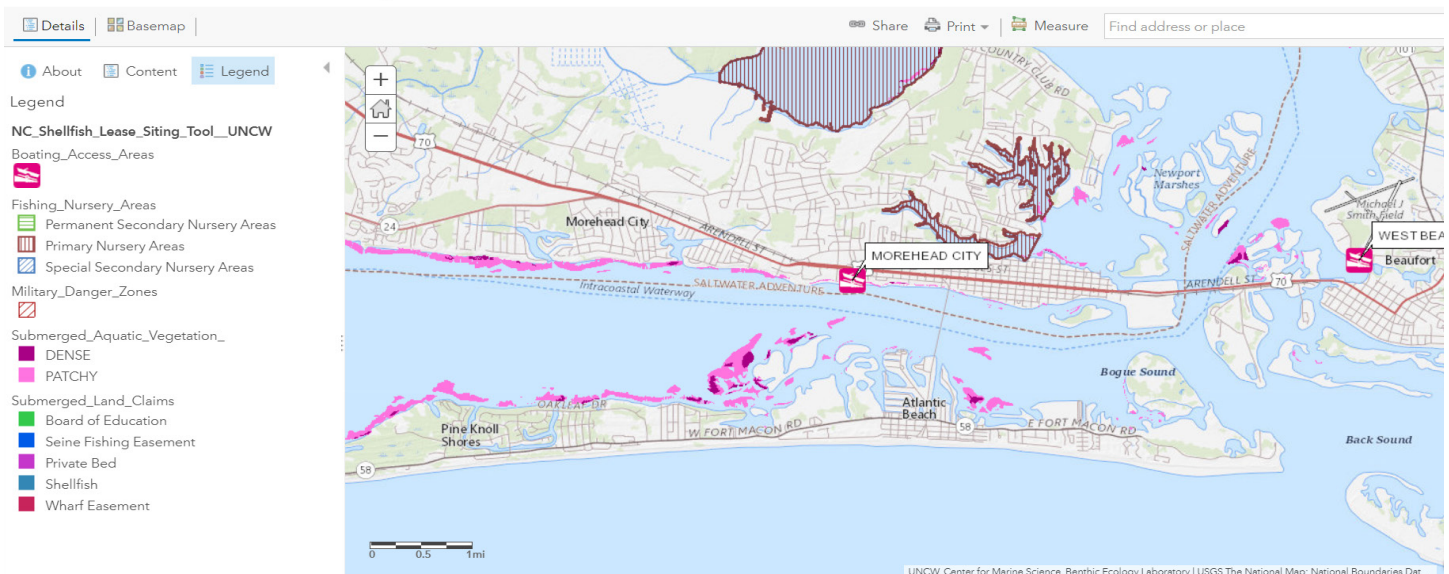


QUICK SITING TIPS

- Choose sites away from navigational channels and inlets.
- Always consider wave energy.
- Scope potential areas of debris spread that might come from your farm or from neighbors (docks, other farms, etc.)
- Be a good neighbor and communicate with adjacent riparian landowners.
- Be aware of tidal range and strong tidal currents.

NC SHELLFISH SITING TOOL

Researchers at the University of North Carolina Wilmington have produced an interactive siting tool for shellfish mariculture that provides invaluable data for growers to scope the feasibility of a potential lease site. The tool includes continuously updated data on salinity, submerged aquatic vegetation, depth, utilized channels and much more. Find the tool at: uncw.edu/benthic/sitingtool



QUICK DESIGN TIPS

- Seek advice from established farmers and mariculture professionals when designing.
- Start small and scale up.
- Design for hurricanes.
- Maintain a well-organized and tidy farm.
- Consult design strength of gear from manufacturer.
- Clearly demarcate lease site to prevent vessel collisions.
- Mark gear units to aid in recovery.

FARM DESIGN

After locating and properly identifying the lease site, thoughtful development of the farm layout and design is a critical step toward developing a successful operation. Organization, gear selection and lease marking are important components of the design stage.



FARM OPERATION

Once the farm is established, daily operations should be set in place that reduce the risk of marine debris generation. Good inspections, materials management, storm readiness and community outreach programs are key to preventing marine debris associated with shellfish farming operations.



QUICK OPERATION TIPS

- Keep lines taut and keep gear neat and orderly.
- Regularly inspect gear and replace items that are worn.
- Keep lines full, so it is obvious when gear is missing.
- Dispose of or recycle used gear once it is no longer usable.
- Prepare the farm for forecasted storms.
- Obtain federal crop insurance.
- Keep lines and materials as deep as possible.
- Pick up loose gear as soon as possible.



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