

**Atlantic Large Whale Take Reduction Team  
Northeast Sub-Group Meeting, April 1-2, 2009, Providence, RI  
Mid- and South-Atlantic Sub-Group Meeting, April 28-29, Philadelphia, PA**

**KEY OUTCOMES MEMORANDUM**

**I. Overview**

The National Marine Fisheries Service (NMFS) conducted two sub-group meetings of the Atlantic Large Whale Take Reduction Team in April 2009: a Northeast Sub-Group meeting on April 1-2 in Providence, Rhode Island, and a Mid- and South-Atlantic Sub-Group meeting three weeks later on April 28-29 in Philadelphia, Pennsylvania. (See **Attachment 1** for a copy of both agendas.) The meetings focused on three primary objectives:

- Brainstorm possible approaches to reducing risk associated with vertical lines; set framework for follow-on discussions in 2010
- Discuss strategies for monitoring the ALWTRP (compliance and effectiveness)
- Provide updates on: (1) TRP modification proposals submitted in 2008; and (2) relevant gear and whale research

This Key Outcomes memoranda summarizes the primary results of the two sub-group meetings into one document. In general, the synthesis integrates the main themes discussed at both sub-group meetings in order to provide a comprehensive cross-cutting summary. Where there were significant distinctions between the two meetings, sub-group-specific presentations, deliberations and actions are called out.

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 team's brainstorming on ideas related to vertical lines. This topic was the primary focus of the Team's deliberations.
- **Consensus Actions.** This section summarizes consensus actions taken by the Team.
- **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.

Additionally, a number of meeting materials are included as attachments.

## II. Participants

The two meetings were attended by 44 of the 58 Team members. Below is a listing of all TRT members in attendance.

- ***Northeast Sub-Group.*** Attendees at the Northeast Sub-Group meeting included: Jack Finn, Bob Kenney, Scott Kraus, Stormy Mayo, Jooke Robbins, Regina Asmutis-Silvia, Vicki Cornish, Jake Levenson (for Beth Allgood), Mason Weinrich, Sharon Young, Diane Borggaard, Kristy Long, Peter Thomas (for David Laist), Colleen Giannini, Dan McKiernan, Scott Olszewski (for April Valliere), Sarah Cotnoir (for Terry Stockwell), Bill Adler/Arthur Sawyer, Peter Brodeur, Bill Mackintosh, Patrice McCarron, Steve Nippert, Bob Nudd, Steve Robbins III, Bonnie Spinazzola and Jon Williams.
- ***Mid- and South-Atlantic Sub-Group.*** Attendees at the Mid- and South-Atlantic Sub-Group meeting included Moe Brown (for Scott Kraus), Bill McLellan, Jooke Robbins, Mark Swingle, Cynthia Taylor, Regina Asmutis-Silvia, Vicki Cornish, Sharon Young, David Laist, Diane Borggaard, Shannon Bettridge (for Kristy Long), Barb Zoodsma, David Cupka, Jason Didden/Rich Seagraves, Hugh Carberry, Cindy Driscoll, Clay George, Michael Greco, Nicole Mihnovets, Red Munden, Alicia Nelson, Tom Pitchford, Mike Baker, Sonny Gwin, Chris Hickman, Rick Marks and Billy Reid.

Mary Colligan, David Gouveia, and D. Borggaard with NMFS Northeast Region (Protected Resources Division) convened both meetings; Barb Zoodsma with NMFS Southeast Region joined for the Mid- and South-Atlantic Sub-Group meeting. Scott McCreary and Bennett Brooks from CONCUR, an environmental dispute resolution firm specializing in marine resource and water issues, served as the neutral facilitators. Staffers from NMFS, NOAA Office of Law Enforcement and the U.S. Coast Guard attended to support the deliberations. As well, about 33 members of the public attended all or part of both meetings.

## 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 D. Borggaard by phone at (978-282-8453) or via email at [Diane.Borggaard@noaa.gov](mailto:Diane.Borggaard@noaa.gov).

## 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. As noted earlier, the main points raised at the two sub-group meetings are integrated into one discussion synthesis. However, where there were differences between the two meetings, distinct summaries are presented.

## **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 on a number of topics. Below is a quick synopsis of the topics covered and primary feedback from Team members.

### ***ALWTRP Amendments***

D. Borggaard provided updates on a number of recent activities related to the ALWTRP. These include updates on: (1) the status of recent ALWTRP proposed amendments from the State of Maine, North Carolina black sea bass fishery, and the Southeast U.S. Atlantic Shark Gillnet fishery; (2) updates on recent large whale entanglements and discussions related to ALWTRP gear marking; and (3) the Northeast Region's intention to require all future exemption proposals to follow the steps outlined in the document, "Process for Considering Exemptions under the ALWTRP."

- ***Northeast Sub-Group Comments.*** No significant discussion on any of the above items.
- ***Mid/South-Atlantic Sub-Group Comments.*** M. Baker expressed concern regarding the review process for his proposed shark gillnet amendment – both the lack of dialogue with NMFS regarding the proposal's insufficient aspects and the late communication regarding the proposal status. B. Zoodma with NMFS acknowledged the problem with the notification and offered to meet with M. Baker separately to help him better understand the information needed if M. Baker opts to submit a revamped proposal. D. Cupka asked for clarification regarding whether the process document was for conservation benefit or conservation equivalency proposals. He stated that conservation equivalency proposals could make a difference as far as enforcement or expense. NMFS stated that it would consider conservation equivalency proposals, although NMFS has previously said that conservation benefit proposals were preferred.

### ***Enforcement***

Representatives from the U.S. Coast Guard (USCG) and NOAA Office of Law Enforcement (OLE) provided brief updates on their most recent efforts. Team members sought greater information on enforcement strategies for ensuring compliance with the recently adopted sinking groundline regulations. NOAA OLE, USCG and NMFS Protected Resources Division (PRD) staff assured Team members that there is a comprehensive plan that includes both education and outreach as well as enforcement, but – consistent with their standard practice – they declined to reveal specific tactics so as not to compromise future enforcement efforts. State partners also noted their role in enforcement.

### *Timeframe for Vertical Line Discussion and Management Actions*

M. Colligan briefed Team members on the Northeast Region's anticipated timeframe for ALWTRP vertical line rule development and plan monitoring. Given data gaps related to vertical line concentration, whale distribution and entanglement locations, M. Colligan said the Agency is taking steps now to develop better information – both for the Northeast and the Mid- and South-Atlantic – to guide future management discussions and identify areas at a higher risk of entanglement. This step, she said, is responsive to previous Team feedback to NMFS focused around the following points: (1) be realistic in developing a potential regulatory approach; (2) identify and address key data gaps early in the process; (3) front-load critical analysis before engaging the TRT in discussions on a preferred approach; and (4) avoid one-size-fits-all solutions. To that end, NMFS is proposing a schedule that relies on the following:

- Vertical line model development over the next year for all areas, with the Northeast and Southeast finalized by April 2010 and Mid-Atlantic by April 2011;
- Whale distribution data completed by May 2009 for the Northeast, and refined and completed for the Southeast by April 2010 and Mid-Atlantic by April 2011;
- Development of vertical line and whale distribution co-occurrence overlays by April 2010 for the Northeast and April 2011 for the Mid- and South Atlantic;
- Discussion and refinement of possible management options and associated steps between May 2010 and April 2012;
- Identification of preferred option and proposed rule between May 2012 and April 2013, with a published final rule in place no later than April 2014; and,
- ALWTRP monitoring plan development over the next two years, with annual interim reports beginning in July 2012.

Many Team members accepted the Agency's rationale and approach for the proposed timeline, with several speakers noting that the proposed timeline not only allows for the development of better data but also provides time to assess the impacts of the recently enacted sinking groundline regulation. Still, several TRT members (and particularly those from the conservation community) voiced concern that the already slow pace could be further delayed due to challenges in gathering and analyzing the data needed to identify high-risk locations for vertical line entanglements. Moreover, they questioned whether data gathered over the next few years would be sufficiently improved to warrant the delay and, if not, these same Team members suggested, perhaps it would make more sense for NMFS to move forward with a proposed rule based on the best available data. Other comments centered on the following: (1) calling on the Agency to revise the proposed timeline if conditions suggest earlier action is needed; and (2) recommending that an eventual plan be implemented in phases if data gaps in one region (concerns centered in particular on the Mid-Atlantic) become particularly problematic and risk delaying overall implementation. As well, one Team member sought an update on the status of the biological opinion for various fisheries. M. Colligan said the biological opinion was in process.

Additional discussions related to the overall timeline and approach are summarized in the section below on the co-occurrence model.

### *State Updates*

State representatives presented updates regarding their state's recent vertical-line related activities. (Maine, Massachusetts and Rhode Island presented at the Northeast meeting; Florida, North Carolina and Georgia at the late April meeting. Other states folded in their updates throughout the discussions). The state updates focused on data collection efforts, results and limitations; various monitoring initiatives; and recent regulatory changes. Cross-cutting Team comments around the following topics: (1) the importance of improving and standardizing data collection across states; (2) the need for better baseline data to support future monitoring efforts; (3) the potential to use the Atlantic Coastal Cooperative Statistics Program (ACCSP) as a partner in developing better state data; and (4) improving protocols for better cooperation and coordination between NMFS and the various state representatives.

- ***Northeast Sub-Group Comments.*** Discussion at the Northeast Sub-Group meeting covered the following additional points:
  - Participants noted Maine's recent efforts to improve data collection through surveys of lobster fishing effort, but they stressed the importance of further improving both the consistency and credibility of the state's data. This is critical, they said, given the high concentration of vertical lines off the coast of Maine and the significant unknowns associated with the state's extensive lobster fishery.
  - Team members called on NMFS to ensure any future analyses consider the impact of the shift to Individual Transfer Quotas (ITQs) for monkfish and groundfish on the number of nets and lines in the water.
  - Rhode Island's state representative informed the Team that state regulations in Rhode Island call for additional buoy lines to better mark gillnet "set" patterns. He said the state will be revisiting these regulations, as it recognizes that these requirements are inconsistent with the ALWTRP principles and may well increase the risk of entanglement.
  - The Gulf of Maine Lobster Foundation (GOMLF) presented findings from its recent summit that suggest the number of traps and vertical lines in the water will continue to decrease due to economic and fishery trends. The presentation suggested the potential for synergy between TRT aims and GOMLF needs.
  - Several Team members asked NMFS to evaluate the extent to which fishermen (particularly in Maine) are increasing vertical line use by converting from trawls to singles as a means to avoid sinking groundline requirements.
- ***Mid/South-Atlantic Sub-Group Comments.*** Discussions at the Mid/South-Atlantic Sub-Group meeting called out the following additional points:
  - Existing state regulations in North Carolina, Georgia and elsewhere (1) limit state

partners ability to share data on fishing effort due to legally imposed confidentiality constraints, and (2) require fishermen to maintain one pot per line (a historic regulation intended to help shrimp fishermen trawl around pots without becoming entangled in line). Combined, these existing regulations make it more difficult to properly characterize fishing effort and decrease risk to whales. NMFS was urged to work with the states to address and overcome these constraints.

- Emerging trap-pot fisheries (such as the blue crab fishery off Georgia and Florida) may be increasing the risk to whales. As well, there may also be a heightened risk due to what one Team member said is a greater offshore fishing effort in the Southeast (black sea bass, golden crab) and another said is increased bottom longline effort in the Southeast U.S. Restricted Area. Team members suggested these fisheries may need to be the focus of future NMFS discussions and actions.

### ***Vertical line analysis efforts***

A number of presentations focused on the most recent efforts to better map fishing density and whale distribution and then model the co-occurrence of the two. Presenters included Richard Pace, Scott Kraus (Northeast Subgroup only), Stormy Mayo (Northeast Subgroup only), and Industrial Economics, Inc. The intent of the co-occurrence analysis effort is to develop a model that can support NMFS's development of a vertical line strategy that will further minimize the risks of large-whale entanglement and associated serious injury and death. Work to-date has focused on the American lobster, gillnet and other trap/pot fisheries in the Northeast, but the intention is to more fully map the co-occurrence along the full Eastern Seaboard in the next few years. The presentation generated much discussion throughout the two-day meeting; key themes are summarized in the section below.

### **C. Overarching Themes**

The two sub-group meetings focused primarily on vertical lines. The intent, as noted in M. Colligan's opening remarks, was to provide the Team an opportunity to brainstorm options for moving forward, begin to flesh out both preferred strategies and more problematic approaches, identify critical information needs, and – most broadly – provide feedback for NMFS to review as it develops possible approaches for further consideration by the Team in 2010.

The Team's deliberations centered on several broad topics: (1) the merits of using a co-occurrence model to identify areas of greatest risk of entanglement; (2) fishery data needs; (3) possible management actions to reduce risk associated with vertical line entanglements; (4) gear modifications and markings; and, (5) research needs. Below is a synopsis of the main themes discussed during the two meetings. Where appropriate, sub-region-specific issues are highlighted.

### ***Co-Occurrence***

M. Colligan initiated the conversation regarding the co-occurrence modeling by emphasizing several points: (1) the aim of the model is to identify areas of greatest risk; (2) the co-occurrence

model seems to offer a promising approach for targeting future NMFS management actions; and (3) time is needed to develop/refine the model for the Northeast and then expand it south.

Team members generally endorsed the effort to map the co-occurrence of whales and vertical lines, while voicing a number of suggestions for moving forward with the approach. The effort – being undertaken by Industrial Economics – was seen as a potentially helpful strategy for (1) identifying those areas where whales are at greatest risk for entanglement and (2) enabling NMFS to move beyond a one-size-fits-all approach to management options. Still, Team members did voice concerns and offer some recommendations. These cross-cutting observations and recommendations included the following:

- Broaden information sources to decrease uncertainty in the underlying data related to whale distribution. Suggested sources included greater use of data drawn from acoustic monitoring, historic entanglements and qualitative sources. One member also recommended using habitat as a proxy in those areas with poor sightings history.
- Continue efforts to generate credible and consistent data from the states regarding vertical line distribution and fishing effort. [Specific strategies for and concerns related to generating this data are discussed in the Fishery Data Needs section below.]
- Use the co-occurrence model as a base but then layer in other risk factors – from whale species, age, behavior and residency time, to season, water depth, habitat/oceanography, density of vertical lines, and gear type and modifications – to paint a more accurate picture of high risk areas. In essence, several Team members said, it's unwise to assume that high co-occurrence alone equals high risk. Other factors must be considered and accounted for. This point was further underscored in the Mid and South Atlantic meeting by several Team members who called on the Agency to convene a peer review panel to assess the model's ability to identify risk.
- Indicate confidence intervals for the co-occurrence models, since so much data is based on estimates derived from data-poor information sources. Team members noted that this is particularly problematic in areas along portions of the Atlantic seaboard where there is little high-quality data.
- Be willing to accelerate implementation of vertical line management options if new data or extraordinary situations (i.e., a sudden spike in takes) warrants action prior to the completion of the co-occurrence model.
- Better understand the risks associated with entanglement – in other words, why some animals are mortally wounded from entanglements and others are not – so that additional information can be folded into a more nuanced picture of risk. Additionally, some Team members supported the Agency's intent to move forward with its policy review of serious injury determination.

More generally, several speakers reiterated their concern – first voiced as part of the timeline discussion – that the time needed to develop the co-occurrence model may not be timely enough

given the ongoing entanglements and related mortalities. As well, several Team members voiced concern that – given the wide range covered by whales – a model intended to identify high-risk areas might be counter-productive. Finally, speakers at both meetings called for the Agency to consider a parallel path over the next few years: Further develop the co-occurrence model but take near-term steps (as possible) to reduce risk from vertical lines.

Sub-Group specific comments centered on the following:

- ***Northeast Sub-Group Comments.*** Team members strongly recommended that NMFS take stock of the impact of recent changes in fishing practices – from market forces and Council actions to sinking groundline implementation – when assessing the risk associated with vertical line concentrations. This was seen as particularly important given the recent reductions in traps both in coastal and off-shore waters.
- ***Mid-/South-Atlantic Sub-Group Comments.*** Discussion at the Mid-/South-Atlantic Sub-Group meeting centered on an initial statement by Richard Pace with NMFS that the Agency would need to rely on a uniform distribution factor for the Mid-Atlantic due to insufficient data on whales. Team members pressed the Agency to continue efforts to develop a region-specific factor, suggesting there are readily available data sets that – taken together – could paint a more nuanced picture of whale distribution in the Mid-Atlantic. Based on the discussion, the Team recommended that the Agency consider two follow-on tasks: (1) seek sources of other whale distribution data beyond the SPUE; and (2) convene a workshop or teleconference with Agency and TRT scientists to reassess the need to rely on a uniform distribution factor. There was also discussion about identifying a central repository to aggregate and track future data on whales in mid-Atlantic waters. As well, R. Pace noted that it may not be possible to compare risk factors across regions since large whale occurrence descriptions are region-specific.

### ***Fishery Data Needs***

Both meetings focused extensively on the need to generate better data on state fisheries – both because credible and consistent baseline data is essential to developing the co-occurrence model described above and because it is also necessary to track program progress and effectiveness. Team members broadly agreed that current reporting efforts suffer from data gaps, inconsistent reporting methodologies and practices across states, and poor baseline data. These limitations undermine the Agency’s ability to characterize existing fishing efforts, target future management actions and assess program impacts.

Team members broadly agreed that states must, at a minimum, provide the following information: total number of trips fished; total number of endlines; traps per end line; line depth; monthly data (to smooth out daily fluctuations); independent verification/auditing to confirm accuracy of data; and enough geographic specificity to meaningfully support the co-occurrence model. Other ideas – from total number of traps, line diameter and trawl length, to strategies for verifying data – were discussed but no broad consensus views emerged.

Team members cautioned NMFS to keep the final data requests as streamlined as possible so as not to burden fishermen or create duplication of effort. They also encouraged NMFS to work closely with states over the longer-term to integrate TRP data needs into future revisions to state forms. Finally, they called on NMFS to underscore with the states the importance of good, consistent data as a top priority, and they highlighted the ACCSP as a potential ally in supporting state-level data gathering.

Region-specific comments related to data needs are summarized below.

- ***Northeast Sub-Group Comments.*** Team members focused much of their discussion on the State of Maine – both because of the extent of fishing effort there as well as the gaps in current data collection. Maine representatives emphasized their commitment to generating better data, but noted that shrinking budgets have undercut their efforts to compile comprehensive data. (Declining budgets was cited as a significant obstacle by other states as well.) Other specific comments included: (1) calling on NMFS to revise Vessel Trip Reports to make the data fields more consistent with lobster fishing practices; and, (2) advising NMFS to plug current data reporting gaps (Area 1; non-multi-species lobstermen in federal waters).
- ***Mid-/South-Atlantic Sub-Group Comments.*** Mid-/South-Atlantic Sub-Group meeting deliberations focused on strategies for improving data sharing with states. Specifically, state representatives called on NMFS to formally request in writing its specific data needs and seek a response from the states within two months. Such an approach, they said, would raise the profile of the request within state agencies and make it more likely that data requests would be considered a higher priority. (Without such assistance, they said, it is difficult for them to get their respective state agencies to dedicate the resources necessary to generate the requested data.) D. Gouveia expressed frustration with state representatives' follow through on earlier requests for help with data gathering, but committed NMFS to help its state partners overcome internal barriers by submitting formal information requests in writing. (A list of specific data needs presented by NMFS at the Mid-/South-Atlantic meeting is included as **Attachment 4**.) Finally, a member of the Team called on NMFS to fold critical data needs into TRP regulations if such requirements are not or can not be incorporated into applicable state and federal fishery management plans.

### ***Management Options***

Team members discussed a wide range of possible management options to address vertical line reductions. Options considered ranged from full or seasonal closures, gear modifications/markings and effort caps, to education/outreach, revisions to problematic state regulations and longer trap lines. While there were many divergent views and no consensus on either preferred management actions or specific targets, a number of comments and perspectives were common to both sub-group meetings. These primary concepts are summarized below.

- ***Develop targets, then let states and fishermen figure out how best to meet them.*** In both sub-group meetings, TRT members recommended approaches that tap into fishermen's

creativity and avoid top-down requirements. Better, Team members said, to identify area-specific targets (percentage reductions in vertical lines, for example), put in place incentives (where practical), and then let states and fishermen figure out how to best to deploy and configure their gear to meet the stipulated targets. Such an approach taps into fishermen's creativity and is likely to be more fully adopted once implemented.

- ***Assess recent efforts before imposing new management actions.*** A number of Team members at both meetings called on the Agency to take stock of the larger context – industry trends, Council actions, lobster management plans, sinking groundline requirements – before putting in place any new requirements or closures. The intent, these participants said, is to assess the impact on net conservation benefit before determining what additional conservation benefits are needed to meet PBR targets.
- ***Approach closures carefully.*** Discussions at the two sub-group meetings touched on both the merits and downsides of closures. On the one hand, several Team members endorsed closures as a potentially effective and essential strategy when targeted at high-risk locations. Conversely, other Team members around the table strongly recommended that closures be avoided as a management action given the impact to fishermen and isolated local economies. If closures must be considered, they said, use credible data to make them as targeted as possible in duration, location and seasonality. The Team also discussed the possibility of pairing closures with pre-approved triggers. That is, closings that take effect only after certain already agreed-upon benchmarks (for example, an entanglement or rates above PBR) are triggered.
- ***One-size-fits-all approaches are problematic.*** A number of Team members strongly recommended against using a blanket one-size-fits-all approaches for the entire Atlantic seaboard, suggesting instead that NMFS use the results of the co-occurrence model and other data to craft targets and management actions that are place- and situation-specific. At the Mid-Atlantic/Southeast meeting, fishermen strongly suggested that future NMFS actions be focused on “hot spots” and not waste effort on those areas with relatively few vertical lines.
- ***Identify early action opportunities.*** Though Team members generally supported the timeline and co-occurrence model put forward by NMFS, several participants at both sub-group meetings called on the Agency to take early action steps if promising approaches are available or a series of entanglements necessitate more aggressive management moves. In particular, they recommended that NMFS continue efforts to identify promising gear modifications.
- ***Consider tradeoff between longer trawls and more serious entanglements.*** While a shift to longer trawls is one possible strategy for reducing vertical lines, Team members cautioned NMFS about implementing such an approach without additional research. Some participants voiced two main concerns: (1) longer trawls may increase the odds of entanglement; and (2) once entangled, the extra weight of the traps may result in more serious injuries to whales.

- ***Avoiding entanglement is key.*** While it is important to take steps that reduce the severity of marine mammal injuries tied to entanglements, Team members generally agreed that the most critical step is to reduce the likelihood of an entanglement in the first place.
- ***Gear markings.*** Team members at both meetings voiced strong interest in devising gear-marking strategies to better enable NMFS to identify the source of entanglements. However, several Team members noted that gear markings will not necessarily reveal how or where a whale got entangled. As well, they noted that any shift to gear markings needs to be coupled with a policy guiding its use by enforcement to ensure fishermen are not wrongly prosecuted.

The discussions at both meetings generated a number of additional concepts for future consideration by NMFS. Below is a synopsis of the other ideas discussed. Again, the summary of options below does not represent consensus nor was the discussion focused on generating consensus at this point in the development of options; rather, it is simply a listing of the ideas suggested during the two meetings. Items listed in this table include both management concepts and implementation considerations.

<b>Northeast Sub-Group Suggested Ideas</b>	<b>Mid-/South Atlantic Sub-Group Suggested Ideas</b>
Focus on vertical lines, not traps	Tie seasonal closures or triggered closures to the calving area east of the COLREGS; consider need for area- or gear-specific closures (i.e., going after hot spots; closing Southeast Restricted Area to fishing not already taking place prior to plan implementation to avoid effort creep)
Work with other fishery management bodies and fisheries groups (e.g., GOMLF) to improve coordination and synergy	Consider different strategies for placing limits on end lines: general caps; proportional reductions; tied to high-density/high-risk areas
Rely on SAMS, not DAMS	Lower weak-link strength to make it easier for whales to disentangle themselves
Reward fishermen who minimize end lines; use incentives to encourage participation and innovation	Consider minimum trawl lengths; specifically, consider minimum of two pots for each line set east of the COLREGS line; take into account variable economic impacts of pot limits on different fisheries
Recognize that reducing the extent of vertical lines has safety and efficiency impacts on fishermen	Support research into lineless fishing and other gear modifications
Be mindful of gear conflicts when recommending strategies dependent on reduced surface markings	Work with states to: (1) rewrite regulations mandating one trap per buoy; (2) focus on recent activity on offshore waters; and (3) put caps on traps/lines to control effort
Closures may result in denser concentrations of vertical lines around closed areas, resulting in a	Increase education and outreach to improve fishermen compliance and practices

greater risk of entanglement	
Open up closed areas for innovation on “lineless” fishing	Tie management actions to empirical driver: If the issue is whale concentration, lean towards closures; if the issue is line density, lean towards reductions in line
Avoid closures for the lobster fishery; not a mobile fishery	Target sink gillnet gear off North Carolina; inform action by understanding relationship between fishing style and entanglements
	Consider risk from gillnets and not just vertical lines
	Tie management actions to triggers such as changes in mortality patterns or shifts in fishing practices in or near critical habitat (i.e., recent crabbing in critical Southeast calving habitat)

The Northeast Sub-Group also considered three concept papers put forward by Team members. (See **Attachment 5** for copies of the papers.) Two focused on line reductions and better data-gathering; a third focused on establishing an experimental line-free fishing area. The concepts advanced in the first two papers failed to get broad support, with participants taking exception to the extent of line reductions proposed; concerns that longer traplines may be more risky to whales; insufficient baseline data; and the one-size-fits-all approach. The third paper – the experimental line-free fishing area – led to an extensive discussion on the merits of an incentive-based approach and then triggered a revised proposal that garnered consensus support. A discussion of this proposal is provided in the “Consensus Actions” section below.

### ***Gear Modifications/Markings***

Participants at both sub-group meetings strongly urged NMFS to continue efforts focused on gear modifications and gear markings. Effective gear modifications – while elusive – were seen by many participants as the best strategy to avoid difficult choices on closures and other more restrictive management actions. Several Team members emphasized the importance of involving fishermen in developing gear modifications – both to benefit from their expertise and to increase the likelihood of widespread adoption. Gear markings, meanwhile, were seen by a number of Team members as a potentially effective tool for better understanding gear interactions with whales (e.g., parts of gear, relevant fisheries, locations). Specific comments related to gear modifications and gear markings are summarized below.

- Continue research into the viability of glow rope, other sonar or visual markings (whale recognition) to deter whale entanglements
- Consider opportunities for a coast-wide system of gear markings to better identify the source of entangled line (i.e. not the same marking for the whole coast). Among the considerations to keep in mind when exploring gear markings: focus on linking entanglement events to regions, not individuals; make gear markings large enough to be easily seen from spotter planes; put in place protections that hold fishermen harmless if

gear is found to be entangled on whales but they were compliant; prevent overlap with existing gear marking requirements

- Examine the potential for gear modifications to bottom link breakaways, surface system changes
- Consider convening a workshop to identify and prioritize effective short-term gear-marking strategies; as well, consider developing interim regulations based on the results of the workshop

NMFS committed to review past work on gear markings and assess the potential for moving forward with new gear marking schemes

### ***Research Needs***

Team members had fairly limited discussions on research needs. Below is a quick synopsis of the primary points raised at the two meetings.

- Team members expressed interest in research focused on mining past entanglement gear and data to better understand why some entanglements lead to serious injuries and other encounters tend to be non-consequential. The intent is derive lessons learned that can be applied to future gear modifications and fishing practices.
- Meeting participants expressed strong interest in better understanding the relationship between trap-line length/weight and entanglement frequency and severity. This question is considered to be quite time-sensitive since a shift to longer trap-lines is considered a possible strategy for reducing vertical lines in the water.
- Several participants noted the need to review and likely update the current research priorities summarized in the gear and whale research matrices. NMFS staff specifically requested that Team members review and provide them with any suggested changes.
- Discussions at the Mid-/South-Atlantic Sub-Group meeting called out the need to better to understand the risks to whales associated with gillnets.

More broadly, several participants called on the Agency to make greater use of Team members to push for increased funding for priority research needs.

### **D. Consensus Actions**

Though the meeting was primarily intended as a brainstorming session, several actions were discussed, gained traction and received formal consensus support.

1. The Northeast Sub-Group called on NMFS to prepare a paper for discussion with the Team by April 2010 that explores the opportunity for and ramifications of opening up a now closed area to trap/pot fishermen willing to experiment with line-free fishing techniques. The proposal, a direct response to scientists' statement in 2008 that removing lines from the water is the only certain way to eliminate entanglement risks, aims to use incentives to tap into fishermen's creativity regarding line-less fishing. It also appealed to Team members' interest in stimulating continued focus on innovative gear

modifications. Key aspects of the proposal that garnered consensus support of the subgroup focused on the following:

- The subgroup sought to identify management areas currently closed to trap/ pot gear that could be opened to special gear development.
- The management area proposed by the subgroup for consideration as a Gear Development Area (GDA) centered on the Great South Channel, a restricted area presently seasonally closed to trap/pot fisheries (1 April – 30 June).
- Any proposed approach should focus on opening up to experimental lineless fishing only those areas already closed to trap/pot fisheries. It should not contemplate closing new areas to create these experimental zones.
- Upon the designation, the Great South Channel GDA would be opened to trap/pot gear that is fished line-free except for brief period of attended gear retrieval.

In developing the concept paper, Team members also asked NMFS to consider – among other things – regulatory and enforcement issues, coordination needs with other management agencies, and potential funding to assist in the development of new fishing technology. The approach was generally supported by participants at the Mid-/South-Atlantic Sub-Group meeting, though one Team member suggested the effort would be more fruitful if an area now open and important to fishermen were closed to all but those willing to fish without end lines.

NMFS is expected to develop a concept paper for the Team's consideration within a year.

A copy of the proposal is included as **Attachment 6**.

2. The Northeast Sub-Group unanimously endorsed a proposal by Dan McKiernan, State of Massachusetts representative, that calls on NMFS to modify the weak link requirement known as Cape Cod Bay Rule C. The proposal – intended to unify the text and eliminate confusion in the existing regulations – would increase the weak link requirement in Cape Cod Bay Restricted Area (January 1 – May 15) from 500 to 600 pounds to be consistent with the weak link breaking strength required in other state waters.

## **E. Monitoring**

Both meetings included presentations and limited discussion on the Agency's plans for monitoring.

NMFS staff initiated the discussion by introducing the Agency's primary goals associated with monitoring: determining whether the plan is effective and assessing the extent of industry compliance. NMFS staff emphasized that it relies on a variety strategies to monitor plan implementation – from dockside enforcement and special operations, to partnering with states – and it set out its plans for tracking and informing the Team on future progress. But, they also noted that resource constraints necessarily limit the extent of the effort and forces the Agency to be focused in its monitoring and enforcement activities. Richard Pace also explained the

challenges associated with monitoring plan effectiveness in reducing entanglements due to the extremely small sample sizes. Key points from his presentation are highlighted below:

- Annual counts of entangled whales are relatively small numbers that show enough random variation that make it difficult to detect change in central tendency or a trend during time frames less than decades.
- A different approach – modelling the time between entanglement detections or discoveries of deaths due to entanglements – shows much greater potential to detect changes over less than decadal time spans.
- Evaluations using this approach of data collected during 1999-2007 detected no strong signal to indicate reductions in entanglement deaths during that time interval.
- Simulations indicate that, given a halving in entanglement death rate, the waiting time approach would very likely detect change in less than 5 years where as statistical analysis of annual counts would fail to detect change in greater than half the simulated events.

Team feedback on the Agency's proposed monitoring approach centered on the following topics:

- Several Team members asked that NMFS provide an interim report on Program effectiveness and compliance before 2012. Team members suggested this was essential so the information could inform their ongoing discussions. Team members also pressed for as much detail as possible on both effectiveness and compliance. (Several enforcement officials in attendance emphasized that their data collection efforts are likely to stay centered on enforcement, not compliance.)
- Given the challenges inherent in monitoring large whale interactions, Team members strongly recommended that the Agency rely on multiple methods and sources to track effectiveness and compliance. For example, Team members recommended the Agency look at scarring rates, to complement R. Pace's proposed approach, as a way to monitor program effectiveness. They also suggested that the Agency set up a working group to further consider different monitoring methods.
- Several speakers at the Mid-/South-Atlantic meeting recommended that the program improve transparency related to the identification of retrieved gear. Specific suggestions included: (1) faster updates on gear types found on whales; (2) more informal inclusion of fishermen into gear identification efforts; and (3) better coordination with Canadian officials and fishermen related to gear identification.

Based on the discussion, NMFS plans to establish a work group to help fold scarring rates into R. Pace monitoring efforts.

## **F. Other**

Below is a quick synopsis of other topics and comments discussed at the two sub-group meetings.

- **Canada update.** D. Gouveia provided a brief update at both meetings on related actions in Canada. Key updates included: (1) Canada is developing a Draft Conservation Agreement at the national level focused on whales and cetaceans; (2) the Northeast Region is working with Canada's Maritime Region to look at transboundary issues; the two regions have formed a Species-At-Risk Working Group focused on right whales and others; and (3) implementation of Canada's Species-At-Risk-Act (SARA) –ESA-like national legislation – is expected to lead to stepped up protection of Right whales.
- **Large Whale TRT structure.** Both work groups had brief discussions regarding the Large Whale TRT structure. Generally, participants endorsed meeting by sub-group as a way to have more focused discussions. At the same time, several members suggested it will be important to convene the full Team when discussing management actions related to vertical lines to foster cross-region coordination and consistency.
- **Public comment.** Several members of the public spoke during the public portion of the meeting. Below are comments from each of the sub-group meetings:
  - ***From the Northeast Sub-Group***
    - Gary Mataronas, a Rhode Island fishermen, encouraged the Agency and the Team to assess the results of recent management actions (i.e., sinking groundline) before imposing additional requirements on industry. If more restrictions are needed, he asked that the Agency (1) be as targeted as possible; and (2) account for economic impacts on fishermen.
    - Shawn Brilliant with the Canadian World Wildlife Fund (Halifax, Nova Scotia) encouraged the Team to be deliberate in how it defines and evaluates risk and not conflate the risk of encountering line with the risk to the whale of the consequence of such encounters. This comment was seconded by Mo Brown with the New England Aquarium.
  - ***From the Mid and South Atlantic Sub-Group***
    - David Hilton, Southeast fishery liaison, endorsed a number of strategies for controlling effort, including seasonal and/or triggered closures, minimum trawl sizes, limits on end lines, lower weak-link strength and gear marking. He also suggested that blue crab fishery has been well established for a number of years and is not an emerging fishery.
    - Jerry Conway, a former staffer with Canada's Department of Fisheries and Oceans, strongly encouraged the Team to recognize the negative impact of Canadian fisheries on whale entanglements, and he called on NMFS to work closely with Canadian officials to coordinate and expand their efforts.

## V. Next Steps

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

- Work with the states to make fishery data collection more consistent, comprehensive and credible. NMFS will work directly with states in the Mid-/South-Atlantic, sending out a written request to each fisheries agency articulating its specific needs; state representatives committed to providing the requested data within two months of receiving the written request. Industrial Economics will work directly with the states to plug existing data gaps.
- Prepare a paper for TRT consideration that explores gear-marking - cataloguing current efforts, detailing the pros and cons with more extensive gear-marking schemes, and assessing opportunities for expanded gear marking.
- Prepare within the next year a concept paper that explores the potential for opening up the Great South Channel (or another suitable area) to experimental lineless fishing. The paper is to be distributed to the Team for further discussion.
- Convene work groups to address the following near-term needs: (1) a work group to help fold scarring rates into R. Pace monitoring efforts; and (2) a work group focused on looking into alternatives to the uniform distribution approach in the mid-Atlantic.
- Refine the co-occurrence model to fold in additional considerations related to risk. As well, NMFS is to consider the need for a peer review process to assess the model's ability to identify high risk areas.
- NMFS is to follow with the Atlantic Fishery Management Council, Lobster Management Board and other relevant bodies to improve connections and coordination among the different efforts.
- NMFS is attempting to secure funding to explore or perfect new endline gear modifications and gear marking options. If funding is secured, NMFS intends to work collaboratively with fishermen from the New England and Mid-Atlantic areas. Information gleaned from these gear research and gear marking initiatives will be shared with the TRT at the next full or sub-group meetings, tentatively scheduled for early 2010

Other next steps identified include the following:

- Assess and address VTR reporting gaps (inconsistencies between data fields and lobstermen data; non-reporting loophole for non-multi-species lobster fishermen in Area 1, others);
- Seek to better understand the relationship between trap-line length and serious injury risk to whales;
- Flesh out monitoring plan for discussion at the 2010 TRT meeting;
- Update the ALWTRT web site to include the "Process for Considering Exemptions under the ALWTRP;"

- Consider re-posting maps of right whale sightings data and acoustic detections on the NEFSC's website (Note: Some of that information is currently posted in tabular form.)
- Provide meeting presentations to members upon request;
- Provide comments to Diane Borggaard on the gear and whale research matrices; and,
- Distribute to Team members excerpts on MMPA rules regarding requirements related to PBR, especially when "0," and impacts of Canadian and ship strike interactions;

Additionally, NMFS intends to prepare and distribute to Team members an update on the "Next Steps" over the coming year based on the ideas generated at the two meetings. The Team may be asked to comment by email or teleconference on the update. The Team is not expected to meet again in-person until 2010 when it will be convened to review the results of the co-occurrence model and begin fleshing out preferred options as it relates to priority areas, management actions and monitoring.

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**

**Atlantic Large Whale Take Reduction Team  
Northeast Subgroup Meeting  
April 1 – 2, 2009  
Providence, RI**

**DRAFT AGENDA**

**Meeting Purposes:**

- Brainstorm possible approaches to reducing risk associated with vertical line; set framework for follow-on discussions in 2010
- Discuss strategy for monitoring the ALWTRP (compliance and effectiveness)
- Provide updates on: (1) TRP modification proposals from 2008; and (2) gear and whale research

**DAY 1 (Wednesday, April 1<sup>st</sup>):**

- 10:00-10:30am**      **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*)
- Binder 1.a.  
Binder 1.b.
- 10:30-11:30**      **UPDATE ON ISSUES SINCE 2008 ALWTRT MEETING** (*NMFS and others*)  
*Objective: Provide context for discussions and brief overview of TRT issues*
- Follow-up on outstanding items (*NMFS & ALWTRT*)
    - Specific to Northeast Subgroup
      - Maine Proposal
    - General
      - Other TRP modification proposals from 2008
      - Process for Considering Modifications to the ALWTRP
  - Recent context for TRT discussions (*NMFS*)
    - Entanglement activities over the last year
- Binder 2.a.  
Binder 2.b.
- 11:30-12:00 pm**      **OVERVIEW AND DISCUSSION ON VERTICAL LINES** (*NMFS and CONCUR*)  
*Objective: Review latest information and brainstorm next steps regarding vertical lines*
- ALWTRP PRINCIPLE:** “Reduce risk associated with vertical lines”
- Background information and issues related to vertical lines
    - Quick scan of background materials in binder (*NMFS – 10 minutes*)
      - NMFS’ working draft of a Vertical Line Strategy (matrices)
      - Public comments related to vertical lines
    - NMFS perspective on timeframe for vertical line discussions & management action (*NMFS – 20 minutes with questions*)
- Binder 2.c.  
Binder 2.d.  
Binder 2.e.
- 12:00-12:30 pm**      **LUNCH TO-GO** (Members obtain a to-go lunch from nearby)

- 12:30-1:00 pm**      **Follow-on Discussion: Vertical lines**
- Updated research and development activities (*NMFS, TRT, Others*)
    - Discussion/acknowledgement of any updated research and activities
      - Overview of Gulf of Maine Lobster Foundation (GOMLF) lobster summit (*GOMLF representative*) (*10 minutes w/ questions*)      **Binder 2.f.**
      - State/Federal efforts/issues
        - MA vertical line survey (*5 minutes*)      **Binder 2.g.**
        - ME vertical line survey (*5 minutes*)      **Binder 2.h.**
        - RI vertical line regulations (*5 minutes*)
        - Questions on any of the above (*5 minutes*)
- 1:00-3:00pm**
- Vertical line analysis efforts
    - Fishing density (*Industrial Economics, Inc.*) (*30 minutes w/ questions*)      **Binder 2.i.**
    - Whale distribution and behavior
      - Northeast whale distribution (*NEFSC*) (*30 minutes w/ questions*)
      - Right whale sightings/unit effort analysis in Maine Lobster Zones (Kraus) (*15 minutes w/ questions*)
      - Cape Cod Bay research update (Mayo) (*15 minutes w/ questions*)
    - Illustration of co-occurrence between fishing effort & whale distribution (*Industrial Economics, Inc.*) (*30 minutes w/ questions*)
- 3:00-3:15pm**      **BREAK**
- 3:15-5:45pm**
- Brainstorm ideas related to vertical lines around following topics<sup>1</sup> (*TRT*)
    - **Research Needs.** What do we know about the risk associated with vertical lines related to gear and whales? What are the most important uncertainties (i.e., whale distribution, fishing effort, gear configuration) and how do we fill these data gaps?
    - **Risk levels.** What are the different risk levels or categories of risk (e.g. high, medium, low)? Do they vary by species, behavior, season, fishery, area?
    - **Management Options.** What are the appropriate management options to address risk associated with vertical lines (reducing number of vertical lines, gear modifications)? Should these vary by fishery, area, season, etc.? What associated gear marking or monitoring should be considered for these options?
    - **Targets.** How much reduction is enough/what is the appropriate target? Should this vary by area?
    - **Next Steps.** What are the productive next steps that will help NMFS develop and put in place an effective vertical line strategy? What are the necessary attributes to incorporate into any proposals addressing vertical lines?
    -
- 5:45-6:00**      **OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT**
- 6:00**      **ADJOURN; OPTIONAL EVENING SESSION**

<sup>1</sup>NMFS is committed to fostering an open-ended brainstorming session. To that end, NMFS will distribute any concept papers from Team members at an appropriate time during the discussion rather than distributing them beforehand. To date, NMFS has received two concept papers for the Northeast ALWTRT Subgroup meeting.

## **DAY 2 (Thursday, April 2nd):**

**8:00-8:15AM** WELCOME, AGENDA REVIEW AND RECAP FROM DAY ONE (*CONCUR*)

**8:15-2:00PM** FOLLOW-ON DISCUSSION: VERTICAL LINES

(WITH BREAK &  
LUNCH)

- *Objective:* Review latest information and brainstorm next steps regarding vertical lines
  
- Continue brainstorming discussion from Day One (*TRT*)
  - **Research Needs.** What do we know about the risk associated with vertical lines related to gear and whales? What are the most important uncertainties (i.e., whale distribution, fishing effort, gear configuration) and how do we fill these data gaps?
  - **Risk levels.** What are the different risk levels or categories of risk (e.g. high, medium, low)? Do they vary by species, behavior, season, fishery, area?
  - **Management Options.** What are the appropriate management options to address risk associated with vertical lines (reducing number of vertical lines, gear modifications)? Should these vary by fishery, area, season, etc.? What associated gear marking or monitoring should be considered for these options?
  - **Targets.** How much reduction is enough/what is the appropriate target? Should this vary by area?
  - **Next Steps.** What are the productive next steps that will help NMFS develop and put in place an effective vertical line strategy? What are the necessary attributes to incorporate into any proposals addressing vertical lines?

**2:00-3:15**

(WITH BREAK)

**DISCUSS OPTIONS FOR MONITORING ALWTRP** (*NMFS*)

*NMFS to present overview of recent GAO report related to monitoring (compliance and effectiveness), and status of a strategy to monitor the ALWTRP. Opportunity for comment.*

- Overview of GAO Report
- Monitoring plan strategy (*NMFS*)
  - Effectiveness of the ALWTRP
  - TRT discussion and comment

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

**NEXT STEPS** (*NMFS and CONCUR*)

- 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?

**3:45**

**OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT**

**4:00**

**ADJOURN**

**Atlantic Large Whale Take Reduction Team  
Mid/South Atlantic Subgroup Meeting  
April 28 – 29, 2009  
Philadelphia, PA**

**DRAFT AGENDA**

**Meeting Purposes:**

- Brainstorm possible approaches to reducing risk associated with vertical line; set framework for follow-on discussions in 2010
- Discuss strategy for monitoring the ALWTRP (compliance and effectiveness)
- Provide updates on: (1) TRP modification proposals from 2008; and (2) gear and whale research

**DAY 1 (Tuesday, April 28):**

**10:00-10:30am 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*)

Binder 1.a.  
Binder 1.b.

**10:30-11:30 UPDATE ON ISSUES SINCE 2008 ALWTRT MEETING (NMFS and others)**  
*Objective: Provide context for discussions and brief overview of TRT issues*

- Follow-up on outstanding items (*NMFS & ALWTRT*)
  - Specific to Mid-Atlantic/Southeast Subgroup
    - North Carolina Proposal
    - Southeastern U.S. Atlantic Shark Gillnet Proposal
  - General
    - Other TRP modification proposals from 2008
    - Process for Considering Modifications to the ALWTRP
- Recent context for TRT discussions (*NMFS*)
  - Entanglement activities over the last year

Binder 2.a.  
Binder 2.b.

**11:30-12:00 pm OVERVIEW AND DISCUSSION ON VERTICAL LINES (NMFS and CONCUR)**  
*Objective: Review latest information and brainstorm next steps regarding vertical lines*

**ALWTRP PRINCIPLE: “Reduce risk associated with vertical lines”**

- Background information and issues related to vertical lines
  - Quick scan of background materials in binder (*NMFS – 10 minutes*)
    - NMFS’ working draft of a Vertical Line Strategy (matrices)
    - Public comments related to vertical lines
  - NMFS perspective on timeframe for vertical line discussions & management action (*NMFS – 20 minutes with questions*)

Binder 2.c.  
Binder 2.d.  
Binder 2.e.

**12:00-12:30 pm LUNCH TO-GO (Members obtain a to-go lunch from nearby)**

**12:30-1:00 Follow-on Discussion: Vertical lines**

- pm**
- Updated research and development activities (*NMFS, TRT, Others*)
    - Discussion/acknowledgement of any updated research and activities
      - State/Federal efforts/issues
        - Florida vertical line regulations (*5 minutes*)
        - North Carolina vertical line regulations (*5 minutes*)
        - Increased blue crab trap/pot fishing effort in core calving area (*5 minutes*)
      - Questions on any of the above (*15 minutes*)

- 1:00-3:00pm**
- Vertical line analysis efforts
    - Fishing density (*Industrial Economics, Inc.*) (*30 minutes w/ questions*) Binder 2.i.
    - Whale distribution (*NMFS*) (*30 minutes w/ questions*)
    - Illustration of co-occurrence between fishing effort & whale distribution (*Industrial Economics, Inc.*) (*30 minutes w/ questions*)
    - Applicability of model to Mid/South Atlantic (*30 minutes*)

**3:00-3:15pm Break**

- 3:00-5:45pm**  
(WITH BREAK)
- Brainstorm ideas related to vertical lines around following topics<sup>1</sup> (*TRT*)
    - **Research Needs.** What do we know about the risk associated with vertical lines related to gear and whales? What are the most important uncertainties (i.e., whale distribution, fishing effort, gear configuration) and how do we fill these data gaps?
    - **Risk levels.** What are the different risk levels or categories of risk (e.g. high, medium, low)? Do they vary by species, behavior, season, fishery, area?
    - **Management Options.** What are the appropriate management options to address risk associated with vertical lines (reducing number of vertical lines, gear modifications)? Should these vary by fishery, area, season, etc.? What associated gear marking or monitoring should be considered for these options?
    - **Targets.** How much reduction is enough/what is the appropriate target? Should this vary by area?
    - **Next Steps.** What are the productive next steps that will help NMFS develop and put in place an effective vertical line strategy? What are the necessary attributes to incorporate into any proposals addressing vertical lines?

**5:45-6:00 OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT**

**6:00 ADJOURN; OPTIONAL EVENING SESSION**

<sup>1</sup>NMFS is committed to fostering an open-ended brainstorming session. To that end, NMFS will distribute any concept papers from Team members at an appropriate time during the discussion rather than distributing them beforehand. To date, NMFS has received two concept papers for the Northeast ALWTRT Subgroup meeting.

## **DAY 2 (Wednesday, April 29):**

**8:00-8:15AM** WELCOME, AGENDA REVIEW AND RECAP FROM DAY ONE (*CONCUR*)

**8:15-2:00PM** FOLLOW-ON DISCUSSION: VERTICAL LINES

(WITH BREAK &  
LUNCH)

- *Objective:* Review latest information and brainstorm next steps regarding vertical lines
  
- Continue brainstorming discussion from Day One (*TRT*)
  - **Research Needs.** What do we know about the risk associated with vertical lines related to gear and whales? What are the most important uncertainties (i.e., whale distribution, fishing effort, gear configuration) and how do we fill these data gaps?
  - **Risk levels.** What are the different risk levels or categories of risk (e.g. high, medium, low)? Do they vary by species, behavior, season, fishery, area?
  - **Management Options.** What are the appropriate management options to address risk associated with vertical lines (reducing number of vertical lines, gear modifications)? Should these vary by fishery, area, season, etc.? What associated gear marking or monitoring should be considered for these options?
  - **Targets.** How much reduction is enough/what is the appropriate target? Should this vary by area?
  - **Next Steps.** What are the productive next steps that will help NMFS develop and put in place an effective vertical line strategy? What are the necessary attributes to incorporate into any proposals addressing vertical lines?

**2:00-3:15**

(WITH BREAK)

**DISCUSS OPTIONS FOR MONITORING ALWTRP** (*NMFS*)

*NMFS to present overview of recent GAO report related to monitoring (compliance and effectiveness), and status of a strategy to monitor the ALWTRP. Opportunity for comment.*

- Overview of GAO Report
- Monitoring plan strategy (*NMFS*)
  - Effectiveness of the ALWTRP
  - TRT discussion and comment

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

**NEXT STEPS** (*NMFS and CONCUR*)

- 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?

**3:45**

**OPPORTUNITY FOR NON-TRT MEMBERS TO COMMENT**

**4:00**

**ADJOURN**

**ATTACHMENT 2**

**ALWTRT MEETING MATERIALS**  
*Northeast Subgroup, Providence, RI*  
*April 1-2, 2009*

*Mid/South Atlantic Subgroup, Philadelphia, PA*  
*April 28-29, 2009*

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**MEETING BINDER TABLE OF CONTENTS**

**1. General Meeting Information**

- a. Draft Agenda
- b. Ground Rules
- c. 2009 TRT Member Roster
- d. Regional TRT Subgroup Roster
- e. CONCUR Facilitator Biographies

**2. ALWTRT Meeting and Follow-Up/Associated Materials**

- a. Maine ALWTRT Subgroup comments on 2008 Maine Exemption Proposal
- b. NMFS Process for Considering Exemptions under the ALWTRP
- c. NMFS Draft Large Whale Research Matrix (note: in pocket of binder)
- d. NMFS Draft Gear Research Matrix (note: in pocket of binder)
- e. Summary of Vertical Line Comments Received on Proposed Rule for Sinking Groundline Delay (note: these comments were not included in the Final Rule)
- f. Gulf of Maine Lobster Foundation Lobster Summit Meeting Summaries and Materials (note: a presentation will be provided at the Northeast Subgroup Meeting only)
- g. Massachusetts DMF Vertical Line Annual Recall Log Information (note: a presentation will be provided at the Northeast Subgroup Meeting only)
- h. Maine DMR Vertical Line Survey Information (note: a presentation will be provided at the Northeast Subgroup Meeting only)
- i. Vertical Line Presentation from 2006 ALWTRT meeting (contains background information on the model)
- j. Presentations (to be provided at meeting)

**3. Large Whale Entanglements & Other Background Information**

- a. Large Whale Entanglement and Ship Strike Report 2006
- b. Large Whale Entanglement and Ship Strike Report 2007
- c. 2008 & 2009 (through March 17) Preliminary Large Whale Entanglement and Ship Strike Summary
- d. Summary of NMFS Gear Analyses (1997-2007) (note: in pocket of binder)

## **Supplemental Documents Provided at the Meeting(s)**

- Scar-Based Inference Into Gulf of Maine Humpback Whale Entanglement: 2003-2006
- Implemented DAM Actions 2002-April 2009
- Provincetown Center for Coastal Studies – Coded Wire Tag Gear Marking Project Update
- ALWTRP Vertical Line Rule Development and Plan Monitoring Schedule
- North Carolina Administrative Code TITLE 15A
- An Automated RFID and GPS Fixed Gear ID System for Onboard Realtime Data Collection (UNH and Blue Water Concepts)
- A Proposal to Open a Management Area Presently Closed to Trap/Pot Fisheries to Stimulate Development of Ropeless Fishing (supported by Northeast Subgroup)
- Southeast Gillnet Proposal Status (NMFS)
- Information Requested from States on Vessel Activity and Vertical Line Use
- Addressing Risk to Endangered Whales from Endlines In New England Lobster Fisheries (Ocean Conservancy Concept Paper)
- A Way Forward – Reducing Large Whale Entanglements in the Gulf of Maine Lobster Fishery (Scott Kraus Concept Paper)
- Rhode Island Vertical Line Regulations
- A Way Forward: Addressing Risk to Endangered Whales from Endlines Used in Trap/pot Fisheries in New England (Human Society of the US Concept Paper)

## **Presentations Provided at the Meeting(s)**

- 2009 ALWTRT – Follow-up on Outstanding Issues
- Monitoring the ALWTRP
- Developing an Indicator of the Co-Occurrence of Whales and Vertical Lines
- Update on the Vertical Line Analysis Model
- Commercial Trap/Pot Fishing in Georgia Ocean Waters

ATTACHMENT 3

FINAL

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To: ALW TRT Members  
From: Scott McCreary and Bennett Brooks, CONCUR, Inc.  
Date: March 15, 2009  
Re: Proposed Ground Rules

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Attached are proposed Ground Rules for the April 1-2 and 28-29, 2009, Atlantic Large Whale Take Reduction Team sub-group meetings. These ground rules are substantially similar to the ones used to guide the 2008 Team meeting, but they have been updated slightly to reflect the following changes:

- Revise the section on decision-making to amplify the proposed approach related to straw votes. The Key Outcomes section has also been expanded to outline the approach for summarizing straw votes in meeting write-ups.
- Update the section on the use of alternates to be consistent with NMFS policy.
- Add some detail regarding the role of the Agenda Subcommittee.
- Combine what used to be two distinct sets of ground rules into one consolidated version.

These Ground Rules are intended to foster and reinforce constructive interaction and deliberation among 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.

**Next Steps:**

These Ground Rules will be presented for confirmation at the April sub-group meetings. We ask that you review these carefully prior to the meeting and come prepared to discuss any questions and/or recommended changes you might have.

**Atlantic Large Whale Take Reduction Team**  
**Northeast Sub-Group Meeting: April 1 – April 2, 2009, Providence, RI**  
**Mid-/South-Atlantic Sub-Group Meeting: April 28-29, 2009, Philadelphia, PA**

**PROPOSED GROUND RULES**

*(These proposed Ground Rules represent a compilation of the two different sets used to guide the April 2009 Team deliberations. These have been updated slightly since the 2008 meeting.)*

1. Collaboration. Below are a series of ground rules intended to foster collaborative, effective and respectful Team 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.
  
2. Decision-Making: The Atlantic Large Whale Take Reduction Team (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. 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.
  
2. Membership: Membership will reflect a balance by interest, region, and sector. Members are encouraged to reflect their own viewpoints and the viewpoints of their constituencies. Team members are encouraged to attend all TRT meetings.
  
3. Alternates: For those members unable to attend a meeting due to scheduling conflicts, their designated alternate is invited to attend and speak on behalf of the member. [Names of

candidate alternates are to be submitted to NMFS for review and approval at least one month prior to the TRT meeting.] 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.

4. Meeting Agendas: An Agenda Subcommittee will be convened several weeks prior to each TRT meeting to provide input to NMFS on the draft agenda. Proposed meeting agendas are then circulated to Team members prior to each TRT meeting and finalized by the Team during the first portion of the meetings.
5. Meeting Summaries: The facilitation team will prepare Key Outcomes Memoranda (KOM) following each meeting. The KOM will endeavor to summarize key decisions made, issues discussed, and the next steps identified. It will not serve as a meeting transcript nor will it typically attribute comments or suggestions to specific individuals. In general, the KOM will characterize the extent of consensus reached on important management options. In such instances, the summary will make clear the degree of consensus across various groups and not just present a straight numeric tally.

In the event TRT members believe the KOM significantly misrepresents particular decisions, issues, or next steps, they are requested to notify the project facilitators or convenors. The project facilitators or convenors will review the matter and use their professional judgment to determine if revisions are needed. If so, they will prepare a revised KOM and distribute it in a timely fashion to all TRT members.

6. Media Contact: 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. However:
  - 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.
7. Role of Facilitation Team. The TRT facilitation team (CONCUR, Inc.) is non-partisan and will not act as an advocate for particular outcomes. CONCUR will strive to enforce the ground rules in a consistent, fair and firm manner and ensure that the meeting stays on track. CONCUR will keep a list of those waiting to speak, but may opt to take speakers out of turn to foster focused discussions on a particular topic. The facilitation team may, at its discretion, call for breaks to refine meeting strategies to foster effective TRT deliberations. The facilitators may also recommend the use of small-group breakout sessions.
8. 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**

## Information requested from States on vessel activity and vertical line use

In order to develop estimates of vertical line use by area, the type of data needed in the near-term include:

1. Number of active fishermen by:
  - a. Fishery
  - b. Month (Need month-by-month estimates)
  - c. Geography (Divided into particular reporting areas to extent practical.  
Also, we would need map/GIS data illustrating the spatial divisions used.)
  
2. Information on amount and use of gear
  - a. For trap/pot fishery:
    - i. Number of traps fished in designated regions
    - ii. Number of traps per trawl  
(information on variation within fishery is also helpful; for example., 40% fish singles while 60% fish doubles)
    - iii. Number of endlines per trawl
    - iv. Length of groundline between traps configured in a trawl
    - v. Soak time within time period
    - vi. Seasonal variation for each of the above data (particularly number of traps fished)
  
  - b. For anchored gillnet fishery:
    - i. Number of strings fished
    - ii. Number of panels per string
    - iii. Size of panels (length/height)
    - iv. Distance between panels
    - v. Number of end/surface lines attached to each string
    - vi. Soak time within time period (e.g., number of days gear in water by month)
    - vii. Seasonal variations in the above data
  
- The focus of the data collection is on the most recent year for which data are comprehensive in order to develop a good baseline. To the extent practical, historical data (divided on an annual basis) back to 2000 would also be helpful.
  
- In the longer-term, to provide more systematic data, States could add new fields in logbooks and other reporting systems. For instance, States could obtain data on the number of endlines fished directly from fishermen.

**ATTACHMENT 5**

## **Addressing Risk to Endangered Whales from Endlines in New England Lobster Fisheries**

Ocean Conservancy Proposal for Consideration by the NE Subgroup of the  
Atlantic Large Whale Take Reduction Team at the April 2009 Meeting

The premise of this proposal is that removal of a measurable amount of endlines from the water column throughout the Gulf of Maine will reduce the risk of entanglement to endangered large whales. The National Marine Fisheries Service provided summary data to the Atlantic Large Whale Take Reduction Team (ALWTRT) in April 2008. Entanglement events for which gear type and location where gear was set is known are plotted in Figure 1. These data, as well as recent analyses of gear and whale distribution in the Gulf of Maine by Goode (2008), suggest that entanglements of large whales in lobster gear occur throughout the Gulf of Maine, from inshore waters to the U.S. Exclusive Economic Zone. Therefore, a comprehensive, broad-based endline reduction strategy is needed to reduce mortalities and serious injuries of large whales, as required by section 118 of the Marine Mammal Protection Act (MMPA).

This proposal is a conceptual approach to addressing risk to endangered large whales from endlines associated with lobster fishing gear. If there is agreement to this proposal in concept by the Atlantic Large Whale Take Reduction Team (ALWTRT), further discussions will be needed to determine how best to implement this proposal at the state and federal level to achieve the stated goal.

*Goal: To significantly reduce entanglement risks to whales by implementing a 50% reduction in the number of endlines used by lobster fishermen throughout the Gulf of Maine, implemented immediately at the state and federal level, coupled with increased data collection efforts.*

Endline reduction measures could include either one or both of the following:

- A proportional trap reduction, achieved through a limit on the number of trap tags that can be issued to each permit holder or other similar effort control measure, with associated actions taken as necessary to ensure that regulatory and/or legislative measures implemented will indeed reduce the overall number of endlines set in the water.
- An end line reduction, achieved by “trawling up gear” through a requirement to have a minimum number of traps affixed to either one endline (for nearshore waters) or two endlines (for offshore waters).

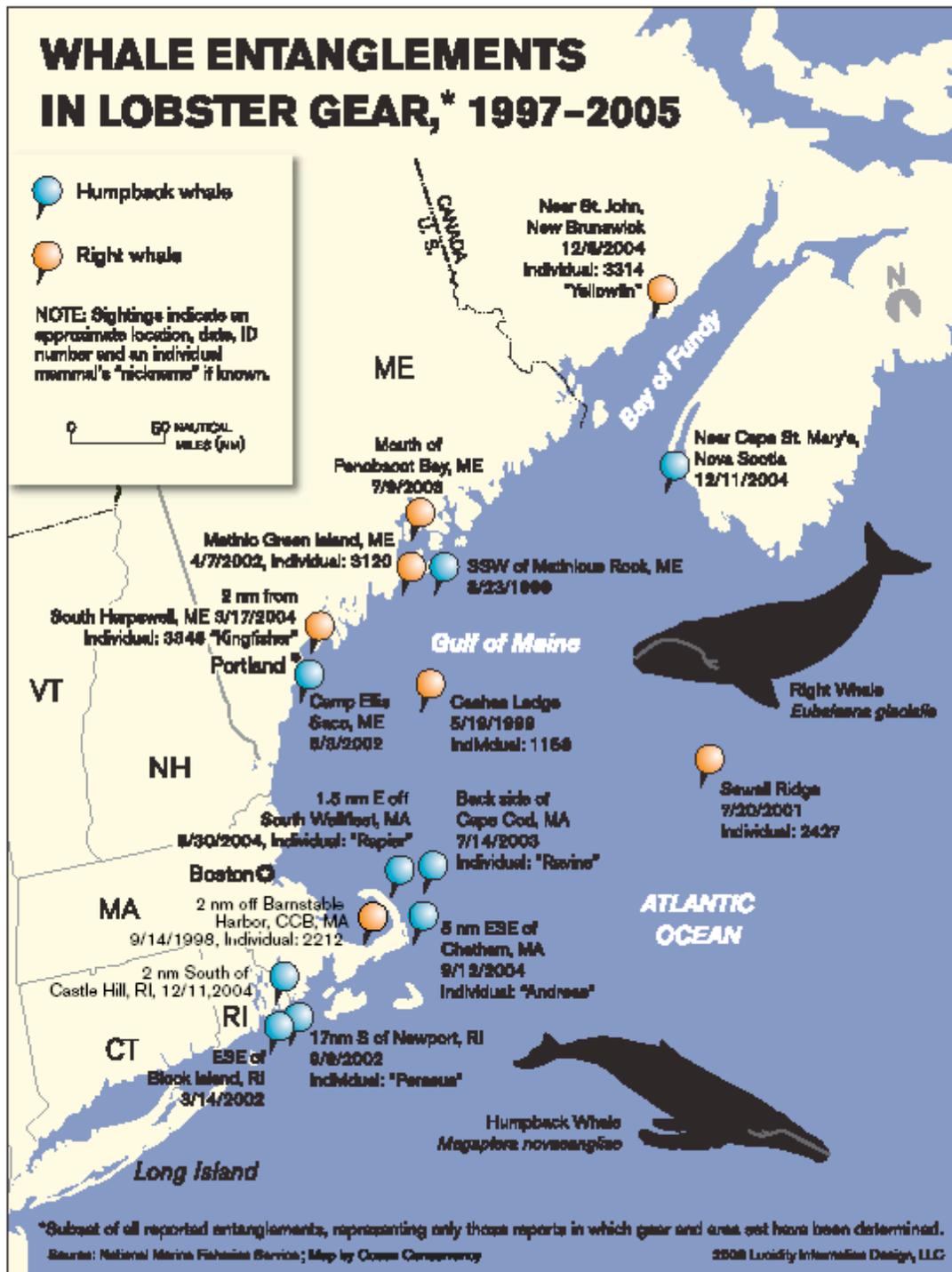
Spatial and temporal information on numbers of traps and endlines currently being used by lobstermen throughout the Gulf of Maine is minimal. However, monitoring the actual number of endlines set in the water is an essential component of measuring the effectiveness of any endline reduction strategy with respect to risk to whales. As such, implementation of this strategy should include expanded data collection programs to approximate both the actual number of traps set by each permit holder and the number of traps set per endline, by area and time. This would be achieved through self-reporting at the trip level by representative sampling of fishermen in all states, and validation of self-reported data achieved through at-sea monitoring via fishery observers and/or electronic monitoring.

*If these measures are successfully implemented by the appropriate state and federal agencies in accordance with the ALWTRT's recommendations, based on the best available science available to the TRT at the time these recommendations were made, the ALWTRT will acknowledge that the implemented measures are an acceptable risk reduction strategy for large whales, in partial fulfillment of the mandates of the MMPA.*

Reference

Good, Caroline. 2008. Spatial ecology of the North Atlantic right whale (*Eubaleana galcialis*). Ph.D. Dissertation, Duke University. 135 pp. Available at: <ftp://moray.ml.duke.edu/Uploads/Caroline/>.

Figure 1. Whale Entanglements in Lobster Gear, 1997-2005



## **A Way Forward: Addressing Risk to Endangered Whales from Endlines Used in Trap/pot Fisheries in New England**

A proposal for Consideration by the NE Subgroup of the  
Atlantic Large Whale Take Reduction Team at the April 2009 Meeting

### Background:

Right whales and humpback whales are both entangled in numbers that, according to their NMFS stock assessments, exceed their respective PBR's. Risk of entanglement comes from both groundline and vertical lines. In 2007, the NMFS issued regulations requiring the use of sinking groundlines in significant portions of New England waters. The ALWTRT has reinforced the need to address risk from vertical line. There is an urgent need to develop methods of reducing that risk. A proposal by scientists at the 2008 TRT meeting stated that the only certain way to remove risk is to remove lines from the water. The scientists emphasized at the meeting that this perspective should impact both the TRP's long-term focus and NMFS' research priorities (Scientists 2008).

### Proposal Goal

This proposal seeks to encourage research and innovation in line-free fishing and to reduce risk in an area where there is current risk to right whales.

### General Proposal Outline

- Identify an area where there is predictable overlap of right whales and fishing gear at least seasonally. Such an area can be seen in Fisheries Statistical Reporting Area 20 which is in the Western Gulf of Maine (Good 2008, Pace and Merrick 2008, Weinrich et al 2000 & Weinrich et al 2008). This area, which overlaps Jeffreys Ledge, has also been the subject of numerous annual Dynamic Area Management (DAM) actions from fall through early spring as recently as February of this year. (NMFS undated). The exact boundaries for management action described below are subject to discussion but should include at least these areas frequently subject to DAM.
- Close the designated area during fall and winter (from September through February of the following year) to all but gear that is being fished line-free. This may entail designation as a special research area.

### Outcome

If this proposal is implemented, it will have 3 potential benefits: (1) encourage innovation in developing line-free fishing strategies by limiting access to the area to only those who can fish use line-free gear; (2) allow feasibility testing and proof of concept; and (3) reduce risk in an area of noted overlap in use by both fixed gear and whales.

### References

Good, C.P., 2008. Spatial Ecology of the North Atlantic Right Whale (*Eubalaena Glacialis*) Doctoral Dissertation available at: <ftp://moray.ml.duke.edu/Uploads/Caroline/>

NMFS. Undated. DAM Actions 2002-2007 Available at:  
<http://www.nero.noaa.gov/whaletrp/plan/dam/index.html>

Pace, R. and R. Merrick. 2008. Northwest Atlantic Ocean Habitats Important to the Conservation of North Atlantic Right Whales (*Eubalaena glacialis*) NOAA/NEFSC. Ref. Doc 08-07; 24pp. Available at:  
<http://www.nefsc.noaa.gov/publications/crd/crd0807/crd0807.pdf>

Scientists 2008. Biological Perspective on Large Whale-Fishing Gear Conflicts in the Northwest Atlantic. Presented as a position paper by multiple authors to the ALWTRP Meeting April 2008. Summary available at:  
[http://www.nero.noaa.gov/whaletrp/KEY%20OUTCOMES%20-%20FINAL%20-%207\\_2\\_08.pdf](http://www.nero.noaa.gov/whaletrp/KEY%20OUTCOMES%20-%20FINAL%20-%207_2_08.pdf) page 3.

Weinrich, M.T, R.D. Kenney, and P.K. Hamilton. 2000. Right Whales (*Eubalaena glacialis*) on Jeffreys Ledge: A Habitat of Unrecognized Importance? Mar. Mamm. Sci. 16: 326-337.

Weinrich, M., K. Sardi, C. Pekarck, and J. Tackaberry. 2008. Fall Boat-Based Surveys on Jeffreys Ledge for North Atlantic Right Whales: Distribution, Abundance, Behavior, Ecology, and Photo-Identification: September 2004 – December 2007 with an emphasis on September 2004 – January 2006. Report to National Marine Fisheries Service Northeast Fishery Science Center in fulfillment of Award # NA04NMF4720401. 145 pp.

**Concept Paper Submitted to NMFS by Scott Kraus, New England Aquarium,  
on March 10, 2009, for Distribution at the April 2009 Northeast Subgroup Meeting**

## **A Way Forward – Reducing Large Whale Entanglements in the Gulf of Maine Lobster Fishery**

Right whales and humpbacks continue to become entangled in fishing gear in the U.S. and Canada. Between December 1, 2008 and January 30, 2009, 5 right whales were observed carrying fishing gear in the coastal waters of the southeastern U.S. One of those entanglements was in Canadian gear, and the other four have not yet been identified. Two whales were disentangled by multi-agency teams, but two others are carrying life-threatening wraps of rope.

The annual frequency of entanglement interaction averages nearly 14% when evaluated crudely (percentage of sighted animals annually with newly detected entanglement scars) and as high as 23% on average when a subset of adequately photographed animals are compared from one year to the next. With a population size presently at around 400 animals, these proportions could represent an annual number of 56 to 92 entanglement interactions. Only a small percentage of these entanglements lead to serious injuries or mortalities, and the lethal and sublethal effects of entanglements on right whales still needs study. Nevertheless, large numbers of entanglements correlate with the probability that lethal and/or serious entanglements will occur, so reducing the total number of entanglements is one strategy for reducing risk to right whales.

Another strategy would be to make all entanglements insignificant, through gear modifications that do not damage whales, or allow whales to free themselves. Research on endline alterations that would reduce entanglement risk to whales in fishing gear are ongoing, but no modifications are ready for implementation. Existing mandated modifications (weak links, etc) have not proven effective at eliminating entanglements or reducing their severity, although testing effectiveness is difficult. Sinking groundlines will go into effect this spring, but at the moment there is no plan for reducing risk from endlines.

Therefore, given the lack of appropriate gear modifications, and the fact that we still do not fully understand how, when or where whales are entangled, the only way in the short term to reduce entanglement risk to whales is to reduce the amount of gear in the water.

To immediately reduce entanglement risk to whales, we propose a two pronged approach as follows: 1) a proportional 60% reduction in traps for the Gulf of Maine, the elimination of single traps, a comprehensive gear marking by zone/area and gear type, the development of a peer-reviewed affidavit system for monitoring the number of traps, and a moratorium on further whale conservation oriented gear modifications for a five year period and 2) an aggressive gear research program on alternative gear and fishing methods that would reduce or eliminate risk of mortality to large whales as described below.

- 1) The quickest way to reduce risk from endlines is a rapid reduction in those lines. We propose a proportional 60% across the board reduction in traps, from the coast

to the EEZ to go into effect in 2010. Implementation of these reductions will occur by the states for inshore waters and by NMFS for all offshore trap fisheries. This means if a fisherman has 800 traps in the water, he will now be fishing 320. If a fisherman has 200 traps in the water, he will now be fishing 80. These gear reductions will be based upon a zone by zone baseline, established through a peer reviewed audit as follows.

- a. Auditing: Each fisherman must get two affidavits signed by their colleagues testifying to the amount of traps that they fished in 2009 (independent of the number of trap tags owned) - this number serves as the baseline from which the proportional reductions will occur.
- b. The audits must be on file with the state enforcement authorities and be made available to the public.

Although this reduction may appear draconian to some fishermen, there is mounting evidence that these reductions may actually increase profits. This is because several studies in the U.S. and Canada, and the example of other lobster fisheries around the world, suggest that lobster catches will not diminish much, if at all, and operating costs will be substantially reduced.

- 2) Along with this reduction, we propose eliminating single traps to reduce the temptation to break up all trap trawls into singles. However, the zone councils and relevant states should develop a monitoring program for each area to determine the proportion of traps fished as doubles, triples, and larger trawls. This data must be developed and maintained so that it is available to scientists and managers to evaluate entangling gear risk.
- 3) To stabilize the fishery in the context of whale entanglements, we propose a 5 year moratorium on further alterations in fishing gear aimed at whale conservation.
  - a. During the five year moratorium, we must maximize the information and our understanding of how whales are entangled. To that end, we propose a zone by zone gear marking system that will be easy to identify by enforcement and biologists, and that can be implemented by 2010 with minimal cost across the entire fishery. The zone councils and other New England state lobster fishing management authorities should be tasked with developing this to maximize utility and minimize cost to the fishermen.
  - b. Also during the five year moratorium, we propose an aggressive research program on seasonal/area risk assessment, endline modifications, and alternative fishing methods. This work will take place in conjunction with the fishing associations such as MLA. We also expect the gear marking program developed by the zone councils to provide much better information on the locations and circumstances of entanglements that occur in the region.
  - c. In addition, comparable marking and gear reduction options should be explored for gillnets, hagfish, and crab traps. These fisheries are different and reduction options may not be as effective, but gear marking should be

mandatory, and coordinated with the lobster zone marking system proposed above.

- d. We also propose to work with Canadian fishermen to transfer information on the entanglement problem, including gear modifications, whale behavior, risk by area and time, and other options for reducing risk.

**ATTACHMENT 6**

## **A Proposal to Open a Management Area Presently Closed to Trap/Pot Fisheries to Stimulate Development of Ropeless Fishing**

Supported by the NE Subgroup of the  
Atlantic Large Whale Take Reduction Team  
2 April 2009

### Background:

Right whales and humpback whales are both entangled in numbers that, according to their NMFS stock assessments, exceed their respective PBR's. Risk of entanglement comes from both groundline and vertical lines. In 2007, the NMFS issued regulations requiring the use of sinking groundlines in significant portions of New England waters. The ALWTRT has reinforced the need to address risk from vertical line. There is an urgent need to develop methods of reducing that risk. A proposal by scientists at the 2008 TRT meeting stated that the only certain way to remove risk is to remove lines from the water. The scientists emphasized at the meeting that this perspective should impact both the TRP's long-term focus and NMFS' research priorities.

### Proposal Goal

This proposal seeks to encourage research and innovation in line-free fishing.

### General Proposal Outline

- The subgroup sought to identify management areas currently closed to trap/ pot gear that could be opened to special gear development.
- The management area proposed by the subgroup for consideration as a Gear Development Area (GDA) is the Great South Channel restricted area presently seasonally closed to trap/pot fisheries (1 April – 30 June).
- This proposal does not contemplate any additional closures for the purpose of advancing the goals of this development strategy, but should instead make use of areas already closed to trap/pot fisheries.
- Upon the designation, the Great South Channel GDA would be opened to trap/pot gear that that is fished line-free except for brief period of attended gear retrieval.

### Outcome

When this proposal is implemented it will have 2 benefits: (1) to encourage innovation in developing line-free fishing strategies by limiting access to the designated area only to those fishermen who can fish with line-free gear and (2) allow room to innovate and to test feasibility.

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After the subgroup discussed and accepted the above proposal for stimulating innovative methods to develop and deploy traps or pots without lines in the water column (except for tended retrieval). The subgroup meeting on 2 April 2009 conducted a straw vote and unanimously requested that NMFS develop a concept paper that considers how an area currently closed to trap/pot fisheries could be opened to those fisheries if fishermen set

gear that does not place line in the water column except for the limited time when gear is being retrieved.

The instructions from the subgroup were as follow:

In the review and preparation of the concept paper NMFS should be guided by the spirit of this proposal but should also have latitude to consider practical alternatives to any part of the proposed plan. The concept paper should provide an area-specific context regarding potential gear conflicts and a history of the management of that area and should provide a vision of

- the definition of ropeless gear and broad guidance regarding acceptable gear for use in the GDA
- regulatory and enforcement issues,
- coordination with other management agencies
- potential funding to assist in the development of new fishing technology
- partnership between NMFS and individual fishermen to assist with coordination of technological development and implementation
- innovative incentives to participate
- a system to document and assess of all aspect of technological developments, catch, and gear loss (must not be burdensome to fishermen)
- reporting of monitoring results to ALWTRT
- steps to implement of the above plan, including the anticipated duration of the plan and timetable for implementation
- changes in risk to whales if the closed area is opened to ropeless gear as defined by the concept paper

The subgroup requests that the concept paper be made available to the entire ALWTRT before the next ALWTRT meeting or 31 March 2010, which ever comes first.

The subgroup further requests that NMFS report to the next meeting of the S.E. subgroup the above concept and actions.