

**North Atlantic Right Whale Recovery Plan
Northeast US Implementation Team
October 30, 2018
(and supporting 2018 meetings)**

**Tip O'Neil Federal Building
Boston, MA**

KEY OUTCOMES MEMORANDUM

I. Overview

The North Atlantic Right Whale Recovery Plan Northeast U.S. Implementation Team (NEIT) conducted a one-day meeting on October 30, 2018, at the Thomas P. O'Neill, Jr. Federal Building in Boston, MA. The NEIT also met via webinar on September 27, 2018 and December 13, 2018, to coordinate both before and after the in-person meeting. Agendas for all meetings (see attached in-person) focused on the following primary objectives:

- Provide overview of NEIT structure
- NEIT Process
- NEIT Planning and Implementation
- Next Steps

This Key Outcomes Memorandum summarizes the primary results of the NEIT deliberations from the discussions noted above. As the NEIT was newly convened, this summary includes all the 2018 discussions given the carryover in topics. In general, the synthesis integrates the themes discussed at the meetings and are presented in five main sections: Overview, Participants, Meeting Materials, Key Outcomes, and Next Steps. The Key Outcomes section is further segmented into the following sections:

- Welcome and Meeting Kick Off. This section provides a brief overview of the meeting purpose and agenda review.
- NEIT Business. This section includes NEIT process and meeting planning.
- Focused NEIT discussions. This section includes focused discussions, including any resulting in consensus actions and/or recommendations.
- Consensus Actions. This section summarizes any consensus actions to be taken by the Team.
- Consensus Recommendations. This section summarizes any consensus recommendations of the Team.
- Other. This section summarizes other topics discussed during the meeting as applicable.

II.Participants

The NEIT in-person meeting was attended by all 12 Team Members: Bob Glenn, Erin Summers, Katie Hastings, Mark Baumgartner, Sofie Van Parijs, William McClellan, Cindy Driscoll, Desray Reeb, Katie Moore, Joel Bell, Dave Wiley and Meghan Rickard.

Diane Borggaard (NEIT Liaison), Mike Asaro, Colleen Coogan, Shannon Bettridge, Sean Hayes, Richard Pace and Barb Zoodsma (remotely) represented NOAA Fisheries (NMFS) at the in-person meeting.

The majority of Team members attended the webinars (except Dave Wiley for September 27th webinar and Desray Reeb for December 13th webinar), and the Key Outcomes Memorandum was distributed to the entire Team for feedback.

III.Meeting Materials

The following materials were provided to NEIT members (distributed via e-mail prior to the meeting and/or presented on at the meeting):

- Draft meeting agenda
- Draft Terms of Reference
- NMFS Right Whale Recovery Plan actions (2005)
- NMFS Five-Year Review recommendations (2017)
- SEIT Mid-Atlantic priorities (2017)
- ALWTRP Whale Research priorities (2017)
- NMFS Right Whale Scenario Planning Exercise (2018 draft priorities)

IV.Key Outcomes

Below is a summary of the main topics and items discussed during the meetings. This summary is not intended to be a meeting transcript and is not necessarily in chronological order of discussions. Rather, it provides an overview of the main topics covered, the primary points and options raised in the discussions, and areas of full or emerging consensus.

A. Welcome and Introductions

The meetings kicked off with a brief review of the meeting purpose and draft agenda, as well as introductions. The NEIT were provided opportunities before and at the beginning of each meeting to provide input into the agendas.

B. NEIT Business

D. Borggaard reviewed ESA Section 4(f) and recovery components, as well as the proposed structure for the larger Right Whale U.S. Implementation Team which includes both a

regional and coastwide structure. NMFS emphasized the importance of partnerships (e.g., DFO), and the importance of working towards recovery of the right whale population, in conjunction with the SEIT. An overview of the coastwide Population Evaluation Tool Subgroup was also provided (e.g., objective, members) including opportunities for future implementation team input. NMFS asked the NEIT to consider possibilities for future regional or coastwide subgroups. Additionally, opportunities for public input (e.g., through North Atlantic Right Whale Consortium for 2018) was noted as important.

Diane reviewed the draft NEIT Terms of Reference, including the purpose and objectives of the NEIT, roles and responsibilities, and terms of service. Diane emphasized that the role of the NEIT is to implement and coordinate the implementation of the Recovery Plan for the North Atlantic Right Whale. Diane noted that NMFS is working to incorporate some minor changes to the draft Terms of Reference which will be circulated to the NEIT for future discussion and consideration before posting it to the NEIT website.

The NEIT discussed trying to use a Google folder to facilitate coordination which NMFS will establish. Although there was overall agreement that a google drive option would be useful, some agencies are not able to access such folders. The NEIT tried using the drive but by December it did not appear to work for the full Team.

NMFS has \$30,000 in funds for the NEIT to recommend the best use of. For the future, NMFS noted that it would be helpful if the Recovery Team identifies and describes projects and associated costs ("shovel ready") so that information is available should funds be unexpectedly identified.

At this time, two annual in-person meetings (with pre-webinars) are being proposed in 2019 and onwards including one spring NEIT meeting (e.g., mid-Atlantic) and one joint fall meeting with the SEIT. NMFS noted further discussions are needed with the NEIT, as well as with the SEIT for the joint meeting. NMFS was interested in additional input on the schedule, including public forum from the NEIT.

Discussion

Comments on the draft Terms of Reference included one member clarifying the NEIT knows it is advisory to the NMFS Regional Office and currently does not serve an advocacy role or issue public statements. Additionally, members noted that the NEIT will consider formal public forums in the future as the Team's efforts continue to get underway. For 2018, Diane coordinated with M. Baumgartner, and the NARWC provided NMFS time and space at the November Consortium meeting to provide an overview of the NEIT to interested Consortium members. This was also viewed as an opportunity for NEIT

members to receive input from attendees. D. Borggaard requested those NEIT members that will be in attendance to sign-up for times to be available to meet with interested parties. M. Baumgartner and other members noted highlights from the RWC meeting (e.g., see 2018 NARWC report card available at <https://www.narwc.org/>) during the NEIT's December call. Discussions will continue at a future meeting.

Members asked about how the NEIT will evaluate and give input into other efforts toward recovery such as ALWTRT's commercial fishery interaction efforts and NMFS's ship strike reduction efforts. M. Asaro and D. Borggaard noted that it was important to look at recovery holistically, but it is important to not duplicate those efforts. Therefore, the NEIT will support needs of TRT and NMFS' ship strike efforts where appropriate. For example, on occasion, the NEIT may address or implement recovery tasks identified by the ALWTRT to help answer questions and support their needs in the Northeast U.S. (e.g., predictive modeling).

Regarding the structure of public forums, members preferred a structure modeled after the SEIT (e.g., first day public forum and second day SEIT deliberative meeting) at some point in the future. One member noted that there are some research topics that require scientific expertise to understand and articulate the research needed to address research priorities. For example, it may be helpful to get external scientists to provide presentations in the future on topic specific issues. Additionally, NEIT members talked about webinar possibilities for NEIT input (e.g., similar to and perhaps in coordination with ALWTRT Information Webinars). Some suggested topics included summaries of relevant surveys, status of ongoing research programs, Amy Knowlton's sublethal mortality research, etc. through a webinar.

Once the NEIT was further underway, the Team will consider an in-person public forum (e.g., one day in advance of larger Implementation Team meeting in the fall and include Canadian presentations) as well as consider making these available via webinar given the broad geographic range to allow public from away from the meeting location to listen in. However, given concerns about how non-published material may be used, members suggested that it was important to set ground rules (e.g., please don't record, please don't copy materials presented, please help us meet our goals of allowing scientists to present their information with some confidence that it won't be misused, etc.). For any future public forum, it was noted that it would be important to have a planning call before the meeting and consider requesting and/or having a call for requests for presentations that are important to NEIT consideration. When the time comes, the NEIT could also work with NMFS to discuss allowing other presentations that may not be a direct tie-in to the NEIT but important.

The NEIT considered whether additional regional or coastwide subgroups are needed at this time. One member suggested a subgroup on Seasonal Management Areas to see if they are effective and noted that one or two recent right whale mortalities may inform closures. NMFS noted that Headquarters is currently in the early phase of evaluating the effectiveness of the ship strike rule and a presentation will be provided in the future. The NEIT did mention the possibility of a health subgroup pending the objectives of NMFS future health workshop (see additional information below). In the meantime, the NEIT will continue to be kept updated on the Right Whale Implementation Team's Population Evaluation Tool Subgroup.

The NEIT and NMFS discussed two Implementation Team working groups. These included the following:

- The SEIT is establishing a working group to review NMFS' existing compliance guide for the right whale ship strike reduction rule and provide Southeast Regional Office a recommendation on how to potentially revise the compliance guide. The NEIT indicated an interest in considering the outcomes of the SEIT's working group efforts as a potential recommendation to the Greater Atlantic Regional Fisheries Office. One NEIT member question for consideration by the working group included why an exemption is needed in pilot boarding areas which extend beyond dredge channels (i.e., the petition that NMFS exclude federally-maintained dredged channels and pilot boarding areas (and the immediately adjacent waters) from the vessel speed restrictions for ports from New York to Jacksonville).
- The NEIT will develop a working group to consider whether acoustics could be used to establish a dynamic management area. Member questions included how to bound an acoustic detection, how to handle multiple detections, consider what acoustic buoys would be used, and buoy performance considerations. The NEIT working group will share a white paper with the full Team for discussion and as a potential recommendation to the Greater Atlantic Regional Fisheries Office. This information will be shared with the SEIT as a potential recommendation to the Southeast Regional Office. NEIT members on the working group include Mark Baumgartner and Sofie Van Parijs/Dani Cholewiak, but additional NMFS staff will be consulted based on their expertise.

The NEIT also discussed NMFS' early plans related to convening a small working group to discuss right whale monitoring considerations with various experts in survey design and spatial density modelling.

Regarding meeting in 2019, members supported a March meeting after the ALWTRT meeting and before April field season starts. At this point, it was too early for the NEIT to consider a public forum for the spring meeting. Suggested locations for a spring meeting in the mid-Atlantic included Silver Spring and Baltimore. Regarding a fall 2019 meeting with the coastwide recovery implementation team; suggestions included a late October or early November meeting, North Carolina location, and public forum one-day before full implementation team meeting. As the NARWC may occur in Canada in 2019, it may be worth considering a meeting separate from this. It was suggested that a webinar with the coastwide recovery implementation team occur before the fall (e.g., after ALWTRT meeting, avoid conflict with field seasons). Early ideas for coastwide topics included Populations Evaluation Tool Subgroup, USCG-CG1View and related outreach, as well as Mandatory Ship Reporting and compliance rates. There was support of more calls between face-to-face meetings as needed.

C. Focused Discussions

Priority Planning and Implementation

The NEIT considered previously identified priority needs (e.g. 5-year review, recovery plan, etc.) as a starting point (see “Meeting Materials” above), as well as an idea to track research. Additionally, R. Pace from the NEFSC provided an extensive presentation on population status and the Population Evaluation Tool Subgroup which helped inform these discussions.

Discussion

Based on the population status update members noted that a goal for the NEIT should be to protect reproductive females. Additionally, it was suggested that priorities focus on immediate needs for the species (mitigating fishing gear entanglement and ship strikes) while also keeping an eye on long-term needs. Other ideas to approach prioritizing included: create weighted list to show overlap across groups; create list that prioritizes impact, focus on actions that can be implemented and the NEIT can do/focus on, gap identification, etc. One member noted that having NEIT priorities identified could help leverage other available resources and this includes collaborating with other federally funded programs.

Members emphasized that it would help priority planning and discussions to show parallels. In the future, it would also be useful to do this for DFO priority plans (e.g. Species at Risk Act recovery documents) to show parallels between the US and Canada, and to create a list of priorities that apply across the range. The DFO Action Plan should be ready for external review by late spring early summer 2019. One member noted it is important to share information on other NMFS right whales efforts.

Members were supportive of getting a baseline of research in the region to help identify gaps and determine what is needed to answer priorities. S. Van Parijs will continue to think about this and talk with other members. One member strongly supported this effort and provided an example of the recent LenFest Ocean Program Webinar on "Climate Change and the Oceanography of the North Atlantic Right Whale Population" which highlighted the funding gap in the Continuous Plankton Recording (CPR) survey in the Gulf of Maine. Such a database could help illustrate funding gaps. One member noted that DFO conducts an annual research coordination meeting to ensure that everyone is aware of each other's research and this could inform a research tracking database.

The NEIT began discussions and brainstormed recovery priorities which are listed below.

1. Important to mitigate fishing and vessels interactions.

The NEIT noted the importance of mitigating fishing and vessel interactions with NARWs. While fishing interactions can be mitigated through the ALWTRT/ALWTRP process, and the ship strike rule regulates large vessels, members deliberated about how to mitigate interactions from small vessels. Ideas included looking at what other agencies, etc. may be doing for small vessels. Another topic the NEIT discussed was monitoring important shipping lanes with PAM to create risk assessment; some suggested target areas included New York Bight and Norfolk area. Suggestions for NMFS' consideration when evaluating the ship strike rule: Asaro 2012, updated Asaro analysis (unpublished), Baumgartner et al., 2017, Rhode Island Animal Patrol proposal presented at 2018 Right Whale Consortium, right whale serious injuries/mortalities including those outside Seasonal Management Areas, etc. Expansions of Seasonal Area Management areas off Block Island and Race Point were suggested.

2. Identify where the whales are, especially reproductive females.

The NEIT discussed the importance of identifying where the whales are, especially reproductive females. The following were listed as important reasons for determining whale locations:

- Mitigate human impacts. However, we won't always know where every whale is so management responses need to consider this to protect whales. What is the range of right whales, and can "we" manage individual females?
- Prioritize risks. For example, focus on where reoccurring whale aggregations are.
- Inform dynamic management in response to right whale distribution.

- Prioritize research areas toward the gaps; where have we not conducted deliberative surveys recently? For example, Gulf of Maine (e.g., Target Outer Fall, coastal Maine) and Mid-Atlantic (e.g., Chesapeake Bay, Hatteras 16 miles offshore).
- Leverage options for acoustic monitoring: whale watch (Canada's coastal acoustic monitoring program initiative could serve as a model), fishermen.

Additional considerations that were noted included:

- Plan for potential future change in whale distribution: Get lessons learned from Canadian passive acoustic detection system; e.g., how to redeploy surveys if whales move again.
- Identify range extension into areas without protective measures in place. Identify threats in the new range.
- Sustainable, real-time surveys for dynamic responsiveness is important.

The NEIT discussed aerial surveys, passive acoustics, drones, etc. as possible tools for learning more about the current distribution of right whales. One member noted that the range could expand outside the NEIT range (e.g., Grand Banks expansion is likely). The NEIT discussed the importance of a gap analysis regarding where and when we are looking for right whales in space and time and by platform. A gap analysis is an important base product for these discussions. S. Hayes described NMFS' current effort on this front and the NEIT was supportive. Diane will keep the NEIT updated on the gap analysis/monitoring effort. Members noted the importance of discussions with Canada as right whale distributions shift -will likely be important to leverage each country's capacity and gaps. One member noted that DFO is considering reviving a similar recovery forum as the U.S. Right Whale Implementation Team and linking to the NEIT would be important.

3. NMFS should continue to fund right whale mortality investigations.

Members acknowledged that mortality investigations are funded now such as through the Right Whale UME, and is important to continue funding.

4. Define areas of risk from fixed gear fishing.

NEIT members noted that identifying fishing locations/gear distribution with a high degree of specificity is urgently needed. Some important considerations include:

- Identify existing data sources that may contribute information to this question; e.g., AIS data for vessels of a certain size up to a certain distance offshore

5. Define areas of risk from vessel threats

NMFS is investigating vessels associated with the ship speed rule, and a NEIT member also suggested investigating methods for mitigating small (non-regulated) vessel interactions. A number of NEIT members noted that it is important to consider smaller vessels not associated with ship speed rule, including operational and maintenance vessels that support construction activities such as wind farms. Create inventory of current federal action agency's vessel speed reduction practice (e.g., currently BOEM requires vessel speed reduction (all sizes) in DMAs).

6. Identify emerging risks.

Comments related to this topic included: the importance of identifying how any emerging risks overlap with whale distribution. For example, there are varying threats by area (aquaculture, pile driving, etc.). Potential resources include: 1) Review humpback UME ship strike "hot spot" analysis to see if that could inform this effort; 2) BOEM research framework when available which considered risks to protected species of offshore energy activity (e.g., scarcity of right whales might make it difficult to obtain the level of power required to detect any potential changes, consider proxy species). Suggestions included that it was important to keep aquaculture from right whale habitat and this is a proactive approach.

7. Identify and create ability to track health of individual reproductive females to characterize risks.

Suggestions related to this topic included

- Identify and create ability to track health of individual reproductive females to characterize risks and identify sublethal effects of threats like entanglements (for example, the New England Aquarium is involved in such efforts).
- Collect data on reproductive health, identify disease burden, teratogenic, trauma, infectious diseases, diet implications of stable isotope analysis, etc. to create baseline.
- Prioritize analysis of dead whales.
- Identify diagnostics needed to help us determine fitness. Need process for creating healthscores. Example of use: anticipation of reproductive capability based on health score of known females; annual calving potential.
- Important to consider what is currently collected and analyzed (for example, Elizabeth Burgess' work could result in a hormone tracking effort for all females).

- Form subgroup that could identify appropriate deliverables.

One question posed was whether we can separate effects of ecosystem changes from effects of anthropogenic impacts to inform our ability to manage using this data? A suggestion was made to review the IWC study of impacts on right whale reproductive rates. S. Bettridge NMFS noted that a working group is being considered regarding right whale health assessments. NEIT members noted that a health subgroup could be considered if the above wasn't considered through the NMFS working group effort.

8. Consider prey modeling (*Calanus*) studies.

Members discussed issues on linking prey models to right whale distribution. One member had highlighted that gap in the Continuous Plankton Recording (CPR) survey in the Gulf of Maine. An emphasis was made that NMFS should prioritize the funding of research into the long-term trends in abundance and distribution of *Calanus* species and the processes affecting these trends. As this is an ecosystem question, any available funds should not come from right whale funds. NMFS should continue to coordinate with DFO on this research and monitoring. This information will also inform broadscale changes we are seeing in right whale distribution and health.

9. When the NMFS Species in the Spotlight is revisited in the future, North Atlantic Right Whales should be included and it is important not to reflect right whales as a recovery success.

NEIT members thought that such a listing could help with some funding mechanisms.

In addition to the above recovery action items, the Team continued to discuss the importance of developing a process for the NEIT to identify priorities for right whale recovery at the 2019 meetings (e.g., consider recovery plan priority actions and other identified actions in distributed documents (e.g., SEIT, NMFS Five-Year Review); each member identify five priorities for future discussion and prioritization by the larger team). This remains ongoing.

D. Consensus Actions

- The NEIT will be discussing a process for identifying consensus actions.

E. Consensus Recommendations

- The NEIT will be discussing a process for identifying consensus recommendations.

V. Next Steps

- Key outcomes will be drafted and distributed for review and finalization by NEIT.

- NEIT members who will be at the NARWC agreed to volunteer to be at a designated table to obtain any public input for discussions in December.
- NEIT to provide recommendations as to how NMFS should use the \$30K available to support NEIT priority need(s).
- NMFS will develop an NEIT website to post roster, terms of reference, meeting summaries, etc. when available. (Note: NEIT website currently at: <https://www.greateratlantic.fisheries.noaa.gov/protected/mmp/team/index.html>).
- NMFS will establish a Google folder for the NEIT. The NEIT will revisit whether a Google drive is the best form of communications work for the Team.
- Diane will distribute a new draft Terms of Reference for the NEIT to consider to be finalized and posted on NEIT website.
- Diane will work on a document to show parallels with the right whale priorities using the background materials. This will help identify actions that the NEIT could address quickly and meaningfully. In the future, this could include DFO priority plans to show parallels between the US and Canada, and to create a list of priorities that apply across the range.
- Sofie will continue to think about the possibility of developing a regional research tracking database to help show funding gaps and will coordinate with the NEIT. Sofie will also consider DFO's annual research coordination meeting which helps share information.
- Future NEIT agendas should include an update on right whale population status and a review of recent NARW mortalities before each meeting as needed.
- The NEIT will develop a working group on whether acoustics could be used to establish a dynamic management area, and keep informed on SEIT working group to review NMFS' existing compliance guide for the right whale ship strike reduction rule.
- Diane to work with others in NMFS to inventory what other agencies require for small vessels (e.g., abide by requirements in SMAs).
- Diane will work with other NMFS staff to create and share talking points related to right whale population estimates, etc. for recovery team member use/outreach. This will include coordination with B. Zoodsma as the SEIT has made similar recommendation so the document can be shared with both teams.
- Discuss and finalize 2019 meeting timeline (e.g., pre-meeting webinar and spring meeting, combined SEIT meeting, any needed informational webinars, public forum ideas).
- Diane will continue to work with other NMFS staff to share information on other right whales efforts to the NEIT (e.g., UME).
- Future presentations/reports/status reports to be provided to NEIT for input include: 1) NMFS presentation on evaluating the effectiveness of the ship strike rule

when available; 2) Monitoring/Gap Analysis information (e.g., NEFSC will invite input on planning next year’s surveys using gap analysis); 3) Population Evaluation Tool Subgroup updates including input on the subgroup’s proposed submodels; 4) NMFS health assessment effort; 5) Humpback UME ship strike analysis; and 6) BOEM research framework.

- If a health subgroup is established in the future, consider reviewing IWC study of impacts on right whale reproductive rates.
- The following should be distributed to the NEIT for continued consideration of priorities: 2015 report on “Marine Mammal Non-Lethal Deterrents: Summary of the Technical Expert Workshop on Marine Mammal Non-Lethal Deterrents”; and SEIT five-year plan/priorities.

Attachment

North Atlantic Right Whale Recovery Plan Northeast U.S. Implementation Team
October 30, 2018 (8:30am-4:30pm)
Thomas P. O’Neill, Jr. Federal Building
10 Causeway Street Boston, MA

Draft Agenda

Meeting Purpose:

- Discuss NEIT process
- Discuss NEIT planning and implementation topics
- Discuss next steps (e.g., December webinar)

8:30AM Welcome and Introductions

9:00AM Process:

- Finalize Terms of Reference
- General approach and specifics (to be continued later in day following detailed team discussions)
 - Meeting schedule (e.g., timing of webinars and in-person meetings; location of in-person; coordination with RWC)

9:30AM Population Status

- Methods for apportioning causes of mortality

9:45AM Subgroup Update

- Population Evaluation Tool Update

10:15AM Break

10:30AM NEIT Planning

- Priorities and Research Tracking Background
 - Priorities Discussion (short and long term)
 - Research Tracking Discussion (what is happening, gaps, timeline: 12 or 24 months)
 - Other?
- 12:00PM** Lunch
- 1:00PM** Continue NEIT Planning Discussion (see above)
- 2: 00PM** NEIT Implementation (what do we need to do to move forward, who, capacity/resources, etc.)
- Funding for projects to achieve priority goals
 - Leveraging
 - US collaboration
 - Northeast
 - Mid-Atlantic
 - Overlaps between Northeast and Mid-Atlantic
 - US-Canada Collaboration
 - Other?
- 2:30PM** Break
- 2:45PM** Continue NEIT Implementation Discussion (see above)
- 3:30PM** Creation of Subgroups
- Others? (e.g., Scientific)
- 3:45PM** Process (continued based on the day's discussions)
- 2018 meetings:
 - December 13th webinar (e.g., agenda ideas)
 - Future meetings (2019 and onward):
 - Schedule (e.g., timing and/or locations of webinars and in-person meetings including consideration of spring public forum (mid-Atlantic preferred), fall RWC meeting and combined meeting with SEIT; early agenda ideas)
- 4:05PM** Other Input/Ideas (e.g., general updates/issues to raise, etc.)
- 4:20PM** Next Steps (e.g., December webinar)
- 4:30PM** Adjourn

NOTE: The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.