

**North Atlantic Right Whale Recovery Plan
Southeast U.S. Implementation Team April 12-13, 2017,
Meeting**



Guana Tolomato Matanzas National Estuarine Research Reserve
Ponte Vedra, FL

KEY OUTCOMES MEMORANDUM

I. Overview

The North Atlantic Right Whale Recovery Plan Southeast U.S. Implementation Team (SEIT) conducted a two-day meeting on April 12 and 13, 2017 at the Guana Tolomato Matanzas National Estuarine Research Reserve in Ponte Vedra, Florida. The SEIT's Forum was conducted from 9:00 am to 5:00 pm on April 12 and was open to the public. The SEIT deliberated from 8:30 am to 3:00 pm on April 13. The Forum agenda was planned with input from the SEIT in order to facilitate priority information updates and discussion with participants and SEIT members. Agendas from both days are attached. The April 12th SEIT deliberations focused on the following primary items:

- Forum Review
- Mid-Atlantic Planning Strategy Update
- 5-Year Planning Strategy
- Implementation Plans of Identified Actions?

This Key Outcomes memorandum summarizes the primary results of the SEIT deliberations on April 13. In general, the synthesis integrates the main themes discussed at the meeting 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 meeting purpose and agenda review.
- SEIT business
- Focused SEIT discussions
- Consensus Actions. This section summarizes consensus recommendations of the SEIT.
- Other. This section summarizes other topics discussed during the meeting.

II. Participants

The SEIT meeting was attended by 9 of the 12 Team members: Brock Durig (Navy replacement for Nancy Allen), Lance Garrison, Clay George, Mike Getchell, Hardee Kavanaugh (alternate for Bill Kavanaugh), Amy Knowlton, Katie Moore, Leslie Ward (Team Lead), and Tom Wright. Barb Zoodsma and Claire Surrey-Marsden represented NOAA Fisheries. Bill McLellan, Becky Shortland, and Sharon Young were unable to attend.

III. Meeting Materials

The following materials were provided to SEIT members via email prior to the meeting:

- The final meeting agenda,
- Draft 5-Year Plan (version Feb 1 2017)
- Fourney et al. –In Press publication on noise impacts
- SEIT Recommended Mid-Atlantic Strategy (version December 2016)
- October 2016 SEIT Meeting Draft Key Outcomes

IV. Key Outcomes

Below is a summary of the main topics and items discussed during the meeting. 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 Meeting Kick Off

The meeting kicked off with a brief review of the meeting purpose and agenda.

B. SEIT Business

Becky Shortland announced that she will be transitioning into retirement from NOAA. Nancy Allen has retired and Brock Durig will be assuming Nancy's Navy representation responsibilities on the SEIT.

The SEIT discussed the November 7-9 timeframe as possible dates for the fall SEIT meeting.

C. Focused Discussions

Forum Review

Some members expressed concern that presentation information from day one is not retained.

The Team discussed possible options for doing so, these included:

- Ask presenters to have one slide that addresses specific points requested by SEIT.
- Minutes of Forum (was a practice in past years, but is time intensive)
- Ask presenters to provide bullets containing key points of their presentations.

B.Zoodsma pointed out that important information from Forum presentations can be captured during SEIT discussions on day two as is the SEIT's current standard practice.

B. Durig inquired if presentations could be provided to SEIT members. If so, the military has a sharesite that could be used (they are unable to access Google Drive).

Key points from forum presentations:

- 3 exploratory surveys off South and North Carolina during first half of February plus lack of public sighting reports suggests whales were not short-stopping along the Carolinas –at least in February. C. George wondered if exploratory surveys should have been flown in January when more sightings were being generated.

- Recent mortalities, and recent observations of poor health –especially in reproductive females, are of concern. A. Knowlton noted that females with a health score <67% don't reproduce.
- The lengthening calving interval is disconcerting.
- It appears more humpbacks are being seen in the SE U.S. and for longer residency times.
- Higher compliance in MSR reporting from Whalesnorth than Whalesouth ports. L. Ward wondered if this might reflect a vessel traffic increase. T. Wright stated that Savannah traffic is increasing 7-10% annually. M. Getchel noted that Jaxport traffic has been level/steady the past 2 years.
- It's good that the SE right whale aerial survey data are now accessible to the Duke habitat-based density modelers. Do they need anything more from SE interests?
- Acoustic information along the mid-Atlantic reinforces findings from Southeast U.S. right whale sightings and photo-ID work: there are not two migratory pulses consisting of a southward migration in fall and a northward migration in spring. Rather, from fall through spring, animals are constantly moving between NE and SE habitats.
- The Team was pleased with the SAFMC S-G FMP Reg-16 outcome. L. Ward noted that the S-G FMP Reg-16 was an example of why it is important to retain an "emerging issues" item in the 5-year plan.
- It's unclear when actual development of wind energy resources will occur. Also need to know potential impacts on calving area (e.g. how many towers will prevent whales from using contiguous calving area) or right whales themselves (e.g. maintenance vessel strikes a whale). Risks/impacts will likely vary between planning, development, and operation phases.

Mid-Atlantic Planning Strategy: Progress Review

To avoid confusion, "Mid-Atlantic" term will be replaced by "Carolinas" for purposes of the SEIT.

B. Zoodsma presented the following progress updates:

Description	Status
Determine pathways used by NARWs to navigate Cape Hatteras, determine offshore use and refine migratory timeframes.	Being assessed through PAM and has been reported on by Genevieve Davis during previous meetings.
Examine when and where surveys have been flown in MAUS and summarize information.	NMFS awarded a contract for this. Contract performance period has passed, deliverables are outstanding.
Integrate retrospective PAM results from several "pop-up" buoy studies to get "bigger picture," and assess annual variability.	Workshop for integrating PAM and visual detection surveys was conducted by NEFSC. Need to investigate status of report.

Literature Search	NMFS awarded a contract for this. Contract performance period has passed, deliverables are outstanding.
Assess effectiveness of survey tools in MAUS	Incomplete, NEFSC Workshop 2015
Short term tagging studies	In process –GDNR, SEFSC, FWC tagging study.
Coordinate with other entities in MAUS to contribute RW sightings to NMFS and NEAq.	Needs further work
Coordinate with other entities in MAUS to make effort data available to URI for integration into effort database.	Needs further work
Explore integration of various data streams to enhance habitat knowledge	No progress to report
Research to improve knowledge on spatio-temporal distribution patterns	Tagging study might have implications for this and there is ongoing NEFSC PAM work
Research to improve knowledge on potential long term habitat shifts	NEFSC PAM work might contribute to this.
Assess “residency” of NARWs in MAUS	NEFSC PAM work might contribute to this.

The following points were discussed during and subsequent to B. Zoodma’s update:

- *Data archiving/housing.* Various contractors, scientists (government and non-government), etc. collect and store survey data in different ways. Consider including something in the Five-Year Action Plan regarding data collection/collaboration/archiving. This item should also be compatible with and consider the White House Office of Science and Technology Policy Memorandum “Public Access to Research Results.” The goal of PARR is to increase the public accessibility of publications and digital data produced by federal researchers or by recipients of federal funds.
- Various SEIT members noted that they would check with their respective agencies regarding survey and opportunistic sighting data destinations and archiving.
- *Data integration.* L. Garrison noted that the available MAUS data is pretty well summarized and there may be enough to answer distribution questions. Should we pursue an integrated or comparative data product (based on aerial and acoustic data). Do the separate datasets complement each other? Are AMAPPS, PAM, and habitat models telling us the same thing?
- *PAM detection ranges.* L. Ward noted that information on PAM detection ranges is still lacking. M. Soldevilla touched upon detection distances during her presentation –may be able to get at this with PAM clusters deployed in previous years.
- *MAUS Humpback whale UME.* The humpback UME investigation may provide insights into threats, etc. that may also apply to right whales in the MAUS. Have wound forensics analyses been conducted on vessel struck humpbacks? A distributional shift of humpbacks to Chesapeake region cannot be ruled out.

- *Public relations/outreach.* Ocearch (shark researchers) has a good model for sharing tracking information with the public. Can we reach out to marine users in the Carolinas in an attempt to generate right whale sightings for EWS-type of efforts? NOAA Corps officer/shipping liaison interacts with commercial mariners, but need a strategy for directing efforts toward recreational vessel operators.

Consensus Actions from Last Meeting: Review

- Compilation of relevant work for upcoming population workshop. Accomplished –Lance presented.
- Determine PAM detection distances –incomplete
- Provide Southeast U.S. right whale aerial survey data to Duke University for use in habitat-based cetacean density models –Accomplished.
- A. Knowlton investigation of biopsy blubber uses. Accomplished –A. Knowlton emailed a report to the SEIT on May 16, 2016.
- Investigate climate change vulnerability in region for right whales –vulnerability assessment tool for protected species. (Navy also has projections for climate change impacts on SE Naval facilitations) Climate predictions are on much larger scale than our regional interests.
- B. Zoodsma produce and provide an example 5-Year Plan Action Item (accessioning SE right whale survey data into Duke model) for the SEIT -Accomplished.

Five-Year Planning Strategy

- *River Incursions.* Development of a plan for right whale river incursions for ports traversed by commercial ship traffic should be included in the Five Year Action Plan.
- *Data collection and archiving plans* should be included in 5 –year plan. Should address PARR directive.
- *Commercial shipping related.*
 - Ship size is increasing, channels are being deepened and lengthened (e.g. Savannah entrance channel is being extended 7 miles to accommodate depth). Impacts of these channel mods will likely have impacts on future dredging projects (expense, frequency, duration, etc.).
 - Ships are becoming more quiet and efficient
 - May see increased LNG related traffic, increase in smaller vessels- tug and barge taking LNG or large ships taking LNG to Freeport. Low sulfur fuel and LNG switching back and forth.
- *Recreational boating.* N. Montez and T. Gowan writing a paper on recreational boating trends over next 5 years.
- *Habitat.* Need better understanding of right whale use in unregulated offshore waters. Do they move East-West as a result of weather conditions? Can existing survey data

provide insights into this? Tag data can fill in details on movement. Action plan should include plans to continue tagging support.

- Some SEIT members were skeptical of the value of Dtags for studying right whales in the Southeast U.S.; however, team members acknowledged they were not clear on the purpose/objectives of the Navy-funded Dtag project. B. Durig offered to investigate the purpose of the Navy-funded Dtag work.
- *Education.* If mega yachts carry AIS transmitters, it may be possible to track/identify popular refueling and provisioning facilities along the East Coast. If so, those facilities could be targeted for outreach. An upcoming wound analysis paper will shed additional light on vessel sizes of concern (some 40'-65', but most over 65').

One member suggested the Atlantic Intracoastal Waterway Association may be a good vehicle for getting information to smaller vessels.

During the final phases of discussion regarding the 5-Year Action Plan, K. Moore pointed out that the Plan currently contained numerous action items. What's the best way to tackle these? Tasks include writing, prioritizing, and identifying key players. Subsets of individuals can work on various tasks. Two teams were identified to help identify actions for Emerging Fisheries/Reduce Entanglements (A. Knowlton, K. Moore, T. Pitchford) and Cumulative Impacts (L. Ward, B. Durig, T. Wright? SEFSC?). Agreed to move Ocean Energy to MAUS plan and discuss during Fall meeting.

D. Consensus Actions

- B. Zoodsma to call B. Mase to discuss large whale stranding response.
- Obtain report on Mid-Atlantic passive acoustics (fall 2017 is target date for report completion).
- Investigate and obtain, if available, report from NEFSC workshop on comparing/calibrating acoustic and visual detection surveys.
- Need information from recent BOEM BMP workshop.
- B. Zoodsma to investigate with Interagency Branch regarding projected trends for recreational boats in the SE.
- C. Surrey-Marsden to investigate AIS carriage on yachts.

E. Other

T. Wright raised the prospect of using satellites to detect whales. Navy satellites are not usually focused at the U.S. and NOAA satellites are also tasked for specific missions (e.g. weather). Another member noted that commercial satellite imagery is available but expensive. L. Garrison thought it may be worth looking into. This is not a consensus-based recommendation, but may be worth investigating.

Note was made that M. Moore, one of only a few authorized large/right whale necropsy team leaders, is no longer available to serve as a necropsy team leader. A few Team members

recommended developing a contingency/alternate plan for mortality response in the Southeast U.S.

A few team members supported having flexibility in the speed restriction rule to accommodate times when few to no whales are believed to be present in the Southeast U.S. L. Garrison and B. Zoodsma pointed out that, during rule development, shipping industry representatives advocated predictable over dynamic since they established schedules far in advance. H. Kavanaugh pointed out that some companies can be flexible and some ports have environmental constraints that require companies to be flexible (e.g. tide windows). L. Garrison noted that an evaluation report of the rule is coming up in 2018.

T. Wright mentioned that the ports remain interested in tagging whales that swim into rivers and that he hasn't heard any more on that topic. B. Zoodsma shared tagging was a complicated, difficult challenge involving activities that must be authorized/permited. L. Garrison pointed out that real-time, precision tagging and tracking technologies are still being worked out. B. Zoodsma suggested development of a response plan would be a useful item to include in the 5-year plan.

Members discussed the need for research and Navy to coordinate on UAS assets. B. Durig stated there may be potential frequency constraints (not an airspace issue) -Navy controlled area is 12 nmi out. Deconfliction should take place on annual basis and prior to calving season.

Camden Spaceport is an emerging issue that may have implications for right whales. L. Ward suggested it might be useful to have a presentation on the Spaceport during the next meeting.

There was a brief side discussion regarding humpback whale sightings and whether to include them in whale alerts (at present, humpback whale sightings are not included in whale alerts). B. Zoodsma mentioned that they can be. K. Moore indicated the Coast Guard is not interested in having mariners report sightings of humpbacks similar to right whales. C. George indicate that humpbacks may be traveling quickly (i.e. the value of sighting locations would have a very short half-life). H. Kavanaugh indicated as a harbor pilot, he would be interested in humpback sighting locations. Consideration should be given to setting up a humpback distribution list for interested users.

Monitoring trends in human-related injuries. L. Ward pointed out that PAM will not provide insights into this important monitoring need.

V. Next Steps

- Teleconference to further flesh out 5-Year Action Plan

NORTH ATLANTIC RIGHT WHALE SOUTHEAST IMPLEMENTATION TEAM MEETING
APRIL 12-13 2017
GTM NERR

AGENDA DAY 1 - FORUM

Meeting Goal: Review the status of ongoing SE recovery activities and identify emerging issues

Meeting Objectives:

1. Review recent studies and upcoming monitoring activities
2. Review recovery activities implemented since last meeting
3. Obtain updates from recovery partners
4. Develop and provide input for SEIT consideration

Time	Topic	Speaker
9:00-9:15	Welcome and Introductions <ul style="list-style-type: none"> • Welcome • Review purpose and objectives of meeting • Housekeeping • Review Agenda • Round-robin Introductions 	T. Pitchford
9:15-9:30	SEIT Update Q&A with SEIT	L. Ward
9:30-10:30	Field Season Updates and Highlights <ul style="list-style-type: none"> • Aerial Surveys • Ruffian Disentanglement • Biopsy sampling, LIMPET and UAS Update Discussion	J. Jakush C. George
10:30-10:45	BREAK – 15 minutes	
10:45-12:00	Research/Monitoring <ul style="list-style-type: none"> • Population Biology/Calf Production • Assessing Reproductive Trends • North Atlantic Right Whale Call Detection Distances in the Southeast US • Understanding Whether and Where Fisherman can Effectively use Whale Release Ropes Discussion	L. Garrison T. Gowan M. Soldevilla A. Knowlton
12:00-1:00	LUNCH	Provided

NORTH ATLANTIC RIGHT WHALE SOUTHEAST IMPLEMENTATION TEAM MEETING

APRIL 12-13 2017

GTM NERR

AGENDA DAY 1 - FORUM

Time	Topic	Speaker
1:00-1:30	Other Updates <ul style="list-style-type: none">• Marine Mammal Commission Mtg. Synopsis• GDNR permit Discussion	A. Knowlton C. George
1:30-2:30	Agency Updates <ul style="list-style-type: none">• Navy• USCG• USACE Discussion	B. Durig K. Moore W. Dauberman
2:30-2:45	BREAK – 15 minutes	
2:45-4:00	<ul style="list-style-type: none">• BOEM• South Atlantic Fishery Management Council• SEFSC• SERO Discussion	D. Reeb C. Collier L. Garrison B. Zoodsma
4:00-4:30	Group Discussion	
4:30-4:45	Closing Remarks and Adjourn	L. Ward/T. Pitchford

NORTH ATLANTIC RIGHT WHALE SOUTHEAST IMPLEMENTATION TEAM MEETING

APRIL 12-13 2017

GTM NERR

AGENDA DAY 2 - DELIBERATIONS

Time	Items
08:30-8:45	<ul style="list-style-type: none">• Next Meeting Date• Overview today's agenda• SEIT Business
8:45-9:30	Forum review/Emerging issues
9:30-9:45	Break
9:45-10:15	Review progress on Mid-Atlantic Planning Strategy , update as needed
10:15-11:30	5-Year Planning Strategy – Review and Add Actions for Topics: Vessel Related Impacts and Cumulative Effect of Non-lethal impacts/Noise
11:30-11:45	Working Lunch (quick break)
11:45-1:30	5-Year Planning Strategy – Review and Add Actions for Topics: Population Assessment and Monitoring, Emerging Fisheries, Eliminate entanglements
1:30-1:40	Break
1:40-2:30	Discuss implementation plans of identified actions
2:30-2:50	Open agenda time to assess next steps, review recommendations, schedule summer call
2:50-3:00	Wrap up