



MARINE MAMMAL COMMISSION

3 June 2015

Docket Management Facility (M30)
U.S. Department of Transportation
West Building, Ground Floor, Rm. W12-140
New Jersey Avenue, SE
Washington, D.C. 20590

Re: Docket No. USCG-2014-0941

To Whom It May Concern:

The Marine Mammal Commission (Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Coast Guard's 5 December 2014 *Federal Register* notice (79 Fed. Reg. 72157) and supporting documents requesting comments on the development of a Port Access Route Study for the Chukchi Sea, Bering Strait, and Bering Sea. The Commission offers the following comments and recommendations. These recommendations supplement those provided to the Coast Guard on 6 May 2011 (letter enclosed) regarding shipping through the Bering Strait, and are based on the map of the new proposed route from Unimak Pass to the Chukchi Sea referenced in the notice.

The Commission believes that the expanded scope of this study to consider a shipping route throughout the eastern Bering Sea from Unimak Pass to the Chukchi Sea is appropriate and commends the Coast Guard for taking this expanded view of regional vessel traffic management. As indicated in our May 2011 letter, the Commission is concerned about the effect of increasing levels of Arctic shipping on marine mammals that is anticipated as global warming reduces the extent of summer sea-ice in the Arctic Ocean and adjacent seas. Increased shipping to and from the Arctic has the potential to affect marine mammals, as well as subsistence hunting of marine mammals, particularly at key choke points along marine mammal migratory routes and foraging areas, such as the Bering Strait, the eastern end of St. Lawrence Island, and Unimak Pass.

Recognizing the possible adverse effects on marine mammals from vessel noise, ship-strikes, and the release of hazardous substances from groundings and vessel collisions, the Commission is concerned about the effects of increasing vessel traffic along the proposed route on both marine mammals and Alaska Native subsistence hunters who rely on marine mammals. As such, the Commission commends the Coast Guard for encouraging formation of the Arctic Marine Mammal Coalition (AMMC) to solicit advice from local communities on regional vessel traffic plans. As it did in its 2011 letter, the Commission recommends that the Coast Guard continue its ongoing consultations with Alaska Native communities bordering the proposed Bering Strait route, Alaska Native Organizations (e.g. the Alaska Eskimo Whaling Commission, Eskimo Walrus Commission and AMMC), the Alaska Department of Fish and Game, and the National Marine Fisheries Service to identify and characterize the species, seasons, and areas in which marine mammals and traditional marine mammal subsistence hunting occur.

As noted in the 2011 letter and as recommended by the AMMC, the Commission supports plans to direct vessel traffic from the west side of St. Lawrence Island to the east side to minimize impacts on subsistence hunting. The proposed route should help in this regard. However, in reviewing the proposed route and specific areas of possible impact on subsistence activities, the Commission suggests that the Coast Guard consult with Native hunting representatives to consider whether there would be a lower impact on subsistence hunters if the route's proposed leg east of St. Lawrence Island were moved further east. This might be accomplished without adding turns along the route by extending the leg between points 4/10 and 5/11 further north before bending west on the leg connecting with points 3/9. The Commission also notes that the AMMC recommended the creation of a Waterway Safety Committee and improvements to the existing communications infrastructure for Arctic shipping, and it urges the Coast Guard to pursue further action on those matters as well.

In addition, because the United States shares jurisdiction of the Bering Strait with Russia, which also has a vital interest in managing increased levels of Arctic shipping and avoiding associated accidents, the Commission again recommends that the Coast Guard continue to consult with its Russian counterparts and advise them about steps being taken in the United States to plan for increased shipping through the Bering Strait, share data on vessel traffic and the possible impact of shipping on the environment, and pursue the establishment of cooperative, complementary vessel management systems on both the American and Russian sides of the Bering Sea and Bering Strait.

The Commission notes that, should there be an accident resulting in the release of hazardous substances anywhere along the proposed route, it would be very difficult to mount an adequate response given the region's remote location, lack of adequate infrastructure, and icy conditions during much of the year. There currently are no proven, effective methods for cleaning up a spill in the Arctic marine environment, particularly in icy conditions. Therefore, the most prudent approach is to emphasize measures designed to achieve accident prevention. In this regard, the Commission believes it would be appropriate and reasonable to designate the proposed route as a Traffic Separation Scheme with separate north-south lanes offset by a separation zone. Consideration should be given to making each lane and the separation zone between them two miles wide. This would be preferable to a Two Way Route within which vessels could be traveling in opposite directions in the same corridor, presenting a higher collision risk. Thus, as recommended in its 2011 letter, the Commission again recommends that the Coast Guard consider establishing the entire proposed route as a Traffic Separation Scheme.

As also noted in the 2011 letter, the Bering Strait is a particularly important marine mammal migratory corridor. Walrus, bowhead whales, other large whales, beluga whales, and ice seals migrate through this narrow strait annually. In view of the Strait's importance to marine mammals and subsistence hunters who depend on them, the Commission recommends that the Coast Guard designate the north-south leg of the proposed route that passes through the Bering Strait (i.e., the leg between points 2/8 and 1/7) as a Precautionary Area with a standing Notice To Mariners advising them to be particularly alert for subsistence hunters and marine mammals and to be prepared to reduce vessel speed when either are sighted in or near the vessel's path. Also, as previously recommended in its 2011 letter, the Commission again recommends that the Coast Guard consider designating waters outside the Traffic Separation Scheme along this stretch (e.g.

within 15 miles of either side of the proposed lane between points 2/8 and 1/7) as an “Area To Be Avoided.”

The ability to monitor vessel traffic along the route is also important. The development of an Automatic Identification System (AIS) to track ship traffic has greatly improved the ability to monitor and manage vessel traffic; however, the proposed route is currently not well covered by existing shore stations. Therefore, as part of the PARS study for the proposed route, the Commission recommends that the Coast Guard consider steps to improve AIS coverage along the proposed Vessel Routing System through the installation of additional shore stations. For example, adding AIS shore stations at places such as the western tip of Nunivak Island, the eastern tip of St. Lawrence Island, on the Alaska mainland near Hooper Bay and Cape Romanzof, and Krekatok Island might significantly improve the Coast Guard’s ability to track vessel traffic along portions of the proposed route.

Although not considered in the proposed Vessel Routing System, the Commission is also concerned about the Vessel Routing System through Unimak Pass. This pass is undoubtedly an important choke-point along the migratory route for North Pacific right whales, which are among the world’s most endangered large whales. These whales almost certainly travel through the pass during the spring and fall as they move between feeding areas designated as critical habitat in the southeast Bering Sea and the Gulf of Alaska. In addition, almost the entire population of gray whales migrates through this pass in the spring and fall. The pass is also used by humpback whales, blue whales, fin whales, killer whales, northern fur seals, and Steller sea lions. Because the pass is narrow (less than 15 miles wide at its narrowest point between Unimak and Ugamak Islands) and surrounded by shoal waters at both islands, there is a high risk of ships encountering and striking whales in this area. In addition, should a grounding or collision between vessels occur, a release of hazardous substances in the Pass could have significant adverse effects on marine mammals and other marine life. Therefore, the Commission recommends that the Coast Guard consider expanding the scope of this study to include the Vessel Routing System through Unimak Pass and designating all lanes within 15 nmi of either Unimak or Ugamak Island as a Precautionary Area and a Regulated Navigation Area with a speed restriction of between 10 and 12 knots. Based on recent experience with such speed restrictions adopted by the National Marine Fisheries Service to protect North Atlantic right whales, speed restrictions could be an effective means of preventing collisions with right whales and other large whales in this sensitive location as well.

We hope these additional recommendations are useful. If you or your staff has questions, please do not hesitate to let me know.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca J. Lent". The signature is written in a cursive style with a large initial "R".

Rebecca J. Lent, Ph.D.
Executive Director

Enclosure



MARINE MAMMAL COMMISSION

6 May 2011

Docket Management Facility
U.S. Department of Transportation
West Building, Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, D. C. 20590-0001

Re: Docket No. USCG-2010-0833

To Whom It May Concern:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Coast Guard's *Federal Register* notice (75 Fed. Reg. 68568) requesting comments on the development of a port access route study for U.S. waters in the Bering Strait. The Commission offers the following recommendations and comments.

RECOMMENDATIONS

The Marine Mammal Commission recommends that, as part of its planned port access route study for the Bering Strait, the U.S. Coast Guard—

- conduct a spatial and temporal analysis of factors affecting the distribution and potential co-occurrence of both marine mammals and ship traffic through the Bering Strait to identify options for vessel traffic routes that would minimize overlap between marine mammals—particularly endangered or threatened marine mammals—and ships while also meeting requirements for vessel safety and other environmental, cultural, and subsistence protection needs;
- consult with the National Marine Fisheries Service and the Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act to determine the vessel management actions and accident response capabilities needed to protect marine mammal species listed or under consideration for listing under that Act from possible impacts associated with vessel traffic and alternative vessel traffic management options;
- consult with the National Marine Fisheries Service's National Marine Mammal Laboratory to characterize the occurrence, movements, and seasonality of non-endangered and non-threatened seals and cetaceans in the Bering Strait and their potential vulnerability to impacts associated with vessel traffic;
- provide a thorough analysis of potentially hazardous cargo that might be transported through the Bering Strait and identify equipment and logistical requirements necessary to free vessels that run aground and clean up any hazardous materials that might be spilled in all possible seasons, weather, and ice conditions;
- consult with Alaska Native communities bordering the Bering Strait, Alaska Native Organizations (e.g. the Alaska Eskimo Whaling Commission and Eskimo Walrus Commission) and the Alaska Department of Fish and Game to identify and characterize the species, seasons, and areas in which traditional marine mammal subsistence hunting occurs;

- assess the value of (1) establishing a mandatory vessel traffic separation scheme, and (2) designating areas outside the vessel traffic lanes as “areas to be avoided” as defined by the International Maritime Organization, while taking account of environmental, cultural and subsistence protection needs;
- consider the need for establishing vessel speed restrictions of 10 knots if vessel traffic and bowhead whales are likely to overlap during the species’ peak migratory periods through the Bering Strait; and
- consult with its Russian counterpart to advise it of steps being taken in the United States to plan for increased shipping through the Bering Strait, to share data on vessel traffic and the possible impact of shipping on the environment, and to consider establishment of cooperative, complementary vessel management actions on both U.S. and Russian sides of the area.

RATIONALE

Decreasing ice cover in Arctic waters has focused international attention on potential use of the Arctic Ocean as a shipping corridor. The only shipping route from the Arctic to the Bering Sea and North Pacific is through the Bering Strait. To address the expected increase in shipping through the Strait, the Coast Guard will assess whether creation of vessel routing measures is advisable to increase the predictability of vessel movements and to decrease potential risk of vessel collisions, oil spills, and other events that could threaten the marine environment.

The Marine Mammal Commission commends the U.S. Coast Guard for its proactive effort to address potential shipping hazards in the Bering Strait. The Bering Strait is a roughly 50-mile-wide gateway between the Seward Peninsula, Alaska, and the Chukotka Peninsula, Russia. A recent report concluded that the Strait meets all seven of the Convention on Biological Diversity’s criteria for ecologically and biologically significant areas (Speer and Loughlin 2010). Among other things, large numbers of marine mammals migrate seasonally through the Strait between feeding and wintering grounds in the Chukchi and Bering Seas.

Vessel traffic and management through the Strait could have significant effects on marine mammals, and those effects should be considered as part the Coast Guard’s study. In general, ship traffic poses at least three significant threats to marine mammals: (1) collisions with ships can kill or seriously injure marine mammals (especially large whales); (2) ship collisions and vessel groundings can introduce contaminants, such as fuel oil or hazardous cargo, into the marine environment, affecting marine mammals either directly through physical contact or indirectly through contamination of their food, and (3) disturbance due to noise from engines, ice-breaking activities, or other vessel noise or the mere physical presence of the vessels can alter marine mammal movements and habitat-use patterns.

Between early March and May bowhead whales migrate north through the Bering Strait to Arctic feeding grounds, possibly following a route that takes most whales along the eastern side of the Strait through U.S. waters. After moving to waters in the western Chukchi Sea north of the

Chukotka Peninsula between late summer and fall, most whales return south in November and December, traveling principally along the western side of the Strait in Russian waters to wintering grounds in the Bering Sea (Braham et al. 1980, Moore et al. 1995, Quakenbush et al. 2010a, b). Less is known about the movement of eastern gray whales through the Bering Strait; however, observations of feeding whales in the Chukchi Sea and the Bering Strait between August and November, and occasionally as late as early December, indicate that a portion of this population moves through the area and that the timing is influenced by ice conditions (Clarke and Moore 2002, Moore et al. 2002 [Figure 7 and Table 6]). In addition, a large number of gray whales feed immediately south of the Bering Strait during summer and fall months (Moore et al. 2002, 2003). A large portion of the Pacific walrus population migrates annually through the Strait. Its northward migration peaks in May and June and the southward migration peaks in October and November as pack ice reforms and pushes south (Garlich-Miller et al. 2011). In late fall, walrus form large aggregations along the Russian coast on the northwestern side of the Bering Strait. Large haul-out sites also have been reported intermittently on islands in the Bering Strait region (Big Diomedes, King Island, and the Penuk Islands) in late fall and early winter, prior to the onset of ice formation (Fay 1982). Substantial portions of several seal populations (particularly the various species of ice seals) and small cetaceans (particularly beluga whales) also move through the Strait seasonally. All of these species are vital cultural and subsistence resources for Native residents in both Alaska and Chukotka.

The potential impact of increased shipping on marine mammals should be an important part of the Coast Guard's study, as recommended in the Arctic Marine Shipping Assessment (Arctic Council 2009). To ensure that the impact is adequately considered, the Marine Mammal Commission recommends that the U.S. Coast Guard conduct a spatial and temporal analysis of factors affecting the distribution and potential co-occurrence of both marine mammals and ship traffic through the Bering Strait to identify options for vessel traffic routes that would minimize overlap between marine mammals—particularly endangered or threatened marine mammals—and ships while also meeting requirements for vessel safety and other environmental, cultural and subsistence protection needs. This analysis should consider obvious physical parameters, such bathymetry, ocean current patterns, tidal range, and seasonal ice conditions, as well as information on the distribution and movement patterns of marine mammals and marine mammal subsistence hunting by Alaska Natives (e.g., Ashjian et al. 2010).

Several marine mammal species in this region are listed or being considered for listing as endangered or threatened under the Endangered Species Act (i.e., bowhead whales, Pacific walrus, ringed seals, and bearded seals). To ensure their protection, the Marine Mammal Commission recommends that the U.S. Coast Guard consult with the National Marine Fisheries Service and the Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act to determine vessel management actions and accident response capabilities needed to protect marine mammal species either listed or under consideration for listing under that Act from possible impacts associated with vessel traffic and alternative vessel traffic management options in the Bering Strait. In addition, because of the importance of the Bering Strait for seal and small cetacean species and populations not listed under the Endangered Species Act, the Marine Mammal Commission recommends that the U.S. Coast Guard consult with the National Marine Fisheries Service's National Marine Mammal

Laboratory to characterize the occurrence, movements, and seasonality of non-endangered and non-threatened seals and cetaceans in the Bering Strait and their potential vulnerability to impacts associated with vessel traffic.

The Coast Guard will need to consider the availability of clean-up response and vessel salvage capabilities to address the risks associated with spills of fuel oil or hazardous materials carried as cargo. Management of such situations will be challenging, given the Strait's remote location and the need to cope with harsh weather and seasonal ice conditions. Nevertheless, this need must be considered, and the Marine Mammal Commission therefore recommends that the U.S. Coast Guard provide a thorough analysis of potentially hazardous cargo that might be transported through the Bering Strait and identify equipment and logistical requirements necessary to free vessels that run aground and clean up any hazardous materials that might be spilled in all possible seasons, weather, and ice conditions.

As noted earlier, most marine mammals are vital subsistence resources for Native residents living along the Bering Strait coast. Their hunting grounds vary by species, season, and annual ice conditions. Engine noise, vessel movements, and perhaps other factors associated with ship traffic may alter marine mammal movement and habitat-use patterns, and it is therefore important to ensure that any increase in vessel traffic does not cause marine mammals to abandon their habitat, making them unavailable to subsistence hunters. To assess such risks, the Marine Mammal Commission recommends that the U.S. Coast Guard consult with Alaska Native communities bordering the Bering Strait, Alaska Native Organizations (e.g. the Alaska Eskimo Whaling Commission and Eskimo Walrus Commission), and the Alaska Department of Fish and Game to identify and characterize the species, seasons, and areas in which traditional marine mammal subsistence hunting occurs.

As a general matter, actions to reduce the risk of vessel collisions or groundings also will protect marine mammals from spills of oil, fuel, or hazardous cargo. Given the remote location and limited logistical support available to respond to such incidents, the Commission believes it is particularly important to recognize that the best protection will be measures that prevent incidents before they happen. With that in mind, the Marine Mammal Commission recommends that the U.S. Coast Guard assess the value of (1) establishing a mandatory vessel traffic separation scheme, and (2) designating areas outside the vessel traffic lanes as "areas to be avoided" as defined by the International Maritime Organization, while taking account of environmental, cultural and subsistence protection needs.

The Marine Mammal Commission also is concerned about the risk of vessels striking and either killing or seriously injuring large whales. Because of their movements and distribution, bowhead whales are likely the species most vulnerable to being struck by ships in the Arctic. Based on right whale carcasses observed along the East Coast of North America in recent years, a third to nearly half of all known right whale deaths resulted from collision with a ship. To address collision effects on right whales along the East Coast, the National Marine Fisheries Service recently limited vessel speeds to 10 knots in times and areas where collision risks are most likely, including areas

along their migratory corridor. To date, there are few records of bowhead whales struck by ships—likely because levels of vessel traffic in the Arctic have been very low so far. However, because of the bowhead's close similarity in behavior to that of right whales, the Commission believes that bowhead whales would be similarly vulnerable to ship strikes if vessel traffic increases.

The area of greatest risk could well be in the Bering Strait during the fall. At that time, the whales move south, principally along the Russian side of the Strait in relatively ice-free conditions that could still be transited by vessels. In the spring, vessel traffic and collision risks are likely to be relatively low because of heavy ice conditions. However, if there is a potential for vessel traffic through the Strait during the March–May migratory period or if it is determined that a significant number of southbound whales travels through U.S. waters during the November–December migration, the Commission believes consideration of a 10-knot speed limit would be warranted. Accordingly, the Marine Mammal Commission recommends that the U.S. Coast Guard consider the need for establishing vessel speed restrictions of 10 knots if vessel traffic and bowhead whales are likely to overlap during the species' peak migratory periods through the Bering Strait.

Finally, while U.S. jurisdiction extends only over the eastern half of the Bering Strait, vessel traffic and the potential impact on marine mammals also are likely in the western half of the Strait, which is under Russian jurisdiction. To coordinate vessel management in and near the Strait, the Marine Mammal Commission recommends that the U.S. Coast Guard consult with its counterpart in the Russian government to advise it of steps being taken in the United States to plan for increased shipping through the Bering Strait, to share data on vessel traffic and the possible impact of shipping on the environment, and to consider the establishment of cooperative, complementary vessel management actions on both U.S. and Russian sides of the area. Such cooperation could be particularly important and cost-effective for addressing equipment and logistical requirements to respond to vessel groundings and contaminant clean-up needs.

I hope these comments and recommendations are helpful. If you have questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Timothy J. Ragen, Ph.D.
Executive Director

Cc: Steven M. Tucker

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