

# Working with Stakeholders to Remove Ghost Gear from Narragansett Bay, RI

Susan D Inglis, Victoria Thomas, Jack Moore and David Bethoney



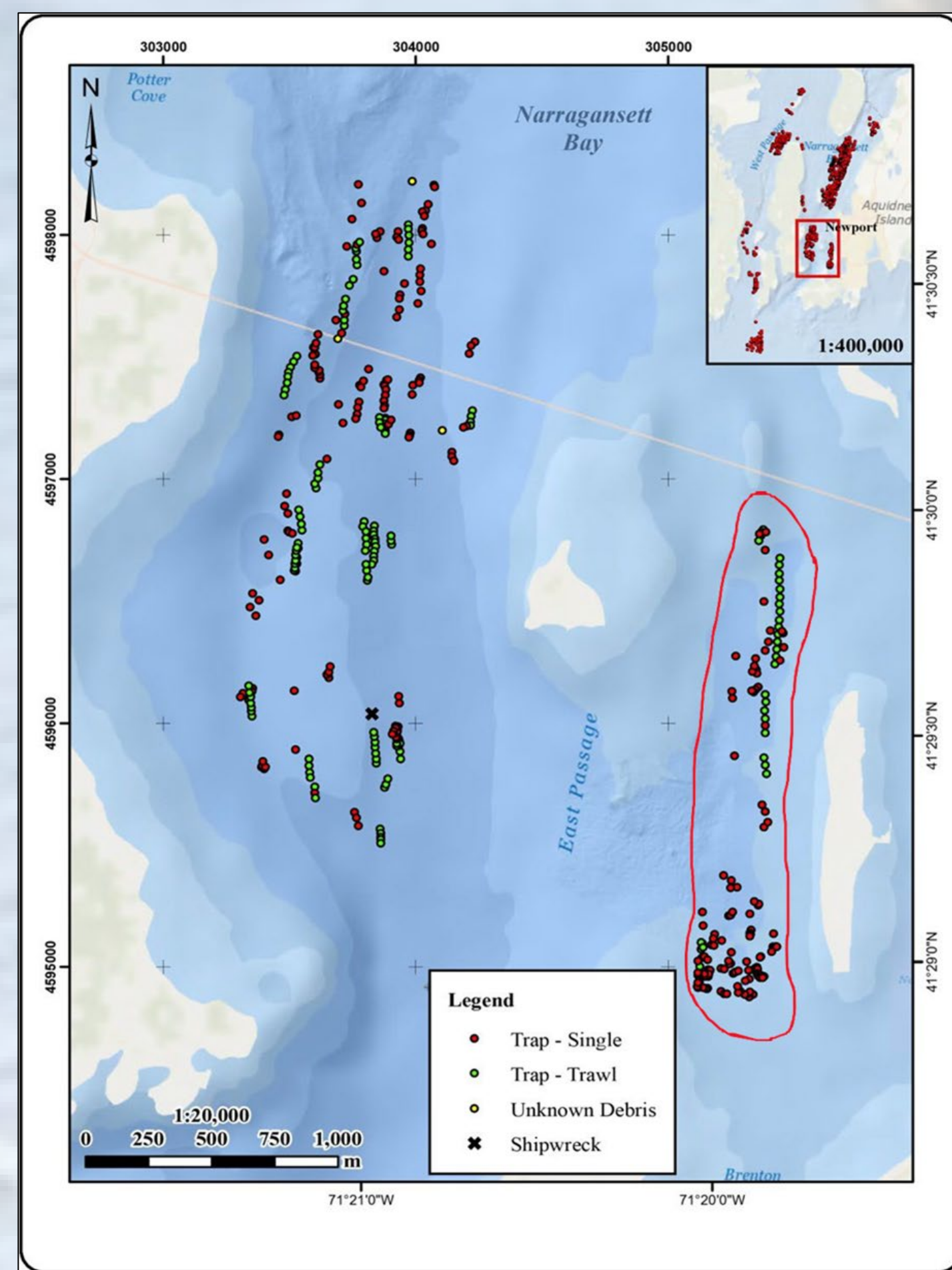
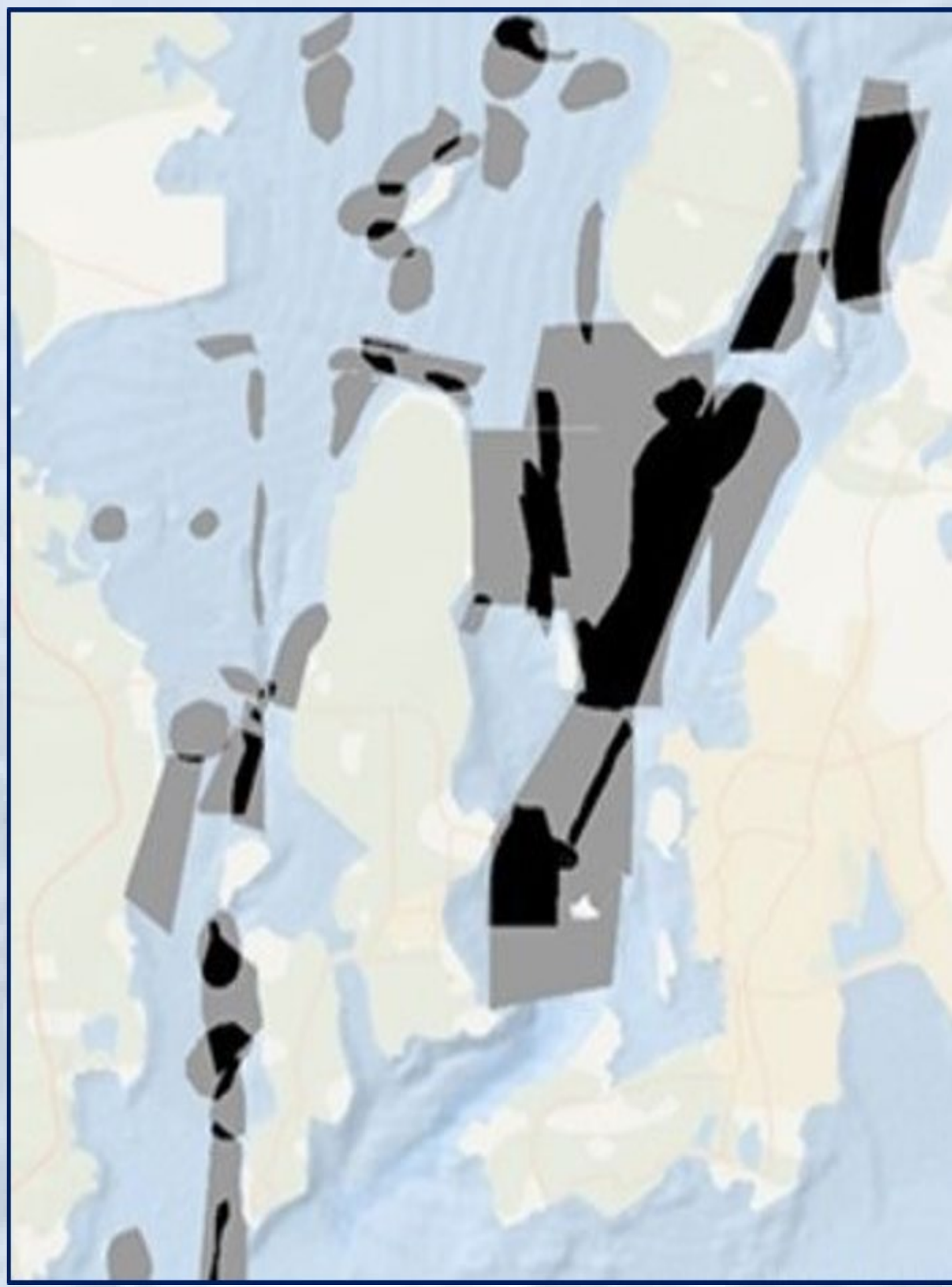
## Introduction

Abandoned, lost, discarded fishing gear (ALDFG), also known as ghost gear, can have wide-ranging impacts on our marine environment. From ecological damage to safety hazards and economic losses, ghost gear has many potential consequences. Fishermen took the lead in identifying the lack of a cohesive program to identify, remove and recycle lost fishing gear in Rhode Island. With funding from a Southern New England Watershed Program grant, we developed a removal plan. In 2024, with assistance from commercial fishermen and the Rhode Island Department of Environmental Management, we completed our second ALDFG removal season in Narragansett Bay.

## Methods

### Locating Targets

Using commercial fishermen's knowledge, we produced a map of ghost gear locations and then confirmed the targets using underwater video cameras. A side scan sonar was conducted in these locations to aid in assigning appropriate retrieval methods for the target.

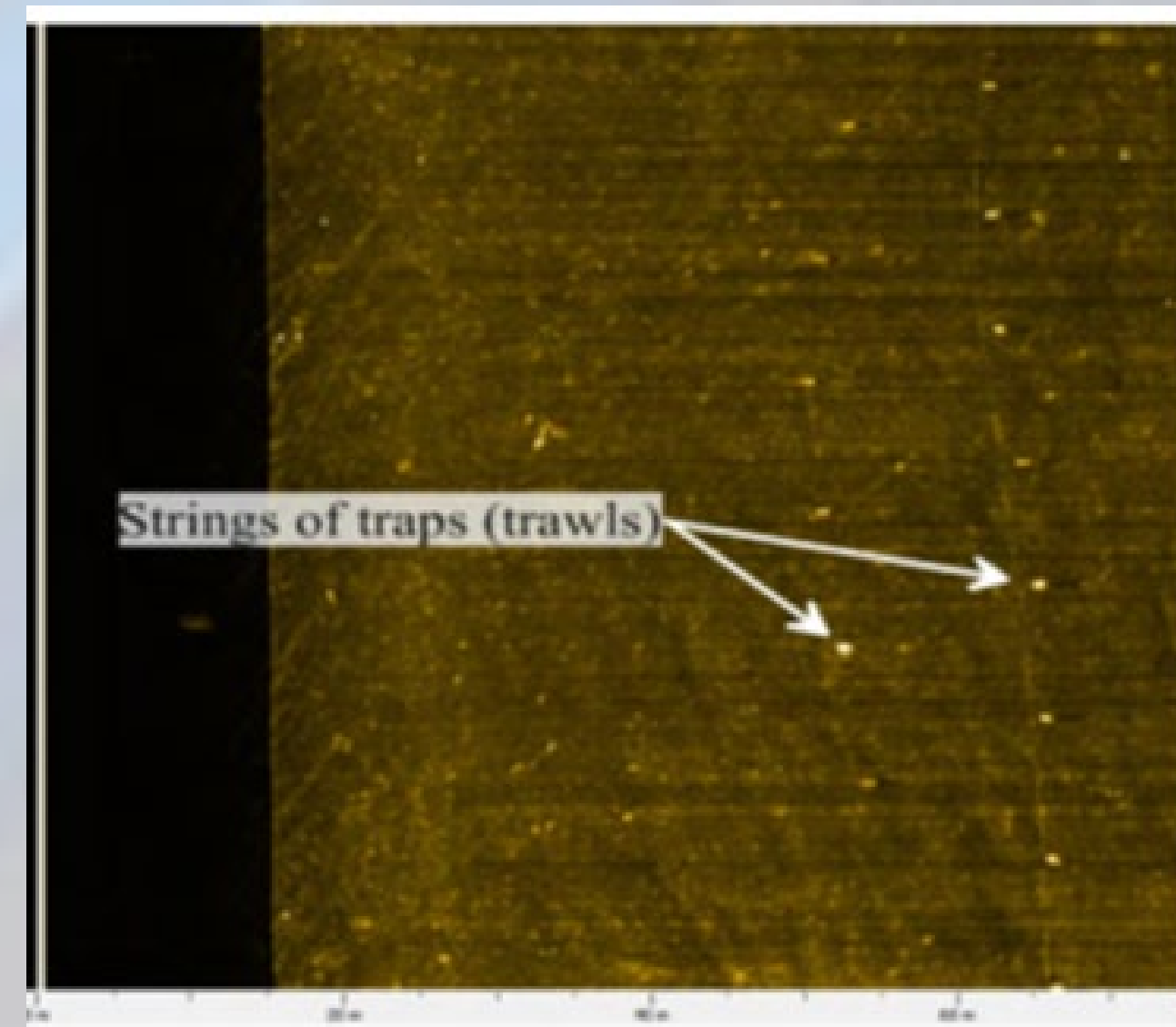


Ghost gear locations based on fishermen's knowledge

Side scan survey results. Red outline represents a target for 2024 survey.

### Removal

To reduce interactions with active fishing gear, removal activities took place in January-March. Removals were conducted on commercial lobster and fish pot vessels using an onboard single commercial grapple and side hauler on confirmed targets with trawl lines.



In 2024, we also successfully tested out a multiple grapple sled dredge using commercial draggers. This extraction technique targeted areas with large debris fields with single ghost traps in low fishing and vessel activity areas.



QR Code to view video of 2023 at sea ghost gear removal



## Results

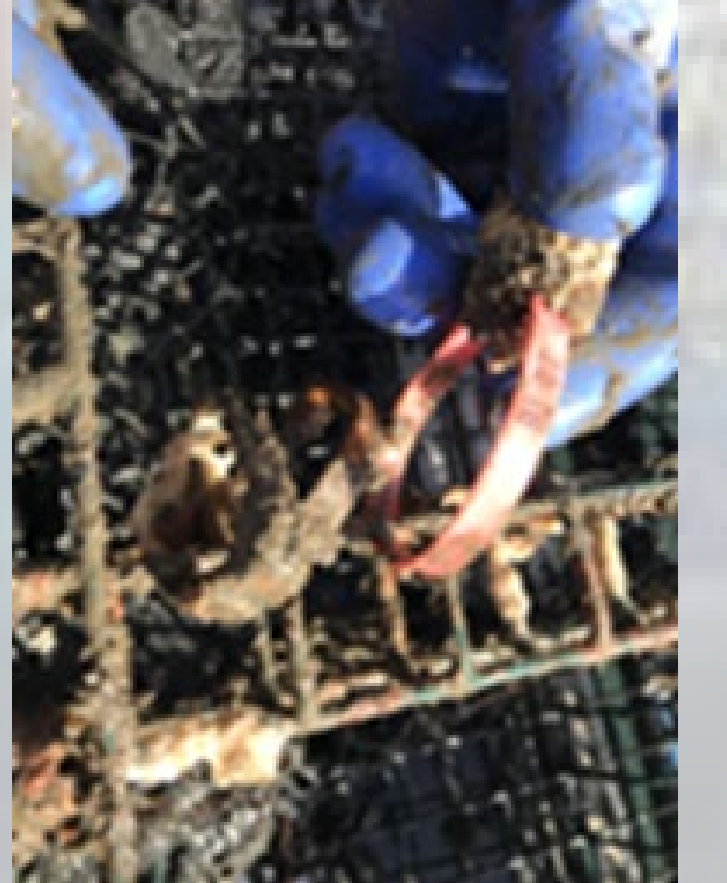
### Data Collection

We collected data on effort, gear type, location, depth, substrate, tag (permit) numbers, species in gear (alive or dead), amount and type of biofouling, and status of ghost panel/ biovents.



#### Escape Vent/Ghost Panel:

- Opening of designated size that allows sub-legal lobsters to escape the trap
- Biodegradable materials used to attach the escape vent panel allows the "ghost panel" to open if the trap has been lost or abandoned
- Prevents the trap from continuing to fish if lost or abandoned



The majority of ghost gear removed were traps and rope, along with other debris such as chain, wire, cable and anchors. Most of the debris collected was recycled through Mid-City Scrap and Net you Problem.



Pier 9 Newport Harbor RIDEM Partnership



To date we have removed over 10,000 pounds of ALDFG from Rhode Island waters. Next year removal surveys will continue in Narragansett Bay and we will begin offshore removals

### Acknowledgments

Captains and crew of the survey commercial fishing vessels, the fishing industry and community, Rhode Island Department of Environmental Management,, and our Program Partners



### Funding



NA23NMF4690144