

NOAA and Shipping Industry Meeting

September 5, 2012

9 am - 12 pm

Port of Oakland Exhibit Room

530 Water Street Oakland, CA

I. Introduction and Opening Remarks

Lisa Wooninck introduced the Sanctuaries program and discussed the west coast region's continued efforts to develop a comprehensive strategy to address ship strikes with the goal to collaborate with the shipping industry.

Penny Ruvelas introduced NMFS and ESA and discussed the agency's interest in ongoing dialogue with invested parties, including the shipping industry.

All meeting participants gave brief introductions.

II. Background on ship strike issue and JWG

Maria Brown, Superintendent of Gulf of the Farallones, presented the recommendations developed by the Joint Working Group on Vessel Strikes and Acoustic Impacts.

Many meeting participants provided feedback regarding the recommendations:

- A member of the shipping industry suggested that NOAA use mariners to distribute DMA information (e.g. pilot groups) and hand out information directly to ship masters
- John Berge requested that 48 hours minimum of advanced notice be required for ships regarding DMA implementation and mentioned the problem of needing standing agreement with homeland security to get researchers on vessels
- A member of the shipping industry stated that NAMEPA works closely with N. Am. Maritime Industries and that it is very effective to go through them regarding mariner education
- A member of the shipping industry stated that a number of issues affect vessel operators and that captains have to review 3-4 megabytes of information before entering US waters. There are lots of regulations that ship masters have to follow, so they need some advanced warning regarding any management actions NOAA may take
- Bill Mahoney explained that there is a lack of understanding regarding outsiders on vessels. USCG determines who can be on the bridge and there are security issues, logistics issues, gender issues, and folks that ride along may encounter unfriendly crew. His recommendation is to use ship members as look-outs and does not agree with the idea to put non-ship members on board as observers. John Calambokidis of Cascadia Research Collective responded that we would use folks from within the industry that are specially trained to board vessels and take sightings data and that bringing shipping industry outsiders onto vessels would not be considered.

III. The status of the science

Jaime Jahncke of PRBO Conservation Science presented information from ACCESS cruises conducted outside the SF Bay area.

John Calambokidis presented on the importance of ship strikes to different ESA whale species, whale population trends, and behavior information

Many meeting participants provided feedback regarding this presentation:

- A member of the shipping industry asked if there were any data of a whale's response when a ship is transiting at fast speeds and how this behavior may differ with slower-moving vessels. John answered that there is an indication of a subtle dive responses in all cases, but more data is required to understand how behavior changes as ship speed varies.
- A member of the shipping industry asked if, outside of SBC, it is deep enough water that ship strikes are not as much of an issue. John answered that when ships shift to south of the islands, it benefits humpbacks, but makes strikes more likely for fin whales, and unknown for blues.
- Captain Bonebakker stated that with over 27 years of sailing on a weekly basis up until the mid-90s, most whales he saw were generally gray whales. He always looked out for whales and enjoyed watching them, and always made sure they weren't in front of his ship. The one time a strike looked likely, he altered course. He emphasized that no one wants to hit a whale. John responded that the whale you see is likely not the one you would hit; the one that pops up right of the bow that you can't see would be the animal struck.
- In response to a question regarding differences in strandings among species, John C. responded that he thinks humpbacks are more maneuverable and may get out of the way more effectively than blues.
- Capt. Mahoney stated that a whale strike immediately affects your engine on a diesel motor ship, and can do cylinder damage, so the captain will definitely know if a whale is struck.. John responded that in one particular case, the vessel did not know that they had struck a whale until it was brought into port on the bow of their ship. When they went back through their records, they were able to find when it happened based on vessel speed and engine information. Another captain stated that right up at load limit, full till, one can definitely notice something hung up on the bow. At reduced rpm, he stated that it wouldn't be as noticeable. Capt. Mahoney agreed that at slow speed, a ship strike would be less noticeable; at full speed, you would definitely know. John asked about a prop strike and Capt. Mahoney responded that a prop strike may have less of an effect if it just cuts through flesh. John then stated that prop strikes are under-represented because the animal does not bloat, therefore does not float.
- Penny Ruvelas asked what damage would occur to a vessel as speed varies and Capt. Mahoney responded that hull damage wouldn't necessarily change, but engine problems could vary with speed.

IV. Current/future activities by NOAA and industry to reduce ship strike

Elizabeth Petras of NMFS presented on the agency's role and approach to the ship strike issue (improve science, refine stranding data collection, engage with shipping industry, agency collaboration). She passed out marine mammal stranding forms and emphasized that they want people to call them if they see a stranded whale.

Many meeting participants provided feedback regarding this presentation:

- John Berge asked about information on whale entanglements
- A shipping captain asked about the time frame of the stranding data and noted that it did not correspond with Jaime's data

- A couple members of the shipping industry expressed frustration with different data coming from different agencies or research groups regarding stranding information and requested that we keep this information consistent
- A member of USCG suggested two ways to normalize the stranding data: 1) by population trends, and 2) by arrival data from ships in order to understand total strikes correlated with changes in whale numbers and ship numbers

Leslie Abramson presented on priorities for this year for ONMS (using opportunistic sightings, broadcasting LNMs) and discussed goals for next year's whale season, which includes outreach (meetings, education materials, and partnerships), developing a voluntary sightings network (using crowd sourced technology), overflights with USCG, the development of a science panel and AIS data analysis.

John Berge of PMSA emphasized the importance for everyone to understand how the JWG came about. He discussed that his personal motivation for joining the group was based on what was happening on the east coast and the media attention that recent ship strikes were getting here. He stated that the group came in with a blank slate and no pre-conceived outcomes or agendas. He continued that because the science behind speed reduction is limited and dubious, the group easily agreed that reducing co-occurrence was ideal. DMA and IMO actions potentially reduce co-occurrence and minimize impact to the shipping industry; this gives ships the opportunity to work around the restrictions. He discussed that USCG and VTS were involved in the process and made sure the recommendations would not increase navigational risk. John also described that traditionally, Seasonal Management Areas (SMAs) have been used, and in order for a Dynamic Management Area (DMA) system to work, managers have to get real-time information on whale locations. If managers can get good data from multiple platforms, management can be more finely focused to avoid broad-brush seasonal speed reduction zones. He emphasized that this takes cooperation from the industry and that ship crews would be the natural solution; it just requires an educational effort. Observations must be minimally disruptive to ship operations. He concluded that it is in the industry's best interest to get involved and that the alternative is mandatory speed restrictions based on seasonal data. The industry needs to demonstrate good compliance; even though it is hard to measure success of management actions, it's easy to tell if ships are cooperating or not.

Bill Mahoney added to the discussion that he has mastered ships for APL, and his experience with the east coast system was that the impact on ships was pretty severe. Pilots in Charleston, Savannah, Norfolk, etc. were in the practice of immediately presenting ship masters with a pre-printed safety exemption form to avoid mandatory compliance. The proposed system from the JWG is a much better option, and the maritime community will definitely buy-in to whale observations. He concluded that the JWG was an excellent effort by all involved.

V. **Demonstration of Spotter App**

Brad Winney of EarthNC introduced a working prototype, loosely calling "spotter", to make whale observations easy and accurate. He described the system as web-based and similar to previous work on marine charts app and whale alert app on the east coast.

Many meeting participants provided feedback regarding this presentation:

- John Berge asked how the data gets from the ship to a manager; Brad responded that it would automatically be sent once the ship returns to internet availability.
- John C. added that some ships have e-mail capabilities, but not necessarily internet. Brad responded that there is a range of options for data transmission that could be figured out; the app could even generate the appropriate e-mail to transmit the data.

- Jan Roletta asked how this data would be used on the backend and Virgil of EarthNC responded that their goal is to collect and centralize and normalize the data, make it available for analysis and management, and that it is ultimately up to the agencies on how to use the data
- John C. asked industry members which method would have the best chance for industry participation. Capt. Mahoney responded that using what most ships already do (amver reporting every 6 hours), and that it's a matter of time before ships become internet-capable but it is expensive. He continued that most ships do have e-mail, and voice communication is possible as well to VTS.
- USCG responded that it would be a significant expansion of conventional VTS duties to participate in whale reporting and they can't distract from their primary role of navigational safety. They also encouraged that any discussion of reporting be far wider than folks in this room (e.g. fishing vessels, recreational boaters). There would be a greater chance of diverse groups reporting sightings if a wider audience is reached.
- Capt. Mahoney stated that small vessels would be more apt to use the spotter app, and it would be important to get cooperation from that section of the seafaring community - particularly recreational users
- John Berge stated that amongst all players, we must come to some agreement about format, content, etc. before too much outreach occurs. There needs to be a solidified message, and he suggested a steering committee to guide this process.
- A call-in participant suggested charter vessels be included.
- A member of the shipping industry explained that most ocean-going ships have good connectivity, and he started using his cell phone onboard years ago. Technology is changing so rapidly, and some of these ideas may work better for younger generations. We need to reduce the intensity of the task; reporting needs to be quick and easy, and it will have to be dropped at times to prioritize safety. He suggested we use any and all means that we can to communicate to the industry - Western States Patrolling Association (WSPA).
- John B. mentioned that even though tugs and barges run at slow speeds and wouldn't be implicated by speed reduction, they could still provide data.
- A member of the shipping industry other stated that masters will warn other vessels of sightings, and this is great for awareness of strike reduction to communicate to others
- USCG noted that NOAA has used e-mail in the past to notify shippers and asked how that has worked. Elizabeth Petras responded that long-term data collection information is sent to office in Hawaii.
- John Berge discussed the need for a feedback loop and that the industry needs to hear how the data is being used. John C. replied that, yes, this is important, however, we need to control who gets the data because we don't want it to result in recreational boats chasing around the whale sightings.

General themes from industry feedback:

- observations should be from insiders to the industry and crew members - no outsiders on ships
- there must be simple and standard formatting for reporting across geographies
- reporting must be fast and easy - not too much time or attention required
- NOAA must develop a steering committee to bring constituents together to discuss the specifics of an observations system (sign up with Leslie)

VI. Discussion: Shipping industry perspectives and input

Maria Brown asked: what is the best way to get IMO information out to the shipping industry?

- John Berge replied that it will be on the charts
- CDFG replied that it will be in LNM, Coast Pilot, and that there is a process for this - plenty of notice will already be given

Avenues for communications:

- Harbor Safety Committee
- ship agents
- exploit all avenues of outreach options
- article in proceedings for NWS