



Oyster Aquaculture Gear Management & Storm Preparation

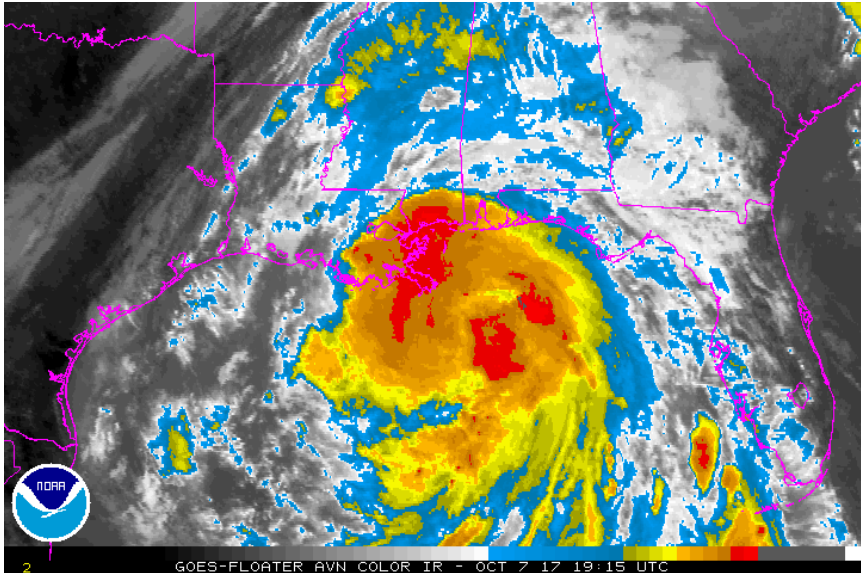
WILLIAM C. WALTON

AUBURN UNIVERSITY SCHOOL OF FISHERIES,
AQUACULTURE & AQUATIC SCIENCES

ALABAMA COOPERATIVE EXTENSION SYSTEM

DAUPHIN ISLAND SEA LAB

Lessons Learned in Alabama



- ▶ Lack of local or fine-scale weather information
- ▶ Lack of proper equipment inventory
- ▶ Difficulty in identifying ownership of equipment during cleanup
- ▶ Inadequate workforce to prepare for and recover from storms
- ▶ Inadequate training to execute storm preparations
- ▶ Lack of storm plan

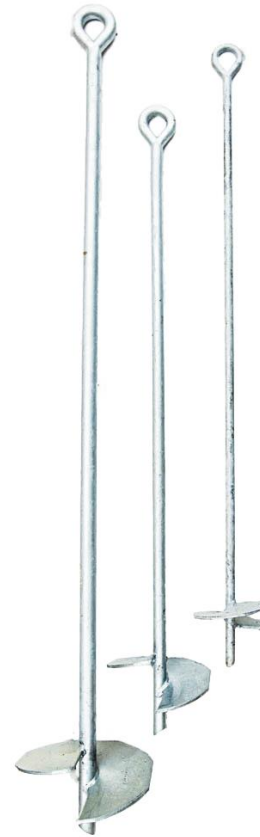
Types of Gear

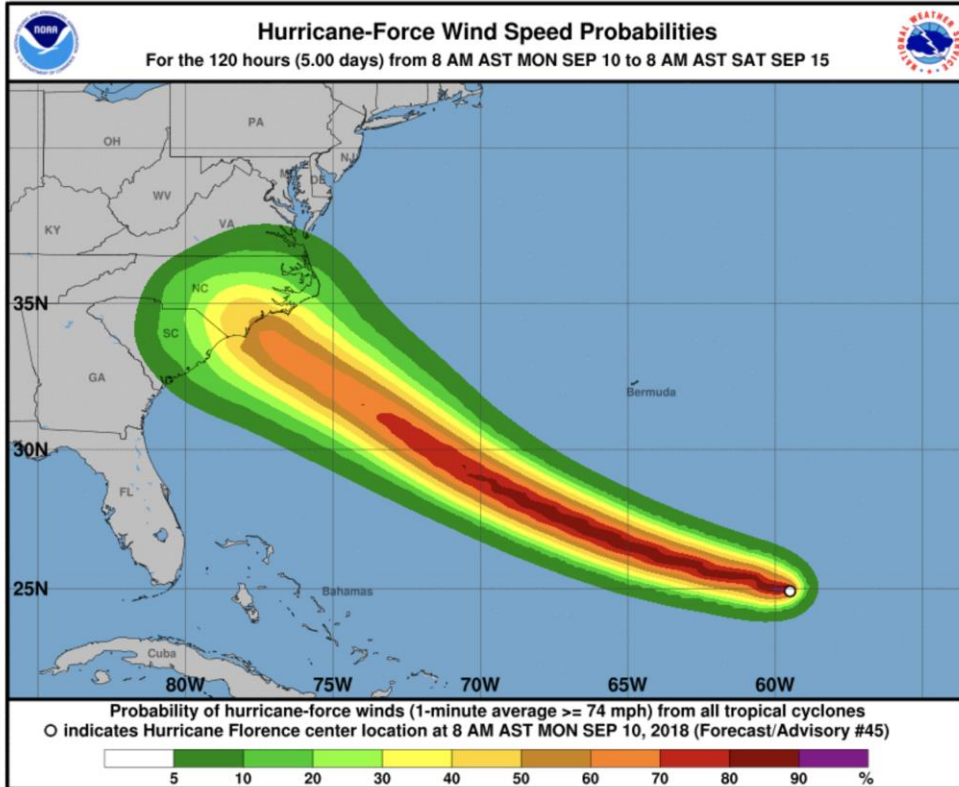
- ▶ Suspended
- ▶ Floating
- ▶ Bottom cages



Gear Management Best Practices

- ▶ Appropriate anchoring/mooring
- ▶ Reducing and managing chafing
- ▶ Tagged gear
- ▶ No overloading the gear
- ▶ Periodic beach/shoreline clean ups
- ▶ Proper disposal of gear at end of useful life





Storm Preparation

Storm Plan

- ▶ Have a (written) plan
 - ▶ Comprehensive – not covered here
 - ▶ Consider a plan with tiers
- ▶ Practice the plan keeping in mind that weather could be rough
- ▶ Evaluate the risk
 - ▶ Wind speed, wind direction, storm surge
- ▶ Prepare land-based operations as well as water-based operations
- ▶ Time yourself! Know what you can realistically do



Possible Tiered Approach to Storm Preparation – Work in Progress

- ▶ Pre-storm season checklist
 - ▶ Check supplies
 - ▶ Check chafing
 - ▶ Check stocking densities
 - ▶ Check loose gear
 - ▶ Tags
 - ▶ Check insurance
 - ▶ Double check records
- ▶ Code Yellow – Storm forming in Gulf?
 - ▶ Recheck chafing, make final adjustments
 - ▶ Ensure up to date inventory
- ▶ Photographs of farm
- ▶ Code Orange – In predicted storm path?
 - ▶ Prepare vessel(s)
 - ▶ Move gear that can be moved (e.g., tumblers)
- ▶ Code Red – High probability of being in storm path
 - ▶ Prepare gear (e.g., lowering or sinking)
 - ▶ Get to someplace safe

Floating Gear

- ▶ Lines should be inspected for wear on cages and anchors.
- ▶ Knots should be checked to be sure that they are secure.
- ▶ Slack may be needed in the lines if wave and tidal surge is predicted to be high.
- ▶ Cage doors and bungee cords should be inspected.
- ▶ Floats and caps should be checked and in good condition.
- ▶ Bags should not be overstocked adding weight which stresses gear in rough seas.
- ▶ If cages are sunk, then sink them so that they rest on the floats.
- ▶ After sinking gear, consider returning the caps to prevent floats from filling with sand.

Suspended Gear

- ▶ Lines should be checked at the pilings for wear and make sure they are secure.
- ▶ Basket doors should be checked to be certain they are firmly closed.
- ▶ Be sure that the baskets are correctly clipped to the line.
- ▶ Baskets should not be over stocked thus adding additional weight to the line.
- ▶ Check posts and line clips.
- ▶ Lines should be lowered to the lowest position on the posts.



Tips

- ▶ Have a plan for recovery of gear after the storm
- ▶ Be ready to do clean up
- ▶ May have other priorities immediately after the storm so want a solution where the oysters can survive for some period of time without you visiting





Questions