What to Expect

Scope:
● New entanglement risk reduction measures coastwide (NE lobster and Jonah crab, gillnet, and trap/pot fisheries)

Agenda:
● 4:30 - 5:00 pm: Presentation on background and remaining risk post-2021 rule
● 5:00 - 5:15 pm: Questions
● 5:15 - 6:30 pm: Public comment

Ground Rules for Speaking:
● Be respectful and direct comments at the presenters.
● When you are called on, we will un-mute you, and then you will need to un-mute yourself.
● Today’s event is being recorded (including anything typed into the questions box) and will be available through the event registration page after the meeting.
Background

Atlantic Large Whale Take Reduction Plan & Right Whale Population Decline
Atlantic Large Whale Take Reduction Plan

Mandated by law (MMPA) when incidental mortality and serious injury in U.S. commercial fisheries exceeds Potential Biological Removal (PBR)

- Develop and recommend measures to reduce mortality and serious injury
- Consensus-based
- NMFS ultimately responsible for taking action

Atlantic Large Whale Take Reduction Team

- 60 member team including 23 fishermen
- Right, humpback, and fin whales
Fisheries Managed Under the Atlantic Large Whale Take Reduction Plan

1. **Northeast lobster and Jonah crab trap/pot fishery**
2. **Mid-Atlantic gillnet fisheries** for monkfish, spiny dogfish, smooth dogfish, bluefish, weakfish, menhaden, spot, croaker, striped bass, large and small coastal sharks, Spanish mackerel, king mackerel, American shad, black drum, skate species, yellow perch, white perch, herring, scup, kingfish, spotted seatrout, and butterfish
3. **Northeast sink gillnet fisheries** for Atlantic cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, windowpane flounder, spiny dogfish, monkfish, silver hake, red hake, white hake, ocean pout, skate spp, mackerel, redfish, and shad
4. **Northeast drift gillnet fisheries** for shad, herring, mackerel, and menhaden and any residual large pelagic driftnet effort in New England
5. **Southeast Atlantic gillnet fisheries** for finfish, including, but not limited to: king mackerel, Spanish mackerel, whiting, bluefish, pompano, spot, croaker, little tunny, bonita, jack crevalle, cobia, and striped mullet
6. **Southeast Atlantic shark gillnet fisheries** for large and small coastal sharks, including but not limited to blacktip, blacknose, finetooth, bonnethead, and sharpnose sharks
7. **Northeast anchored float gillnet fishery** for mackerel, herring (particularly for bait), shad, and menhaden
8. **Atlantic mixed species trap/pot fisheries** for hagfish, shrimp, conch/whelk, red crab, Jonah crab, rock crab, black sea bass, scup, tautog, cod, haddock, Pollock, redfish (ocean perch), white hake, spot, skate, catfish, stone crab, and cunner
9. **Mid-Atlantic trap/pot fisheries** for lobster and Jonah crab
10. **Atlantic blue crab trap/pot fishery** for Atlantic blue crab
Right whale population estimate

Pace population model, preliminary, as of early 2020

All: 336 (321-350)
Females: 137 (128-145)

Unusual Mortality Event Declared in 2017

- Observed M/SI since then: 54
- Observed Births since then: 55
- Estimated mortality is 2 to 3 times higher
Right Whale Mortality and Serious Injury in U.S. exceeds PBR

PBR = 0.7
U.S. Commercial Fishery Risk Reduction Calculations

- Advised by the Atlantic Scientific Review Group:
  - Use of the total mortality estimate from Pace population model
  - Uses the most-recent published 5 yr. observed M/SI to apportion the cause of death (vessel strike or entanglement)
- Estimates Canada’s apportionment across three assumptions.

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Remaining ALWTRP Fishery Risk Coastwide
Evaluating Risk
Decision Support Tool: Analysis of risk

- **Decision Support Tool** is a model designed to assess and compare the risk reduction that may be achieved by various management measures
  - Developed by the Northeast Fishery Science Center in 2019
  - NEFSC expanded the spatial extent of model from the Northeast to the entire Atlantic in 2021

- Model calculates **right whale entanglement risk** based on three components:
  - **Gear density**: the density of vertical buoy lines in the water and nets (including net height)
  - **Right whale density**: the distribution of whales (as indicated by a habitat density model predicting right whale distribution from 2010 through Sept 2020 based on sightings and environmental data)
  - **Gear threat model** to determine the relative threat of gear based on gear strength

- **Monthly risk** = gear density * whale density * gear threat
What Have We Done So Far?

2021 Final Rule Overview: NE Lobster Jonah Crab Focus

Target area of highest overlap of right whales with >90% of buoy lines

Challenge to Team: 60 to 80 percent risk reduction

- Identify risk hotspots and areas with higher predicted whale density as candidates for restricted areas: expanded 1, added 2 new areas

- Gear configurations that broadly reduce the number of buoy lines in the water throughout federal waters: trawling up measures

- Reduce the breaking strength/lethality of lines throughout the Northeast region

- Increase resolution of gear marks, particularly between states and state vs. federal

Web page: fisheries.noaa.gov/2021modifications
All Post-Phase 1 Risk
Shown as a log-scale/in orders of magnitude
Values based on low-resolution calculations
Phase 1 reduction in NE Lobster/Jonah Crab: 46%

Remaining NE Lobster/Jonah Crab: 47.5%

Remaining risk after Phase 1: 3.7%

Other Trap Pot: 2.8%

Gillnet: 3.7%

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Remaining risk after Phase 1: 47.5%

Values based on low-resolution calculations
Why We Are Scoping

- We have to reduce entanglement risk to endangered right whales by at least 90 percent to comply with the Marine Mammal Protection Act (mandated by law).
- Important part of the process is to get information and suggestions from you.
- Specifically, we need new ideas on how to use fewer lines in the water so that right whales have a lower risk of mortality or serious injury.
Scoping in August - October 2021

- Generated initial ideas for U.S. gillnet and mixed species trap/pot, and mid-Atlantic lobster
- Some additional ideas for NE Jonah crab and lobster measures
- May 2022 ALWTRT meetings generated more ideas, with an emphasis on non-NE Jonah crab and lobster
- September 2022 meetings generated more ideas for all fisheries managed under the Plan
Tools in the Toolbox

Weak Rope or Weak Links to Allow Whales to Break Free

Pros: Works well in shallower waters
Cons: Have not found workable solution for deep offshore waters though new ½ inch rope being tested

Remove Rope from the Water

Pros: Removing rope from water provides significant risk reduction
Cons: One end ropeless can increase gear conflicts; hard to determine fair way to set caps and/or enforce caps

Area Closures to Reduce Overlap Between Ropes and Whales

Pros: Removes gear from hotspots, decreasing risk
Cons: Depending on how they are done, closures may result in movement of gear to other places, and inadvertently create different hotspots.
Examples of Measures Discussed by TRT

- **Broad weak line**
  - Weak line requirements by distance from shore for all fisheries
  - Expand use of weak links in the headrope for gillnet fisheries

- **50% vertical buoy line (VBL) reduction**
  - One end ropeless
  - Trawling up measures for trap/pot fisheries
  - Trap caps
  - Line caps

- **Seasonal Restricted Areas**
  - Apply Trap/Pot VBL restricted areas to gillnet fisheries
  - Expand the South Island Restricted Area in space and time
  - Rolling closures in the Northeast and mid-Atlantic

_Risk reduction measures that are outside of the scope of the model_

- **Gear Marking Requirements:** increase number/type of marks
We Need Your Ideas

- Measures that, combined with others, will reduce mortality and injury of right whales in U.S. commercial fisheries by at least 90% (less than one whale a year)

- Measures to improve resolution of gear marking (e.g. by state/federal waters, region, and/or gear type)

- See handout for specific questions input requested

Tips for Useful Comments:
- Unique, adding something new to conversation
- Specific recommendations
- Succinct - we want to hear from as many people as possible
- Productive - focus on things we CAN do
- Fishermen, specific experience with gear is helpful
- Include any scientific data
How to Participate in Tonight's Meeting

**Ground Rules**
- We will be recording this webinar.
- Be respectful and direct comments at the presenters.
- When you are called on you will be unmuted, then will need to un-mute yourself.
- You may get in line for questions/comments at any time.

**Questions**
- We will have a ~15 min period for questions. We may take additional questions as time allows.
- If you have a question, type QUESTION in the Questions Box. Please include the slide number or topic of your question.

**Public Comment**
- If you’d like to give public comment, type COMMENT in the Questions Box. You may change your mind at any time. Type or say pass when your name is called.
- If you have already provided public comment but wish to give another, we reserve the right to put you at the end of the queue to give everyone an opportunity to speak.
Questions & Comments

Comment Period - September 9–October 11, 2022
Submit comments through Regulations.gov using Docket #NOAA-NMFS-2022-0091

Atlantic Large Whale Take Reduction Plan Website