MID-ATLANTIC
FISHERY MANAGEMENT COUNCIL

Northeast Trawl Advisory Panel (NTAP) Progress Report for Industry-Based Survey Pilot Project

April 10, 2024
Atlantic City, New Jersey

Recent Meetings

- February 8, 2024: NTAP meeting
  - Center Updates
  - Bigelow Contingency Plan & Industry Based Survey
  - Survey Redesign & Mitigation
  - Restrictor Rope Research
  - Brainstorming Next Research Projects
- February 29, 2024: NTAP Bigelow Contingency Plan Working Group meeting
  - Further refine Bigelow Contingency Plan
  - Further refine Industry Based Survey Pilot

Recent Meetings

- **February 8, 2024: NTAP meeting**
  - **Center Updates**
  - Bigelow Contingency Plan & Industry Based Survey
  - **Survey Redesign & Mitigation**
  - **Restrictor Rope Research**
  - **Brainstorming Next Research Projects**
- February 29, 2024: NTAP Bigelow Contingency Plan Working Group meeting
  - Further refine Bigelow Contingency Plan
  - Further refine Industry Based Survey Pilot

NTAP Meetings – Center updates

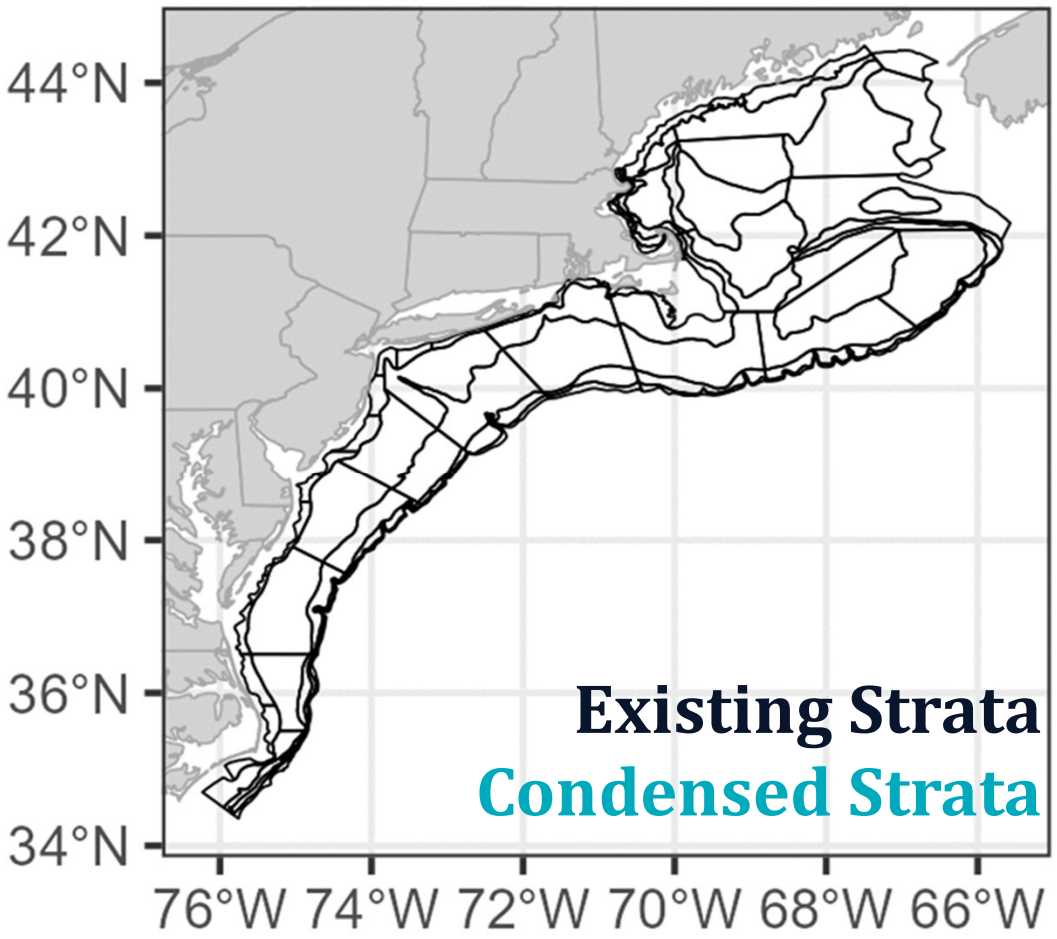
- OMAO has no current policies regarding transiting and surveying in wind farms
- Current NTAP funding supportive of ~2 yrs of in-person meetings
- PEMAD reorganization with new Offshore Wind Ecology Branch

<u>Survey updates</u>

- Fall NEFSC and NEAMAP BTS had high completion rates
  - Missed tows dues to weather and fixed gear
- Fall BLL survey hit 10yr milestone
  - Used in Atl. cod, barndoor, thorny skate, and red hake assessments
- Successful NEAMAP/SEAMAP trawl vessel and gear calibration workshop on Jan. 16-18

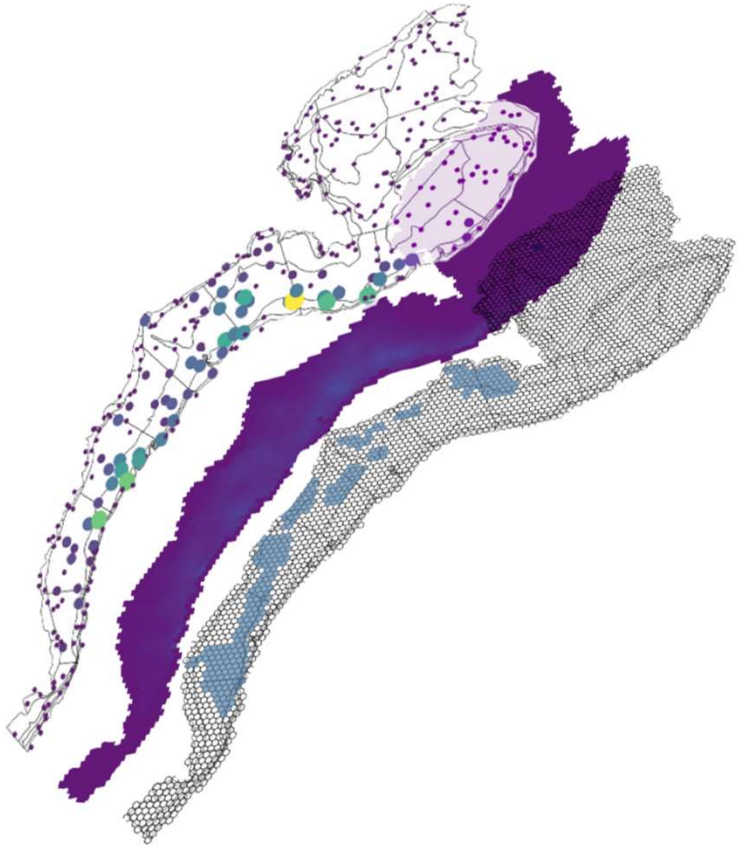
NTAP Meetings – Survey Redesign and Mitigation

1. **Evaluation of alternative stat sampling design for NEFSC BTS**
   - Reducing number of stata by condensing existing strata or developing a spatially balanced sampling design
2. Survey Simulation Experimentation and Evaluation Project (SSEEP)
3. Survey specific mitigation plans for 19 surveys that will be affect by offshore wind
4. Pilot Hook & Line Survey



NTAP Meetings – Survey Redesign and Mitigation

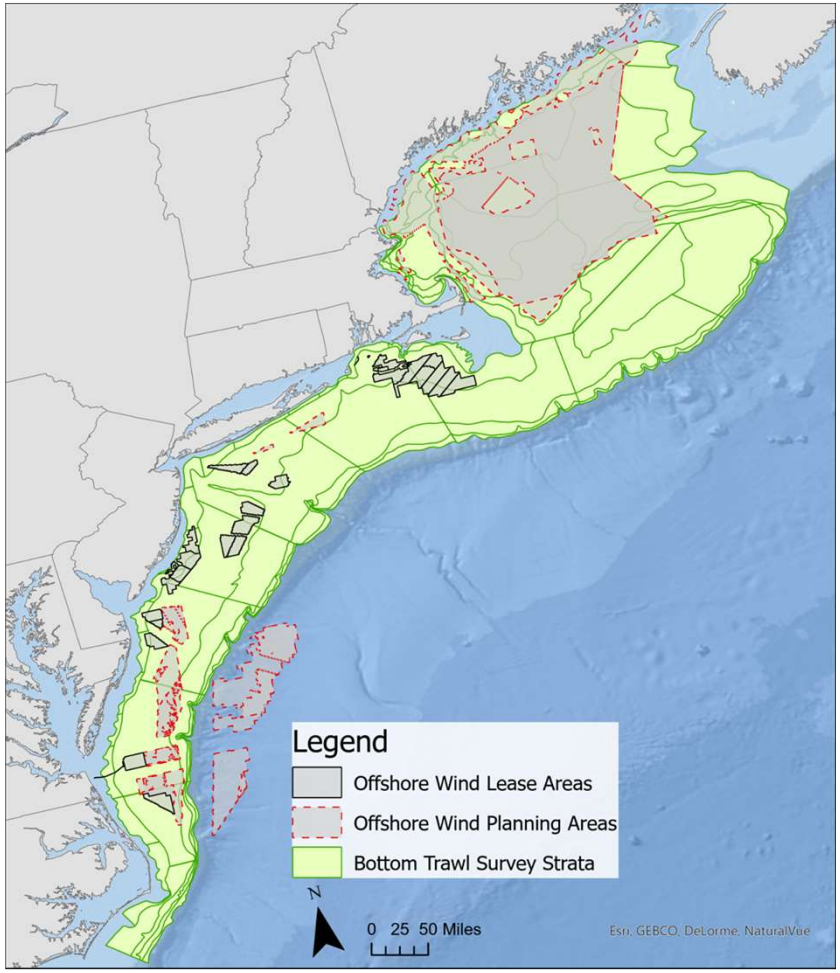
1. Evaluation of alternative stat sampling design for NEFSC BTS
2. **Survey Simulation Experimentation and Evaluation Project (SSEEP)**
   - Quantifying likely changes as a result of survey effort reduction associated with offshore wind
3. Survey specific mitigation plans for 19 surveys that will be affect by offshore wind
4. Pilot Hook & Line Survey



Bottom layer: Northeast US survey grid with wind area cells in blue; middle layer: example species distribution with higher densities in lighter blue, top layer: example simulated survey data over survey area

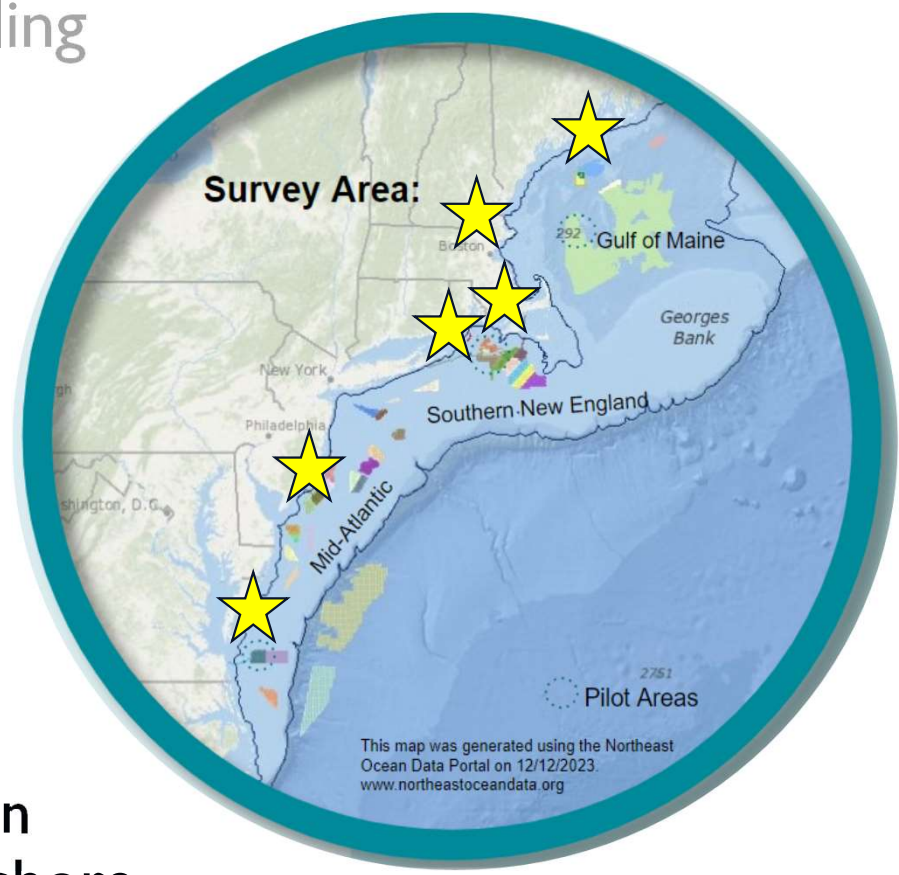
NTAP Meetings – Survey Redesign and Mitigation

1. Evaluation of alternative stat sampling design for NEFSC BTS
2. Survey Simulation Experimentation and Evaluation Project (SSEEP)
3. **Survey specific mitigation plans for 19 surveys that will be affect by offshore wind**
   - Internal NEFSC review
   - Planning for an external review by Councils/Commission
4. Pilot Hook & Line Survey



NTAP Meetings – Survey Redesign and Mitigation

1. Evaluation of alternative stat sampling design for NEFSC BTS
2. Survey Simulation Experimentation and Evaluation Project (SSEEP)
3. Survey specific mitigation plans for 19 surveys that will be affect by offshore wind
4. **Pilot Hook & Line Survey**
   - Testing methodology for sampling in complex habitats and alongside offshore wind turbines in multiple regions using multiple vessels



NTAP Meetings – Restrictor (Ruhle) Rope Research

- Results/Conclusions
  - Restrictor rope had limited impact on catch
  - Consider the positive impact the restrictor rope had on standardizing trawl gear performance when surveys in wind energy areas are being developed
  - Not enough data to say, "there was no effect of restrictor rope on all species" but some confidence based on diversity of species caught through research
- Next steps
  - Peer reviewed publication
  - Presentations at World Fisheries Congress, ROSA, Councils
  - Recommendations of usage/expanded research project

NTAP Meetings – Brainstorming New Research Ideas

- Expand restrictor rope study into Gulf of Maine
- Expand NEAMAP surveys to deeper water depth
- Develop survey techniques for floating wind energy areas
  - Acoustics, eDNA, short string bottom longlines
- Calibration and standardization across wind survey/monitoring programs
- Perimeter sampling studies in survey restricted areas (Before-After-Gradient)

WIND! WIND! WIND! - no new Bigelow survey efficiency ideas

Recent Meetings

- February 8, 2024: NTAP meeting
  - Center Updates
  - **Bigelow Contingency Plan & Industry Based Survey**
  - Survey Redesign & Mitigation
  - Restrictor Rope Research
  - Brainstorming Next Research Projects
- **February 29, 2024: NTAP Bigelow Contingency Plan Working Group meeting**
  - **Further refine Bigelow Contingency Plan**
  - **Further refine Industry Based Survey Pilot**

Bigelow Contingency Plans Update

Bigelow Contingency Plan Options

1. Pisces
2. NEFSC vessel calibrated to Bigelow
3. Industry vessel calibrated to Bigelow
4. Industry Based Survey not calibrated to Bigelow (parallel, separate survey)

- Contingency plan is for when the Bigelow is not available on short notice
- This plan does not reflect the alternative for when Bigelow will be offline for vessel midlife repairs
  - It has been determined the Pisces will fill in during that time period

Bigelow Contingency Plans Update

Bigelow Contingency Plan Options

1. **Pisces**
   - Readiness plan has been drafted and is being refined by NMFS and OMAO
   - SEFSC agreement that Pisces can be primary backup to Bigelow
   - Next steps:
     - Specific plan and funding for improvements
     - Discussion of when to "trigger" Pisces
     - Discussion of need to calibrate (Bigelow and Pisces are sister ships)
   - NTAP concern: time to get Pisces ready for trawling and moved from Mississippi to NE on short notice

Bigelow Contingency Plans Update

Bigelow Contingency Plan Options

2. **NEFSC vessel calibrated to Bigelow**
   - Proposal provided to NEFSC Director and being discussed at NMFS HQ
   - Optimistic timeframe 1+ yrs. to acquire vessel
3. **Industry vessel calibrated to Bigelow**
   - No progress but potentially few commercial vessels that fit the bill

Option 4: Industry Based Survey

Not calibrated to Bigelow – parallel, separate survey

How we got here

- **October 2023:** *The Council requests that the Northeast Fisheries Science Center (NEFSC) develop a white paper to be submitted to the Council by January 12, 2024, outlining an industry-based survey that is complementary to the spring and autumn Bottom Trawl Survey.*

- **February 2024:** *Move to recommend to task NTAP and the NTAP Bigelow Contingency Working Group to develop an outline detailing a plan to conduct a multi-vessel IBS Pilot Program to test the viability of the program as presented in the "Draft Proposed Plan for a Novel Industry-Based Multispecies Bottom Trawl Survey on the Northeast U.S. Continental Shelf" white paper with a particular focus on refining Section 2 "Survey Design Elements," considering NEAMAP protocols and current Industry platform capabilities. A progress report on the draft plan should be presented in time for further discussion at the April 2024 meetings of the NEFMC and MAFMC, and the spring 2024 meeting of ASMFC.*

Similar motions made by NEFMC and ASMFC

Industry Based Survey Pilot Project
NTAP/NTAP WG Recommendations

- Survey should be able to operated in wind farms
- Sample same strata as Bigelow, but with a truncated depth
  - 130-150 fathom with focus on stock assessment needs
- Should occur in multiple regions (GOM, GB, SNE, Mid-Atl.)
- Use similar sized paired vessels operating 12 hrs./day over 24 hr. periods (noon-midnight/midnight-noon)
- Gear type
  - Same trawl gear used on Bigelow (net a sweep gear; but not doors)
  - Restrictor (Ruhle) rope
  - No auto-trawl
  - Net mensuration gear and other electronics currently used by ind. vessels
  - Collect CTD, plankton, and acoustic data during pilot

Industry Based Survey Pilot Project
NTAP/NTAP WG Recommendations Continued

- Host a follow-up meeting with scientific survey crew in the region to scope out cost and ideas of portable sampling workstations
- Host a workshop to discuss pilot survey with interested vessel owners/operators
  - Similar to those hosted during the planning stages of the hook-and-line survey pilot project

Industry Based Survey Pilot Project
Elements to be Determined

- Who will manage pilot development and implementation
  - NEFSC – would require resources for staff and administrative support
  - Third party – need to identify entity and would still require NEFSC resources
- Amount of space and electrical requirements for sampling workstations
- Data management implications of using multiple types of net mensuration and other electronic equipment
- Data and samples – volume, who will process, who will lead data analysis

Industry Based Survey Pilot Project
Elements to be Determined Continued

- Review and refine survey elements
  - Wire scope
  - Tow speed and duration
- Refine cost estimate (~$1-2 million)
- Review statistical design
  - Shallower depth range
  - Timing
  - Overlap with NEAMAP
  - Adaptability for future loss of survey area (GOM floating wind)

Next Steps

- Follow-up working group meeting
  - Need to continue discussion on the identified elements to be determined
  - Tentatively planning for a meeting in early May

Acknowledgements/Questions?

- **Kathryn Ford – NEFSC**
- **Wes Townsend – MAFMC Co-Chair**
- **Daniel Salerno – NEFMC Co-Chair**