

Conclusions and Recommended Alternatives:

The Seventeenth Coast Guard District believes that this study demonstrates that implementation of vessel routing measures is warranted in the Bering Strait and Bering Sea. Since the Bering Strait is recognized as an international strait, and it already sees usage by vessels from many different nations, routing measures should be pursued through the International Maritime Organization. The Bering Strait Port Access Route Study developed seven alternatives for routing measures that have been determined to have merit. While the Seventeenth Coast Guard District recommends adoption of Alternative 1 as its preferred alternative, alternatives 2 and 3 are also viable. The Seventeenth Coast Guard District also recommends adoption of alternatives 4, 5, 6, and 7, which would implement four Areas to be Avoided. Charts of these alternatives are below, along with a narrative highlighting the differences between the alternatives. Routing measures would apply to vessels of 400 gross tons and larger, as a review of traffic patterns demonstrated these are the vessels that will use them.

Recommended Alternatives

Alternative 1 - Original Proposal, Two-way Route Including “Western Leg”

Advantages:

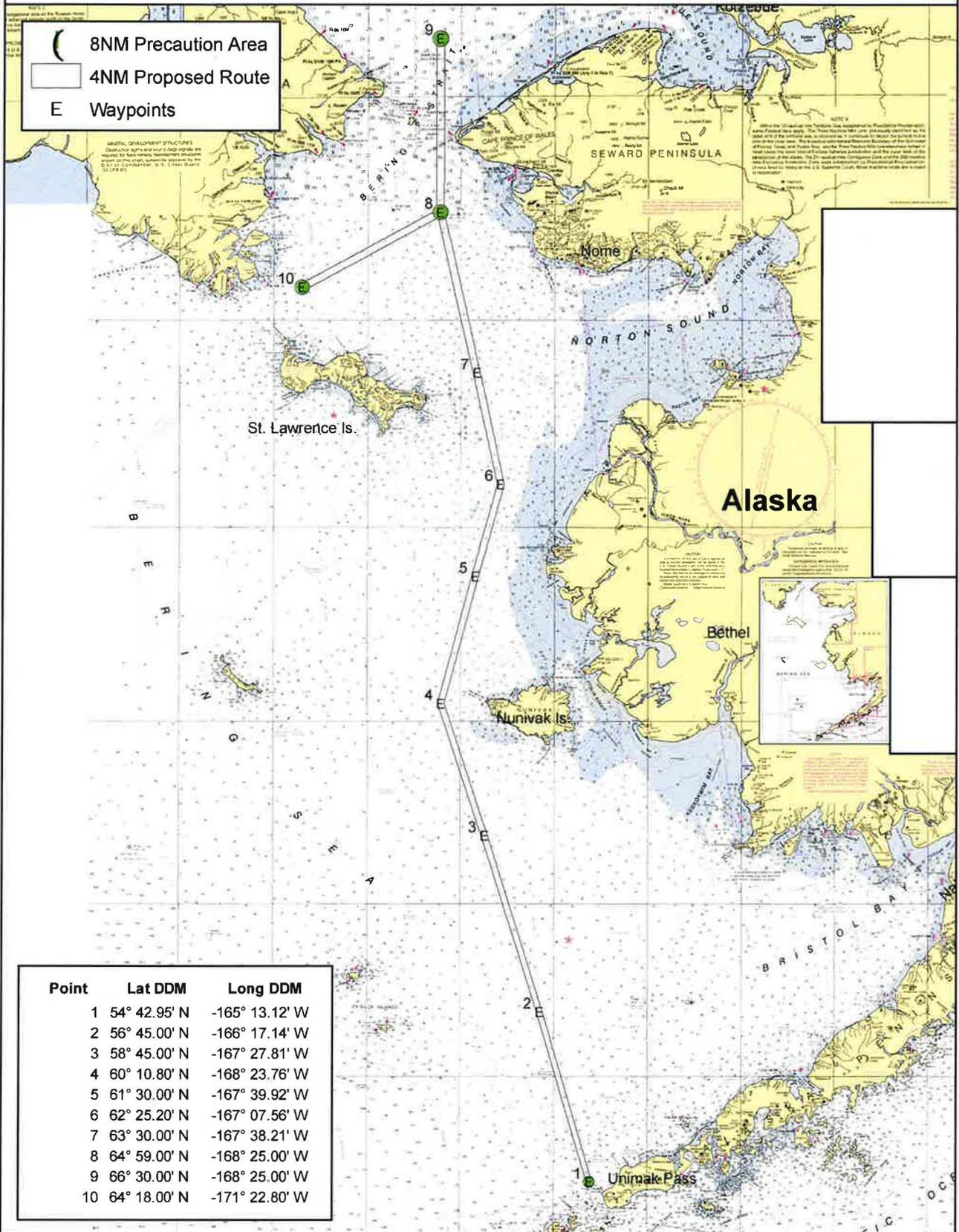
Alternative 1 is the originally proposed two-way route, modified to include additional waypoints that approximate the shorter great circle route. Since this alternative establishes ship routing measures leading all the way to Unimak Pass, it will minimize the risk of collisions between fishing vessels and other commercial traffic, regardless of where fishing activity occurs. Alternative 1 does provide a route for traffic bound to or coming from the Far East, however it does not conform well to current traffic patterns, in which most vessels transit further to the north. For purposes of clarity, this section of the two-way route is being called the “Westward Spur”. Advancing alternative 1 to the International Maritime Organization may yield a way forward towards identification of a joint US/Russian routing measure that would more closely mirror existing traffic patterns. In the event that both Alternatives 1 and 4 are advanced, that portion of the precautionary area that overlaps with the King Island area to be avoided proposed in Alternative 4 would be removed.

Disadvantages:

Alternative 1 routes vessel traffic through a Northern Right Whale Critical Habitat Area(CHA) in the Bering Sea. Modifying the two-way route to avoid the critical habitat area would increase the length of the route by approximately 31 nautical miles. The Coast Guard believes most vessels would not follow a longer route that avoids this critical habitat area, and the ensuing result would be less predictability overall in traffic patterns with a higher degree of collision risk that could affect the critical habitat area. Vessels that would follow a longer two-way route to avoid the Right Whale CHA would have more exposure to higher densities of fishing vessels coming from Unimak Pass or Dutch Harbor on voyages toward fishing grounds to the west of the proposed route along the 100 fathom curve. The Westward Spur of this route has not been surveyed, but validating the need for routing measures for vessels bound for destinations in the Far East who transit through waters between St. Lawrence and the Diomed Islands may result in hydrographic surveys being completed sooner.

Alternative 1 - Original Proposal

-  8NM Precaution Area
-  4NM Proposed Route
- E** Waypoints



Point	Lat DDM	Long DDM
1	54° 42.95' N	-165° 13.12' W
2	56° 45.00' N	-166° 17.14' W
3	58° 45.00' N	-167° 27.81' W
4	60° 10.80' N	-168° 23.76' W
5	61° 30.00' N	-167° 39.92' W
6	62° 25.20' N	-167° 07.56' W
7	63° 30.00' N	-167° 38.21' W
8	64° 59.00' N	-168° 25.00' W
9	66° 30.00' N	-168° 25.00' W
10	64° 18.00' N	-171° 22.80' W

Alternative 2 - No “Westward Spur”:

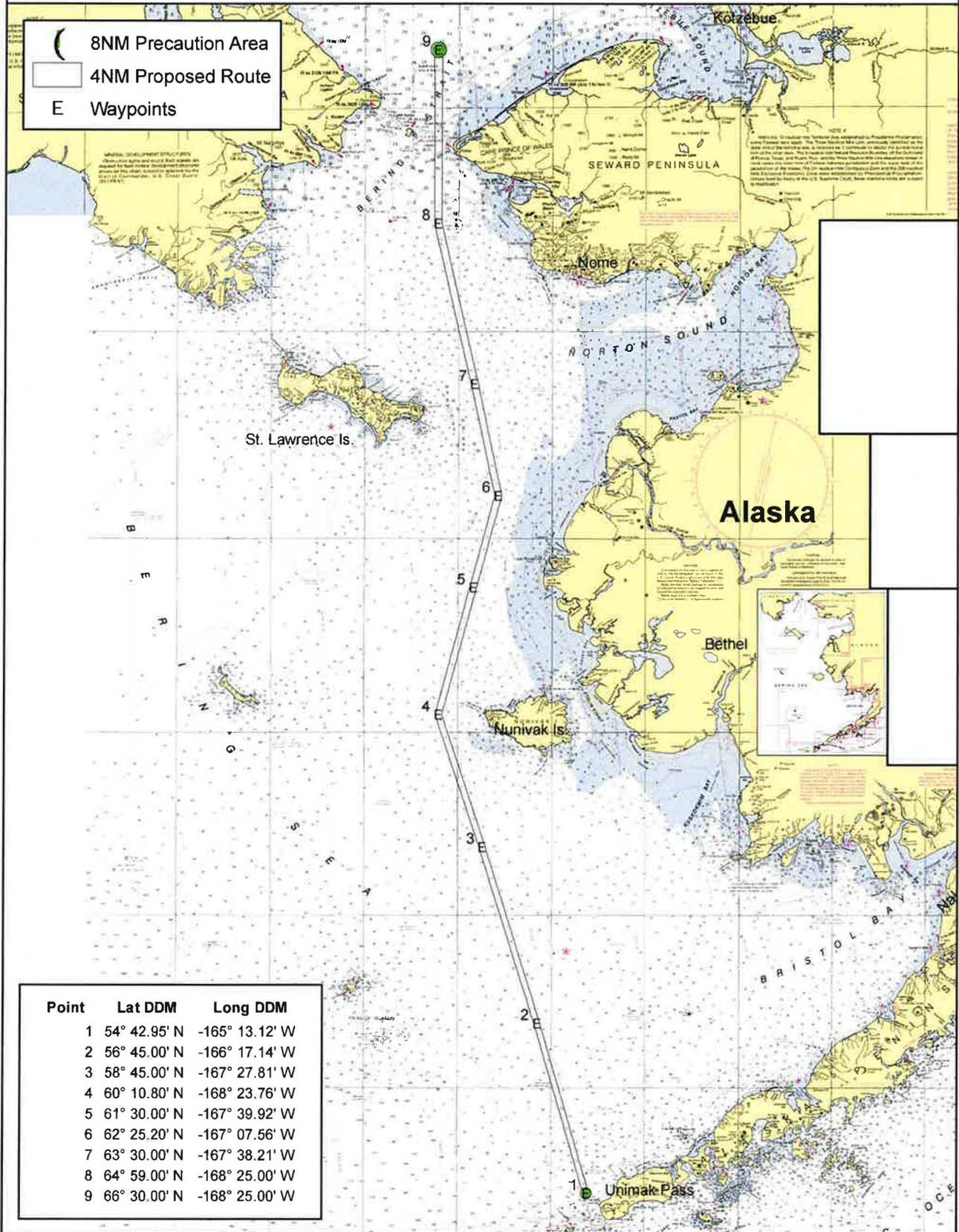
Advantages:

This route provides similar collision avoidance benefits to Alternative 1 in areas where fishing vessel traffic is dense. Removing the precautionary area near King Island provides additional stand-off distance from shore, which is desired by subsistence users who use this area.

Disadvantages:

As discussed in Alternative 1, this Alternative also routes vessel traffic through a Northern Right Whale Critical Habitat Area in the Bering Sea.

Alternative 2 - No Westward Spur



-  8NM Precaution Area
-  4NM Proposed Route
-  Waypoints

Point	Lat DDM	Long DDM
1	54° 42.95' N	-165° 13.12' W
2	56° 45.00' N	-166° 17.14' W
3	58° 45.00' N	-167° 27.81' W
4	60° 10.80' N	-168° 23.76' W
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Alternative 3 – Shortened Route:

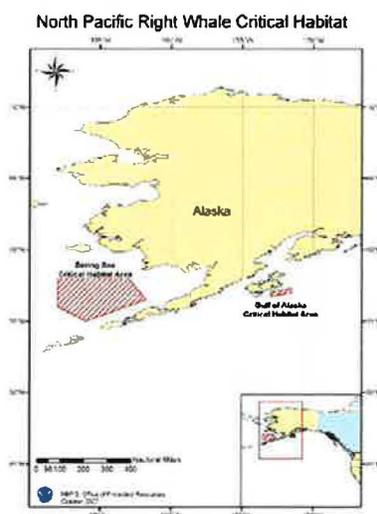
Advantages:

This route's southern terminus is at a location where existing traffic patterns show vessels bound for Unimak Pass and Dutch Harbor merging. The precautionary area at the southern end of this route serves to alert mariners that they are entering an area where it is more likely they will encounter another vessel on a slightly different course. Once a vessel is within the two-way route, some benefit in the form of reduced collision risk would accrue as vessels remain on the right side of the route in the direction they are travelling. This route is not within the limits of the area designated as Northern Right Whale Critical Habitat Area, although it is likely that vessels bound for Unimak Pass or Dutch Harbor would continue to follow existing traffic patterns that exist in the western portion of the Right Whale Critical Habitat Area.

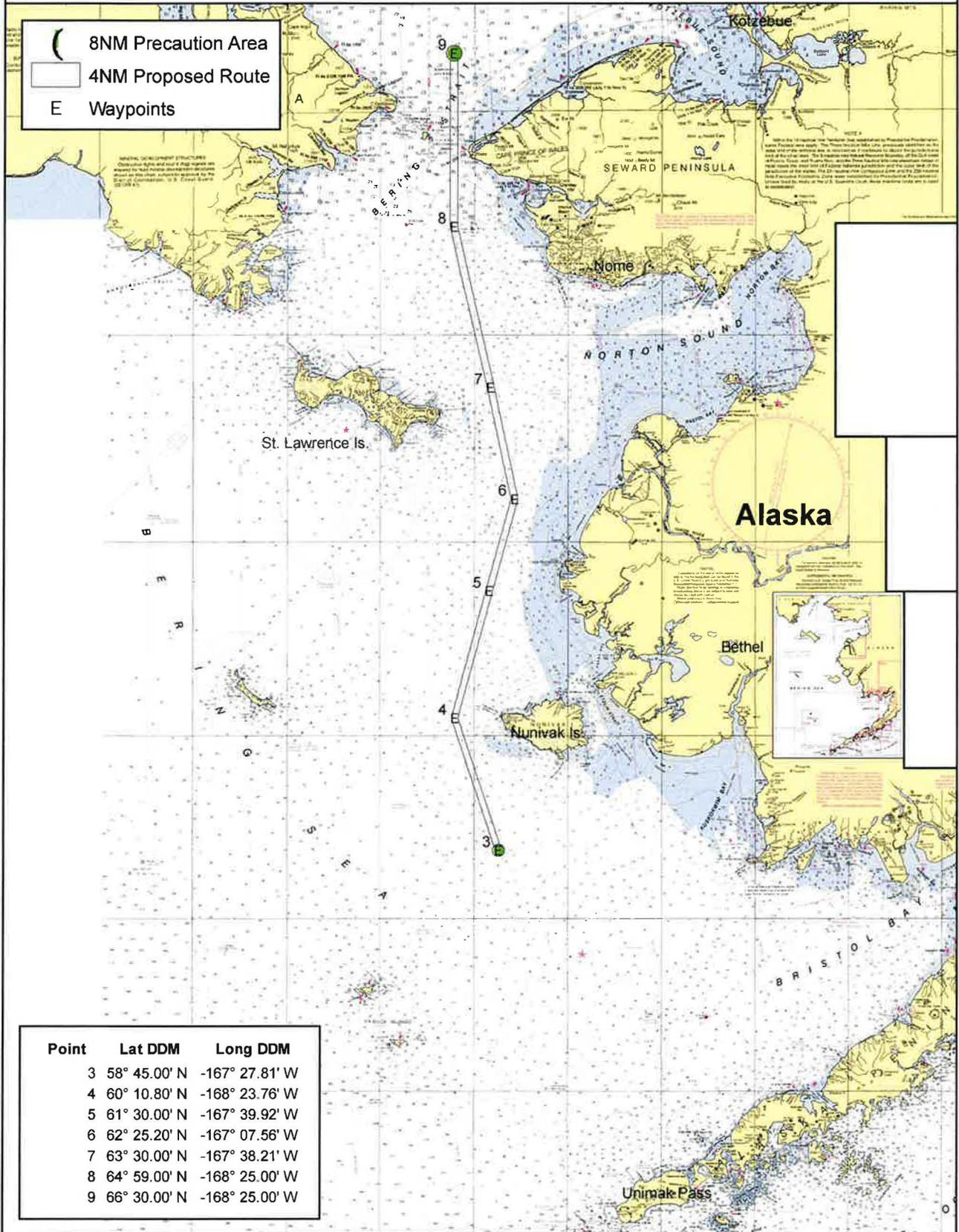
Disadvantages:

South of where this two-way route begins, no benefit of reduced collision avoidance risk would accrue. Fishing vessels would not know where to expect other commercial traffic bound to or from the Arctic. Vessels travelling between Unimak Pass and the starting point of the two-way route that would take them North through the Bering Strait will not enjoy the benefit of the 4 mile wide, two-way route that in most circumstances would provide opposing traffic a closest point of approach of about 2 nautical miles. This alternative also provides a less structured situation for navigators planning a voyage to the Arctic. In some cases, such as where a Northbound vessel departs Unimak Pass and sails a rhumb-line course, and a southbound vessel follows a great circle route, two vessels might draw track lines that place them at risk of a head-on collision. Appendix F explains this scenario in greater detail.

The figure below shows the extent of currently designated North Pacific Right Whale Critical Habitat.



Alternative 3 - Shortened Route



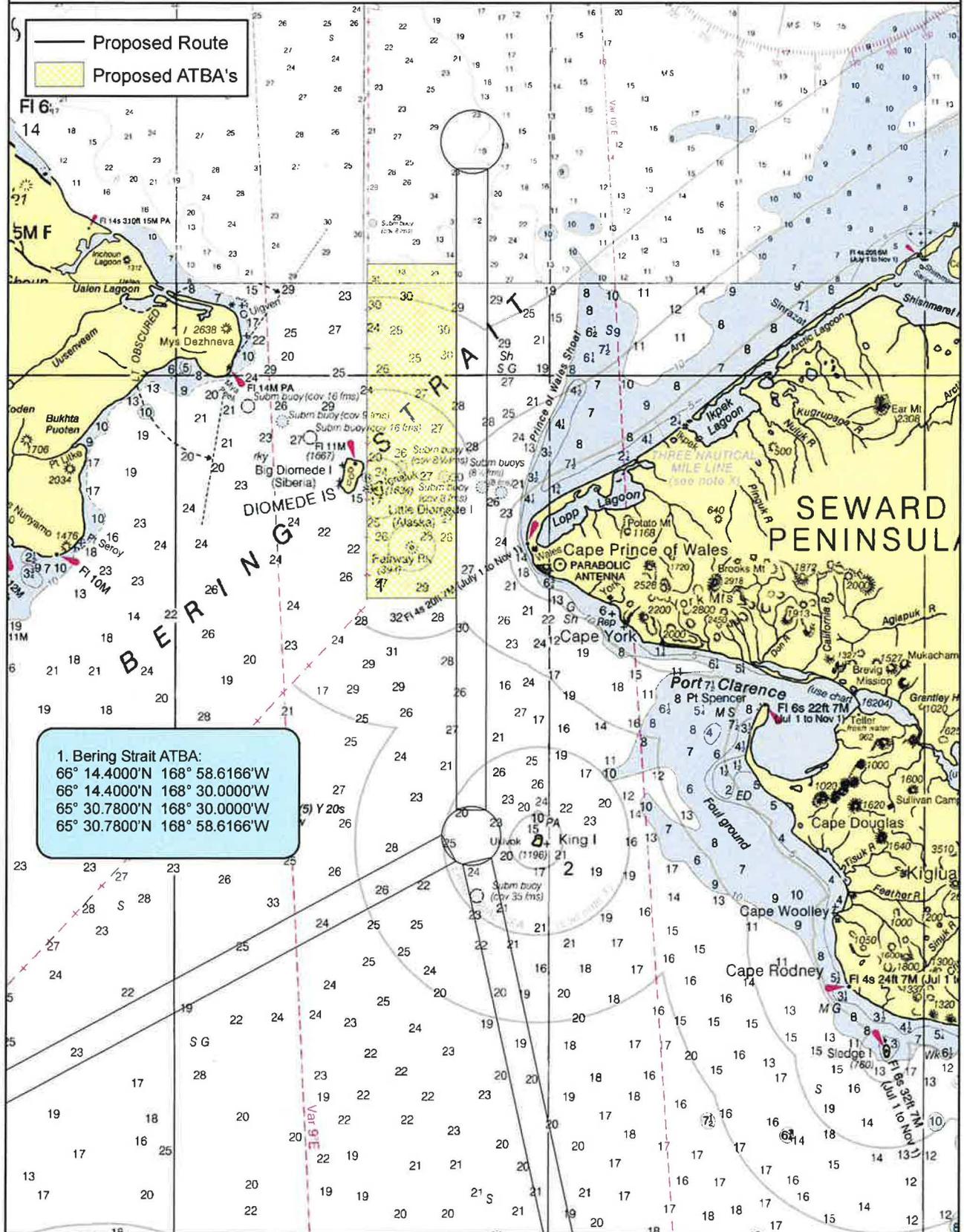
Alternative 4 - Bering Strait Area to be Avoided:

Advantages:

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 numerous public comments that identified this area as being of particularly high concern. It serves as a migration corridor for every species that migrates between the Bering Sea and Arctic Ocean. It is also a vitally important area for subsistence hunting, particularly bowhead whales, beluga whales and walrus, and ice seals.

Disadvantages: None identified.

Alternative 4 - ATBA Bering Strait



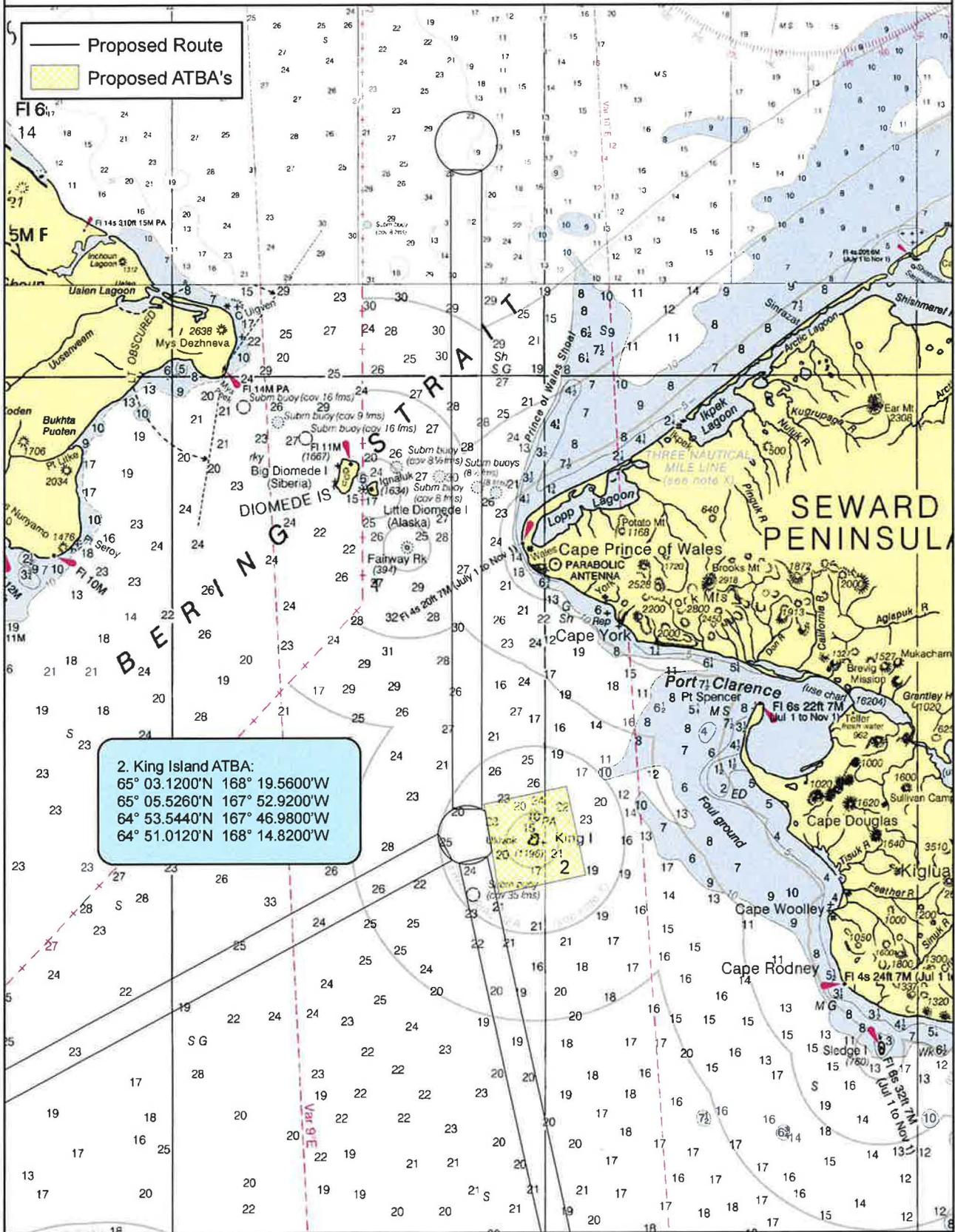
Alternative 5 - King Island Area to be Avoided:

Advantages:

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. These concerns include not just the use of King Island as an important subsistence harvesting area, but also the historic heritage of King Island itself. If this alternative is selected in combination with a two-way route alternative that does not include the Westward Spur, a portion the western side of the precautionary area would be omitted in that area where the Area to be Avoided and the precautionary area overlap.

Disadvantages: None identified.

Alternative 5 - ATBA King Island

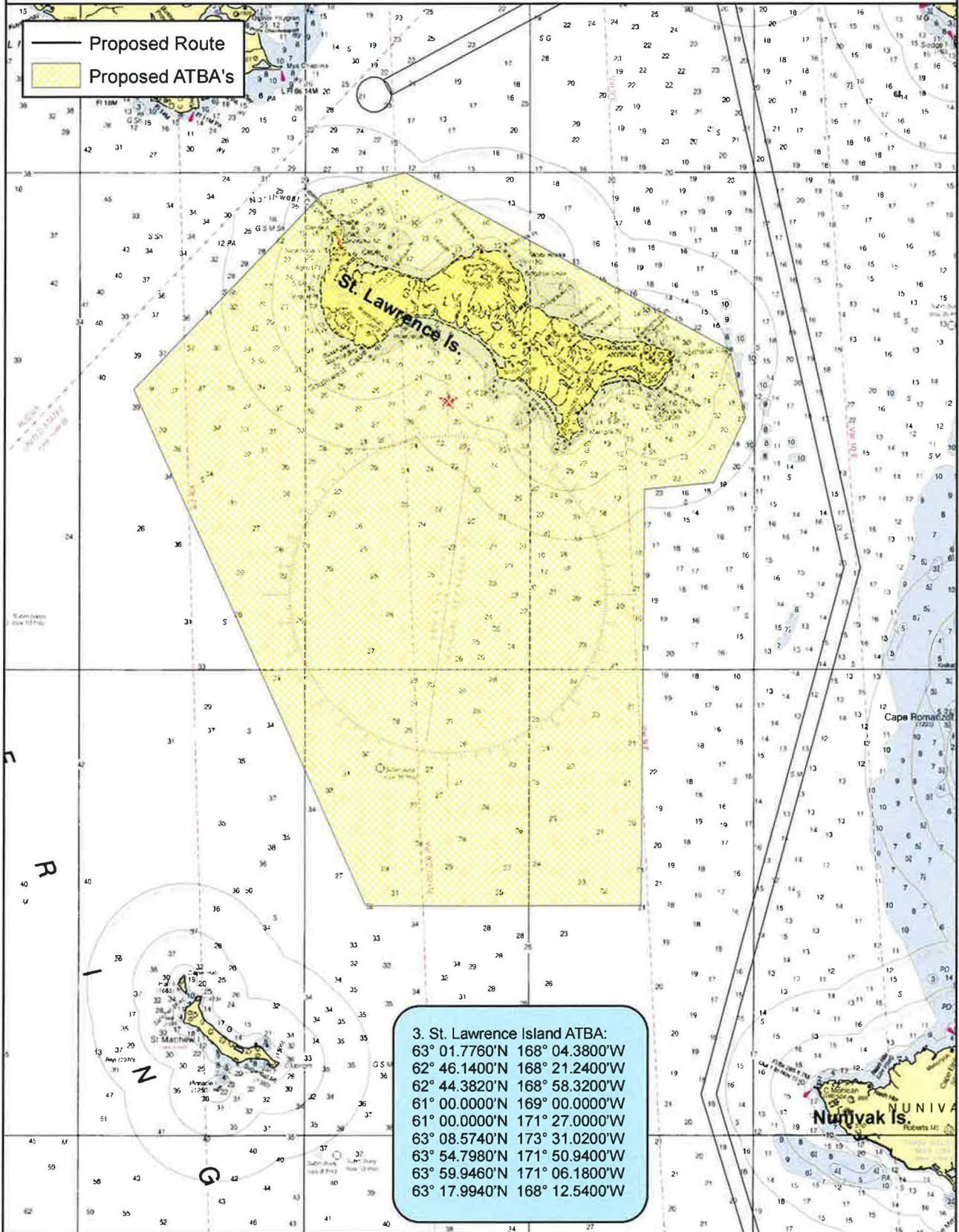


Alternative 6 - St Lawrence Island Area to be Avoided:

Advantages: 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. Residents of Gambell and Savoonga noted the eastern tip of St. Lawrence Island was vitally important to subsistence activities. Review of vessel traffic patterns revealed a number of ships passing relatively close to the island through waters where hydrographic survey confidence is low. The large portion of the Area to be Avoided to the south of Saint Lawrence Island is intended as an additional protection for the endangered Spectacled Eider. Nearly the entire population of this species congregates in this area each winter, putting the species at unusually high risk in the event of a widespread release of oil following a marine casualty. This portion of this ATBA falling south of Saint Lawrence Island currently sees minimal vessel activity.

Disadvantages: None identified.

Alternative 6 - ATBA Saint Lawrence Island



Alternative 7 - Nunivak Island Area to be Avoided:

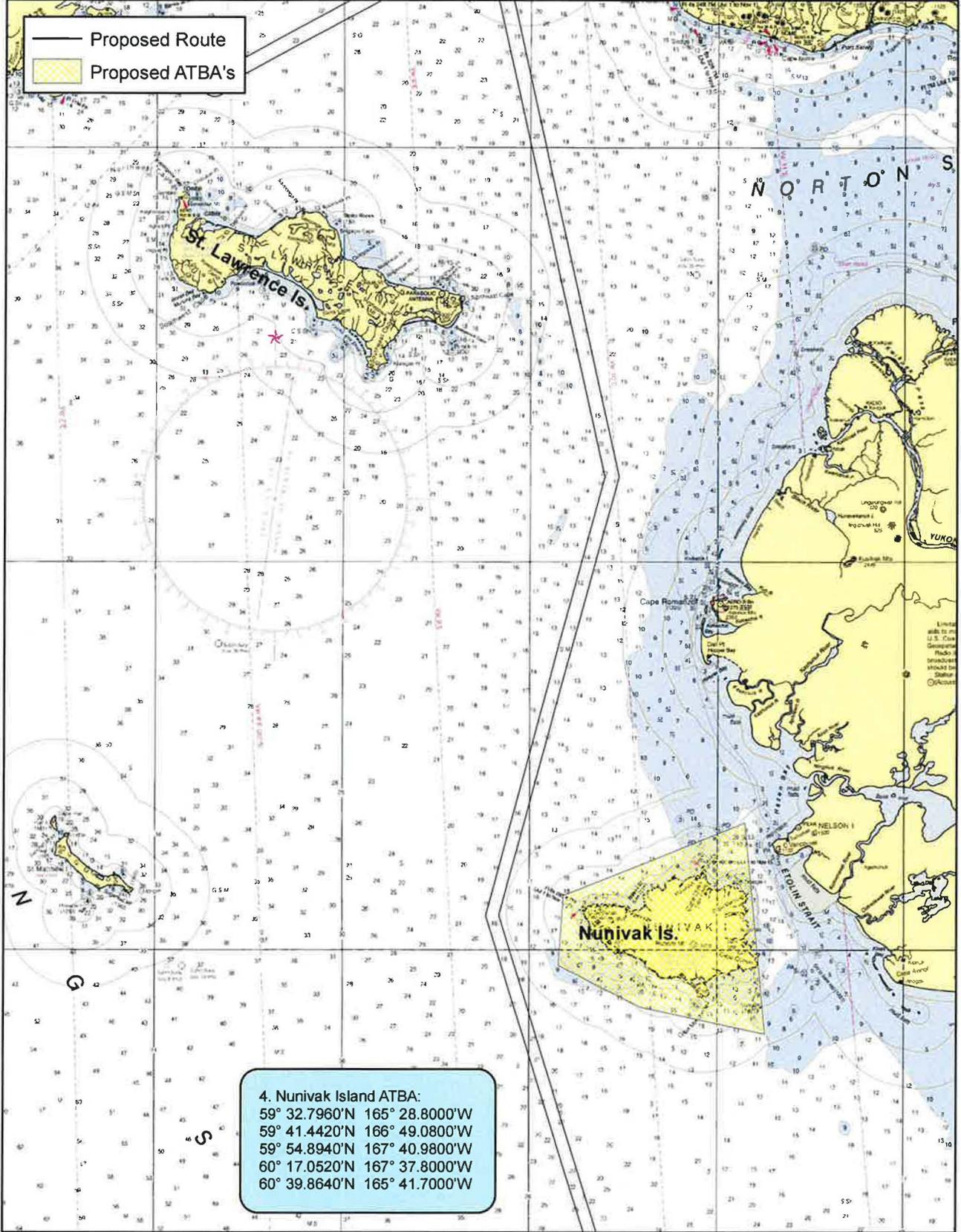
Advantages:

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.

Disadvantages: None identified.

Alternative 7 - ATBA Nunivak Island

— Proposed Route
▨ Proposed ATBA's



4. Nunivak Island ATBA:
59° 32.7960'N 165° 28.8000'W
59° 41.4420'N 166° 49.0800'W
59° 54.8940'N 167° 40.9800'W
60° 17.0520'N 167° 37.8000'W
60° 39.8640'N 165° 41.7000'W