

## **Appendix D - Environmental Analysis and ATBA's**

### ***Environmental Analysis***

One of the most heavily commented upon aspects of the Bering Strait PARS was in regards to the hazards that vessels bring to the environment and wildlife living in the Bering Sea region. Of specific note in the comments was the mention of endangered and threatened species living in the area and at risk from a vessel borne accident. Also included with the comments was a sizable body of scientific literature on wildlife and habitats to support the submitted comments.

The Coast Guard read all of the comments and associated literature offered in support of the stated environmental and wildlife concerns. Additionally, the Coast Guard reviewed information published by NOAA and the USFWS in an effort to verify the submitted information was accurate and consistent with the information being published by the federal agencies charged with management and oversight of the various wildlife species. The jointly submitted comment from Audubon Alaska, Friends of the Earth, Oceana, Ocean Conservancy, Pacific Environment, The PEW Charitable Trusts, Wildlife Conservation Society, and WWF on June 9, 2015, which included 38 maps was especially helpful.

In lieu of publishing an extensive series of maps to illustrate wildlife use patterns for the Bering Sea region, the Coast Guard encourages all interested parties to view the following websites to get a sense of the regional environment and wildlife distribution.

- NOAA's Environmental Sensitivity Index (ESI) Maps available at <http://response.restoration.noaa.gov/maps-and-spatial-data/environmental-sensitivity-index-esi-maps.html>
- NOAA's Marine Mammal Species Range and Habitat maps available at <https://alaskafisheries.noaa.gov/mapping/esa/>
- USFWS Endangered Species Act (ESA) listed species information available at <https://ecos.fws.gov/ecp0/reports/species-listed-by-state-report?state=AK&status=listed>
- Maps included with the letter from Audubon et, al. which is available at <https://www.regulations.gov/document?D=USCG-2014-0941-0022>

Those viewing the previously mentioned environmental and wildlife maps will see the Bering Sea region is home to an abundant and diverse array of wildlife, some of which are endangered or threatened species. Also readily observable from the maps is the fact that the entirety of the Bering Sea is habitat range for multiple threatened or endangered species. These two items make it impossible for the Coast Guard to develop a routing system which completely avoids important environmental areas or locations where wildlife are present. Consequently, the Coast Guard had to identify a balance between all the competing waterway uses.

Because completely avoiding all wildlife and all important environmental areas was not possible, the Coast Guard sought ways to reduce the impact on the environment, while still ensuring the needs of navigation were met. The Coast Guard originally proposed a four nautical mile wide recommended vessel route from Unimak Pass thru the Bering Strait. The Coast Guard still believes a recommended route is helpful from an environmental standpoint because it will help to condense vessel traffic into a narrow corridor thereby reducing the overall footprint where vessel traffic is transiting. In theory, this leaves more of the marine environment open and undisturbed for wildlife to utilize.

In reviewing the submitted comments and previously mentioned environmental information, the Coast Guard came to the conclusion that in general, wildlife and environmental sensitivity decreased as distance from shore increased. The Coast Guard recognizes that this is not always true, nor is the trend perfectly linear. This general observation of decreasing sensitivity and wildlife activity seems to be confirmed and well illustrated by map # 36 and 38 submitted by Audubon et al, which are a Marine Mammal composite map and an Ecosystem Composite map respectively. Both maps show lower occurrences of wildlife in locations far out sea as compared to the waters nearer to shore.

Given that there is less environmental sensitivity as distance from shore increases, the Coast Guard believes any proposed vessel routing system directing traffic between Unimak Pass and the Bering Strait should utilize a route that is as far off shore as is reasonably practicable which would help to direct vessels clear of the most sensitive and productive areas. Coincidentally, the Coast Guards recommended route was designed to stay as far from shore as reasonably possible because it provides additional time for a disabled vessel to receive assistance prior to drifting aground as well as avoid shoal water that is typically near shore. Taken collectively, there are multiple reasons for vessel routes to be as far off shore as reasonably practicable while still ensuring navigational use is preserved.

### ***ATBA's (Areas to be Avoided)***

Many comments urged the Coast Guard to consider ATBA's. ATBA's are a ship routing measure used to direct vessels away from certain areas, which employs the opposite tactic to that of a recommend route which directs vessels towards a certain area. Based on the comments and supporting evidence received, Coast Guard believes employing ATBA's has merit in those areas where they will afford additional protections to the most environmentally sensitive areas. In some locations, ATBA's are also useful for increasing stand-off distance and alerting mariners to potential navigational hazards. An additional benefit of key importance is that ATBA's are clearly marked on nautical charts. While the reasons for the ATBA's existence might not appear on a chart, the presence of the ATBA nonetheless signals a warning to the vessel navigator that there is a particular concern in that area.

Over the course of this study, the Coast Guard has already observed changes in the timing and migration patterns of some species. The timing and in some cases the location of subsistence hunting effort has changed as ice conditions change. The Coast Guard considers it possible that future radical changes in migration patterns could occur. Establishing ATBA's in key areas now will provide a good starting point if future change warrants modifications or additional ship routing measures.

The next map shows the four locations where the Coast Guard proposes to place ATBA's. The Coast Guard recognizes that in some of these areas, vessels may be actively avoiding ice or severe weather that will necessitate entry into the ATBA. While areas on both sides of the route may be of heightened environmental or navigational concern, the Coast Guard has attempted to avoid placing ATBA's on both sides. In a situation where a vessel following the route needs to depart from the route, the presence of the ATBA on one side of the route should influence a vessel to deviate, if the situation allows, toward the side of the route that is of lesser environmental or navigational concern and not part of an ATBA.

### **The Bering Strait ATBA**

The Area to be Avoided in the Bering Strait is intended to prevent disruption of subsistence activities, minimize pollution risk, and also alert mariners to the presence of Fairway Rock in the event a navigational error puts a ship in closer proximity than would otherwise occur had the vessel remained within the two-way route. The Coast Guard received several public comments that identified this area as being of particularly high concern.

### **King Island ATBA**

The Area to be Avoided around King Island is intended to prevent disruption of subsistence activities, minimize pollution risk, and alert mariners to the presence of King Island in the event a navigational error puts a ship in closer proximity than would otherwise occur had the vessel remained within the two-way route. The Coast Guard received several public comments that identified this area as being of particularly high concern, in particular from Kawarek, Inc. and individuals in nearby villages in the area that Kawarek represents.

### **Saint Lawrence ATBA**

The Area to be Avoided around Saint Lawrence Island is intended to prevent disruption of subsistence activities, minimize pollution risk, and alert mariners to shoal waters in close proximity to the proposed two-way route as it passes the eastern end of Saint Lawrence Islands. The Coast Guard received several public comments that identified this area as being of particularly high concern, in particular from residents of St. Lawrence Island residents in Gambell and Savoonga who rely extensively on this area for subsistence activities.

### **Nunivak Island ATBA**

The Area to be Avoided around Nunivak Island is intended to prevent disruption of subsistence activities, minimize pollution risk, and alert mariners to shoal waters in close proximity to the proposed two-way route where the consequences of a grounding could be particularly severe. The Coast Guard received several public comments that identified this area as being of particularly high concern.

# ATBA's Around Key Areas

