

MINUTES
Atlantic Scientific Review Group
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Mote Marine Laboratory
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8 February 2012

1. Introduction

The meeting was called to order at 8:45am. Gordon Waring (NEFSC) welcomed everyone and introduced the two new SRG members – Drs. James (Buddy) Powell and Michael Moore. SRG chairperson Andy Read also made some general opening statements and attendees all introduced themselves. Randy Wells went over housekeeping issues.

2. Right Whales

Read explained that the business of the day was to review right whale programs and research with the goal of making the SRG to be as helpful as possible to NMFS. The SRG will convene at the end of the day to draft right whale recommendations. Mike Simpkins (NEFSC) said the timing of the review and forthcoming recommendations is good for NMFS. Because of key personnel changes as well as increasingly tight funding constraints NMFS is in a planning stage and is at the point of making tradeoff decisions.

2.1 Management

- **Atlantic Large Whale Take Reduction Team (ALWTRT)**

David Gouveia (NERO) explained that at the 2003 ALWTRT meeting, the team agreed by consensus to two overarching principles associated with reducing large whale entanglement risks in commercial trap/pot gear, reducing entanglement risks associated with groundlines and reducing entanglement risks associated with vertical lines (endlines or buoy lines). The team focused first on addressing the groundline entanglement risk. This led to a lengthy rule development process that ultimately led to the implementation of a sinking groundline requirement for all trap/pot fisheries throughout the entire east coast which was approved in October 2007 and became effective in April 2009. To address the entanglement risk associated with vertical lines, NMFS has taken a different approach. The approach for the vertical line rule addresses the data limitations encountered during the development of the sinking groundline rule and focuses the vertical line management scheme on smaller discrete, high impact areas where gear density and large whale sightings overlap versus wide-scale, broad-based management. Gouveia reviewed the timeline for the vertical line rule. The timeline included development of the vertical line model; development of conservation measures based on the model outputs; analysis of alternatives proposed by NMFS and the ALWTRT; public scoping meetings conducted by NMFS in 2011; a full ALWTRT team meeting in 2012; publishing the proposed rule in 2013; and publishing a final rule in 2014. Subgroup and Working Group meetings were held in November 2010 and April of 2011. At these Subgroup and Working Group meetings the underlying variables that drive the co-occurrence model were shared and discussed by the Group. Results of a co-occurrence model were presented at the April 2011 meeting, as were example management scenarios. The need to refine the model was identified and discussed by the ALWTRT and its Working Group. The ALWTRT agreed to use the co-occurrence layer as a vehicle for developing a vertical line strategy.

NMFS agreed to let stakeholders submit proposals outlining what to do in their areas and to hold public scoping meetings. Public scoping meetings were held in 15 locations in July and August 2011. A full team meeting was held January 9-13, 2012 at which proposals and analysis were presented and revised, new proposals were developed, and gear marking/gear characterization reporting and monitoring strategy were discussed. Proposals were received from NMFS, New Hampshire Department of Fish and Game, Maine District C-9, and Maine Department of Marine Resources. Proposals included increasing trawl lengths, closures, exemptions for state waters, exemptions for small vessels, exemptions due to trap reductions, increased reporting, increased gear marking, a cap on breaking strength of line, and weaker weak links. The next step is to analyze the proposals.

A final monitoring strategy document was presented to the ALWTRT at the January meeting. The monitoring strategy consists of two components: effectiveness monitoring (PBR, population abundance, scarification, etc.) and compliance monitoring (observer data, law enforcement, education/outreach). The primary metric for compliance monitoring will be comparing serious injury and mortality to PBR and secondary metrics will include the number and frequency of observed entanglements, the percentage of entanglements resulting in SI&M, and rates of entanglement based on scarring, strandings and disentanglement data.

Gouveia mentioned that he had recently received a proposal from Bob Kenney to revise the co-occurrence model being developed to compare right whale sightings overlap with lobster fishing area. The proposal requested that NMFS consider revising the underlying analysis contained in the co-occurrence model. Specifically, the proposal expressed concern that the model should include sighting per unit effort (SPUE) values greater than zero in model blocks with low levels of survey effort and no on-effort whale sightings. Gouveia stated that NMFS plans to provide the proposal to the TRT and the contractor working on the model. Kenney explained that the co-occurrence model splits the region into 10 minute square boxes. Co-occurrence scores range from 0 to 1,000,000. People are concerned that some areas have low effort (where effort is being defined as the number of kilometers of track-line surveyed under conditions within standardized sea state, visibility, and altitude criteria) so those grids get assigned co-occurrence values of zero but the risk is not zero. An original proposal was to change all the zeros to ones. This new proposal is a more objective way of dealing with those zeros and is based on actual distribution of SPUE numbers. Gouveia said that the team had reached a similar conclusion but there was no consensus regarding moving forward. Gouveia said Kenney's proposal is good, but timing-wise it is a challenge to work this into the model. NMFS had built time in its timeline for the vertical line rule development process to discuss the co-occurrence model design and underlying analysis. The Team had similar discussions surrounding the "0" score issue, but the Team could not reach agreement as to whether the "0" scores should be changed or not and if so, what number should it be changed. Richard Seagraves asked if any averaging and smoothing was done. Kenney said not really, but another thing that could be done would be to put in opportunistic sightings. Doug Nowacek said that it seems that the question is not whether or not the zero cells should be improved, but how. Gouveia agreed but said NMFS would have to vet this through the whole team. Something along these lines could be used for sensitivity analysis. Read said he could circulate Kenney's document to the SRG to provide comments on the sensitivity analysis issue, the zero cells issue and perhaps suggest how to improve the approach. It was pointed out that recommendations coming from the SRG go to the Commission and recommendations from the TRT don't go beyond that forum.

Kenney said he somewhat disagrees that the TRT agreed to the timeline. Gouveia said that although agreement of the timeline may not have been a consensus agreement by the TRT, NMFS did provide a realistic estimate of the steps needed to complete the vertical line rule along with a realistic expectation of when each step would be completed. Gouveia further noted that NERO is being challenged right now on the slow pace of the timeline. Any change to the model at this juncture would result in further time needed to complete the rule. David Laist (MMC) said it is important to get the model right because the next chance to do it is 10 years down the road. It is important to identify the best model to use and whether or not to factor in some minimal value. Gouveia agreed but said NERO had hoped that the discussion would have been resolved earlier. Gouveia noted several Subgroup and Work Group meetings where these issues were discussed but the Groups had not reached agreement resulting in NMFS moving forward with its current approach in order to meet its timeline for the vertical line rule. However, Gouveia stated that at the very least, the sensitivity part is important and wants to work with the SRG on that. Michael Moore said the focus of effort is misplaced. He noted that the 2006 MMC meeting recommendation was to get rid of vertical lines, yet we are still stuck on gear modification. Read said the SRG is not constrained in the same way the TRT is constrained so they can capture that sentiment in the SRG recommendations. Nowacek asked how future modifications and new technologies will be brought into effect. Gouveia said there is a process to put things on the TRT agenda. It does not have to go through the whole process again.

Gouveia said it would be good to get SRG input on the monitoring strategy. The primary questions the monitoring is supposed to answer are: are we below PBR and are we below ZMRG, which are the mandates that NMFS follows. Monitoring to determine the level of compliance is harder. Seagraves asked about enforcement. Gouveia said NERO funds states to do some enforcement but the states mostly don't cover federal waters. Seagraves asked if there is a sense of whether the monitoring is in the same area as the fishing effort. He pointed out that compliance hinges on the industry buying into the process, and not the deterrence from enforcement. Are we getting sufficient information to see if fishers are complying? Gouveia said in Maine yes, other states no. Nowacek said there are additional issues to consider when developing the monitoring program; for example, what is going to happen when

offshore energy is ramped up? Also, there is a problem with the practice that unless an entanglement looks lethal it is not counted. Richard Pace (NMFS) said he will address that. Read asked if we have looked to see where the reports come from for the serious injury and mortality (SI&M) analysis. If we cut back aerial survey will we miss more entanglements? Pace said yes, 80% of entanglements are reported by aerial survey. Nowacek said that also puts an emphasis on the continued look at scarification and health data. Waring pointed out that in the late 80's there was a problem with changes in aerial effort affecting calculated survival rates.

- **Ship speed rule**

Shannon Bettridge (F/PR) gave an overview of the ship strike reduction rule, which took over 4 years to bring into effect but was finalized in December of 2008. Under the “sunset clause” the rule will expire in December 2013. A report titled “An Assessment of the Final Rule to Implement Vessel Speed Restrictions to Reduce the Threat of Vessel Collisions with North Atlantic Right Whales” is currently under preparation and when complete will be provided to the group. After NMFS leadership reviews this report, they will determine what the next steps will be with regard to the ship strike rule. The report attempts to analyze the effectiveness of the rule in terms of a biological metric, human behavior, mariner awareness, economic impacts and dynamic management areas. The Pace 2011 paper, “Frequency of whale and vessel collisions on the US eastern seaboard: two years post ship strike rule”, addressed the biological metric with conclusion that data was too sparse to be conclusive. Compliance with speed restrictions is being monitored using Automatic Identification System (AIS). Compliance was low in 2009 and 2010 but improved in 2011. There was minimal response to voluntary restrictions (DMAs). An outreach campaign was launched to increase mariner awareness. Read asked what lead time would be required to put in a new rule. Bettridge replied that it depends on the complexity of the rule, but in general rules can take about 2 years from development to completion. Joe DeAlteris asked if outreach had been done with pilot associations. Bettridge replied in the affirmative but said there are some pilot associations that are not very supportive of the rule. DeAlteris also asked if the megayachts that tend to travel more parallel to coast had been targeted. Bettridge replied that all maritime sectors had been targeted, but agreed that NMFS probably could work more with the recreational industry. Lance Garrison said the Implementation Team (SEIT) is now focusing on that. Nowacek asked Pace if there were significant changes since he presented at the November 2011 Right Whale Consortium. Pace said no. Nowacek asked if there are other analyses underway. Michael Moore said he has a paper under review. Nowacek said there are other things that need to be considered and that it also seems nebulous as to what the mechanisms are to extend the rule. Bettridge said they want to make the process as streamlined as possible. She could not share more about the rule as it is pre-decisional at this point. Laist recalled that during the rule-making process NMFS was forced to make some concessions such as distance from shore for the Seasonal Management Areas. He wondered if there was going to be a chance to revisit that. Another question he had was for Pace, wondering which serious injury and mortality cases were considered. For instance, there was a case where a recreational vessel severed part of a whale's fluke and that animal has not been seen since. Pace replied that all known serious injury or mortality events from ship strikes were included. Laist's third point was that at a recent MMC meeting there were a number of other analyses considered for monitoring effectiveness, including “commitment”. Will those sorts of data be considered as well? Bettridge said that study only looked at the Stellwagen Bank area and those results were consistent with the one NMFS used. Nowacek asked if NMFS is considering other areas, such as the coast of Maine, for extension of the speed regulation. Bettridge replied yes, and referred to Mike Asaro's paper on DAMs and DMAs¹. In response to a question from Nowacek about planned offshore energy development, she responded that any such project would involve an ESA Section 7 consultation with NMFS. Moore pointed out that the ship strike body count is down. We should recognize NOAA's efforts. Wells said he has heard that the shipping industry is decreasing speeds due to fuel prices. Bettridge said the NMFS economist is taking that into consideration as part of his analysis.

- **Gear research**

Gouveia presented a synopsis of gear research projects that NERO has funded in the past and what they are funding currently. He pointed to some useful links for gear research information on the NERO website, including www.nero.noaa.gov/whaletrp/, www.nero.noaa.gov/prot_res/GrantsResearchProjects/, and www.nero.noaa.gov/prot_res/mmgp/, and www.nero.noaa.gov/prot_res/prgrants/. Seagraves said the mid-Atlantic Fisheries Management Council (MAFMC) had a similar case where they had put in a trigger to shut down the

¹ M.J. Asaro. 2012. “Geospatial analysis of management areas implemented for protection of the North Atlantic right whale along the northern Atlantic coast of the United States.” *Marine Policy* (36) 915–921
<http://www.sciencedirect.com/science/article/pii/S0308597X1200005X>

fishery and they have managed to stay in business. Moore said you are looking at the industry to be proactive where the agency has failed at being reactive. A sunset clause is needed for looking at the gear modification approach.

- **Southeast Implementation Team (SEIT)**

Laura Engelby (SERO) presented on the SEIT. Leslie Ward (FWC) said that the SEIT has been focused in part on working with NOAA to identify NOAA's priority management objectives that are best addressed via aerial surveys. Team effort includes identifying important knowledge gaps that, once filled, could facilitate data-driven decisions regarding future survey strategies that are aligned with objectives. Currently aerial surveys may be viewed as both a management action (mitigation) and a monitoring tool. Depending on what the objectives for aerial surveys are, the monitoring plans may be different. Engelby said she is interested in SRG recommendations for priorities for aerial surveys. Moore said the FAA is going to let drones be used more for civilian work. He further noted that passive acoustics do not detect entanglements. Aerial detection is the most effective method. Corkeron said NOAA has a drone program but they don't expect to run drones on the east coast for the next few years. Moore said the legal requirements are changing fast and a recommendation from the SRG might help. Bettridge said it would be useful to have shippers and port people as part of the dialog in any program shift on how to monitor. Read inquired as to what proportion of the SE aerial surveys are NOAA funded. Garrison responded that 75% is probably NOAA money. The other 25% is from the Navy, Coast Guard, and Army Corps. Read asked if NMFS has thought about how much effort is needed. Garrison said that is the next step. Ward said articulation of the priority objectives is important.

- **Critical habitat**

Gouveia said NMFS is currently in rule making to revise critical habitat, and anticipates publication of a proposed rule later this year once all the required internal and external reviews and clearances of the proposed action are complete.

2.2 Science

- **Aerial surveys (NEFSC/SEFSC)**

Corkeron summarized the NEFSC right whale aerial survey program. Sixty surveys were conducted between October 2010 and June 2011, with sightings of 472 right whales (including repeats of individuals and 125 entangled whales (16 right whales) and 139 dead whales (4 right whales)). Since 1998, there have been 1995 surveys, 5231 flight hours, and 7346 right whale sightings. This work has been responsible for the addition of 1675 photoIDs to the catalog since 2005, and the enactment of 48 of 78 Dynamic Management Areas (DMAs) (2008-2011) and 61 of the 150 Dynamic Area Managements (DAMs) (2002-2008). While flights were conducted between November 2011 and January 2012, and some are planned for May-June 2012, the program has been severely reduced. The implications of this for science and management support are important to discuss.

Simpkins said the situation at NEFSC is all about tradeoffs between research needs and budget constraints. The question is, where do we want to be focusing our efforts. Pace noted that an important aerial survey component was the number of whales that are only seen in the Great South Channel (GSC). Without those whales there is a less complete picture of survivability. Read asked what NMFS would need to be able to adequately estimate survival rates. How much do you need to fly? Corkeron said passive acoustics shows that whales are around more than we thought they were from aerial survey. It also shows that DMAs are not that effective. If you could use the Seasonal Management Areas (SMAs) to manage ship speed you could focus available survey effort on the demographics, but we would have to get agreement from management. Moore asked how we reconcile reduced effort with our discussions on PBR exceedance. Corkeron said we may have to estimate SI&M instead of enumerate. Read said there are some policy things that can come out of this. Moore said the value of the photo-identifications from aerial survey is huge. Read said there is potential to think more creatively about SI&M. Kenney pointed out that data from the NEFSC surveys are the only things that go into several models like the one the TRT uses.

In addition to aerial survey work, NEFSC conducted a May shipboard right whale survey in the Great South Channel in May 2011, and is researching right whale mother/calf acoustic communication in collaboration with Dr. Susan Parks. In 2012 there is another May Great South Channel cruise planned, as well as a March and a June ship survey - all with focus on right whale research.

Lance Garrison (SEFSC) gave an overview of SE aerial surveys. The calving ground aerial surveys began in 1992, with the primary goals of direct ship strike mitigation and documenting on calving rates. The Early Warning System (EWS) involves a pager protocol to provide near real time notification of sightings, occasional direct notification to ships, mandated speed reductions for dredge operators in the vicinity of right whales, and Dynamic Management Area notifications. Additional outcomes of the program include photo-identification of every encountered whale contributing to understanding of right whale demography, increased understanding of vessel traffic patterns, and identifying entangled whales and assisting in disentanglement efforts. The aerial survey data were used in the habitat model which informed the designation of critical habitat and are being used to support ALWTRT vertical line strategy.

In the seasons of 2000-2001 and 2005-2006 flights were also conducted further north up to the Chesapeake area to try to identify residency and migration patterns. Garrison said that within the next few months the SEFSC has to make some decisions about whether to do more S. Carolina/Georgia surveys.

- **Passive acoustics (NEFSC/SEFSC)**

Corkeron presented a synopsis of NEFSC acoustics programs – most of which can be found on the Protected Species Branch website at <http://www.nefsc.noaa.gov/psb/acoustics/>. Laist asked why no acoustic monitoring work is being done along the inshore coast of Maine. Corkeron replied that NEFSC is still mostly getting tools ready for prime time, but Chris Clark (Cornell) has been collaborating with the College of the Atlantic in that area. Read said his programs have also been finding that acoustic technologies find more whales and larger distributions than we knew of before. The complementarity of techniques is important.

Garrison said that in the SE passive acoustic monitoring work has been done by contract with Cornell since 2000-2001, although the SE now has a dedicated acoustician. Objectives of the program include: 1) to augment visual survey efforts to evaluate right whale occurrence and seasonal habitat use, 2) to examine vocalization patterns throughout the calving season—are there diurnal or seasonal patterns in call rates, 3) to evaluate the ability to detect and localize whales—how do acoustic detections compare to visual sightings, and 4) to assess the potential role of passive acoustic detection and notification in mitigating ship strike risk in the southeast. Nowacek said we need to think about how to make these tools complementary to other things. Read said it seems like the migratory corridor question is one that is largely unanswered and acoustics could help. Moore concurred, saying if you look at the map of where strandings come to shore in the last couple years it is mostly the mid-Atlantic, so that speaks to covering that area better acoustically. Read noted that the cost comparisons presented by Garrison—Autobuoy 150K, MARU 8K—do not represent a big cost savings compared to aerial survey. The question is do you need to try to mitigate at the level of fine scale real-time notification or not.

- **Population Metrics**

Pace provided a presentation relaying analytical work using individual right whale re-sight histories to inform status determinations of North Atlantic right whales. His presentation included how these data are used to produce N_{min} for the SAR as well as estimates of survival and ultimately used in a population viability analysis. While noting limitations of these data, he stated that they allow development of one of the best informed statements of status among Atlantic stocks. He also described the use SI and M detections in the SARs and monitoring programs for the efficacy of management actions, specifically the ship strike and ALWTRP. Because of the general recognition that these counts likely grossly understate the scale of human interaction influencing demography of all large whales, he proposed an alternative approach to estimating the level of SI & M due to human interaction based on the product of N_{best} , time-based sex specific mortality rates (from the individual re-sight data) and estimated fractions of cause-specific mortality. Read suggested that it may be worthwhile to conduct a retrospective analyses, not only for interpretation of data but also to see what future changes will impact. Garrison noted that he was trying to do the same thing with stranded dolphins. Moore and Read thought the general approach was excellent; Read noted we have pretty good confidence of the survival estimates. Pace emphasized that the ship strikes and entanglements have different detection functions. Read concurred, but noted that the detection probability is so low anyway. Moore stated that for most of the dolphins we work on we recognize old age mortality and we just don't see that in right whales and humpbacks. So in comparison to anthropogenic mortality senescence is negligible. Kenney was concerned that NMFS may get criticized if we start changing the metrics. Read did not think it was a worry. Gouveia asked how NMFS would proportion U.S. vs Canada mortalities. Read suggested using the historic proportion. Moore suggested that marking U.S. and Canadian gear would also improve the allocation.

- **Entanglement and stranding update (NERO)**

Gouveia said the goal is to eliminate the program by having no entanglements to respond to. He ran through the right whale mortality statistics from 2000 to 2011. Moore said the change in prevalence needs to be shown in respect to population size. A per capita assessment of entanglement risk should be produced. Corkeron said that would be something you could compare to other populations of right and humpback whales. Seagraves had a question relative to the change in funding for disentanglement capabilities. Will we see a reduction in ability to respond? Gouveia said the system is working at present but we are about as low as we can go. Laist asked isn't Section 6 funding going down? Gouveia stated that this wasn't Section 6 money. The only states that have come close to using up their funding are Georgia and Florida. Laist asked if NERO was going to be taking over the Atlantic Large Whale disentanglement network as well. Gouveia stated that the NERO coordinates the program and has done so since the inception of the Disentanglement Program, but that the NERO will be assuming the role as the lead for the disentanglement database and web site in March or April of this year. The database and website had traditionally been led by the Provincetown Center for Coastal Studies through a contract with NMFS. However, given the lean budget it has become more cost effective for NMFS to serve as the lead for these activities. Gouveia lauded Moore for helping NERO allocate funds through WHOI for a 5-year umbrella contract to do necropsies.

2.3 Research Priorities

Gouveia presented a summary of research projects supported by NERO, from entanglement response and support, state conservation and monitoring activities, vessel strike mitigation projects, joint enforcement agreements and take reduction team support to outreach and education.

Simpkins said there is a need for both scientific and management priorities. He would appreciate suggestions or thoughts either on priorities or ways to set priorities. Corkeron asked if anyone does not think that the photo-ID catalog should be sacrosanct. Pace said he doesn't think it saves any right whales but it certainly helps us understand what is going on. Read said that has been the project that people defend at all cost and that he feels we should keep it. Wells suggested maybe there should be an evaluation, Moore agreed. Pace said if you look at three different decades of data you can get three different population trends. The long term database helps us understand the variability. However, he would like to see if subsets of the database give the same picture as the whole database. Moore said there has to be a balance between survey effort and catalog effort because you need the sighting data to feed into the catalog. Laist wondered if there were fewer surveys would that affect the cost of the catalog. Pace said yes. Laist said so if sighting effort goes down the cost for the catalog goes down. He said he would put both the catalog and the necropsy effort as immutable. Moore said animals wash up independent of effort. Read said he would rather have a catalog that processes a small amount of data than surveys generating data with no catalog to put them in. Wells asked if the surveys are also collecting other species of animals. Kenney said planes are now required to carry 2 pilots and there is no data recorder so they just look for large whales. Pace said that is only in the SE, in the NE we record all species. Read said they record everything on their surveys. Garrison said if the SE changed the focus of their surveys that might change. Ward said aerial teams in the SE have gained skills/experience to initially ID many whales, therefore reducing laboratory effort on the ID data sorting side. Pace said there may be ways to spread out effort better and still keep recapture rates high. Lawson said if you are focusing on demographics you may not be seeing as many entanglements. Moore said the number of animals that are disentangled is insignificant compared to the number of entanglements. Read said we need to factor in the passive acoustics in the priority setting. Moore said for carcass detection aerial surveys in the mid-Atlantic have the greatest value. It would be interesting to do a cost-benefit analysis comparing the mid-Atlantic and the SE. You are not going to detect entanglements or mortalities with passive acoustics. Garrison added that you would have to put in a lot of effort for 5 or 6 whale carcasses. Read said doing passive acoustics first would tell you more about migratory patterns. Moore asked if we are we trying to mitigate the risk to individuals or are we more concerned with populations. Read said we may be moving away from trying to mitigate risk to individuals. Pace said looking at the information on individual whales, out of 641 id'd animals only about 25 are known to have died. Counting the dead is just not very informative. You have to focus on the live ones and survival estimates.

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3. Take Reduction Plan Updates

- **Bottlenose Dolphin Take Reduction Plan (BDTRP)**

Stacey Horstman (SERO) presented a summary of recommendations from the BDTRT's 2009 meeting and progress made on amending the BDTRP based on those recommendations; updates to the VA pound net regulations; and some research and monitoring projects that are being accomplished based on the BDTRT's 2009 consensus recommendations. The SE Region is currently working to amend the BDTRP in two separate rulemakings: (1) North Carolina nighttime medium mesh gillnet prohibitions; and (2) Virginia pound net proposed regulations. The first proposed rule amending the BDTRP will include the BDTRT's 2009 recommendation to remove the current sunset clause on the nighttime medium mesh gillnet restrictions, making these restrictions permanent. This proposed rule will come first because the current nighttime medium mesh gillnet prohibitions for North Carolina state waters expire May 26, 2012. The proposed rule will also amend the BDTRP by updating changes to bottlenose dolphin stock structure and stock names, and including the BDTRT's 2007 and 2009 non-regulatory consensus recommendations. This proposed rule package is currently in the clearance process.

The second proposed rule amending the BDTRP will be based on the BDTRT's 2009 recommendations pertaining to the Virginia pound net fishery. Because the proposed amendments may affect current ESA sea turtle regulations, SERO will conduct a joint-rulemaking under both the MMPA and ESA to amend: (1) the BDTRP under the MMPA, proposing Virginia pound net requirements; and (2) current federal sea turtle regulations for Virginia pound nets under the ESA to ensure consistency between regulations. Although this proposed rule will be a joint MMPA and ESA rule, all regulations pertaining to the Virginia pound net fishery for bottlenose dolphin conservation will be enacted under the MMPA. This proposed rule is in progress and anticipated release is fall 2012.

In the meantime, Virginia has also enacted regulations for the pound net fishery based on some of the BDTRT's 2009 recommendations to reduce dolphin interactions incidental to this fishery. These include 1) effective December 18, 2009, any fixed gear licensed and fished in Virginia tidal waters east of the Chesapeake Bay Bridge Tunnel must use a modified leader and be inspected at least 72 hours before deployment; and 2) effective July 16, 2010, any licensed offshore pound net fishing in Pound Net Regulated Area I to use modified leaders May 6 through July 31 and to be inspected at least 72 hours before deployment. "Inshore pound net" was defined per sea turtle regulations.

Additional research is ongoing in support of the BDTRP's goals, including development of mSAT DNA markers to help genetically identify injured or dead dolphins to stock, and biopsy sampling in North Carolina coastal state waters to examine distribution of coastal and estuarine stocks. Research into the use of modified net leader in the Virginia pound net fishery was also completed in 2011. Also, in 2010, SERO allocated federal observer coverage in inshore waters for the first time. They continued this in 2011 by allocating additional federal observer sea days in North Carolina inshore waters, as well as some alternative platform trips to help better characterize the nature of fishing effort and better place federal observers on vessels.

Laist asked if the strandings the region is seeing now in Virginia are in areas other than the ones where the Virginia state regulations went into effect. Horstman said some were and some weren't. They were mostly outside the time period covered. Laist asked if there have been any observed takes in the observer program for Spanish mackerel. Horstman said no. Laist said he was glad to see all the things that are being done. Read asked if the dogfish rule is going to be in place before the next fishing season. Horstman said yes, it is in clearance right now. Read asked about the stock structure of dolphin bycatch in VA poundnets. Horstman and Garrison said they are looking into that but they are either northern estuarine or southern migratory. They are looking at fin images of animals stranded in pound net gear to compare with North Carolina catalogs.

- **Pelagic Longline Take Reduction Plan (PLTRP)**

Erin Fougères (SERO) summarized the history of the PLTRP, outlining its regulatory and non-regulatory components and their geographic scope. In 2012, the SEFSC plans to continue monitoring compliance with the rule in coordination with the Pelagic Observer Program, NOAA Office of Law Enforcement (OLE), and the US Coast Guard, continue quarterly bycatch updates to the PLTRT, and convene a team meeting in the late summer/early fall of 2012 to review the rule and provide stock/research updates based on the recent SEFSC cruise. In addition, there may be an additional SEC/NEC biopsy cruise in 2012 in the mid-Atlantic to partition pilot whale mortality.

Wells asked if there are consequences for having longlines longer than the rule allows. Horstman said no. Young suggested that an after the fact fine could fix that. Garrison said NMFS gets the mainline lengths from logbook data. He pointed out that in the last Q3 report there were a lot of takes and they were all in long mainlines.

- **Atlantic Trawl Gear Take Reduction Strategy (ATGTRS)**

Gouveia said that NMFS continues to monitor the status of various stocks of concern as well as the research and educational and outreach recommended by the Atlantic Trawl Gear Strategy. In particular, NMFS has been monitoring the status of pilot whales (both short-finned- and long-finned) as well as Atlantic white-sided dolphins. Research is underway to partition mortality estimates between long- and short-finned pilot whales.

- **Harbor Porpoise Take Reduction Plan (HPTRP)**

Gouveia explained that the final rule amending the HPTRP was published on February 19, 2010. New measures in New England included new and expanded pinger areas, an expanded pinger season in Gulf of Maine, and a consequence closure strategy with established targets for both the Gulf of Maine and for Southern New England. New measures for the Mid-Atlantic area included new time area closures for gillnet gear. NERO is currently monitoring the effectiveness of and compliance with 2010 HPTRP amendments as well as simultaneously monitoring bycatch rates within HPTRP consequence closure areas.

Young asked for clarification on the trigger process. Gouveia explained the timeline. Read asked if NERO anticipates reconvening the team. Gouveia said, yes, if targets are not met the team will meet again. If the trigger is met due to non-compliance there is probably non-compliance in other non-consequence areas so we may be going over PBR. Laist asked if triggers were exceeded in both areas. Gouveia said preliminary analysis didn't look good and NERO sent out an immediate notification in August before the analysis was finalized to provide a warning to industry. Read explained that the idea of the consequence closures came from industry. This is going to be a big deal in New England and the mid-Atlantic. DeAlteris noted that the fisherman better get serious about it otherwise they are not going to fish. Laist asked if NERO has been talking with the Canadians. Gouveia replied not on harbor porpoise issues, but noted that the recent and past SARs for harbor porpoise show that the U.S. serious injuries and mortalities far exceed those levels in Canadian fisheries.

4. Manatee Update

Jan Zegarra (FWS – on phone) said his office got comments on the Puerto Rican Antillean manatee last year from the SRG and most of them were incorporated into this year's draft. They shortened one of the sections, eliminated a graph in the population size section and put the counts in table format, and updated the report with a new count. There is a description of new methods for aerial survey. Only one set of data has been completely analyzed so the direct count from September 2011 was used. The final analysis numbers won't be presented until they are complete and peer reviewed. There is updated mortality data, though there are some issues with the local Department of Resources getting reports in on time. For 2011 data there are 5 reports we have not yet gotten. We have more deaths than in the last 20-30 years. We are trying to get some samples and are trying to figure out what is going on. None of the deaths are fisheries-related aside from one reported case of manatee tangled in Caribbean gillnet.

Read thanked Zegarra for addressing the comments the SRG had last year. Dan Odell said he would like to see the map that was not in the document. He also expressed concern about the large number of unpublished reports cited. Zegarra said that is a problem in Puerto Rico for a lot of species. We try to promote people to get their reports peer reviewed. We depend on FWS reports. Odell noted that there are a lot of contract reports to the electric company. There should be some way to encourage those groups to publish their work formally. Zegarra said the Caribbean stranding network is currently compiling 5 years of those electric company reports for publication. He offered to provide any of the unpublished reports to the SRG. Read said would be good to have the USGS report provided. Odell agreed, saying he would like to see the methodology. Buddy Powell said he would like to see the new methodology and see how that compares with the Florida synoptic survey. Zegarra said he can provide that report and also the raw data. Powell said he would like to take a look at that. Read said we can have several people look at those and provide comments if that would be helpful. Zegarra emailed them to Josephson and she provided them to the SRG.

Stefanie Barrett (FWS) reported on the Florida Manatee. She noted the fact that there have been significant mortality events due to the last 2 years of cold stress. There were back to back bad winters, especially the winter of 2009- 2010. In 2011, 112 were manatee deaths were attributed to the cold. This winter has been pretty mild. Ward

said red tide has been an issue this year. Recent red tide related manatee mortalities have been documented since Oct with approximately 30 (preliminary) mortalities involved to-date. Barrett said that watercraft-related mortality is average, holding steady. Barrett said FWS is rerunning the core biological model. Runge is updating the model with updated parameters. Dr. Langtimm is working on improved survival estimates, and Runge is doing threats analysis. They should be available by the fall. They are working on a structured decision making process for warm water issues. Stefanie has taken over the SAR temporarily from Jim Valade and didn't get the SRG comments from last year till December so didn't have time or expertise to address them all. She said she is aware of some things that need to be fixed. Valade has been on long-term medical leave, but is starting to come back to work. Powell asked Stefanie if she now going to be the lead person. She replied that she hopes to be handing the responsibility back to Jim. Powell wondered if Barrett could update the group on how the core biological model is going to be incorporated. Barrett said adult survival estimates will not include the last 2 cold years. But cold stress is addressed in the model through stochasticity. It can be put in as a catastrophe in the model. The question is how it will affect the model into the future. Ward said the adult survival rate parameter incorporates data through 2007-2008 and in fact the last 3 winters (2009-2011) were cold. Survival rates from those years will need to be incorporated into the model in future updates. We will have to get that incorporated into the model. Powell pointed out that, with regards to the Runge risk assessment from a few years ago, there have been changes in the last few years, and asked if we know whether Dr. Runge is going to focus more on the specific changes. Barrett said FWS has asked Dr Runge to do several 'what if' scenarios. FWS funded a study on the carrying capacity of several natural springs. Powell asked if over the next 8 months there will be major changes in the amount of information. Barrett said yes, they will have updated model runs. Odell said State politicians seem to be dismantling the regulations. Barrett said FWS has stated that existing regulations are important for continued protection of the manatee population. Lawson said he would like to see an estimate of abundance that has variances, i.e. move from counting to estimating. He said, given the mortality numbers, he is surprised the population is still growing. Barrett said there has been the recognition that the synoptic counts are a minimum. Ward said the State has a comprehensive 5-year manatee management plan and one of the goals is to develop a statistically-sound method to estimate statewide abundance. They are developing the methodology and have conducted pilot tests. It is a major concentration of their program. Lawson wondered when the new approaches would be put into practice. Ward said they have been working on a stratified random protocol. They will be flying the east Florida coast this year. There is a lot of effort being put into making progress. There has been no 'traditional' synoptic count this year because of the weather. She was asked what the State's thoughts were in terms of moving to this new methodology and if the methodology is different from that being developed in Puerto Rico. Ward said she was not familiar with what was being developed in Puerto Rico. Powell expressed concern about making comparisons with older data. He asked what is the expense of the new technique and if it is not contingent on cold weather? Ward said it would be conducted in warmer winter weather where the animals are somewhat dispersed from aggregation sites. Powell asked if the State's management side has been supportive. Ward said the managers and many conservation partners have been in step and updated on this method development during the past few years. No publically-available documents yet. Dr. Julien Martin (FWRI) would be available to present to this group at a later date. Read said he thought the approach they are going seems to be the right direction.

Laist said Dr. Langtimm is getting information for survival rates so it can be done quickly on a year by year basis. The Commission is interested in factoring in the last 2 years. They are disappointed that this analysis will only include through 2007-2008. The new model will be used as a basis for potential downlisting. Barrett said that probably has to do with the bias at the end of the time series. Laist also pointed out that the mortality data in the tables is only in-state – doesn't include out of state. He also wondered, since it was mentioned that FWS is working towards a structured decision making process, what the timing would be on that. Barrett replied that Julien Martin will be working with Fred Johnson and once those discussions are complete FWS will move on to convening the groups.

Young noted that there are trend data for only 2 of the 4 regions. She also pointed out some redundancy between the superheading and subhead "human caused mortality". On page 5 there is statement indicating that watercraft mortality increased between the 2 years provided, but page 9 says there is reduced mortality. Barrett said she will make sure they are not making conflicting statements. Young said the discussion on page 7 about injuries says "19 rescues unsuccessful", does that mean serious injuries? The language is vague. Wells said the variable use of the management units in the SAR were confusing. What proportion of the population does a population unit represent? Maybe new abundance estimates will address this, but it is confusing. To lump the units together for much of the SAR doesn't give a good picture of what is really happening throughout the state. Read said if this was a cetacean

and NMFS was preparing this SAR it would be 4 stocks. He is heartened to hear that State is working on getting abundance estimates that could be apportioned. DeAlteris said historically there was a table with population counts for each management unit. Barrett said she will work with Valade to address the management units. Read said if the service is never going to contemplate splitting the species into 4 stocks as was recommend in the December letter from the SRG they should tell the SRG why and we will stop making the comment year after year. Laist said the Commission raised that and got the response that for ESA purposes they want to consider as a single stock. From a DPS perspective those are not distinct population segments. Young said they can and should be separated based on the different mortality rates – the Service is ignoring MMPA. Read said it would be good to get a response to the first recommendation. Barrett said it may have to go through the Washington office. On a side note, she said she may have reported incorrectly the shrimp trawl mortality - that shrimp trawl fishery may not be one that is listed in the LOF. That will be corrected. Engleby said SERO should work with Valade on that.

5. List of Fisheries (LOF) Updates

Jessica Powell (SERO) reported on southeast region updates. Engleby added that there is now menhaden fishery observer coverage. Forty-one active vessels were observed biweekly on rotational basis, April - November. Fifty-four sea days were observed resulting in approximately 1% coverage. Read asked if there were any issues with the menhaden coverage. Engleby said yes, observers were only allowed on the mother ship, and only one observer was on a time. There was a lot for the observers to monitor. Dolphins were observed on 50% of sets. Three dolphins were released alive. She also said that her office finally has results in from a survey study on recreational fishing and depredation. The Southeast Region held a Human Interaction Workshop to develop a research plan and goals to better understand and mitigate depredation and scavenging by bottlenose dolphins. A number of proposals were submitted in response to the first phase of the developed research plan

Allison Rosner (NERO) reported on the NE LOF updates. Seagraves commented that the MAFMC had requested a longer than 30 day comment period. For a while there the Agency was giving them more time but this one had a short period. Rosner said typically they try for a 60 days comment period but sometimes there are other constraints.

6. Stranding Programs

Gouveia reported on strandings in the northeast. He said a request for a harbor porpoise UME for 2011 was declined due to lack of information. NERO will be resubmitting the request now that data gaps are filled. There has been a harbor seal UME. One of the problems that came up in identifying that UME was lag time for data entry and the regional office will be working with network members that issue. Odell asked if the NE has 24 hr hotline. Gouveia said yes but Fougères clarified that the NE does not have the 24 hr reporting requirement that the SE has. Moore said much of the issue is driven by the fact that the stranding networks are expected to be funded by philanthropy. Also, surely it is time that the network is provided with technology for real time data entry. There should be data management that is appropriate so that volunteers can do their job. As an aside he mentioned that they are seeing good results from satellite tags attached to the recent strandings. Gouveia said the point is well taken about data entry. Hopefully we will get there someday. Moore said part of the problem is that each network ends up doing their own thing. The interface for uploading data to national database is very frustrating. Fougères said they tend to get a text from a responder on the beach. Garrison interjected that having the paper records, given the variance in skill level, is good and Kenney reinforced that sentiment. There are a tremendous numbers of errors in entry. Moore said if the federal government cares about stranding data, and many management decisions are based on it, there needs to be a systemic change in the way this is funded. Read suggested maybe talking to other SRGs to see if a joint letter would help. Gouveia said funding is a big issue. The infrastructure doesn't fit the value of that program. We struggle with how to make things work.

Fougères reported on the SE strandings. Odell asked if there is any measure of effort for the northern Gulf of Mexico. Garrison said there is one gap in LA where there is no effort. SEFSC is working on comparing coverage levels for the Natural Resource Damage Assessment (NRDA). The perception is that it is back to normal now, but stranding rates remain high. There is not a huge effort magnitude effect. Wells pointed out that there was another disentanglement case in Baratavia Bay. Bettridge asked if reentanglement is typical. Fougères said the

reentanglement cases she presented were both Indian River Lagoon animals, and reentanglement rates could be a reflection of more photo-id effort there now.

7. NMFS Stock Assessments

- **Status of 2011 SAR (NEFSC)**

Waring said revisions to the 2011 SAR have been made based on the public comments received. The final review process is underway.

- **Status of NMFS Serious Injury & Mortality guidelines (F/PR)**

Bettridge reported that the final policy has been published and will be applied to the draft 2013 SARs. Moore expressed concern that disentangled animals are not counted. Garrison said that was discussed extensively. Moore said there are also cases of animals in id catalogs of animals carrying no gear but with other evidence of entanglement. There is no mechanism in the data flow for those to get counted. Garrison said the guidelines are just guidelines, there is some discretion to make judgments.

- **Status of GAMMS III report, guidelines, pilot application (F/PR/NEFSC/SEFSC)**

Jeff Moore (SWFSC) presented a summary of the changes in the Guidelines for Assessing Marine Mammal Stocks that were worked out at a workshop held in February 2011 in La Jolla, CA, as well as a sample SAR prepared using the new guidelines (Pacific stock of fin whales). The guidelines are currently in a public comment period.

Seagraves asked if there was any consideration given to smoothing the drop in abundance estimates that happens at year 9 under the proposed decremting scheme. J. Moore said there was discussion of decremting 10% per year from year 8, rather than applying the decrements retroactively. Garrison said all of a sudden you may not only be below PBR but you may have been for several years. There may be some pushback from industry and managers. Read said the SRG can push the other direction to help make sure NMFS gets the resources for surveys. Simpkins pointed out that the drop off wouldn't be a surprise. It can be in the SAR so everyone is prepared. J. Moore said the guidelines don't say how it should be reported. Read said an explicit projection would be helpful. Palka pointed out that there are usually 2 years before the estimates are in a final SAR, so there are already 2 voided PBR values. M. Moore noted that surveys are cheaper than lawsuits. Young said it would be easier for users to have a table to convey that information. DeAlteris remarked on the fact that yesterday we were talking about reduced funding and reduced surveys and today we are talking about needing to do more. The Agency may be building itself into a box. Palka said we need to do the surveys at least every 8 years. J. Moore said we need to make the case clear to funding sources that these surveys are essential. We have mandates under the MMPA to do this stuff. This was a way to incentivize this. Bettridge said this is an attempt to fix a jam we are already in with undetermined PBR values. Garrison commented that in two TRTs with which he has been involved the system just starts focusing on a stock when the TRT is convened. It would be better if everyone could see ahead of time. Bettridge brought the group's attention to a program with which Mridula Srinivasan (NMFS S&T) is involved to update the marine mammal stock assessment improvement plan (SAIP). Srinivasan said there is a need to prioritize stock assessments. We can give some incentive to actually fund surveys. These guidelines would force the issue. We hope that this will work and we are trying to come up with a new direction for stock assessment planning. Laist said he was going to mention the same thing. The Marine Mammal Commission was told the NMFS fisheries side of the house had developed a strategy to increase their budgets because of this sort of thing. An SRG recommendation might be to recommend 5 year stock assessments with a proactive long-term strategy for funding. Securing a long-term funding plan is in everybody's interest. Seagraves said on the fish side it is true industry got on board. He made a suggestion for the GAMMS revisions, saying it might have been a better strategy to start reducing at year 5. Here you are not really paying any penalty up to 8 years. Palka said there was a stock improvement plan for marine mammals but it has been ignored. There were funds that year but they all disappeared. Read said there is nothing like an impending crisis to focus the mind. DeAlteris said Seagraves's suggestion addressed his problem - instead of having a jump, have an ordered progression of penalty. M. Moore said there is no fundamental logic in the drop off after year 8.

Following J. Moore's presentation, Bettridge said it is easier for F/PR if the SRG comments on GAMMS were separate from other SRG items. Several of the GAMMS III recommendations were briefly discussed. Wells supported the proposed workshop on improving stock id. On "Very small stocks," M. Moore noted that right whales

and humpback whales were good examples, but there is a strong reliance on strandings data. Read noted that the alternative scenario proposed by Pace uses that framework. Simpkins said that it was important to recognize that most large whale serious injury and mortality is not reported by an observer program. Garrison noted that the recovery factor in the PBR calculation takes into account uncertainty. Regarding the recommendation for “apportioning PBR,” Read noted that we have been doing that (i.e., see humpback whale, pilot whale, and harbor porpoise SARs). Palka stated that this doesn’t get to sources of mortality that you do not know exist. Garrison said that this can be addressed in the SAR sections on other mortality and habitat. On Optimum Sustainable Population (OSP), Read noted that this is a formal determination, and asked why the SAR authors should be recommending this. Young asked if this makes it vulnerable for people to say we don’t have evidence so it is not likely to be below OSP. Palka asked if this means that the authors have to do the back calculation for each species or do we just make this statement if we have don’t do the analysis. J. Moore stated that the latter is the appropriate step.

J. Moore used the Pacific fin whale SAR as an example of how to apply the new guidelines. Young said that the new requirements will be confusing to a lay person/general reader. DeAlteris noted that over the past decades the SAR have grown from a short story to a book. He suggested that perhaps there should be a layman’s abstract, with the full SAR as an electronic document. Seagraves noted that fisheries assessments are produced that way. As an alternative, Palka suggested writing a book on each species and the SAR would be just a summary. Young thought that it would be too difficult to review with all the numbers. Kenney suggested keeping the SAR as is, but creating appendices for all the details. Wells suggested that the SARs include potential sources of mortality that are not used against PBR. Read noted that a lot of textual things are already being done. Waring wanted to know how consistent the text should be between regions. Bettridge responded that the intent needs to be similar, not the words.

- **Atlantic Stock Assessment Report Review**

The group made the decision to not review the sample SARS which used new GAMMS guidelines.

Atlantic Spotted Dolphin – The 2011 sightings are not included in the distribution maps. There are new abundance estimates for the north but not the south. Read asked Patty Rosel (on phone) where she stands in the separation of shelf and offshore spotted dolphins. She replied that they have found significant genetic differentiation, and is working with a graduate student on this. They were trying to meet the deadline for this report but it is not finished so is not included.

Dwarf Sperm Whale – M. Moore pointed out that although the report says the two species of *Kogia* are hard to distinguish at sea, the 2011 surveys have distinguished them, so might be nice to know how the ability to distinguish has changed. Palka replied that the difference mainly has to do with hiring observers that know these animals. Moore said the *Kogia* SARs and the beaked whale SARs should include some text to reflect that methodological change. Also, in the population size section, the report says the dwarf is more pelagic than the pygmy sperm whale. There should be some linkage between the differential stranding rates and the distribution.

Blainville’s Beaked Whale – The same generic comment was made in terms of surveys and the ability to speciate. There is a link in all the beaked whale SARs that is dead and needs updating. In the paragraph about sonar issues the most valuable paper to cite would be Fernandez et al.

Common Dolphin – Young said having a new abundance estimate is good. She had a question about the takes in experimental gillnet gear. Were they just added in, not extrapolated up? The answer was yes, they were added in to the totals but not extrapolated up. She also asked about the basis for not extrapolating up the northeast mid-water trawl estimate, since there is one observed take in that fishery. Palka said NEFSC can consider that. There was a question about monitor coverage. Palka explained that the statements about fisheries observer and at-sea monitor (ASM) observer data need to be fixed. She explained that there are now two data sources. Northeast fisheries observer program (NEFOP) data is what we have had for the last few decades. Starting in May 2010 there was an additional set of monitors with much higher observer coverage but lower-trained observers who don’t have to collect all the data fields. We are not comfortable enough yet with the new data to pool the two datasets for the trawl bycatch analysis. ASM is a subset and doesn’t cover all parts of the fisheries. NEFSC has hired 2 new contractors to help do the comparison. We feel comfortable with using the ASM for the gillnet analysis but not yet with the trawls. Kenney observed that the common dolphin abundance estimate was not summed with Canadian estimate. Read said the SRG has cautioned in the past about mixing and matching years.

Cuvier's Beaked Whale – M. Moore commented that the cryptic nature of this species leads one to wonder if there could be more passive acoustic work encouraged. Palka and Garrison said both centers are collecting those data. Palka added that a recommendation to support analysis and incorporation of those data into the abundance estimates would be good.

Fin Whale – It was noted that the abundance estimate is the sum of US 2011 and Canadian 2007 surveys. Lawson said he now has corrected estimates. Read said he has concerns about the combination of estimates from different years and different areas. Pace said the bigger error would be not including a big portion of the stock in the estimate. Palka said there are other ways to analyze it. A more robust analytical estimate can be done and is something we will be working toward. Lawson said DFO has an acoustic study going on that may suggest that fin whales from different parts of eastern Canadian waters have different calls. He also pointed out that the Canadian 2007 estimates are lower than they usually see – they might be more conservative than usual. Corkeron said there is a lot of fin whale acoustic data at NEFSC that might help solve these questions. Kenney said he is not terribly concerned that these are too high because there is no dive correction and they are still 2/3 of the estimate from 30 years ago. Kenney wondered why the Pacific fin whale SAR used 0.3 for a recovery factor instead of 0.1. Shouldn't it be 0.1 if it is a listed species? J. Moore said there is the discretion to use other values if you have other information. He wondered if NEFSC had asked Len Thomas for assistance on these issues. He said SWFSC staff consult with Thomas' group. He also suggested NEFSC could assume a bigger CV for the Canadian part of the estimate because it is older. Read said in this case there are no management consequences; however, using the summed estimate makes him uncomfortable. He recommended using the 2007 estimate as best since it covers more of the range and then just saying that some new information exists.

Gervais Beaked Whale – M. Moore had no substantive comments, aside from the addition of one new reference. He wondered if we can say anything about how significant the drift net fishery was to beaked whale populations. Palka said she doesn't think we can answer that, even though it is an important question. Moore encouraged Fred Wenzel's (NEFSC) paper to be completed and inserted next year.

Gray Seal – A comment was made that the report at one point says the population size is 4% higher, but the numbers are the same. One is wrong.

Harbor Porpoise – Read noted that takes are close to PBR. There was an unclear sentence about the compliance rate that should be removed. Read also wondered why we have the Newfoundland and St Lawrence information in that SAR. Shouldn't it just include the Scotian shelf? Palka mentioned the abundance document that she had prepared and asked for SRG review. She said usually harbor porpoise data is beautiful but this year NEFSC used the 2 independent teams and ran into some questions such as how to analyze the fact that 2 observers have different view sizes. Nobody on the SRG had finished reviewing the document but they agreed to get comments to Palka.

Harbor Seal – No substantive comments.

Harp Seal – Lawson mentioned that the Canadians have seen large changes in fecundity possibly tied to ice conditions in Canada.

Humpback Whale – Kenney asked if data from the MONAH project are still being analyzed. Pace replied that is still underway. On the first run through the point estimates were less than the previous estimates. Gouveia asked if the PBR reported is correct? Pace explained that he had changed the Rmax value. Maybe that should be better explained. Kenney said he thought it was pretty clear. Young brought up humpback entanglements from 8/21/09 and 6/19/2010 that were not in the table. Lawson said DFO has new abundance estimates that he can provide.

Minke Whale – Young brought up a disentanglement from 8/11/2009 that is not in the report. Jack Lawson said that he may have some more mortalities to add, and has new abundance estimates.

Risso's Dolphin – Marjorie Rossman's (NEFSC) explanation of estimation difficulties was discussed. In 2010, the bycatch of 15 Risso's dolphins was observed in mid-Atlantic region bottom trawl fishing operations. Complicating the issue was the fact that two vessels responsible for most of the bycatch were experimenting with a variety of acoustic deterrent devices (ADDs). Under three different approaches to expanding the estimate, the estimate could

range from 30 to 130 animals. Palka said those estimates would not be included in the current SARs as NEFSC needs to figure out which of the 3 ways of analyzing the data is best. Read thought it interesting that fishermen are experimenting with ADDs and that probably means that they have been having a problem. It is hard to imagine that pingers are going to increase bycatch rates. DeAlteris said he had heard of informal reports of more than a handful of animals in single tows. Palka said the least that we will do is have an explanation that there were some takes. Gouveia said from the policy side this is a big deal. It is a bona fide experimental fishery but if the trip is a commercial trip it does not need a special research permit. NERO is working with HQ to let people know that if they want to do this research without a permit they are not protected. They are trying to get a handle on this. Read said he thinks NERO has no idea what devices are being tested out there. DeAlteris said we need to figure out how to cast it so research can be done without it being counted against the fishery. Also, there are changes in fishing practices when observers are aboard.

The SRG noted that the most recent abundance estimate for many species doesn't include the southern survey region. Garrison said SEFSC is not in a position to analyze the data from the 2011 survey anytime soon.

Right Whale – Kenney wondered whether we should display the mortality the way we did it with the harbor porpoise SAR (before and after rule changes - i.e. split the table or do a summary table). Gouveia noted that the driver for right whale PBR seems to be the net productivity rate since the abundance went up a lot and the recovery factor remained the same yet PBR only went up a little. Gouveia noted that he receives numerous questions from industry regarding the PBR calculation and asked that the SAR provide a better explanation of the numbers being used specifically surrounding the net productivity rate. Pace explained that in 2010 he had used the observed net productivity (R) instead of an estimated maximum (Rmax). He was taking the only maximum that has ever been observed. In 2010 he should have used more words to explain that he used the observed R instead of Rmax. Patrice McCarron (Maine Lobstermen's Association) asked for clarification. Pace explained that the 2010 PBR calculation used the observed R so you don't take half. 0.7 is right. Read said he thought it was an error you made last year that we didn't catch. J. Moore pointed out that the statute defines PBR as using Rmax. In GAMMS the default Rmax is 0.4, but if you have other information you can use that. Kenny said the difference between the 2010 and 2011 R values need to be better explained. Pace asked the SRG if he should use the observed R instead of Rmax. J. Moore said he didn't think that the maximum it can go is 0.2. Pace said it is an assumption that anthropogenic mortality is additive. Read said one option is to use the default value of 0.4, or we can use something else. Corkeron observed that if you use the observed value you may have a few more years of calving like this year and then you would be back at 0. Read asked the SRG how they feel about using the default rate. Wells noted that it would be consistent with the past. DeAlteris suggested following guidelines and precedent. If you want to veer from that you should write a paper defending your views. SRG agreed that use of the default rate is appropriate.

McCarron asked if there is any explanation of how serious injuries and mortalities are apportioned between the US and Canada. Pace explained that the location specified in the table is where the animal was first discovered unless there is gear recovered that allows the entanglement to be attributed to a particular country. Gouveia asked if there is any thought to apportioning the takes to country and if attribution of cases is corrected for differences in effort? Pace said no, the sample sizes are too small.

Sei Whale – Lawson said in the Canadian 2007 survey they only saw 3 sei whales. Young suggested mentioning that NMFS is undertaking a status review.

Sowerby's Beaked Whale – No substantive comments.

Sperm Whale – Read said this SAR is unique in it includes a statement about toxicology. He recommended that it be removed. Garrison noted that this stock is another for which there are only the partial survey results. The recommendation was for this edition to use the partial estimate.

Striped Dolphin – DeAlteris said it would be useful to add a note that this estimate is based on half the survey area. That could be clarified with a sentence or two. Seagraves commented that the 2011 survey methodology details were missing.

Trues's Beaked Whale – Moore noted that there was no 2011 estimate for this species. Palka said none were seen on the survey. The group agreed that footnote or text should be added saying that there were no sightings so no estimate could be derived.

Atlantic White-Sided Dolphin – No substantive comments.

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- **Gulf of Mexico Stock Assessment Report Review**

Clymene Dolphin – A general suggestion was to add the 2009 survey data to the maps. Mullin said they have taken care of that and new maps will be included in the next revision. It was noted that there was a big drop in the clymene population. DeAlteris said there should be some comment in the population discussion about what happened to all the animals. Garrison said we need to take a closer look at it. It could be a seasonal issue since the 2009 survey didn't include the spring season.

Blainville's Beaked Whale – Kenney said he had no substantive comments, however, there are some across the board organization issues. For instance, the population size section has too much text. It needs to be one sentence – “refer to the appendix”. In the human caused mortality section the first paragraph duplicates a sentence in the next section. It should just be “The average is...”. In the status of stock section it states “...not known but none is documented” – that is zero. Go ahead and say it. Seagraves pointed out that in the Other Mortality section the discussion of the UME event being from 2010 to present is too open ended.

Bryde's Whale – Kenney said he had some of the same general comments. In addition, he pointed out that the report shows the average mortality and the PBR to be equal but in fact they are rounded wrong, and the stock is actually over PBR. Palka added that new guidelines say you need to keep unrounding till you can tell the difference.

Cuviers Beaked Whale – no comments.

Dwarf Sperm Whale – Odell noted that the population estimate is less than half of the previous one. DeAlteris said where there is a marked change it is worth a sentence of explanation. Pace point out that sometimes the difference may not be statistically significant because of the variance. Dwarf and pygmy sperm whale estimates are combined because SEFSC doesn't make the attempt to id at sea.

False Killer Whale – 2009 abundance estimates are not in this one.

Fraser's Dolphin – Seagraves suggested there should be some discussion of the abundance changes. There is no discussion on possible differences in survey effort. He also wondered why 1998 is the starting point on fisheries data.

Gervais Beaked Whale – Young said she had the traditional comment about lumping species. Nowacek said in the stock definition section there is a comment that *Ziphius* and *Mesoplodon* cannot be distinguished in the field but that is not true.

Killer Whale – Kenney had the same general comments. DeAlteris said it seems like there may be enough data here to determine a trend. Read asked if it is possible to do trend analysis. Garrison said it is possible but would require work. SEFSC may be in a position to start doing that kind of work. Wells said with the Deepwater Horizon oil spill there will be some pressure to look at trends. DeAlteris said it seems important to do something here. Read said he will capture that as a recommendation.

Melon-headed Whale – Seagraves said it is not fully explained how the abundance estimate was derived. This is a shared stock with Mexico and Cuba - there should be some language about the lack of information from those countries, i.e. something along the lines of “This is a transboundary stock and there is little information about abundance and distribution in other countries”.

Pantropical Spotted Dolphin – Seagraves said there is lack of information on how the abundance estimates were derived. Read said it may be worthwhile putting in the transboundary stock comment mentioned above into each applicable SAR.

Pygmy Killer Whale – Young commented that the SAR should address the trend issue and also that the 2009 survey should go into the verbiage.

Pygmy Sperm Whale – Same comments as for dwarf sperm whale.

Risso's Dolphin – Young said the trend section doesn't mention 2009.

Rough-toothed Dolphin – The 2009 estimates are not in this one.

Short-finned Pilot Whale – No comments.

Sperm Whale – Kenney had a question about the sperm whale killed in the sea anchor – was it counted as a fishery or non-fishery interaction. The answer was that it was not attributed to the fishery because the animal was not in the gear. Lawson commented that Canadians are starting to see sperm whale depredation and longline interactions and wondered if that was an issue in the U.S. Garrison said no. Garrison also noted that there is a small methodological difference between estimates because in 2004 SEFSC did some 90 minute counts to estimate sperm whale group size, but only conducted 10-minute groups size counts in 2009 which most certainly underestimates group size. Garrison will update that – probably change the estimate to be more consistent. He also said they are working on adding estimates based on acoustics.

Spinner Dolphin – Odell noted that the population estimate was way up. Young recommended including 2009 data in the trend section.

Spotted Dolphin – The term 'tickler' mentioned under fishery information should be explained. The sentence about necropsy should be removed, as the carcass wasn't recovered.

Striped Dolphin – The population estimate was down, but CV was up. It was recommend to mention 2009 in the text.

Patty Rosel (SEFSC) (via conference line) explained that the SEFSC has been working on stock structure for non-bay, sound and estuary bottlenose dolphins. Data suggest 7 stocks as opposed to the 5 we have now. There are more than one offshore and shelf populations. A manuscript in progress should be available for journal submission within 6 months or so. We are still trying to define boundaries. The biggest hole in the dataset is the West Florida shelf, where the amount of differentiation is high. Read asked when that revision would make its way into the SAR. Rosel said it would be presented to the SRG next year. Rosel said they do look like populations but whether or not we want to call them stocks is another question. Garrison added that SEFSC will have newish estimates to go with these.

Bottlenose Dolphin –

Barataria Bay – Wells said he had mostly editorial comments, and said that effort to break out stocks is useful. There was greater discussion on this population because it was heavily impacted by the Deep-Water Horizon (DWH) oil spill. The SRG recommend including more discussion about ongoing research. The phrase "likely small" seems wrong as the population is larger than many of the other BSE stocks. Maybe a cautionary note should be added in status of stocks. Garrison said there is some sensitivity about putting things in writing about DWH. Wells agreed regarding the impact studies, but ongoing research should be cited.

Choctawhatchee Bay– Wells thought there was at least one mortality from a rescue capture that is not there. He also asked why there was no estimate of unmarked animals in abundance estimate. Rosel- That is the way Paul Conn and his colleagues did the estimate. There is no effort to estimate the number of unmarked animals.

Bays, Sounds and Estuaries – The SRG had several comments: Under the Other Mortality Section there is no discussion of entanglement in recreational gear. There was also no earlier time period reports on crab pot

interactions, how do you decide when you are going to start talking about a fishery. There seems like sufficient data for drafting separate SARs for the Apalachicola Bay and Sarasota Bay stocks. Garrison said the SEFSC will consider that for next year.

Eastern Coastal – No substantive comments.

Northern Coastal – SRG noted that there was a lot of information that wasn't really relevant. For instance the report should just mention UMEs that affect that stock. This stock is another particularly affected by DWH and UMEs so that should be mentioned. Lawson wondered about the $g(0)$ correction. Garrison said for the surveys SEFSC is doing now we will have those.

Oceanic – The SRG suggested adding some text about abundance change, mentioning DWH, and adding a sentence saying the current offshore stock has no shelf animals.

Shelf – The SRG noted that a major hole was the lack of an abundance estimate for this population.

St Joseph Bay – SRG said the draft was perfect the way it is. It is an interesting model for what can happen with seasonal changes.

8. NEFSC Updates

Palka presented a summary of the NEFSC field work that related to AMAPPS. Field work related to right whales was discussed on the first day. During 2011, the NEFSC AMAPPS activities included: a winter (January-March) and summer (August) aerial survey over continental shelf waters (shallower than 2000 m) offshore of New Jersey to Maine targeting marine mammals and sea turtles; a summer (June-July) shipboard survey covering waters from the 100 m depth to the Gulf Stream and EEZ offshore of Virginia to Maine targeting marine mammals, sea turtles and seabirds using both visual searching and passive acoustics, and targeting plankton using bongos, a visual plankton recorded and active acoustics (EK60); a spring (April-May) harbor seal abundance project which included tagging seals in Massachusetts and Maine, aerial photographing flights over haulout sites in Maine and aerial flights looking for signals of the tags; and a summer (June) satellite tagging of loggerhead turtles offshore of Delaware and New Jersey. In 2012, the NEFSC will conduct the following AMAPPS activities: aerial surveys in the spring and fall; a spring harbor seal abundance project; and a summer loggerhead turtle tagging project.

9. SEFSC Updates

Garrison presented a summary of SEFSC 2011 and 2012 fieldwork. AMAPPS aerial surveys were conducted in summer and winter of 2011 and a vessel survey in summer 2011. A pilot whale biopsy survey was conducted in the fall, and although the weather was terrible they got 25 biopsy samples and lots of acoustic recordings and photographs. Natural Resource (NRDA) broadscale aerial surveys of the Gulf of Mexico were completed in all 4 seasons, the first Gulf-wide surveys since the early 1990s. Photo-identification and biopsy studies are ongoing in Barataria Bay, Chandeleur Sound, and Mississippi Sound in support of NRDA Damage Assessments and will continue through the end of 31 May 2012. The photo-id studies are designed to provide seasonal mark-recapture abundance estimates for Barataria Bay and Mississippi Sound. In 2012, SEFSC will continue the AMAPPS aerial program with spring and fall surveys as well as conduct BOEM-supported Gulf of Mexico bottlenose dolphin stock structure research and Eastern Gulf of Mexico sperm whale research. Wells added that 25 bottlenose dolphins have been satellite-tagged in Barataria Bay and another 20-30 will be tagged offshore of Sarasota. They are finding the animals do not move much at all.

10. New Business

- **FY12 budget status (F/PR)**

Bettridge provided an update on the NMFS budget. She noted that it is static, but losing ground because costs are going up. There was little change from FY11 to FY12. The FY12 spending plan is under review by congress. She

provided a link to the website that shows historical funding for marine mammal research <http://www.nmfs.noaa.gov/pr/about/budget.htm>. FY13 information was not yet available.

- **SRG membership**

Bettridge stated that there was great inconsistency between the 3 regional SRG groups. Missing from the language used to develop the teams is an overall 'terms of reference' guidance. She also noted that this is a time of turnover on all SRGs. F/PR is planning to develop a terms of reference (TOR) document for each of the SRGs, which will be helpful, especially as we get new members. The TOR would involve origins, scope, roles, framework for appointing new members, outline conflict of interest issues. F/PR, Centers and Regions will be drafting something up and sending it around.

Simpkins noted that one thing people have been thinking about is the process of making sure the expertise is appropriate. He said he didn't know if that would entail a term limit or what. Read said he thought that would be quite useful. The SRG recognizes that there is sometimes a need for expertise not in the group. The SRG is involved in that process too, through self-evaluation. Bettridge said she anticipates that the TORs for the different regions may be a little bit different. The process should be done by email and not put off till next February. Read agreed that it is important to move forward. Simpkins said the SRG should contact Bettridge directly if there are things that should be clarified. Read asked if NMFS will engage FWS in this process too. Bettridge said yes, we are looking for consistency. Read wondered if it would be spelled out that each SRG should have two of this type person, etc. Bettridge said no, they are leaving that aspect to the individual SRGs.

11. SRG Business

There was a general discussion on ecosystem approaches to fishery management and how marine mammals are incorporated. Seagraves said that it would be beneficial to have the marine mammal community involved in this process. Palka stated that it is already happening. For example, the Atlantic Herring assessment will explicitly incorporate marine mammal data. Seagraves noted that the MAFMC is putting in an explicit M2 term for mammal predation with it modeled as a fleet. Corkeron noted that there is classical fisheries biologist approach and there is the marine spatial planning view. Palka said as a potential topic it may be of interest to review the numbers that are going into these models. Simpkins noted that the herring assessment will have happened by next year.

Read asked the group if they felt it is a good use of SRG time to focus on a topic each time. Four topics suggested were;

- 1) review of DWH impacts. (although Garrison said he would be surprised if we were going to be much further along in terms of being able to release things)
- 2) Manatee Assessment.
- 3) Offshore alternative energy impacts.
- 4) Ecosystem based management. (Corkeron observed that the Norwegians have spent 20 years doing this in the Barents Sea and have made little progress. Palka pointed out that they have yearly data on the fish consumption and we don't have such a time series for mammals.)

DeAlteris suggested letting topic ideas be initiated by NMFS. Maybe the SRG should request a synthesis be done for the topic selected. Read said he liked the idea but was skeptical that a synthesis would be attainable. If we actually asked for that we would not get it. The SRG could have pushed harder on the agenda for the right whales. We can think creatively and ask for specific things. Seagraves asked Garrison if he would be interested in doing a national historical synthesis. Garrison said it may be feasible if funding is available.

Wells suggested bottlenose dolphin stock differentiation in the Gulf of Mexico as another idea for a focus discussion. Read said we could work that into our regular agenda. Garrison noted the need for a comprehensive bottlenose dolphin stock structure paper. DeAlteris suggested the use of acoustic deterrents in the trawl fishery as another topic, and the SRG could invite the industry. Simpkins and Bettridge suggested the Stock Assessment Improvement Plan as a topic. Simpkins also suggested the Atlantic Marine Assessment Program for Protected Species (AMAPPS). Laist thought the manatee discussion would be timely but would have no effect.

Based on these discussions the following was recommended for 2013:

Special Topic - Comprehensive manatee review (surveys, population structure, the Runge model, etc.).

As part of the regular agenda the following items will be added/deleted:

DWH - Garrison will summarize

AMAPPS- NE/SE will summarize

TRT reports- keep in

LOF – drop off

Stranding programs – just highlight UMEs.

The 2013 meeting will be held in February (dates to be determined) and hosted by SERO in St. Petersburg Florida.

- Read agreed to serve as Chair for one more year.
- SRG will draft letters of recommendation on
 - Right whales
 - Manatees
 - Generic on SARS
 - GAMMS guidelines

Adjourn

The SRG meeting was adjourned at 1245.

APPENDIX I
Atlantic Scientific Review Group
Meeting Agenda – February 8-10 2012
Mote Marine Laboratory
Sarasota, FL

Wednesday, 8 February, 2012 (0830)

1. Introduction (Read, Waring)

- Welcome, housekeeping
- Travel reimbursement
- Introductions
- Appointment of rapporteurs; Minutes deadline
- Agenda review and schedule
- Documents

2. Right Whales

2.1 Management

- ALWTRT (NERO/SERO)
 - Vertical Line Rule Development
 - ALWTRP Monitoring Strategy
- Ship speed rule (F/PR)
- Gear research (NERO)
- SE implementation team (SERO)
- Critical habitat (NERO/SERO)

2.2 Science

- Aerial surveys (NEFSC/SEFSC)
- Passive acoustics (NEFSC/SEFSC)
- Population assessment (NEFSC)
 - Abundance Estimates (NEFSC)
 - Serious injury and mortality estimates (NEFSC)
- Entanglement and stranding update (NERO)
 - Health assessment (SERO)

2.3 Research Priorities

- Management and science (SE&NE)

Thursday, 9 February, 2012 (0830)

3. Take Reduction Plan Updates

- BDTRP (SERO)
- PLTRT (SERO/SEFSC)
- ATGTRP (NERO/NEFSC)
- HPTRP (NERO/NEFSC)

4. Manatee Update (USFWS)

- Mortality events
- 2011 research
- Management actions

- Review of draft 2012 Manatee SARs

5. Proposed List of Fisheries

- Regional changes (NERO/SERO)

6. Stranding Program / Events

- Northeast region (NERO/NEFSC)
- Southeast region (SEFSC/SERO)

7. NMFS Stock Assessments

- Status of 2011 SAR (NEFSC)
- Status of NMFS Serious Injury & Mortality guidelines (F/PR)
- Review of GAMMS III workshop (SWFSC (~2 hours))
- GAMMS III pilot applications (NEFSC/SEFSC)
- Review of 2012 SAR appendices (NEFSC/SEFSC/NERO/SERO)
- Review of draft 2012 SARs (NEFSC/SEFSC)

Friday 10 February, 2012

8. NEFSC/NERO Updates

- 2011 fieldwork
- 2012 fieldwork plans
- Staff changes (including NEFSC and NERO Directors)

9. SEFSC/SERO Updates

- 2011 fieldwork
- 2012 fieldwork plans
- Staff changes

10. New Business

- FY12 budget status (F/PR)
- SRG membership
- Other items

11. ASRG Business & Wrap-UP

- Finalize recommendations from this meeting
- Venue, timing and structure for 2012 meeting
- Adjourn

Appendix II. Meeting Attendees (those marked with an asterisk were phone-ins)

Firstname	Lastname	Organization	StreetAddress	City	State	Zip	email	Phone
Stefanie	Barrett	USFWS	7915 Baymeadows Way, Suite 200	Jacksonville	FL	32256	stefanie_barrett@fws.gov	
Shannon	Bettridge	NMFS- PR2	1315 East-West Hwy.	Silver Spring	MD	20910	shannon.bettridge@noaa.gov	
Peter	Corkeron	NMFS/SNEFSC	166 Water Street	Woods Hole	MA	02543	peter.corkeron@noaa.gov	508-495-2191
Joe	DeAlteris	URI	Fisheries Center, East Farm	Kingston	RI	02881	jdealteris@uri.edu	401-874-5333
Laura	Engleby	NMFS/SERO	263 13th Ave. South	St. Petersburg	FL	33701	Laura.Engleby@noaa.gov	727-551-5791
Erin	Fougeres	NMFS/SERO/PRD	263 13th Ave. South	St. Petersburg	FL		erin.fougeres@noaa.gov	727-824-5323
Lance	Garrison	NMFS/SEFSC	75 Virginia Beach Dr.	Miami	FL	33149-1033	lance.garrison@noaa.gov	305-361-4488
David	Gouveia	NMFS/NERO	55 Great Republic Drive	Gloucester	MA	01930-2276	david.gouveia@noaa.gov	978-281-9280
Jim	Hain	ASWH and Right Whale News					jhain@earthlink.net	
Dennis	Heinemann	MMC		Bethesda	MD		dheinemann@mmc.gov	
Stacey	Horstman	NMFS/SERO	263 13th Ave. South	St. Petersburg	FL	33701	Stacey.Horstman@noaa.gov	727-551-5780
Beth	Josephson	NMFS/NEFSC	166 Water Street	Woods Hole	MA	02543	elizabeth.josephson@noaa.gov	508-495-2362
Robert	Kenney	URI	Narragansett Bay Campus Box 40	Narragansett	RI	02882-1197	rkenney@gso.uri.edu	401-874-6664
David	Laist	MMC					dlaist@mmc.gov	
Jack	Lawson	DFO	NAFC, 80 East White Hills Rd.	St. John's	NL, CANADA		Jack.Lawson@dfo-mpo.gc.ca	(709) 772-2285

Patrice	McCarron	Maine Lobstermen Assoc.	21 Western Ave. #1	Kennebunk	ME		patrice@mainelobstermen.org	
Jeff	Moore	NMFS/SWFSC					jeff.e.moore@noaa.gov	
Michael	Moore	WHOI					mmoore@whoi.edu	
Keith	Mullin	NMFS/SEFSC	P.O. Drawer 1207	Pascagoula	MS	39568	Keith.D.Mullin@noaa.gov	228-762-4591 x 280
Douglas	Nowacek	Duke University	Duke Marine Lab, 135 Duke Marine Lab Rd	Beaufort	NC	28516	dpn3@duke.edu	252-504-7566
Dan	Odell	Hubbs Sea-World Research Institute	6295 Sea Harbor Drive	Orlando	FL	32821- 8043	dodell@CFL.RR.com	407-761-7601
Richard	Pace	NMFS/NEFSC	166 Water Street	Woods Hole	MA	02543	richard.pace@noaa.gov	508-495-2253
Debi	Palka	NMFS/NEFSC	166 Water Street	Woods Hole	MA	02543	debra.palka@noaa.gov	508-495-2387
Buddy	Powell	Sea to Shore Alliance	200 2 nd Ave. S. #315	St. Petersburg	FL	33701	jpowell@sea2shore.org	
Jessica	Powell	NMFS/SERO	263 13th Ave. South	St. Petersburg	FL	33701	Jessica.powell@noaa.gov	
Andy	Read	Duke University	Duke Marine Lab, 135 Duke Marine Lab Road	Beaufort	NC	28516	aread@duke.edu	252-504-7590
*Patricia	Rosel	NMFS/SEFSC	646 Cajundome Blvd. Suite 234	Lafayette	LA	70506	patricia.rosel@noaa.gov	337-291-2123
Allison	Rosner	NMFS/NERO	55 Great Republic Drive	Gloucester	MA	01930- 2276	allison.rosner@noaa.gov	978-282-8462
Richard	Seagraves	Mid-Atl. Fishery Management Council	201 N. State Street	Dover	DE	19904	rseagraves@mafmc.org	302-674-2331
Mike	Simpkins	NMFS/NEFSC	166 Water Street	Woods Hole	MA	02543	michael.simpkins@noaa.gov	508-495-2358

Mridula	Srinivasan	NMFA/Office of Science and Technology	1315 East-West Hwy.	Silver Spring	MD	20910	Mridula.srinivasan@noaa.gov	301-713-2363
Leslie	Ward-Geiger	USFWS					leslie.ward@myfwc.com	727-896-8626
Gordon	Waring	NMFS/NEFSC	166 Water Street	Woods Hole	MA	02543	gordon.waring@noaa.gov	508-495-2311
Mike	Weimer	FWS	4401 N. Fairfax Dr. Rm. 850-A	Arlington	VA	22203	mike_weimer@fws.gov	703-358-2279
Randall	Wells	Chicago Zoological Society - Mote Marine Lab	1600 Ken Thompson Pkwy.	Sarasota	FL	34236	rwells@mote.org	941-388-2705
Sharon	Young	Humane Society - US	2100 L. St. NW	Washington	DC	20037	syoung@hsus.org	508-833-0181
*Jan	Zegarra	USFWS	USFWS-Caribbean Ecological Services Field Office	Boquerón, PR 00622	PR	00622	jan_zegarra@fws.gov	787-851-7297 ext. 220