

**ATLANTIC LARGE WHALE TAKE REDUCTION TEAM  
NORTHEAST SUBGROUP MEETING**

**November 30 – December 3, 2010  
Providence, Rhode Island**

**KEY OUTCOMES MEMORANDUM**

**I. Overview**

The National Marine Fisheries Service (NMFS) conducted a meeting of the Atlantic Large Whale Take Reduction Team Northeast Subgroup (Subgroup) meeting November 29 to December 3, 2010, in Providence, Rhode Island. (See **Attachment 1** for a copy of the agenda.) The meeting focused on the following primary objectives:

- Provide updates on overall Atlantic Large Whale Take Reduction Plan implementation and activities
- Review the co-occurrence model and consider its implications for an overarching management strategy to address vertical line entanglements
- Provide status report on an ALWTRP monitoring plan and other related activities

This Key Outcomes memoranda, summarizes the primary results of the sub-group meeting. The report is presented in five main sections: Overview, Participants, Meeting Materials, Key Outcomes and Next Steps. The Key Outcomes section is further segmented into the following:

- **Welcome and Introduction.** This section provides a brief overview of meeting, purpose, agenda overview and ground rules.
- **Background Briefings and Presentations.** This section summarizes the upfront briefings presented at the meeting outset.
- **Overarching Themes.** This section summarizes the results of the subgroup's brainstorming on ideas related to vertical lines. This topic was the primary focus of the Subgroup's deliberations. It is divided into three topics
  - Overview
  - Key Discussion Points
  - Consensus Actions
- **Monitoring.** This section provides a synthesis of the main ideas discussed related to monitoring (both compliance and effectiveness).
- **Other.** This section summarizes other topics discussed during the meetings.

**II. Participants**

The meeting was attended by 25 of the 31 Northeast Subgroup members. Attendees included the following: Bill Adler (and his alternate, Arthur Sawyer), Beth Allgood, Regina Asmutis-Silvia, Peter Brodeur, Sarah Cotnoir, Colleen Giannini, Bob Kenney, Scott Kraus, David Laist, Kristy Long, Bill Mackintosh, Stormy Mayo, Patrice McCarron, Dan McKiernan, Bob Nudd, Scott

Olszewski (for April Valliere), Cheri Patterson, Jooke Robbins, Steve Robbins III, Bonnie Spinazzola, Sierra Weaver (for Janis Searles-Jones), Mason Weinrich, David Wiley and Sharon Young. Additionally, Bill McLellan, a member of the Mid-Atlantic/Southeast Work Group, sat in on the deliberations.

Mary Colligan, David Gouveia, and Kate Swails (replacing Diane Borggaard), all with NMFS Northeast Region (Protected Resources Division), convened the meeting. Scott McCreary and Bennett Brooks from CONCUR, an environmental dispute resolution firm specializing in marine resource and water issues, served as neutral facilitators. Staffers from NMFS, NOAA Office of Law Enforcement and the U.S. Coast Guard attended to support the deliberations. In addition, other observers included Subgroup alternates, a Canadian government representative and several NGOs.

### **III. Meeting Materials**

A number of meeting materials were provided to support the group's deliberations. Much of the material was sent out prior to the meeting, but some documents and much of the presentation material was distributed as handouts or provided after the meeting. (A detailed listing of materials is included as **Attachment 2**). Copies of meeting materials can be found by contacting K. Swails by phone at (978-282-8481) or via email at [Kate.Swails@noaa.gov](mailto:Kate.Swails@noaa.gov). Meeting materials are also posted on the web at: <http://www.nero.noaa.gov/whaletrp/trt/meetings/nesubgroup.html>

### **IV. Key Outcomes**

Below is a summary of the main topics and issues discussed during the meeting. This summary is not intended to be a meeting transcript. 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 self-introductions. These were followed by review and confirmation of both the agenda and proposed ground rules. (The ground rules are included as **Attachment 3**.) Both the agenda and ground rules were accepted without any revisions or comment.

#### **B. Background Briefings and Presentations**

The meetings included focused updates by NMFS on a number of topics. Although the updates were kept deliberately brief, so as to ensure the Subgroup could focus the bulk of its conversations on the vertical line strategy, NMFS staff offered to meet with individual Subgroup members after the scheduled daily agenda topics. The presentations, all summarized on the website listed above, covered the following topics:

- ***Recent ALWTRP Implementation-Related Updates.*** These updates, provided by K. Swails, related to changes to ALWTRT staffing; changes in Subgroup composition (the addition of several new State and Conservation representatives, as well as the departure

of several fishermen representatives who have asked to be removed from the full Team); entanglement/ vessel interaction report; right whale critical habitat; recent biological opinions on fishery management plan amendments; humpback whale status review; enforcement-related activities; State activities; and a review whale and gear research activities and priorities. Additionally, Cathy Merriman with Fisheries and Oceans Canada provided an update on right whale-related activities in Canada.

Subgroup member comments focused primarily on clarifying questions, though there was a concern voiced that there was not sufficient time to consider and digest the information presented during the updates. NMFS staff noted that the topics related to the vertical line management strategy discussions would be discussed in greater detail later in the meeting and that the information contained in the update briefing was provided in advance of the meeting to allow time for Subgroup members to review the information. Further, NMFS staff offered to meet with Subgroup members after the scheduled agenda to discuss any questions they may have with the annual update report.

- ***Follow-up Activities from 2009 Subgroup Meeting.*** D. Gouveia provided an update on a number of activities identified at the 2009 ALWTRT meeting. These included the following:
  - ***Vertical line rule development and schedule.*** D. Gouveia noted that the Region's proposed vertical line rule development schedule outlined at the 2009 meeting is on track, culminating in a proposed rule in 2013 and a final rule in 2014.
  - ***State data collection.*** D. Gouveia noted that the Region has been working closely with the states and the Atlantic States Marine Fisheries Commission (ASMFC) to improve data sharing on state fishery management (location of fishing activity and gear configuration) for use in the co-occurrence model.
  - ***Outreach and coordination.*** D. Gouveia noted the efforts the Region has undertaken to improve outreach and coordination, noting recent meetings with ASMFC and others.
  - ***Funding opportunities.*** D. Gouveia highlighted recent activities to fund vertical line gear modifications, including three grants issued in fiscal year 2009.

Other topics included updates related to VTR reporting gaps; website updates; and various concept papers and workshops. Again, more detailed backup on these presentations is available on the team website listed above.

- ***Lineless Fishing.*** D. Gouveia provided an update regarding the Region's investigation of the feasibility of allowing experimental lineless fishing in the Great South Channel. He noted NMFS's interest and unanimous consensus support for the concept, but informed the Subgroup that based on a variety of feasibility considerations – most notably, the potential for gear conflicts; lack of sufficient incentives for industry; regulatory barriers; enforcement and monitoring complexities; and possible increased risk to whales in the event of gear failure – the Region believes its most immediate activities

are better focused on developing and moving forward with the vertical line strategy rather than undertaking rulemaking to allow lineless fishing in the Great South Channel. However, NMFS noted its support for lineless fishing research in areas that would not require a regulatory action. To that end, a brief synopsis by Glenn Salvador regarding recent research efforts focused on: (1) grappling fixed gear deployed without buoy lines; and, (2) radio frequency identification (RFID) line marking research was presented.

Subgroup members broadly acknowledged the constraints noted by D. Gouveia, but several participants underscored the importance of tapping into industry creativity and they pressed NMFS to continue its discussions with fishermen to surface viable concepts – both in terms of location and incentives – to test lineless fishing. The issue was also discussed as part of the Subgroup’s broader focus on vertical lines (summarized below). Several Subgroup members also said the grappling experiment results discussed by G. Salvador showed clearly the unacceptable risks associated with such an approach.

- ***Mid-Atlantic SPUE.*** D. Gouveia provided an update regarding the efforts of a Mid-Atlantic Large Whale Work Group convened in the past year to consider alternatives to the large whale uniform distribution approach proposed to be used in the mid-Atlantic for NMFS vertical line model. The deliberations highlighted several challenges – data gaps, differences in survey approach – that will make it difficult to compare large whale SPUE data across the Mid-Atlantic, Southeast and Northeast.

Several Subgroup members encouraged NMFS not to abandon efforts to scale mid-Atlantic data in a way that would enable NMFS to combine regional data into a single comprehensive and comparable view. Some Subgroup members also expressed the importance of increasing survey effort in the mid-Atlantic to better document habitat use.

## C. Overarching Themes

### ***Overview Related to Vertical Line Management Strategy***

The bulk of the meeting focused on presentation and discussion of NMFS’s development of a vertical line strategy. The discussion began on Day Two with a series of briefings intended to make clear the proposed approach and provide Subgroup members with a detailed understanding of the co-occurrence model and its underlying components, data sources and assumptions.

M. Colligan kicked off the discussion by summarizing the Agency’s objectives and proposed timeline for moving forward with a vertical line strategy. Her presentation emphasized the Agency’s interest in eliciting Subgroup guidance on three key options for structuring a management regime: (1) where to manage (should the vertical line strategy should be based on areas with the greatest vertical line densities, whale populations, co-occurrence of vertical lines and whales, or some combination); (2) when to manage (should the vertical line strategy be year-round, seasonal or a combination); and (3) how to manage (what actions – from traps-per-trawl limits to seasonal or year-round closures – should be put in place to force vertical line reductions. Her remarks also called out the challenges in putting any strategy in place, noting the possible impacts of shifts in gear or whale locations, the potential effects of latent effort re-entering the

fishery, and the overall data limitations. Finally, she underscored NMFS's commitment and imperative to move forward with a proposed rule in 2013.

Industrial Economics, the consultant team developing the co-occurrence model for NMFS, then provided a detailed overview of its analytic work since the last Subgroup meeting. Their presentation stretched over several hours and highlighted, among other things, the overall approach to model development, as well as a detailed look at data mobilization and the input data driving the co-occurrence model. Specific aspects of their presentation focused on the following: (1) reviewing the model's objectives and development schedule; (2) reviewing methods employed to estimate the number of active vessels and vertical lines in the Northeast (using 2008 as a baseline); (3) discussing the status and use of state data in the model; (4) providing updates on the latest whale sightings per unit effort (SPUE) data; and (5) explaining the development of the whale-vertical line co-occurrence indicator.

M. Colligan then walked Subgroup members through a series of "illustrative" scenarios developed by NMFS to elucidate the ramifications of opting for certain vertical line management strategies. The examples, put forward to spark Subgroup discussion and not intended to reflect Agency preferences or future direction, covered a range of options – from managing by whales and vertical lines to co-occurrence, to relying on a variety of trap per trawl minimums, end line restrictions and/or closures. The scenarios made clear the wide range of vertical line reductions anticipated dependent on the approach and actions bundled together. M. Colligan also made clear that additional hybrid scenarios could be constructed.

### ***Key Themes Related to Vertical Line Management Strategy***

The presentations – all available on the Team website listed above – generated dozens of clarifying questions and led to a series of full group and within- and across-caucus deliberations over the remainder of the meeting. Below is a summary of the key themes tied to those discussions.

- ***Some version of co-occurrence model makes sense as analytic platform for moving forward.*** Subgroup members endorsed the concept of a co-occurrence model – rather than relying on either whale distribution or vertical line data separately – as the primary vehicle for developing a vertical line management strategy. While not perfect, many Subgroup members noted that the co-occurrence model appears to offer a useful methodology for identifying vertical line risk to whales. That said, Subgroup members said the model would need to be revised significantly to be of greatest use. (See discussion below and **Attachment 4** for detailed listing of recommended revisions.)

Subgroup discussions did generate several concerns and suggestions related to moving forward with the co-occurrence model as the analytic framework. These individual comments centered on the following:

- The co-occurrence model is most beneficial at a large enough scale to mask data gaps and anomalies. Caution is needed, Subgroup members said, to ensure it is not used to draw overly targeted zones for vertical line reductions.

- NMFS should consider coupling significant, targeted vertical line reductions based on the co-occurrence model with broader but less drastic region-wide vertical line reductions, as whale and vessel distribution is unpredictable.
- The co-occurrence model, while useful, is limited by data gaps and seems not to identify well-known whale aggregation spots. For this reason, some Subgroup members recommended that NMFS consider amplifying the co-occurrence model with well-known whale “hot spots” around Stellwagen Bank and other areas, including the use of other databases, establishment of SAM and DAM areas, passive acoustics, and other non-systematic information on distribution.
- The way the co-occurrence model is structured – assigning a “0” co-occurrence risk to areas where there are no vertical lines or whale sightings in a particular month – underestimates the overall level of risk. This is particularly true, some Subgroup members said, given some of the gaps in the SPUE data (i.e., no aerial surveys in August). The Subgroup did not confirm a method to account for this concern, but participants agreed it was important to consider further strategies to address this issue. (The intent is to recognize that it is not possible to discern if and where there are no true zeroes for occurrence, because whales are, to some extent, distributed everywhere in the region and the scale should not make it appear – with certainty – that there are areas where there is no risk of entanglement possible.)
- ***Co-occurrence model revisions needed.*** Subgroup members offered a broad range of suggestions for strengthening the co-occurrence model and its underlying data. The recommended changes tended to aggregate into several categories: broadening data sources and timeframes to provide a more comprehensive picture of whale and line distribution<sup>1</sup>; refining the model to allow for more beneficial real-time, “what if” scenario testing; rethinking ways to scale and bin co-occurrence data to more realistically depict higher-risk areas; addressing potential inconsistencies in state and federal data<sup>2</sup>; and, more aggressive testing of the model’s validity (incorporating sensitivity analyses, understanding the impact of compounding errors, etc.). Other recommendations focused on updating the model to reflect recent regulatory and fishing practice changes – from the impact of sectors on gillnet soak time to the increase in the black sea bass trap/pot fishery in Rhode Island – and there were also calls for the Agency to use existing state data (for example, Massachusetts buoy line data) to ground-truth model results.

---

<sup>1</sup> Several Team members said that the NOAA aerial survey data alone was too limited and, as a result, the model did not adequately reflect all high-use right whale habitats; skewed risk estimates towards fin whales; and did not utilize all available data on right and humpback whales.

<sup>2</sup> Some Team members reiterated concerns voiced at earlier meetings regarding the adequacy of data on endline numbers and traps per endline, noting that NMFS and the states each collect information in different formats, at differing levels of detail and using different methods. These different approaches, some Team members said, could complicate and limit analyses and program effectiveness. Several State representatives noted that the cost for collecting and analyzing such data was a significant limitation.

NMFS staff agreed to work with Subgroup members and Industrial Economics to investigate the potential to incorporate the many suggested changes, but they also noted that some of the recommended changes may prove difficult to incorporate into the model fully or even at all. As well, NMFS staff noted that a more comprehensive model is likely to be more complex and less nimble in its ability to generate quick results. Subgroup members generally agreed that some data (historic SAMs and DAMs and entanglements for example) may be best to incorporate as layers – i.e., with a virtual toggle switch that can be turned on and off – while other data (for example, sightings from the Right Whale Consortium database) are important to fold into the SPUE. They pressed NMFS to convene a Work Group to inform the ongoing revisions to the model.

A complete summary of Subgroup recommendations related to model revisions are included in **Attachment 4**. This listing represents the range of ideas put forward by the Subgroup but is not intended to represent a consensus recommendation on changes to incorporate.

- ***Interest in allowing for “equivalency proposals” to reduce vertical lines.*** Fisheries representatives strongly advocated for an approach that would enable States and other local entities to devise vertical line reduction strategies tailored for specific geographies and fisheries. These strategies, referred to as “equivalency proposals,” would be crafted to provide a level of vertical line reductions for consideration by the full Team and NMFS rather than insisting on a blanket formula (i.e., closures, single buoy lines, minimum trap per trawl requirements) for those areas identified as high risk. This approach was endorsed as a way to tap into local initiative, bring affected parties together in a collaborative discussion, build incentives and buy-in for any eventual changes in fishery practices, and avoid top-down actions that may be unsafe or uneconomical for the fishery.

While the approach was broadly supported by Subgroup members, some participants voiced concerns that locally targeted actions – if too narrowly drawn – may be difficult to monitor and enforce and may assume a level of precision not warranted by the underlying data in the co-occurrence model. The Subgroup did not determine an appropriate geographic scale for such locally driven “equivalency proposals.”

The Subgroup discussed the elements to include in an “equivalency proposal.” The list – summarized in **Attachment 5** – incorporates the following concepts: (1) description of area and fisheries; (2) description of baseline; (3) description of management approach; and (4) description of assurances. NMFS is to develop and distribute to Team members a more guideline for developing “equivalency proposals.”

- ***Divergent views on need to include inshore Exempted Waters in vertical line strategy.*** Subgroup members expressed divergent views on the need for the co-occurrence model to assess risk to whales in the inshore Exempted Waters. Some Subgroup members strongly urged NMFS to consider managing for vertical line risk to whales in the Exempted Waters, saying language in the sinking groundline EIS suggests that the exemption line was crafted to apply only to the sinking groundline requirement based on the presence and feeding behavior of right whales in those areas. Others strongly

disagreed, noting that delineation of the exemption line had been a controversial topic that should not be reopened. Moreover, NMFS staff clarified that the exemption line was based on an analysis of whale distribution and not specifically tied to the risks associated with sinking groundline or right whale feeding behavior. The issue was not resolved, but the Subgroup did recommend that NMFS at least assess the vertical line risk in the inshore Exempt Waters and bring the results back to the Subgroup for further discussion and consideration.

- ***Strong interest in NMFS vertical line reduction target.*** Subgroup discussions underscored participants' interest in NMFS articulating a vertical line reduction target or target range. Subgroup members saw such a target as essential both to shape Team expectations and future deliberations, as well as to give the states and others a bounded target to aim for when developing "equivalency proposals." NMFS staff acknowledged the benefit of a concrete target, but suggested that – given the difficulty in identifying a conceptual model able to link with certainty specific vertical line cuts with predictable reductions in serious injury and mortality – no one target is likely to be immediately forthcoming. Rather, once the model is updated and new high-risk areas identified, NMFS is likely to identify scenarios it sees as necessary to reduce risk to whales. A vertical line reduction goal could then be set based on scenarios NMFS puts forward.
- ***Need to address latent efforts.*** Several Subgroup members emphasized the critical importance of addressing latent fisheries effort (i.e., unused permits or using less fishing gear than authorized in permits) in any vertical line strategy eventually put forward. If this is not addressed, several speakers said, it is possible that any risk reduction gained by limited vertical lines will be offset by new fishing effort coming into the fishery. Subgroup members recommended that any "equivalency proposal" address its approach to handling latent effort.
- ***No easy approaches identified.*** NMFS's scenarios underscored the challenges facing the full Team in reducing vertical line risk. The scenarios generated a range of vertical line reduction, ranging from zero reduction (status quo) to approximately 100% for some areas through closures. Subgroup members identified serious challenges associated with many of the proposed actions. Increasing trawl size, for example, was said by fishermen around the table to be impractical, risky or both given the small vessel size in certain fisheries. Switching to heavier gear may pose a greater risk of serious injury or mortality to whales. And closures could result in simply displacing effort to other areas – thereby hurting the fishery's economics while only marginally reducing risk to whales.
- ***Other.*** The Subgroup's deliberations surfaced a host of additional issues, the most critical of which are summarized below:
  - ***Baseline importance/concerns.*** Participants discussed the importance and complexity in selecting a baseline of fishing effort/vertical line numbers to use in the co-occurrence model. Subgroup members did not press for agreement on a baseline year at the meeting, but considerations cited include: (1) identifying a year without significant changes in fisheries management practices; (2) clarifying

the potential impacts on credit for past efforts; and (3) selecting a year with reliable data. In the co-occurrence model, 2008 is currently the baseline year.

- ***Overemphasis of fin whales in co-occurrence model.*** Several participants noted that the co-occurrence model may overestimate risk reduction for right whales and humpbacks due to the preponderance of fin whale data. They recommended the model be revised to diminish this skewing. Other Subgroup members suggested that data gaps may result in underestimating risks to humpbacks.
- ***Sinking groundline impacts.*** Several Subgroup members underscored the importance of highlighting the impacts of sinking groundline regulations as early as possible. Fisheries representatives said it is critical to demonstrate impacts of the sinking groundline rule, so fishermen can see the benefits of their actions. Several conservationists also were interested in seeing both the benefit to whales, as well as whether the shift to sinking groundline regulations has resulted in an increase in single traps. One Subgroup member questioned whether there was funding available to assist offshore lobstermen who are losing pots and replacing deteriorating groundline at a higher-than-usual rate.
- ***Vertical line risk in recreational fishing.*** Several Subgroup members asked that the model be expanded to incorporate recreational fishing lines. While Subgroup members recognize the TRP cannot regulate recreational fishing activities, several participants said it was important to at least understand their impact on risk. The information can also be used by State partners to promulgate changes, as needed.
- ***Link with experimental lineless fishing.*** At least one Subgroup member recommended that states and other entities putting forward “equivalency proposals” be asked to consider incorporating strategies for incentivizing experimental lineless fishing in their area.

Additionally, discussions included the following individual comments: (1) include Team members, and particularly the research community, early on in future modeling efforts to enable concerns and considerations to be raised and addressed soon in the process; (2) put forward vertical line reduction strategies that include gillnets so that all fisheries are evaluated for their potential to reduce vertical line risk; (3) take a close look at regulatory actions to-date to identify and sunset those requirements that are not reducing risk to whales; and (4) consider programs to pay fishermen to remove ghost gear from water.

Finally, the Subgroup recommended that NMFS use ideas generated at the Northeast Subgroup meeting to inform its ongoing development of the Southeast/Mid-Atlantic co-occurrence model. At the same time, NMFS staff and some Subgroup members acknowledged the importance of keeping the Southeast/Mid-Atlantic model somewhat fluid to enable broad input when that subgroup is convened in April 2011.

### ***Consensus Actions Related to Vertical Line Management Strategy***

Based on the Subgroup’s deliberations, the Subgroup agreed to the following consensus approaches and actions:

- ***Use co-occurrence model as analytic platform.*** The Subgroup unanimously agreed that the co-occurrence model should serve as the primary platform for developing and analyzing a vertical line strategy. The Subgroup agreed to this approach with the caveat that other information and sources may be beneficial to look at and will be determined through subsequent Subgroup and Team deliberations. These other information and sources are summarized in **Attachment 4**; they represent the views of individual Subgroup members and not consensus recommendations.
- ***Consider equivalency proposals.*** The Subgroup broadly endorsed the opportunity for States and other entities to draft and submit for full Team and NMFS consideration “equivalency proposals” to achieve vertical line reductions, rather than relying on a blanket set of actions (trap per trawl requirements, closures, etc.) to be applied in high-risk areas identified in the Northeast. The intent is to enable local fishermen and others to tailor locally nuanced approaches. NMFS is to distribute a more detailed set of guidelines to inform the development of these “equivalency proposals.” A first cut at guidelines developed at the meeting is included as **Attachment 5**.
- ***Convene Work Group in near- to medium-term.*** The Subgroup recommended NMFS convene a balanced subset of Subgroup members as a Work Group to serve as a sounding board for NMFS and Industrial Economics as they work to revise the co-occurrence model and identify high-risk areas. Any recommended approaches developed by the Work Group are to be discussed, revised (as needed) and confirmed by the full Team through either email or teleconferences. A detailed overview of the charge and membership of the Work Group is included as **Attachment 6**.
- ***Overall Timeline.*** The Subgroup broadly endorsed an overall timeline proposed by M. Colligan that stepped out the following approaches and timeframes for moving forward over the next 12 months:

January/April	<ul style="list-style-type: none"> <li>• Convene initial Work Group deliberations, with focus on informing NMFS work on:               <ul style="list-style-type: none"> <li>○ Data layers (whales, gear, habitat/depth, etc.) and methodologies</li> <li>○ Model runs to delineate updated co-occurrence areas</li> <li>○ Proposed areas to focus vertical line-related management actions</li> </ul> </li> </ul>
April/May	<ul style="list-style-type: none"> <li>• Foster discussion with full Northeast Subgroup to review, confirm and, as necessary, revise approaches developed in discussion with Work Group. Via email or webinar.</li> <li>• Lock in areas for NMFS scenario development</li> </ul>
May/July	<ul style="list-style-type: none"> <li>• NMFS develops scenarios outlining different management strategies for reducing vertical lines</li> <li>• NMFS work informed by ongoing input from Work Group</li> <li>• Follow-on webinar/email communication with full subgroup to review approach</li> </ul>
January/November	<ul style="list-style-type: none"> <li>• States and others develop, if they wish, “equivalency proposals” to be considered in place of the scenarios to be put forward by NMFS in summer 2011</li> <li>• NMFS to distribute “equivalency proposal” format and criteria to Subgroup members by January 2011</li> </ul>
Fall 2011 Meeting <sup>3</sup>	<ul style="list-style-type: none"> <li>• Full Team, in-person meeting (both Northeast and Southeast/Mid-Atlantic Subgroups)</li> <li>• Review co-occurrence model and NMFS scenarios</li> <li>• Review any initial “equivalency proposals” brought forward by States and others</li> </ul>

<sup>3</sup> Based on funding constraints, this meeting may be delayed from November 2011 until early 2012.

## D. Other Topics

The Subgroup's deliberations also included discussion of a handful of other topics. These issues are briefly summarized below.

- ***Scarification/Monitoring Plan.*** The meeting included a brief presentation and discussion of both the November 2009 scarification workshop and the Region's updated proposed monitoring plan for tracking TRP effectiveness. Main points covered in the presentation – information on the scarification workshop was presented by D. Gouveia, while Mike Asaro with the Region's PRD office summarized the monitoring plan – included the following:
  - Scarification can be an important factor in showing interaction rates and, thereby, assessing TRP effectiveness. The Agency is continuing to assess the potential to use scarification data to track serious injuries and mortality relative to PBR.
  - The proposed monitoring plan centers on the following aspects: (1) effectiveness monitoring, by looking at biological analyses, gear analyses and oceanographic/fisheries-based analyses; and (2) compliance monitoring, by looking at enforcement activities, industry behavior and education/outreach. The strategy is also to include an annual ALWTRP monitoring update report, as well as a more comprehensive ALWTRP status summary every five years.

Subgroup member comments centered on the following:

- ***Regarding scarification.*** Some Subgroup members voiced uncertainty whether scarification data will ever be sufficiently analyzed and interpreted to meaningfully inform serious injuries and mortality relative to PBR. Others expressed interest in seeing whether scarification rates can be used to help prove the benefits of the sinking groundline requirements (as in, do scarification rates show a decline in scars associated with sinking groundline).
- ***Regarding monitoring.*** Subgroup member individual comments on the outlined monitoring plan included the following: (1) emphasizing the importance of relying on a broad suite of measures to assess Plan effectiveness; (2) incorporating more information on the details of entangled gear in the annual report; (3) calling for multi-year funding for monitoring activities to diminish the likelihood of data gaps tied to single-year funding limitations; (4) collecting and retaining gear removed from entangled animals; (5) broaden use of gear marking, within cost and industry constraints, to improve knowledge of fisheries' involvement in large whale serious injuries and mortalities; and, (6) requesting that the TRT be given an opportunity to review and comment on the proposed draft Monitoring Plan before it is finalized and implemented. D. Gouveia said the Agency intends to distribute a draft monitoring plan in mid-2011 to inform the Team's discussion and input at the next full TRT meeting (tentatively planned for November 2011). He also noted that the Agency is developing an on-line database that will make detailed entanglement data more readily available.

- ***New England Fishery Management Council gear-marking proposal.*** Subgroup member Bob Nudd flagged for consideration a proposal from the New England Fishery Management Council (NEFMC) VMS Committee that would, if implemented, require an elaborate gear-marking scheme, which will result in a surface configuration (double buoys, high fliers) that will increase vertical lines and undermine TRP efforts. D. Gouveia said the Northeast Region will follow with NEFMC staff to (1) understand the rationale and basis for the recommended action; and, (2) raise concerns as they relate to TRP implementation. Additionally, State representatives will weigh in on the issue.

## V. Next Steps

The discussion generated a number of next steps. The most critical next steps are summarized below.

- ***Co-Occurrence Model.*** NMFS staff and consultants are to continue its work to develop and refine the co-occurrence model. This entails the following next steps:
  - Subgroup member Bob Kenney is to provide NMFS with data from the North Atlantic Right Whale Consortium database (by month, species, Florida to Maine) by December 10 for incorporation into the SPUE data set informing the Industrial Economics co-occurrence model.
  - NMFS staff are to work with Industrial Economics to assess the feasibility and impacts of incorporating the set of potential model refinements generated by the Subgroup's deliberations.
  - NMFS staff are to establish a Work Group to inform the Agency's ongoing refinements to the co-occurrence model. The Work Group is to conduct its first meeting, in-person if possible, in the late January/ February timeframe. (See **Attachment 6** for more detail on the Work Group.)
  - NMFS staff are to keep the full Northeast Subgroup informed on Work Group process and, at critical junctures, seek Subgroup input and support for proposed refinements.
  - As possible, NMFS will use recommendations from the Northeast Work Group to inform the ongoing development of the Southeast/Mid-Atlantic co-occurrence model.
- ***Equivalency Proposals.*** Several next steps were identified to further the concept of "equivalency proposals" to meet vertical line reduction goals. These include:
  - NMFS staff are to flesh out and distribute to Subgroup members by early January 2011 first-cut "equivalency proposal" criteria.
  - By summer 2011, NMFS is to distribute to Subgroup members its proposed vertical line reduction strategies based on the updated co-occurrence model and the identification of high-risk areas.
  - States/other groups are to begin discussions with affected constituencies to consider interest in and possible structure of equivalency proposals. These discussions are expected to become more focused by late summer 2011 as NMFS

- development of the co-occurrence model is firmed up and high-risk areas and potential vertical line reduction strategies are identified.
- States/other groups are asked to prepare first-cut “equivalency proposals” in time for discussion at the planned November 2011 full Team meeting.
  - **Outreach.** Subgroup deliberations called out several next steps related to future outreach efforts. These include:
    - NMFS is to prepare brief talking points based on the Northeast Subgroup’s deliberations. This is expected to be completed and distributed to Subgroup members by early to mid-January 2011 for their use in preparation of any outreach efforts.
    - P. McCarron said the Maine Lobstermen’s Association expects to include an update on the Northeast Subgroup meeting in its next newsletter set to be published in January 2011. P. McCarron offered to send a draft to NMFS for its review and comment.
    - NMFS is to consider putting out an Advance Notice of Proposed Rulemaking (ANPR) in summer 2011 to generate interest in and comments on the evolving vertical line management strategy
  - **Other Next Steps.** Other next steps included the following:
    - NMFS anticipates holding the next full Team meeting in November 2011 and a follow-on meeting in early spring 2012 to continue its development of a vertical line strategy. The exact schedule is dependent on funding.
    - NMFS’s proposed Monitoring Plan is to be refined and distributed to the TRT in draft form well before the next meeting to facilitate Team member input.
    - CONCUR is to prepare a draft Key Outcomes Memorandum for red-flag review by Subgroup members. CONCUR expects to distribute a draft to the Subgroup by early January.
    - NMFS staff are to update the Team website to include handouts and presentations from the November 2010 Northeast Subgroup meeting. NMFS is also to link the updated SARs to the Team website.
    - NMFS staff are to meet with Team member Peter Brodeur to assess the potential to generate more data from existing VTR reports to inform the co-occurrence model.
    - When possible, NMFS is to provide feedback on the impact of sinking groundline implementation (compliance, impact on increase or decrease in the use of single traps in place of trawls, effect on entanglements, etc.). This is not expected in the near-term due to time lags and challenges in monitoring effects.

Questions or comments regarding this summary should be directed to Bennett Brooks or Scott McCreary with CONCUR. Bennett can be reached at 212-678-0078 or via email at [bennett@concurinc.net](mailto:bennett@concurinc.net). Scott can be reached at 510-649-8008 or via email at [scott@concurinc.net](mailto:scott@concurinc.net).

**ATTACHMENT 1**

**ALWTRT NORTHEAST SUBGROUP MEETING  
NOVEMBER 30 – DECEMBER 3, 2010**

**MEETING AGENDA**

**Atlantic Large Whale Take Reduction Team  
Northeast Sub-Group Meeting  
November 30-December 3, 2010  
Providence, RI**

**PROVISIONAL DRAFT AGENDA<sup>1</sup>**

**Meeting Purposes**

- Provide updates on overall ALWTRP status;
- Discuss options for identifying management areas;
- Discuss management options to reduce mortality and serious injury in those areas;
- Continue development of the ALWTRP monitoring plan; and
- Provide updates on gear and whale research to support ALWTRP goals and objectives.

**DAY 1 (Tuesday, November 30<sup>th</sup>)**

**1:00-1:30 PM WELCOME, INTRODUCTIONS AND GETTING ORGANIZED (NMFS and CONCUR)**

- Review meeting purpose and round robin greeting (*CONCUR*)
- Opening comments (*NMFS*)
- Review and confirm agenda and ground rules (*CONCUR*)

**1:30- 2:30 PM INFORMATIONAL UPDATES: RECENT ALWTRP IMPLEMENTATION (NMFS)**

*Objective: Provide update on ALWTRP activities since 2009 subgroup meetings*

- Provide brief status reports on recent ALWTRP-related activities
  - ALWTRT Membership
  - 2008 Entanglement/Vessel Interaction Report & 2009/2010 Preliminary Data
  - Right whale critical habitat update
  - Recent biological opinions on fishery management plans update
  - Humpback whale status review
  - Provide brief status report on enforcement-related updates
    - Activities
    - Implementation of sinking ground line requirement
    - All other requirements
  - Provide brief status report on state activities
    - Individual state reports
  - Review of research grants and whale and gear research matrices
  - Canadian update

---

<sup>1</sup> Opportunity to caucus provided —TBD at meeting.

**2:30-3:00 PM**

**FOLLOW-UP ACTIVITIES FROM 2009 ALWTRT SUBGROUP MEETINGS (NMFS)**

*Objective: (1) Provide overview of 2009 ALWTRT subgroup meetings; (2) Provide update on NMFS action items from 2009 ALWTRT subgroup meetings; (3) Identify action items for further discussion in 2010 subgroup meetings; and (4) Review and discuss concept papers and mid-Atlantic distribution workshop*

- Review key points from 2009 ALWTRT Subgroup Meetings
  - Review ALWTRP vertical line rule development and monitoring strategy schedules
  - Provide brief updates on action items requested by ALWTRT in 2009
    - Improved data collection efforts with states
    - Outreach and coordination efforts with AFMC, Lobster Management Board, others
    - Funding opportunities for new endline gear modifications/marketing options
    - VTR reporting gaps
    - Refinements to co-occurrence model to fold in additional considerations related to risk
    - ALWTRT web site updates related to exemptions
  - Review 2009 action items needing further Team discussion
    - Convene work group to address how to fold scarring rates into R. Pace monitoring efforts (*to be covered on Day 4*)
    - Flesh out monitoring plan for discussion at the 2010 TRT meeting (*to be covered on Day 4*)

**3:00-3:15 PM**

***BREAK***

**3:15-4:45 PM**

**CONTINUE: FOLLOW-UP ACTIVITIES FROM 2009 ALWTRT SUBGROUP MEETINGS (NMFS)**

- Consider need for and/or approach to concept papers and workshops raised at 2009 meetings
  - Concept paper exploring potential opening Great South Channel (or similarly suitable area) to experimental lineless fishing
    - Follow-up research conducted by NMFS
  - Concept paper that explores gear-marking
  - Work group to investigate alternatives to the uniform distribution approach in the mid-Atlantic

**4:45 PM**

**OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT/PREVIEW OF DAY TWO (CONCUR)**

**5:00 PM**

**ADJOURN**

## **DAY 2 (Wednesday, December 1<sup>st</sup>)**

**8:30 - 8:45 AM WELCOME, AGENDA REVIEW AND RECAP FROM DAY ONE (CONCUR)**

**8:45 – 9:00 AM VERTICAL LINE MODEL OVERVIEW (NMFS)**

- Overview of intent, focus and desired outcomes of Team deliberations on model and implications for vertical line management options

**9:00 – 10:30 AM MODELING VERTICAL LINE DISTRIBUTION (*Industrial Economics*)**

- Provide overview of vertical line data
  - Discuss the collection of State data
    - Definition of an “active” fishery
    - Gear characterization
  - Observations and caveats
  - Revisions made based on Team’s input at 2009 ALWTRT meetings
- Invite Team member clarifying questions

**10:30 - 10:45 AM BREAK**

**10:45 AM – NOON MODELING WHALE SIGHTINGS PER UNIT EFFORT (SPUE) (*Industrial Economics*)**

- Provide overview of whale SPUE
  - Discuss survey effort
  - Observations and caveats
  - Revisions made based on Team’s input at 2009 ALWTRT meetings
- Invite Team member clarifying questions

**NOON – 1:15 PM LUNCH BREAK**

**1:15 PM – 2:30 PM MODELING CO-OCCURRENCE (*Industrial Economics*)**

- Provide overview of co-occurrence data
  - Development of co-occurrence score
  - Observations and caveats
  - Revisions made based on Team’s input at 2009 ALWTRT meetings
- Invite Team member clarifying questions

**2:30 – 2:45 PM BREAK**

**2:45 – 4:30 PM USING THE MODEL FOR MANAGEMENT (NMFS)**

- Initial framing of possible management options using the model to reduce risk associated with vertical line entanglements
  - Present initial thoughts for Team consideration
  - Team clarifying questions

**4:30 PM**                    **OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT (*CONCUR*)**

**4:45 PM**                    **REVIEW OF KEY DISCUSSION POINTS AND PREVIEW OF DAY THREE**

**5:00 PM**                    **ADJOURN**

## **DAY 3 (Thursday, December 2<sup>nd</sup>)**

- 8:30-8:45 AM**            **WELCOME, AGENDA REVIEW AND RECAP FROM DAY TWO (CONCUR)**
- 8:45 AM – 4:30 PM**    **DISCUSSION OF VERTICAL LINE MANAGEMENT OPTIONS (NMFS)**  
(WITH BREAKS & LUNCH)    *Objective: Discuss management options for reducing risk associated with vertical line entanglements*
- Discuss overarching management strategy to address vertical line entanglements
    - **Manage by Fishing Effort.** What are the target management areas suggested by the model? Do they vary seasonally by month? What are the different risk levels or categories of risk (e.g. high, medium, low)?
    - **Manage by Whale Distribution.** What are the target management areas suggested by the co-occurrence model? Do they vary seasonally by month? What are the different risk levels or categories of risk (e.g. high, medium, low)?
      - Choose a single species to focus on or use all three?
    - **Manage by Co-Occurrence Areas.** What are the target management areas suggested by the co-occurrence model? Do they vary seasonally by month? What are the different risk levels or categories of risk (e.g. high, medium, low)?
      - Choose a single species to focus on or use all three?
  - Discuss Management Options
    - What are appropriate management options to address risk associated with vertical lines? What are the building blocks of these management options? Should these vary by fishery, area, season, etc.?
      - Review current requirements
      - Review potential scenarios
        - Level of reduction achieved
        - Feasibility of implementation
        - What associated gear marking or monitoring should be considered for these options?
  - Discuss research needs to clarify and/or assess the effectiveness of different vertical line management options
    - What do we know about the risk associated with vertical lines related to gear and whales?
    - What are the most important uncertainties (e.g., whale distribution, fishing effort, gear configuration) and how do we fill these data gaps?
    - How can we develop a better understanding of the relationship between trap-line length and serious injury risk to whales?
- 4:30 PM**                    **OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT (CONCUR)**
- 4:45 PM**                    **REVIEW OF KEY DISCUSSION POINTS AND PREVIEW OF DAY FOUR**

**5:00 PM**

**ADJOURN**

**DAY 4 (Friday, December 3<sup>rd</sup>)**

- 8:30-8:45 AM**            **WELCOME, AGENDA REVIEW AND RECAP FROM DAY THREE (CONCUR)**
- 8:45-10:00 AM**        **FOLLOW-ON DISCUSSION: VERTICAL LINES**
- Continue discussion from Day Three (*NMFS and TRT*)
    - Management Strategy
    - Management Options
    - Research Needs
    - Next Steps
- 10:00-11:00 AM**        **REVIEW AND DISCUSS SCARIFICATION WORKSHOP (NMFS)**
- Review of 2009 ALWTRT discussion related scarification workshop
  - Elicit Team input on timing and focus for scarification workshop
- 11:00-11:15 AM**        **BREAK**
- 11:15 AM**                **UPDATE ON ALWTRP MONITORING STRATEGY (NMFS)**  
*Objective: To provide an update on NMFS development of the ALWTRP monitoring strategy.*
- Overview of Monitoring plan strategy
    - Effectiveness of the ALWTRP
    - TRT discussion and comment
- 12:15 PM**                **NEXT STEPS (CONCUR and NMFS)**
- What will be done with the product from this meeting?
  - Recap of meeting and review next steps
  - Discuss next ALWTRT meeting
    - Recommended dates and locations?
    - Other issues?
- 12:45 PM**                **OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT**
- 1:00 PM**                 **ADJOURN**

**ATTACHMENT 2**

**ALWTRT NORTHEAST SUBGROUP MEETING  
NOVEMBER 30 – DECEMBER 3, 2010**

**LIST OF MEETING MATERIALS**

**ALWTRT Meeting Materials**  
*Northeast Subgroup, Providence RI*  
*November 30- December 3, 2010*  
*\*to be provided at TRT meeting*

---

---Day One---

1. General Meeting Information

- a. Draft Agenda
- b. Proposed Ground Rules
- c. 2010 TRT Member Roster
- d. ALWTRT Meeting Materials

2. Gear Research Materials

- a. UNH Grant Report (Time Tension Line Cutter)
- b. UNH Grant Report (An Automated RFID and GPS Fixed Gear Identification System for Onboard Real-time Data Collection)
- c. PCCS/MDMF Grant Report (Investigation of Practical Aspects of Marking Fixed Fishing Gear With Coded Wire Tags To Better Understand Whale Entanglement)
- d. ALWTRP Draft Whale Research Matrix
- e. ALWTRP Draft Gear Research Matrix

3. 2009 ALWTRT Meeting Follow-up Materials

- a. Updates on ALWTRP since 2009\*
- b. ALWTRP Vertical Line Rule Development and Plan Monitoring Schedule
- c. Update on Actions Items since 2009\*
- d. Process for considering exemptions
- e. Key Outcomes of Mid-Atlantic data workshop
- f. Gear marking concept paper
- g. Lineless Fishing concept paper

4. Background Information

- a. Large Whale Entanglement and Ship Strike Report 2008
- b. 2009 & 2010 Preliminary Large Whale and Ship Strike Summary
- c. Reports/Materials from States
  - Maine (9)
  - Massachusetts (1)
  - Connecticut (1)
  - Rhode Island (1)

---Day Two---

1. Materials from Industrial Economics\*

---Day Three---

1. Materials from NMFS regarding the model\*

---Day Four---

1. Key Outcomes of Scarification Workshop
2. Update on ALWTRP Monitoring Strategy\*

**ATTACHMENT 3**

**ALWTRT NORTHEAST SUBGROUP MEETING  
NOVEMBER 30 – DECEMBER 3, 2010**

**TEAM GROUND RULES**

**Atlantic Large Whale Take Reduction Team**  
**PROPOSED GROUND RULES**  
*(as of November 2010)*

The proposed Ground Rules for this year's ALWTRT meeting are similar to the Rules used at the 2009 meeting, with the exception of a few changes:

- Reformatted the rules for consistency with other TRT Ground Rules.
- Added a statement about NMFS' role regarding voting during formal recommendations.
- Edited for clarity.

These Rules emphasize clear communication, respect for divergent views, creative thinking, collaborative problem solving, trust building, working towards consensus, and the pursuit of mutual gains. The TRT may decide to reconsider and revise these Ground Rules if they appear not to be serving the TRT process.

The proposed Ground Rules will be presented at both subgroup meetings. Please review these Ground Rules prior to the meeting and come prepared to discuss questions or changes you may have.

**Atlantic Large Whale Take Reduction Team**  
**PROPOSED GROUND RULES**

*(as of November 2010)*

The following ground rules have been informed by CONCUR's professional experience, discussions with NOAA's National Marine Fisheries Service (NMFS), and directives in the Marine Mammal Protection Act. These ground rules are intended to foster and reinforce constructive interaction and deliberation among Take Reduction Team (TRT) members. They emphasize clear communication, respect for divergent views, creative thinking, collaborative problem solving, trust building, working towards consensus, and the pursuit of mutual gains. The TRT may decide to reconsider and revise these Ground Rules if they appear not to be serving the TRT process.

**TRT Purpose**

- The TRT will serve as an advisory group to NMFS and will develop recommendations based on the collection and analysis of abundance, stock structure and bycatch estimate reports from the Northeast Fisheries Science Center and other scientific reports. Where appropriate, the TRT will recommend research on bycatch reduction strategies. NMFS will make the final rulemaking on take reduction actions.

**Representation**

- **TRT recruitment and selection.** TRT members have been invited to serve by the NMFS Assistant Administrator for Fisheries. TRT members were selected based on professional expertise or experience in the areas of conservation or biology of marine mammal species or fishing practices which result in the incidental mortality and serious injuries of such species. TRT members were also selected for their diversity of interests, geographic location, communication network, capability to work with diverse viewpoints, and commitment to developing a consensus-based Take Reduction Plan in the prescribed timeframe.

**Participation and Collaboration**

- **Primary and alternate TRT members.** Primary TRT members will make every effort to attend all TRT meetings. Team members may identify alternates if they will not be able to make all team meetings. Names of candidate alternates are to be submitted at least one month in advance of the next meeting for approval by NMFS. It is the responsibility of the Team member to keep their alternate informed and prepared for meetings. A Team member who needs to send an alternate is requested to notify NMFS at least one week in advance that the approved alternate will attend for them. Primary TRT members will work with their alternates to ensure that they are up to speed on TRT deliberations.
- **Active, focused participation.** Every participant is responsible for communicating his/her perspectives. Everyone is encouraged to participate; no one dominates. Only one person will speak at a time and only after being recognized by the facilitation team. Everyone will help stay on track.

- **Respectful interaction.** Participants will respect each other's personal integrity, values and legitimacy of interests. Participants will assist each other in creating an effective atmosphere by: using microphones; turning off cell phones; refraining from sidebar conversations; and using computers for TRT related work only.
- **Integration and creative thinking.** Participants will strive to be open-minded and integrate members' ideas and interests. Participants will attempt to reframe contentious issues and offer creative solutions to enable constructive dialogue. Proposals will be offered in a timely fashion to facilitate the group's consideration of possible approaches.
- **Adherence to ground rules.** As a set of mutual obligations, TRT members will commit to adhere to these ground rules once they are adopted. TRT members are encouraged to help uphold and enforce these ground rules.
- **Mutual gains approach.** Participants will work to satisfy not only their own interests but also those of other TRT members. Participants are encouraged to be clear about their own interests and to recognize the important distinction between underlying interests and fixed positions.
- **Right to terminate membership.** Any TRT member may withdraw from the TRT process at any time, without prejudice. To withdraw from the TRT, the member must formally notify NMFS of such actions, and if possible, recommend an alternate.

### **Commitment to process**

- Participants will review meeting materials in advance of the meetings and come prepared to address the meeting objectives.
- Draft meeting agendas, developed by CONCUR and NMFS, are to be circulated to TRT members prior to any TRT meeting for their input and finalized by the TRT during the meetings.
- Meetings will start on time. Participants who know that they will be absent, late or leave early are asked to inform project staff in advance and coordinate with their alternates as needed.

### **TRT Decision Rules**

- The TRT will seek to develop consensus recommendations where possible. In this context, "consensus" means that the recommendation in question is supported by all TRT members present at the meeting; this does not necessarily mean that each TRT member likes everything about the recommendation, but that each member is willing to accept it. Where consensus cannot be reached on a particular issue in the time available for developing a recommendation on that issue, the range of possibilities considered by the TRT will be presented, including the views of both the majority and minority.

- From time to time, the facilitators may opt to use straw votes to gauge the extent to which Team members support various items under discussion and to move the effort forward. The intent of these straw votes is to assist the Team in building broader consensus and help the Agency understand and characterize the extent of common ground. All attending members will have the opportunity to vote.
- If the team is making a formal recommendation to NMFS, then the NMFS representative will abstain from voting. During straw votes related to other matters (e.g., when to take breaks, caucus, scientific/technical advisory issues), one NMFS representative will vote.

### **Multi-interest Work Teams and Interest Group Caucusing**

- NMFS staff and CONCUR expect that within- and across-interest group work teams may be an important way to develop constructive, integrative work products. The aim of such work teams is to encourage multi-interest options and work products rather than work products put forward by a single bloc or interest group. These caucuses may be region- and/or interest-based.
- As appropriate, opportunities will be provided during TRT meetings for caucusing within and across interest groups.

### **Media Contact and Contact with Political Representatives**

- Media inquiries concerning the TRT will be referred to the NMFS Public Affairs Officer, who will share the TRT roster upon request. Media representatives inquiring about the TRT process will be referred to approved meeting summaries. Team members may talk to media representatives concerning their own views about the issues being discussed by the Team.
- TRT members agree not to attribute particular comments to particular individuals, nor to characterize others' views.
- TRT members agree not to portray ideas as consensus before the TRT has explicitly agreed on them.

### **Information Sharing and Joint Fact Finding**

- TRT members recognize that the TRT project depends on using the best readily available information.
- TRT members commit to identify information needs in a timely fashion and to contribute in framing needs for additional research and analysis.
- TRT members commit to share, and not withhold, relevant information. Preliminary information will be treated as such.
- NMFS staff and CONCUR commit to provide, to the extent practicable, all meeting

materials at least one week ahead of time in order to give TRT members ample time to review the relevant information. All TRT members will have equal access to meeting materials.

### **TRT Communication Protocols**

- TRT members wishing to send email correspondences or documents to the full TRT are requested to send these through the facilitation team and the convenor.

### **Role of Facilitation Team**

- The TRT facilitation team (CONCUR, Inc.) works as a neutral party and will not act as an advocate for particular outcomes. The facilitators will strive to ensure that all TRT members clearly articulate their respective interests and to assist members to complete their work in a well-informed and efficient fashion.
- The role of the facilitator includes crafting draft agendas, chairing informal meetings and committee discussions, working to resolve any impasses that may arise, facilitating consensus building, preparing meeting summaries, assisting in the location of meetings, circulating background materials and other important information to the TRT members, and other requests relevant to the TRT process.
- The TRT facilitation team will prepare Key Outcomes Memoranda (KOMs) to summarize the main results of the TRT meetings. These KOMs will endeavor to summarize key decisions made, issues discussed, and the next steps identified for moving the process forward. They will not serve as a transcript of the meetings. The facilitators will strive to prepare KOMs within two weeks of the meetings. The facilitators will typically not invite comment on the KOMs; nor will formal approval of KOMs be agendized at the TRT meetings.
- In the event that TRT members believe the KOMs significantly misrepresent particular decisions, issues, or next steps discussed in such a way that will impede the TRT process, they are requested to notify the project facilitators and convenors. The project facilitators and convenors will review the matter and use their professional judgment to determine if a revision to the KOM is in order. If so, they will prepare a revised KOM and distribute it in a timely fashion to all TRT members.
- The TRT facilitation team will serve as the primary secretariat in assisting parties to develop modifications to the Take Reduction Plan. The Take Reduction Plan, unlike the Key Outcomes Memoranda, will be subject to detailed review and approval by all TRT members.

### **Public Comment**

- Members of the public are encouraged to direct comments through TRT members or speak at designated times on the meeting agenda.

**ATTACHMENT 4****ALWTRT Northeast Subgroup Meeting  
Northeast Subgroup Recommended Refinements to the Co-Occurrence Model**

Below is a summary of potential model refinements generated as part of the Northeast Subgroup's (Subgroup) deliberations during its November 30 to December 3, 2010, meeting in Providence, Rhode Island. These proposed refinements represent a "wish list" identified and confirmed by members at the Northeast Subgroup meeting and will need to be expanded upon and ground-truthed in discussions with and between Northeast Region staff, Industrial Economics, the Northeast Region Science Center and the follow-on Northeast Subgroup Work Group. It is not assumed that each and every potential refinement will be adopted.

**Recommended Refinements to the SPUE Data:**

- Broaden SPUE to fold in data from Consortium database
  - Show inter-annual variation
  - Include data up and down Atlantic Coast (and not just for Northeast)
  - Consortium database to be provided to Science Center by Bob Kenney
- Provide expanded time series – both backwards looking and accessing most recent data
- As possible, create a more comprehensive picture of whale distribution data by layering in additional data sets. At minimum, as noted in the Co-Occurrence section below, portray these additional data as on/off layers that can be looked at as overlays on top of a refined co-occurrence model
  - Historic SAMs/DAMs
  - Entanglement data
  - Whale "hot spots"<sup>1</sup>

**Recommended Refinements to the Gear Characterization:**

- Assess impact of shift in management strategy to sectors
  - Impact on gillnet soak time
  - Other
- Incorporate sensitivity analysis to measure variability in gear characterizations
  - Mean trawl length, number of buoys, etc.
- Account for latent effort in each state
- Consider Massachusetts buoy line data
  - Both to refine model and, importantly, to assess model accuracy
- Update model to account for upwards shift in Rhode Island fishing effort due to increase in black sea bass trap/pot fishery
- Update time series
  - Expanded data (both past and more current) for trap pot
  - Expanded data (forward looking) for gillnet due to shift to sectors

---

<sup>1</sup> Other ideas discussed but not captured in the synthesis reviewed and confirmed by the Subgroup at the meeting included acoustic monitoring, satellite telemetry and other non-systematic information on distribution.

- Fold in recreational fishing data, as possible, for Cape Cod Bay, Coastal Maine, East Side/Cape Cod
  - Intent is to understand impact of recreational fishing vertical lines on co-occurrence; probably best incorporated as a data layer that can be turned on and off

### **Recommended Refinements to the Co-Occurrence Model:**

- Refine model to show co-occurrence as outlined below:
  - Right whale alone
  - Humpback alone
  - Fin whale alone
  - Right whale and humpback together
  - Right whale, humpback and fin whale together
- Refine model to weight results by whale species (relative to PBRs or levels of serious injury and mortality)
- Refine model to allow for real-time (or near-real time) “what if” scenario testing:
  - Subgroup interest is to see the potential impact on vertical lines, in real-time, based on proposed closures and/or vertical line reductions.
- Refine model to fold in sensitivity analysis
- As possible, create more comprehensive picture by layering in additional data related to the following (best incorporated with on/off toggle):
  - Historic SAMs/DAMs
  - Entanglement data (distinguish, as possible, between ground and vertical line)
  - Whale “hot spots”
- Refine model to add bathymetry and habitat type layers
- Consider more meaningful way to scale and bin co-occurrence data
  - Initial discussion centered on looking at different indexes (mean v. max) or a log-normal distribution
  - Later discussion focused on testing model to see impacts of swapping out “0’s” for “1’s” (or some other representation greater than “0”) in the underlying SPUE data. The intent is to recognize that it is not possible to discern if and where there are no true zeroes for occurrence, because whales are, to some extent, distributed everywhere in the region and the scale should not make it appear – with certainty – that there are areas where there is no risk of entanglement possible.
- Test model to see ramifications of looking at co-occurrence shoreward of the ALWTRP exemption line.

### **Recommended Refinements to Scenarios:**

- Express vertical line percentage reductions relative to the entire Northeast Study Area<sup>2</sup> (and not only in the “boxes” where management changes are proposed). These changes could also be expressed as changes in co-occurrence.

---

<sup>2</sup> The Northeast Study Area refers to Federal waters north of 40-degrees latitude.

## ATTACHMENT 5

### **Northeast ALWTRT Subgroup End Line Reduction Equivalency Proposal**

*(as discussed at the November 30 to December 3, 2010, Northeast Subgroup meeting)*

Below is a first-cut listing of the information to be included in any “equivalency proposal” put forward by states and other entities to achieve vertical line reductions. This listing was developed by NMFS with participant input at the Northeast Subgroup’s 2010 meeting. NMFS is to further refine and expand upon this list and distribute an updated version to Subgroup members in early 2011.

#### **Equivalency Proposal Requirements (preliminary)**

##### Description of Area and Fisheries

##### Description of baseline<sup>3</sup> (co-occurrence model from NMFS)

- Number of vertical lines
- Current effort relative to latent effort

##### Description of Management Approach

- Number of end lines reduced
- Number of end lines allowed
- Year-round/seasonal
- Method of allocation
  - How do you decide? Lottery? Who is in the allocation pool?
  - What tool do you use (eg., tags, permits)?
- Strategy for addressing latent effort

##### Description of Assurances

- How will you measure effectiveness of proposal?
  - What data will be collected? What frequency? Who is collecting data?  
Mandatory logbook reporting? Observer coverage?
- Description of Monitoring
  - What tools do you use? Gear marking?
- Description of Enforcement

---

<sup>3</sup> The baseline to be used in the co-occurrence model is to be considered by the Northeast Subgroup Working Group and then discussed and confirmed with the full Northeast Subgroup.

## ATTACHMENT 6

### **Northeast ALWTRT Subgroup Co-Occurrence Model Work Group Description** *(as outlined by Mary Colligan and confirmed at the Northeast Subgroup's November 30 to December 3, 2010 meeting)*

#### ***Work Group Purpose***

NMFS proposed to convene a Work Group to inform Agency and contractor revisions to and future runs of the co-occurrence model. As discussed at the Northeast Subgroup meeting, the primary functions of this Work Group are to:

- Serve as a preliminary sounding board for the Agency and Industrial Economics as they work to incorporate the Northeast Subgroup's proposed revisions into the co-occurrence model. This input necessarily will involve considering trade-offs between and limitations of various proposed revisions.
- Provide feedback to the Agency and Industrial Economics regarding the updating of NMFS' scenarios based on the revised co-occurrence model

This ad-hoc Work Group is a subset of the Northeast Subgroup; it does not replace the involvement of the Northeast Subgroup as a whole. Rather, the Work Group is intended to serve only as an initial sounding board and a place where diverse views can be heard and integrated into a coherent and broadly supported modeling approach. All ideas developed within the Work Group will be considered by the full subgroup – either via email or webinar – for its input and eventual confirmation.

#### ***Work Group Participants***

The Work Groups comprises a sub-set of the full Northeast subgroup intended to ensure balanced representation of the range of views on the Northeast Subgroup. Participation is as follows:

Erin Burke/Dan McKiernan	Bill Mackintosh	Sarah Cotnoir/Erin Summers
Scott Kraus	Patrice McCarron	Mason Weinrich
David Laist	Bonnie Spinazzola	Sharon Young

Ideally, the Work Group will meet in-person if possible. Teleconferences and webinars may also be used. The Work Group will be staffed primarily by NMFS Northeast Region. Science Center staff and the Industrial Economics team will also support deliberations.

### ***Work Group Timeframe***

Below is a summary of the proposed timeframe for Work Group deliberations. The table also shows the fit with broader Team deliberations and alternative proposal development by states and other entities. The first Work Group meeting is expected to be held in late January or early to mid-February 2011.

January/April	Initial Work Group deliberations, with focus on informing NMFS work on: <ul style="list-style-type: none"> <li>• Data layers (whales, gear, habitat/depth, etc.) and methodologies</li> <li>• Model runs to delineate updated co-occurrence areas</li> <li>• Proposed areas to focus vertical line-related management actions</li> </ul>
April/May	Discussion with full Northeast Subgroup to review, confirm and, as necessary, revise approaches developed in discussion with Work Group; to be conducted via email or webinar <ul style="list-style-type: none"> <li>• Lock in areas for NMFS scenario development</li> </ul>
May/July	NMFS develops scenarios outlining different management strategies for reducing vertical lines <ul style="list-style-type: none"> <li>• NMFS work informed by ongoing input from Work Group</li> <li>• Follow-on webinar/email communication with full subgroup to review approach</li> </ul>
January - November	States and others develop, if they wish, “equivalency proposals” to scenarios to be put forward by NMFS in summer 2011 * NMFS to distribute proposal format and criteria to Northeast Subgroup members by January 2011
Fall 2011 Meeting <sup>4</sup>	Full Team, in-person meeting (both Northeast and Southeast/Mid-Atlantic Subgroups) <ul style="list-style-type: none"> <li>• Review refined co-occurrence model and NMFS scenarios</li> <li>• Review and consider merits of “equivalency proposals” put forward by states and others</li> </ul>

Team members will be provided updates on significant changes to the schedule and approach outlined above.

<sup>4</sup> Based on funding constraints, this meeting may be delayed from November 2011 until early 2012.