Northeast Trawl Advisory Panel Report

Regional Industry Based Trawl Survey Update

September 2026 Council Meeting

NTAP Report

- NTAP Survey Working Group meetings - 1-2 hours every three weeks for last year or so (+ 4 more thru December)
  - topic specific meetings for RIBTS phase 2 development
- NTAP full panel meeting – July 9 in New Bedford
  - NEFSC & Survey Updates
  - Reidars Manufacturing tour
  - RIBTS Phase 1 Report
  - RIBTS Phase 2 Progress Report

RIBTS Phase 1 Pilot Survey

Credit: Dr. Jim Gartland, Robert Ruhle, Jameson Gregg, Gregg Mears, Jacob Davis, Dr. Jason Morson, Dr. Anna Mercer

Pilot Survey Objectives

1. Evaluate feasibility of sampling within an offshore wind area (OSW), including minimum safe working distance from turbines.

2. Quantify survey trawl performance across a broad depth range spanning from OSW to shelf edge.

3. Evaluate operational efficiency of all biological and oceanographic data collection components in wind farms & offshore.

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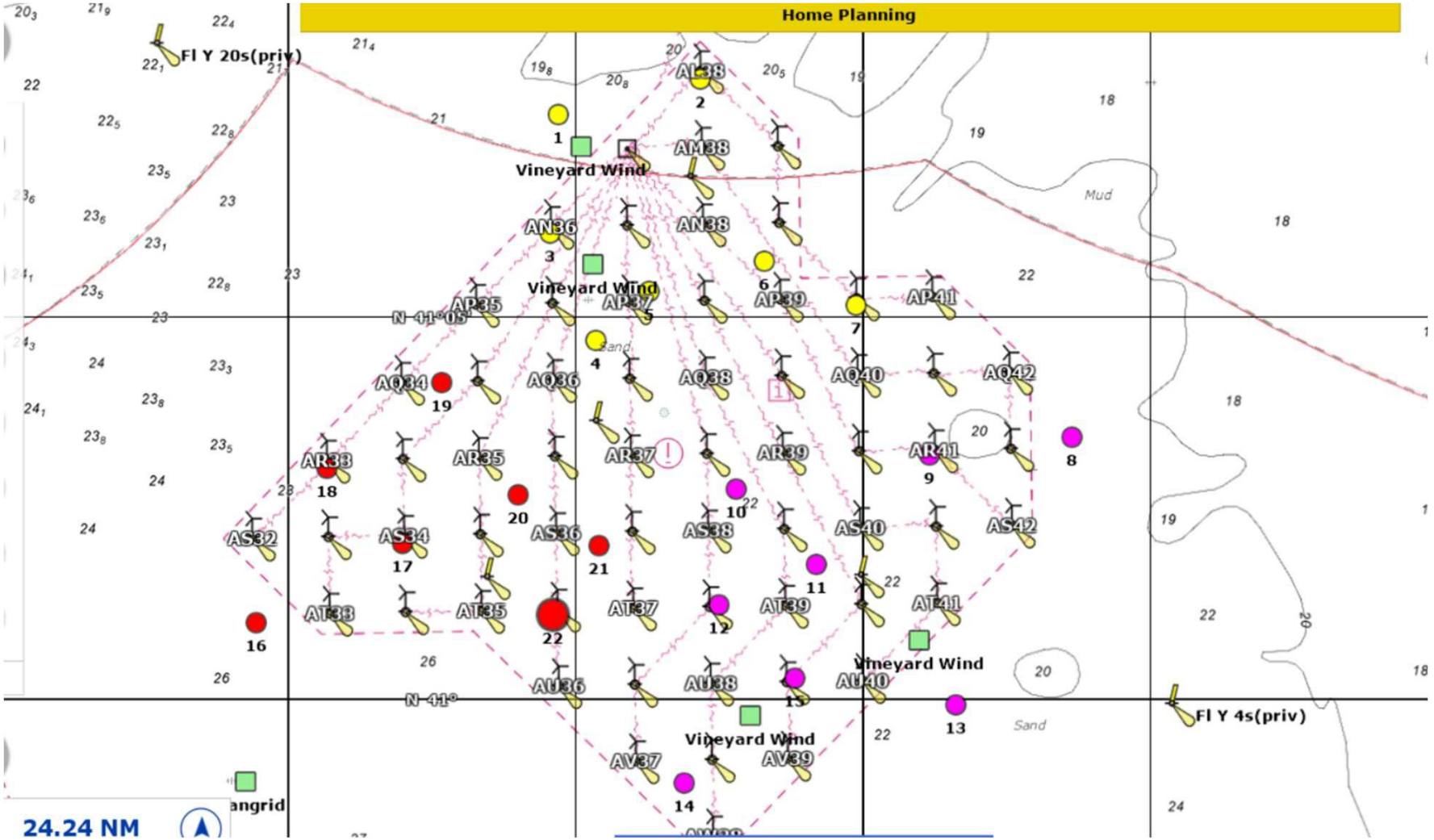

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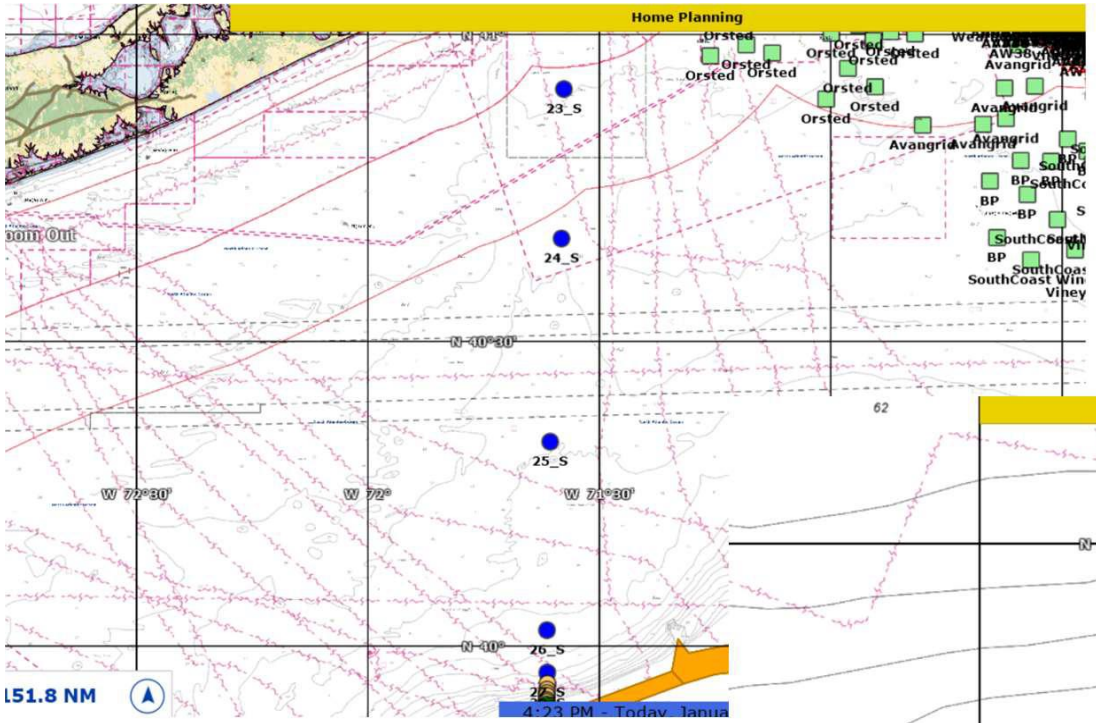
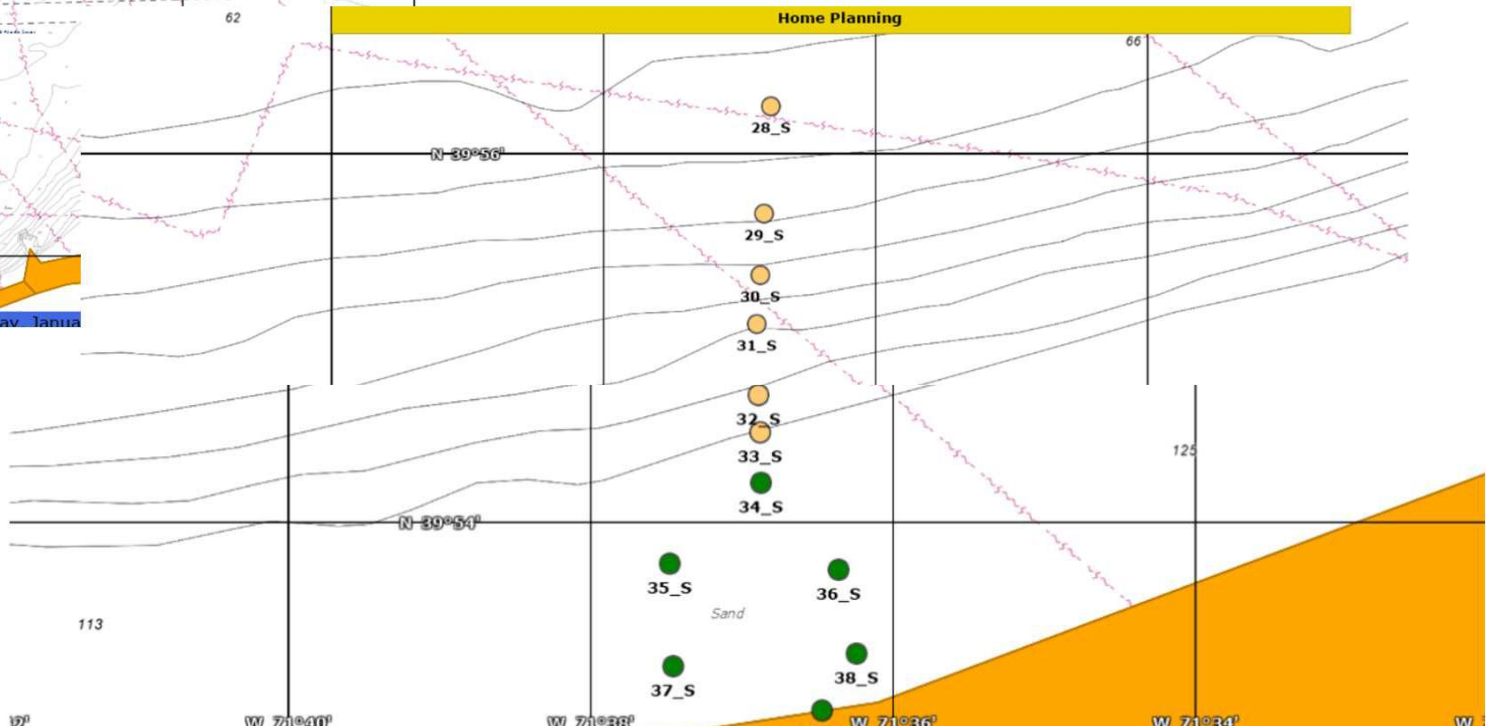


Offshore Sites



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OSW Stations	Day	Night
Turbines	7	2
Lanes	6	3
Adjacent	2	2

Tide required attention!

- Monopile-induced turbulence (swirlies).

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Obj. 1 – Lessons Learned & Recommendations

1. Conducting bottom trawl survey operations in & around an OWS is possible with an industry vessel.

2. Minimum safe towing distance from a turbine structure (i.e., scour protection) was ~120 m (394’) during the day and ~225 m (738’) at night.

3. Sampling adjacent to OWS & in turbine lanes (over transmission cables) was not a problem, day or night. Near turbines ok during daylight hours.

4. Towing near turbines at night was quite risky. (NO SIGNIFICANT LIGHTING!) Recommend eliminating night tows near turbines in future RIBTS operations.

5. Recommend creating a repository of tow tracks in OSW – gather from Phase I, wind farm monitoring projects, industry (?).

6. Recommend developing fact sheets for OSW to avoid surprises and establishing rapport with liaisons (high turnover).

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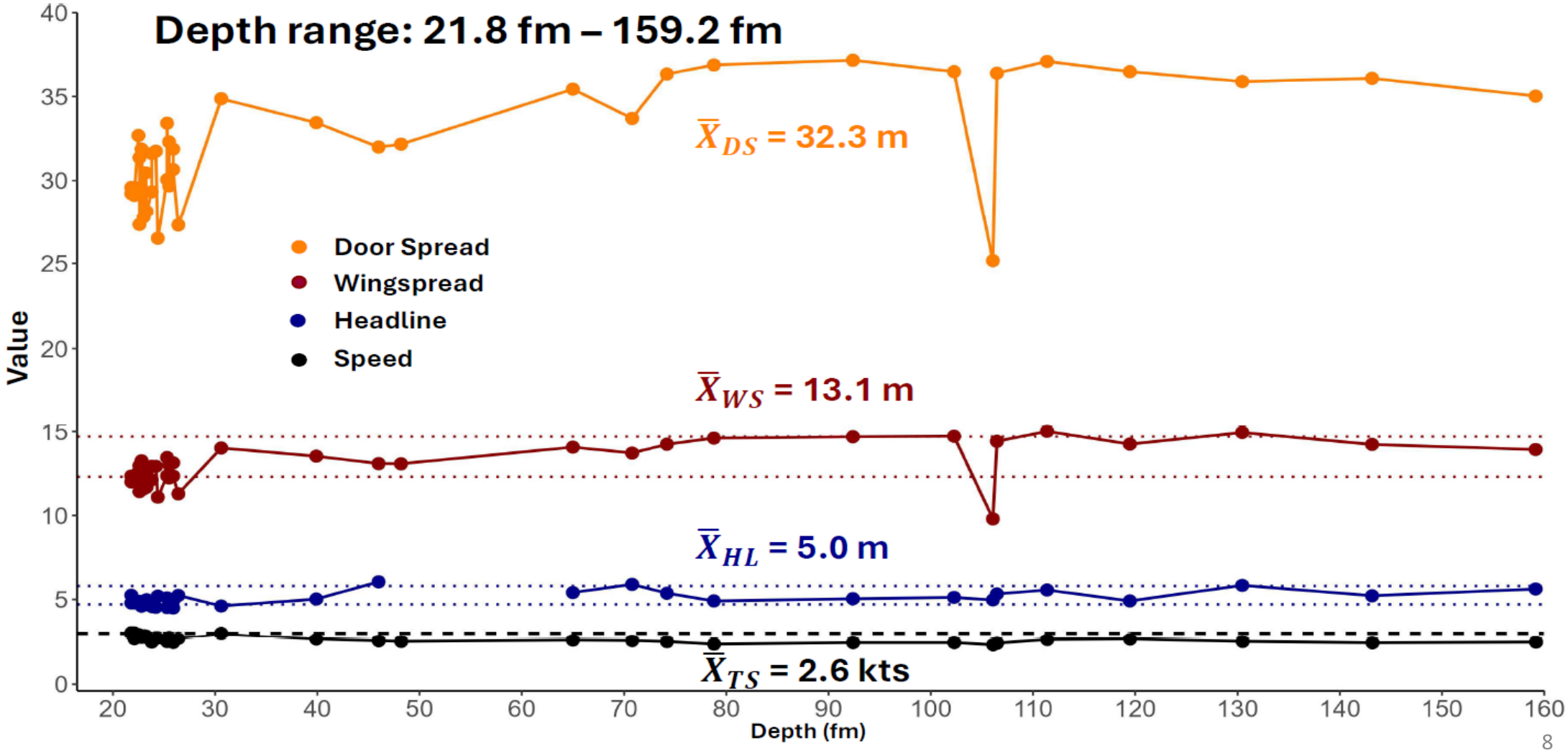

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Obj. 2 – Lessons Learned & Recommendations

1. NEAMAP 400 x 12 cm net w/ Thyboron Type IV 66” doors fished from 90’ industry vessel with 19.5’ bollard spread remained within peer-reviewed acceptable geometry from 22 – 160 fm depth. No trends in headline or wingspread were observed.

2. It was necessary to adjust wire out (scope) in OSW to account for sea state (heavier seas = more wire).

3. When sampling >130 fm, brake at 150 fm of wire out, allow gear to open, then finish setting out to attain acceptable wingspread and headline height (otherwise net struggles to spread). Recommend implementing this approach during future phases.

4. Recommend allowing some flexibility in wire scope & towing speed-over-ground at deeper depths to maintain geometry (1.9:1 – 3.3:1 scope; 2.4 – 3.0 kts).

5. Recommend using a bottom contact sensor on all tows & the depth option on headline sensor. Wingspread & headline can look right when the net is “flying”.

6. Recommend using the Simrad TP90 system, or equivalent, to quantify net position. Valuable when towing close to turbines (safety) and in deep water (more accurate sampling location).

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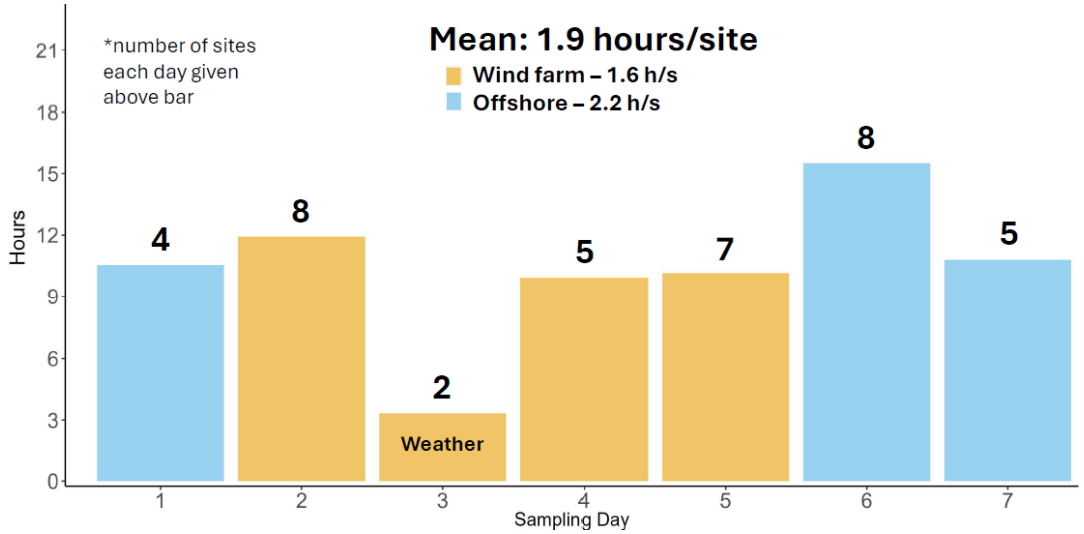
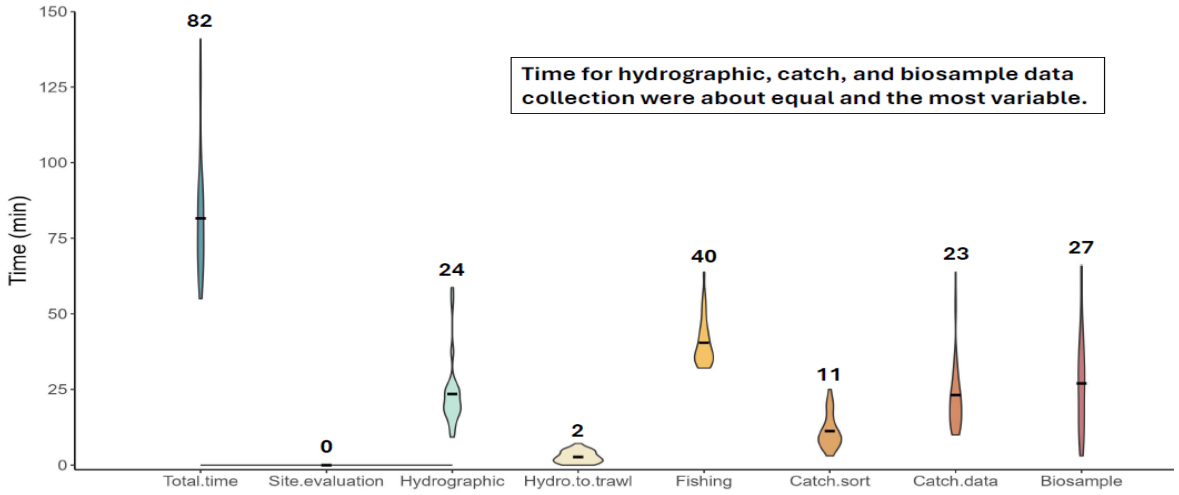
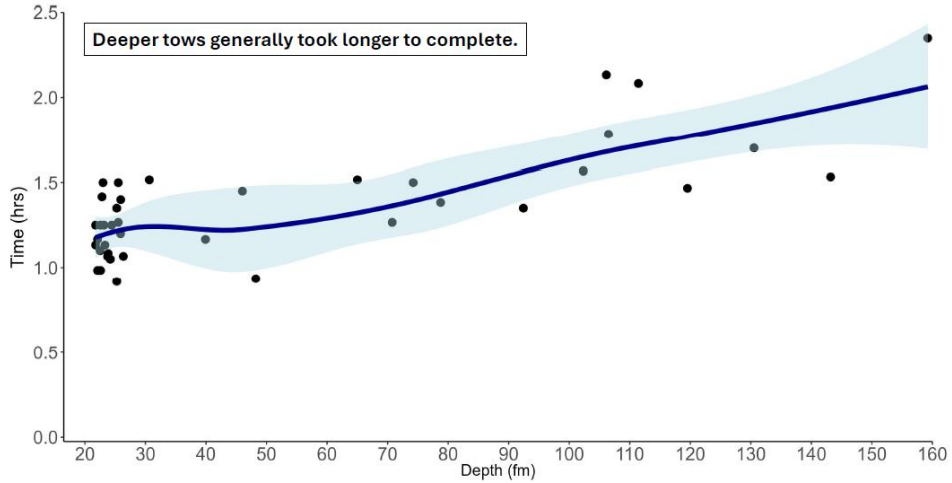
Available Time Data

- Total time on station
- Transit time
- Site evaluation
  - Initial
  - Run site
- Hydrographic
  - Preparation
  - Cast
  - CTD data
  - Niskin sample
  - Plankton sample
- Hydro-to-fishing
- Fishing
  - Set
  - Tow
  - Haul
- Catch Processing
  - Sort
  - Catch data collection
  - Biosample (lab) acquisition







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Obj. 3 – Lessons Learned & Recommendations

1. Sampling efficiency was unaffected by wind turbines.
2. Day & night sampling rates were comparable.
3. Offshore sites took an average of 25 min longer than wind sites.
   - Recommend using time-on-site vs depth relationship + distance between sites to estimate realistic sampling rates in future ops.
4. Hydrographic collections added 24 min to time on site.
   - Recommend retaining CTD/niskin/plankton collections.
   - Add real-time depth measurement (perhaps real-time CTD data?).
   - Identify sea-state cutoff for plankton tows.
5. Data collection was equally efficient using NEFSC & NEAMAP protocols.
   - Recommend picking one and retaining for future.
   - Note that both are currently used in assessments.
   - Likely need to modify FSCS. Catch & biosampling occur “in parallel” on industry boat.
6. Overall, expect to average 6 – 7 sites per 14 hour day in Phase II.

RIBTS Phase 1 Pilot Survey

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OSW

- Number tows = 22
- Number species = 43
- Catch count = 28,500
- Catch biomass = 5,706.3 kg
- Number measured = 7,622
- Number biosampled = 851 (25 spp.)

Species	Count	Biomass (kg)
Red hake	10,105	1,427.5
Silver hake	14,639	730.9
Spiny dogfish	384	506.2
Little skate	1,075	497.3
Winter skate	765	487.3
Northern searobin	535	117.3
Summer flounder	44	28
Fourspot flounder	105	22.5
Barndoor skate	20	22.1
Atlantic mackerel	96	22.1

Offshore

- Number tows = 17
- Number species = 54
- Catch count = 34,359
- Catch biomass = 2,149.0 kg
- Number measured = 7,357
- Number biosampled = 276 (21 spp.)

Species	Count	Biomass (kg)
butterfish	25,686	1,354.2
spiny dogfish	350	290.9
silver hake	3,184	220.3
longfin inshore squid	2,896	96.6
northern shortfin squid	729	30.8
winter skate	8	18.6
goosefish	8	18.0
smooth dogfish	7	15.3
barndoor skate	6	13.0
red hake	62	12.7

Other Takeaway from RIBTS Phase 1

RIBTS was not completely immune to some of the recent issues experience by NEFSC BTS

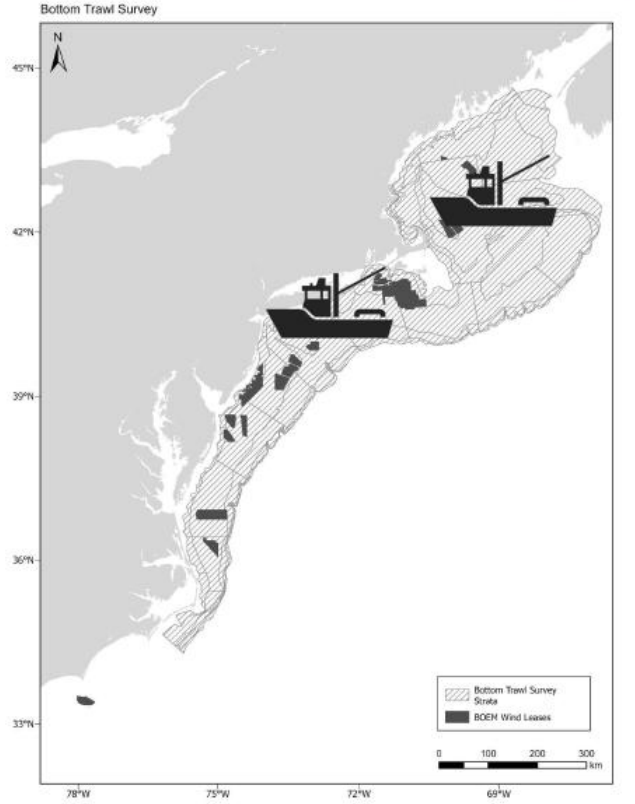
- Government Shutdown
- Unexpected maintenance delays
- Other Commitments
- Weather

RIBTS Phase 2 Pilot Survey Development

Credit: Dr. Jason Morson, Dr. Anna Mercer, Jessica Blaylock, Dr. Catie Foley, Dr. Larry Alade, Dr. Madison Hall, Dr. Kathryn Ford

Objectives:

- Pilot survey aboard 2 F/Vs
  - Trawl, oceanography, biological sampling operations
- Pilot long-term data acquisition system
- Purchase some survey gear, equipment, and supplies
- Products:
  - Establish vessel staging SOPs: Consider differences among ports/vessels
  - Define staffing needs: Number/expertise needed for staging and sea-going on multiple vessels
  - Establish gear and instrumentation SOPs
  - Define efficiency with proposed survey density/design
  - Define long-term vessel requirements to support scientific operations



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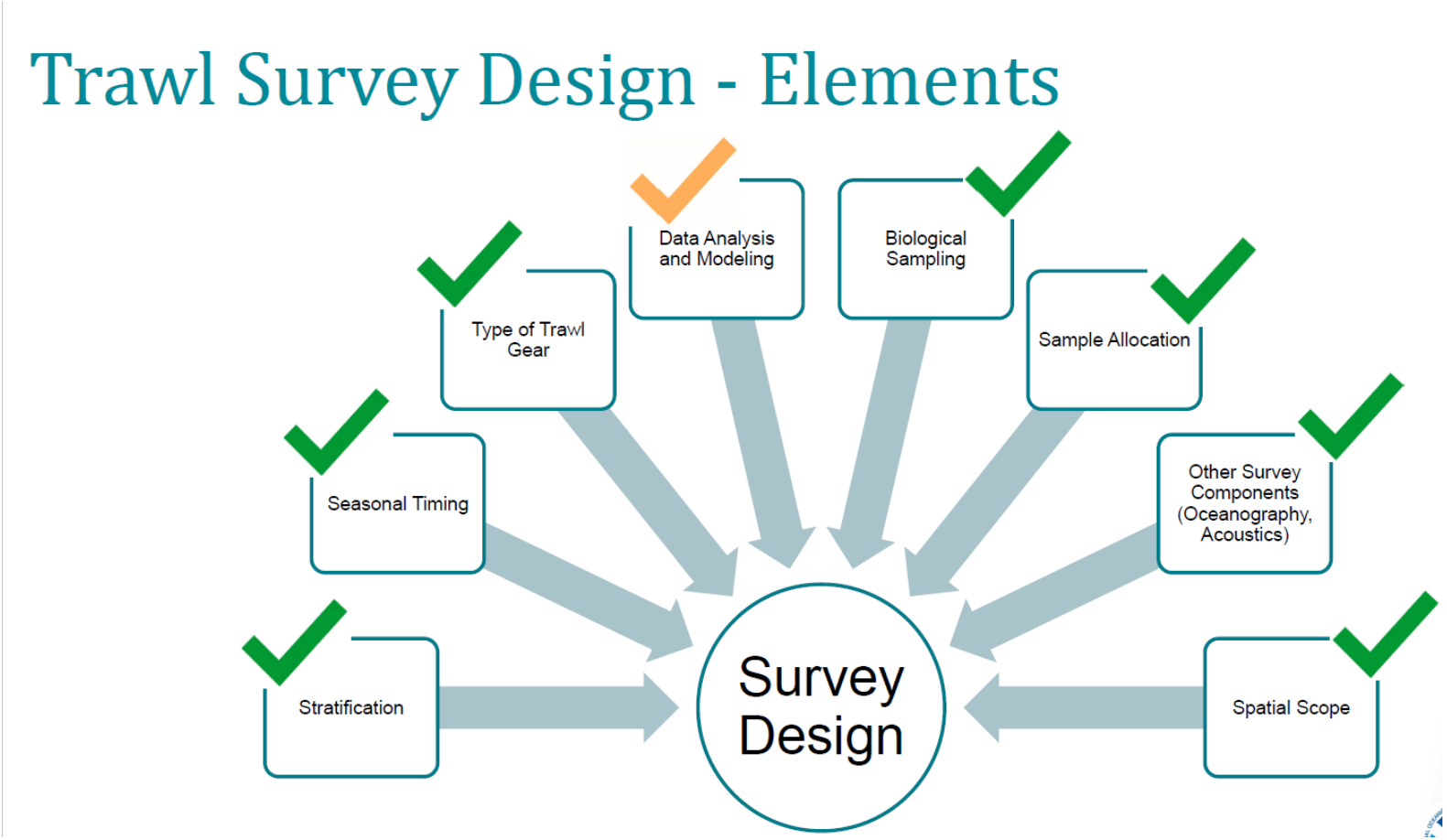

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NTAP WG Recommendations

Gear (Nets, Doors, Cables & Floats): NEAMAP gear package (VIMS SNEMANTS)

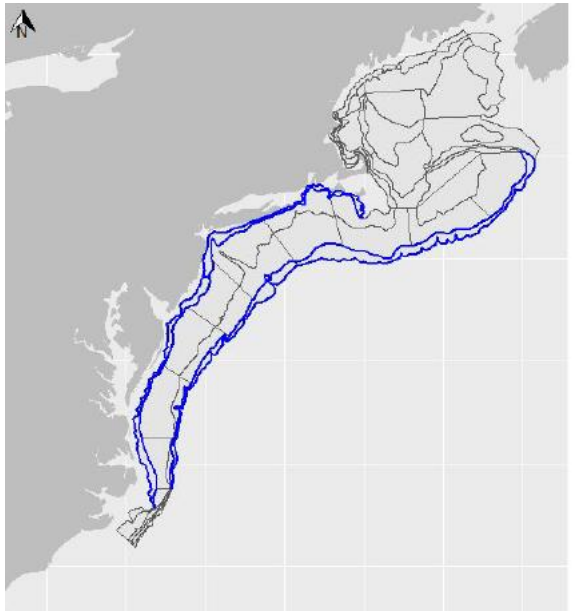
Gear (Sweep): two sweep designs

- rockhopper in GB/GOM & cookie in SNE/MA
- smaller rockhopper than R/V Bigelow (16”)

Survey Strata: full NEFSC BTS strata

- consolidated strata

Survey Timing: spring 2027 (fall 2027 back up)



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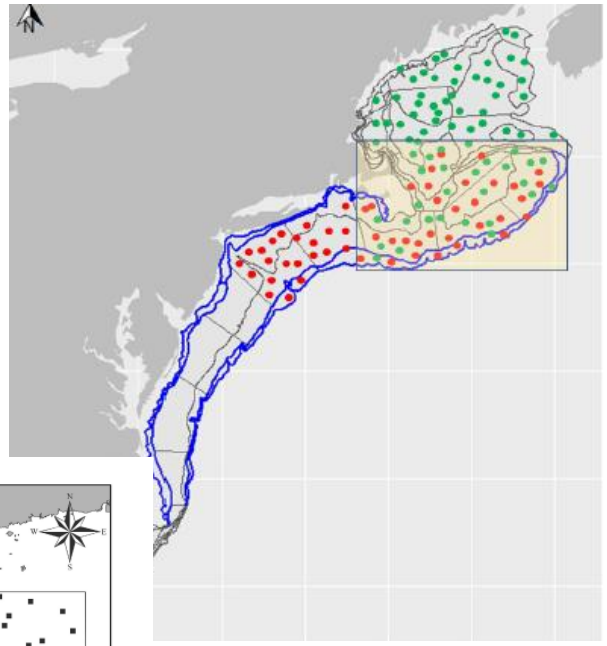
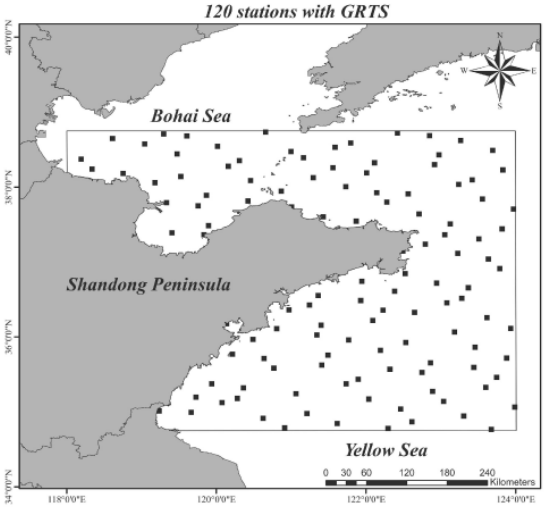


Spatial Scope:

- target SNE/GB/GOM
- select strata to maximize stock-specific spatial coverage
- target spatial and temporal overlap between sweeps

Sample Allocation:

- use a spatially-balanced approach to allocate samples/stations across and within strata



Adapted from Cheng et al. 2024. Fisheries Research 270, 106879

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NTAP WG Recommendations

Net Mensuration: Simrad PX system

Catch Data Collection: aggregate catch weights for each species

- sub-sample of individual lengths & weights

Biological Sampling: otoliths, maturity staging and samples & stomachs

Oceanographic Sampling: CTD every station

- Bongo nets on subset of stations
- Niskin water sample once per day

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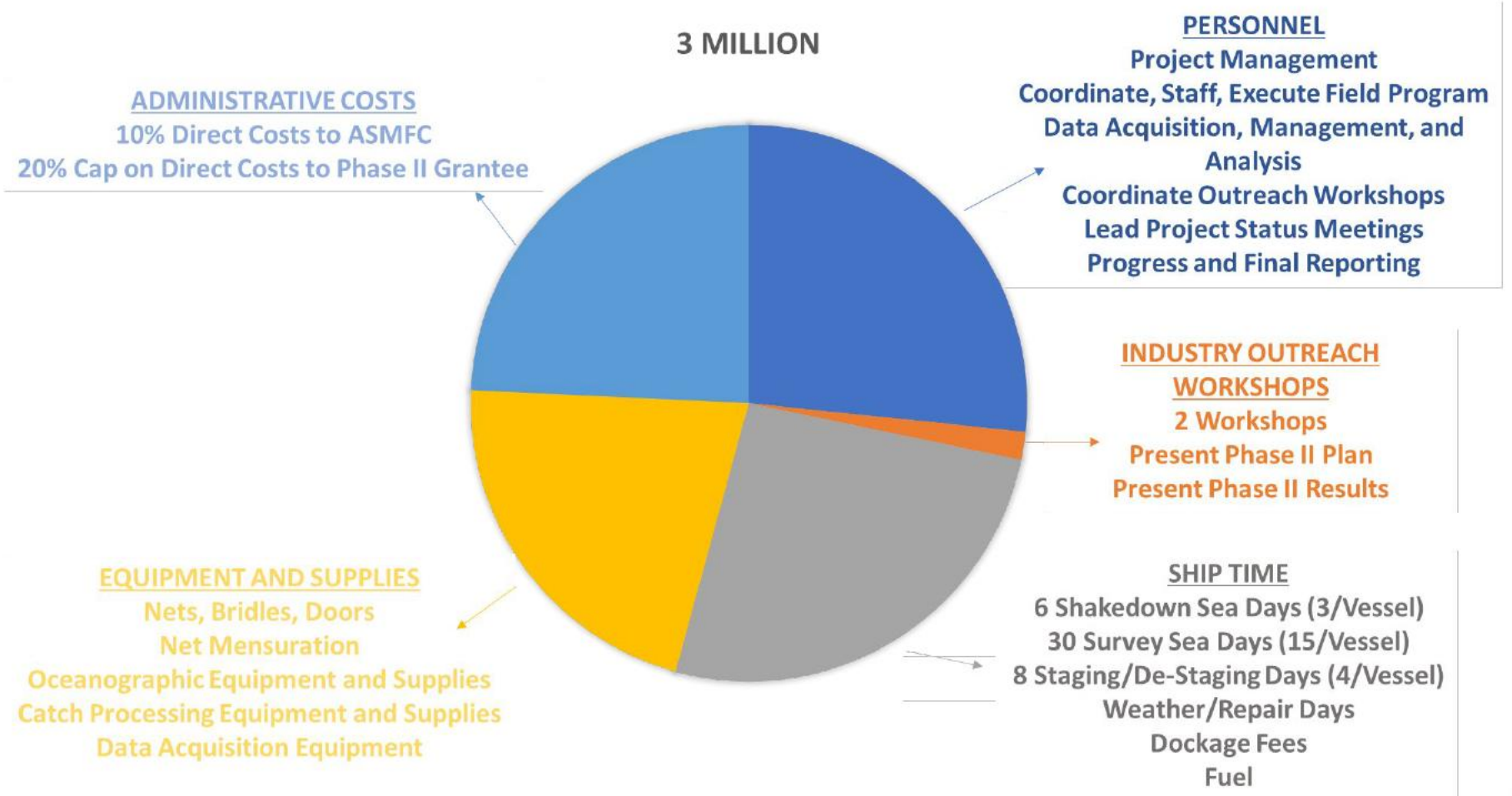
RIBTS Phase II – Estimated Phase II Costs



Budget includes sufficient fishing and scientific equipment for concurrent sampling, with the exception of oceanography

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Phase II - Timeline

July 2026 - Draft RFP July 2026

August 2026- Issue RFP

September 2026 - Review Proposals and Select Phase II Team

Begin October 2026 - Contracting, Phase II Team Meetings, Purchasing and Fabrication

January 2027 - Workshop #1 (Phase II Plan)

Spring 2027 - Shakedown and Field Program

Fall 2027 - SOPs, Workshop #2 (Phase II Results), Final Reporting

Contracting, fabrication, purchasing timelines may impact feasibility of spring 2027 field work

NTAP Survey Working Group

NEFSC

Dr. Anna Mercer (lead), Dr. Jason Morson (co-lead), Dr. Kathryn Ford & Jessica Blaylock

NEFMC

Vito Giacolone, David Goethel, Terry Alexander, Dr. Chris Rillahan & Daniel Salerno

MAFMC

Robert Ruhle, Dr. Emerson Hasbrouck, Dr. James Gartland & Jameson Gregg

ASMFC

Eric Reid