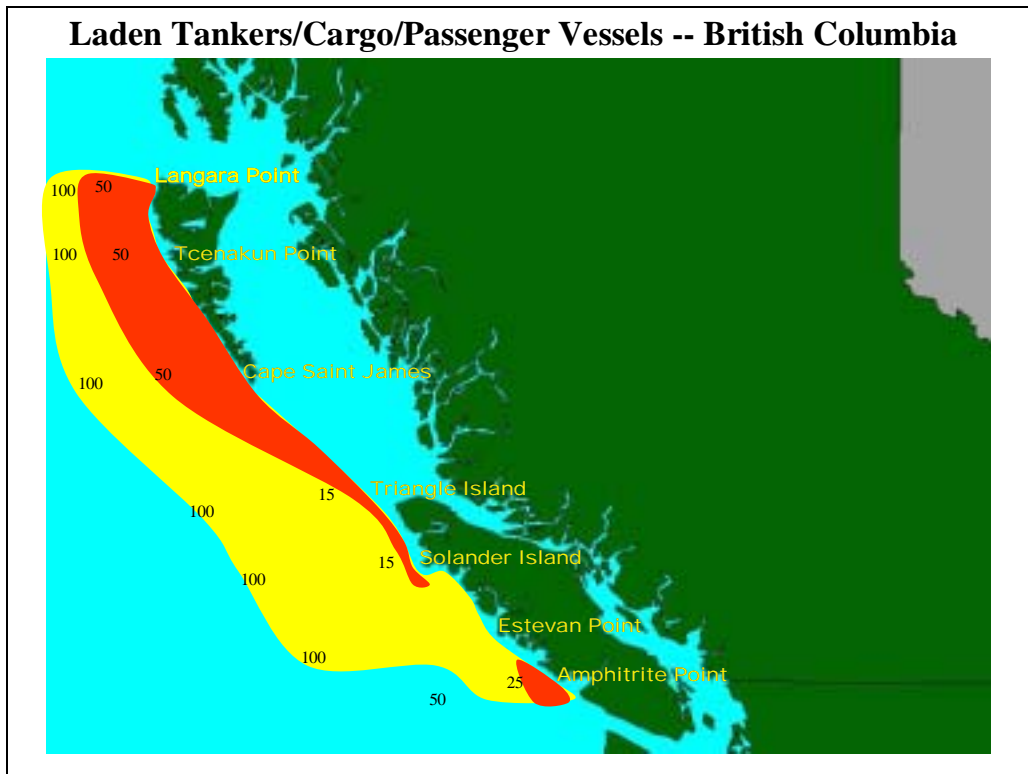


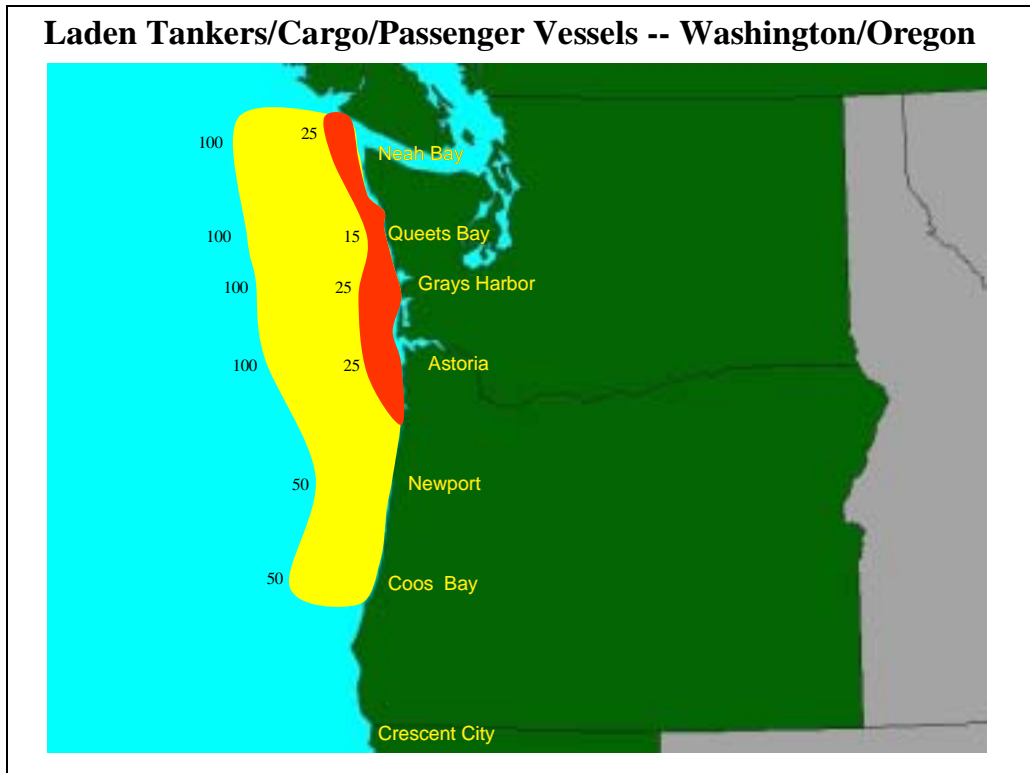
The factor contributing to this higher-risk area for laden tankers, cargo ships, and passenger vessels is mainly the lack of rescue tugs at homeports in the area. The only ocean-going rescue tug stationed in this area is at Hinchinbrook entrance to Prince William Sound. It is important to note that the scenarios graphed here are all for single-hull, laden vessels operating during the winter season – in other words, worst case scenarios.



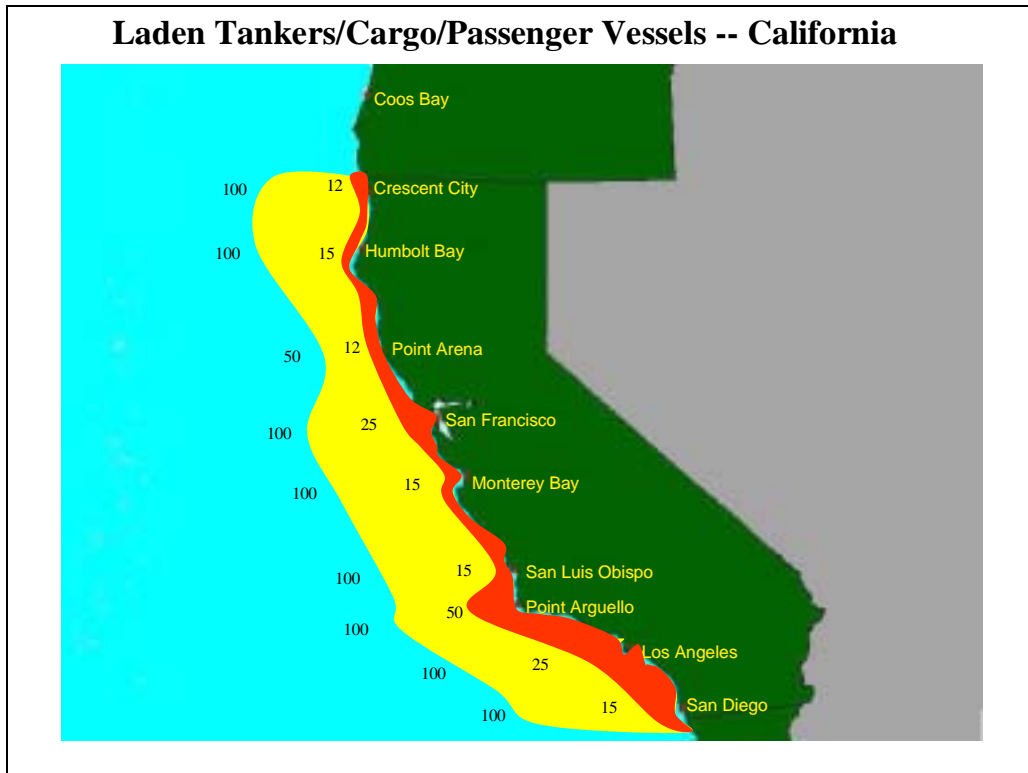
Off of British Columbia the Higher risk for these vessel types runs from 0 to 50 nautical miles offshore.

Off of Amphitrite Point, the risk is mainly due to the fact that the area is a high transition/intersection zone for the entrance of the Strait of Juan de Fuca, contributing to a higher collision hazard.

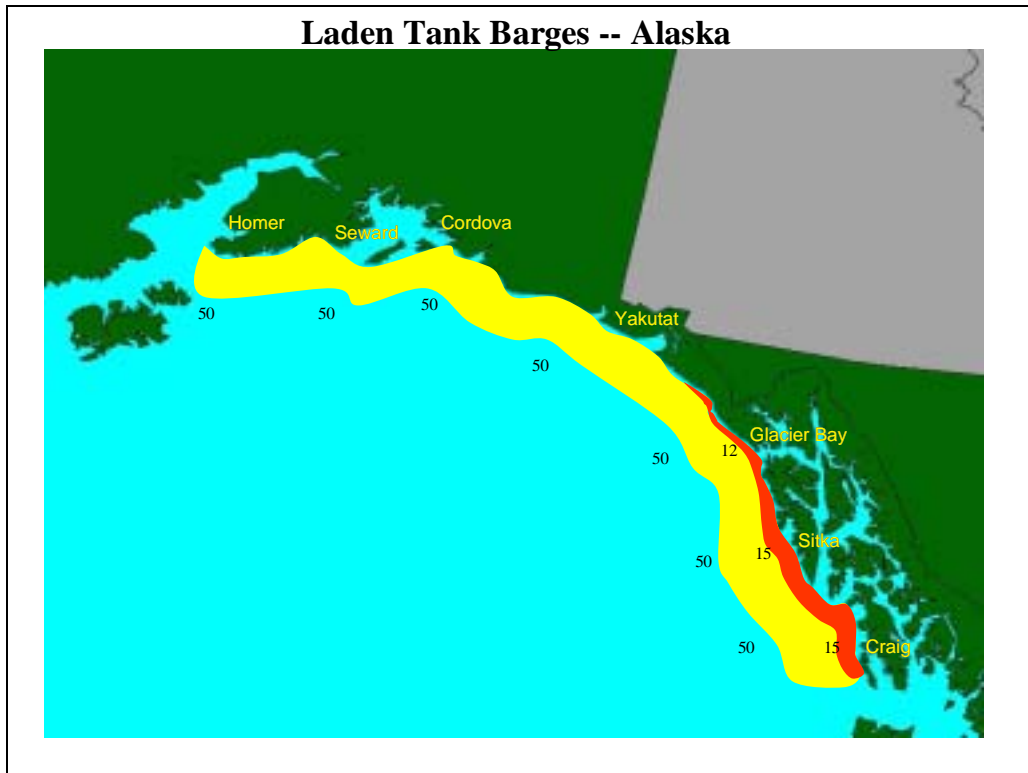
From Solander Island and further north, the risk is mainly due to the distance from a designated rescue home-ported in Port Angeles.



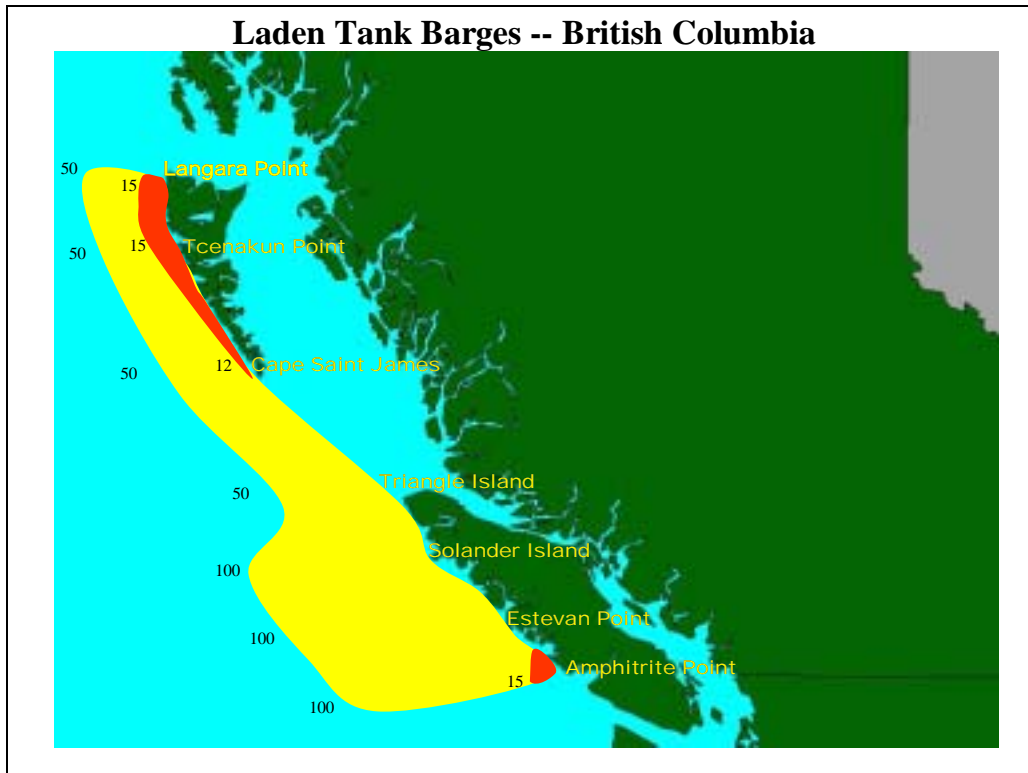
Higher risk areas off Washington and Oregon extend from 25 nm off of Neah Bay to 25 nm off Astoria and Gray's harbor with a slight indentation to 15 nm off Queen's Bay. The main risk factors are high vessel traffic density and busy intersection zones at the entrances to the Strait of Juan de Fuca and the Columbia River.



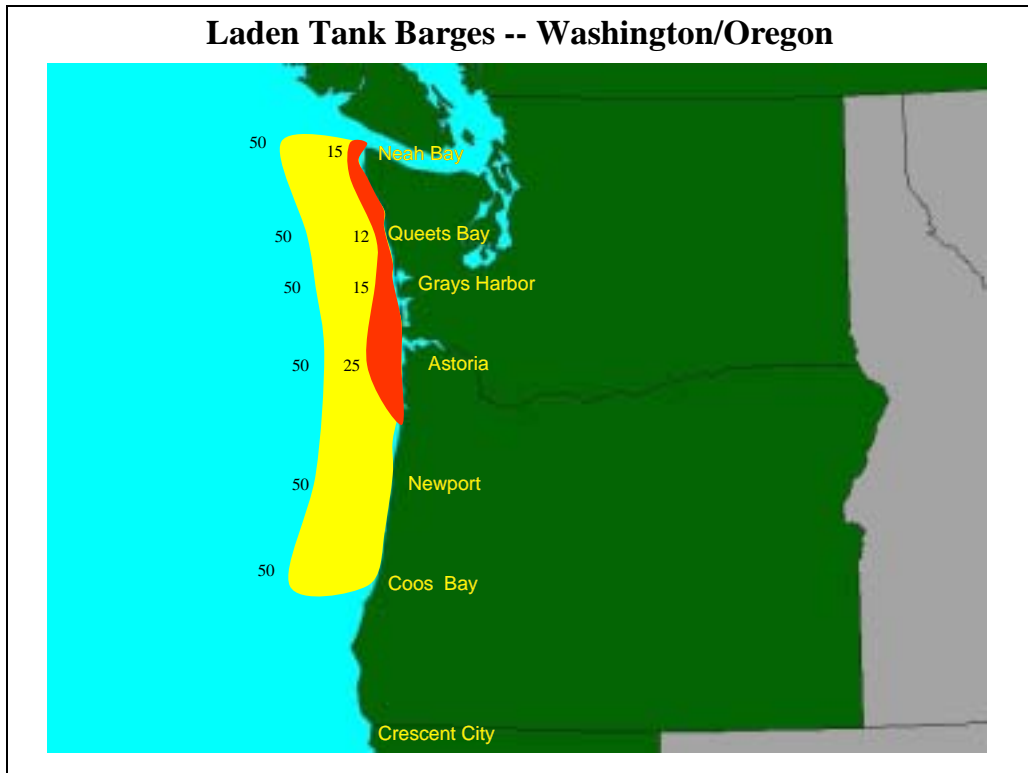
In California, these vessels are at higher risk along the entire coastline, ranging from 12 nm off Crescent City to 15 nm off San Diego, with the higher risk area off Point Arguello extending to 50 nm. These higher risk areas are primarily caused by high vessel traffic density and busy transition zones. The increased risk off Point Arguello is due to the lack of rescue tugs home-ported nearer than San Francisco or LA/LB.



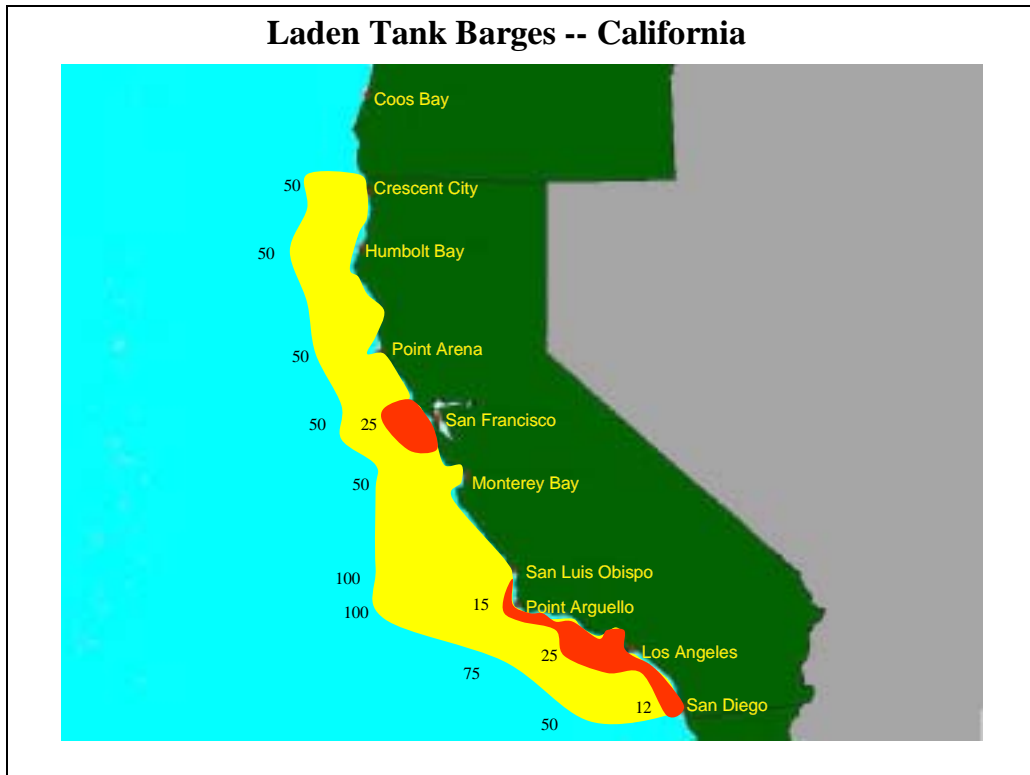
The higher risk area for laden tank barges in Alaska is relatively small, extending only 12 to 15 nm out from Glacier Bay to Craig. Rescue tug availability is still the major factor contributing to these higher risk areas. However, laden tank barges are expected to have a significantly lower drift rate than other vessels, thus lowering the overall risk scores.



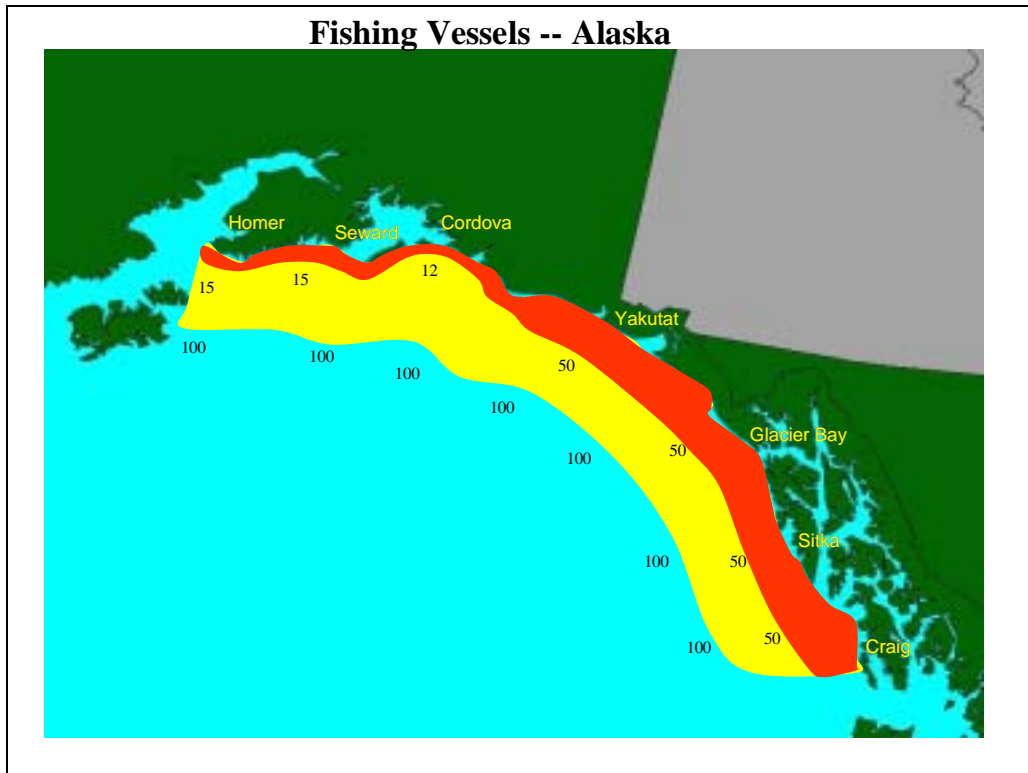
Off of British Columbia, the higher risk areas for laden tank barges were limited to approximately 15 nm off of Amphitrite Point and to 12 to 15 nm off of Graham Island (Cape St. James to Langara Point). The higher risk off of Amphitrite Point is due to higher collision risk factors. Off of Graham Island, the risk is due to lack of rescue tug availability.



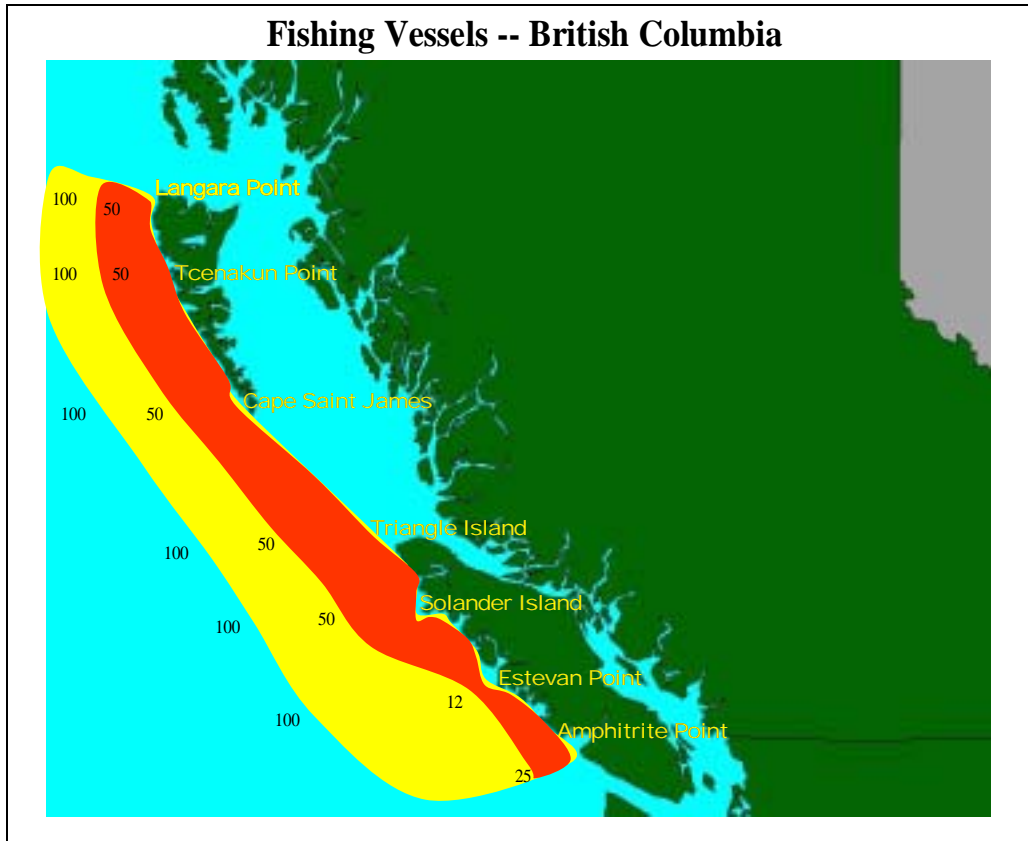
Higher risk regions for Washington and Oregon extended from 15 nm off of Neah Bay to 25 nm seaward of Astoria. These higher risk zones for laden tank barges are identical to those for tankers and cargo and passenger vessels due to high traffic density and busy transition points.



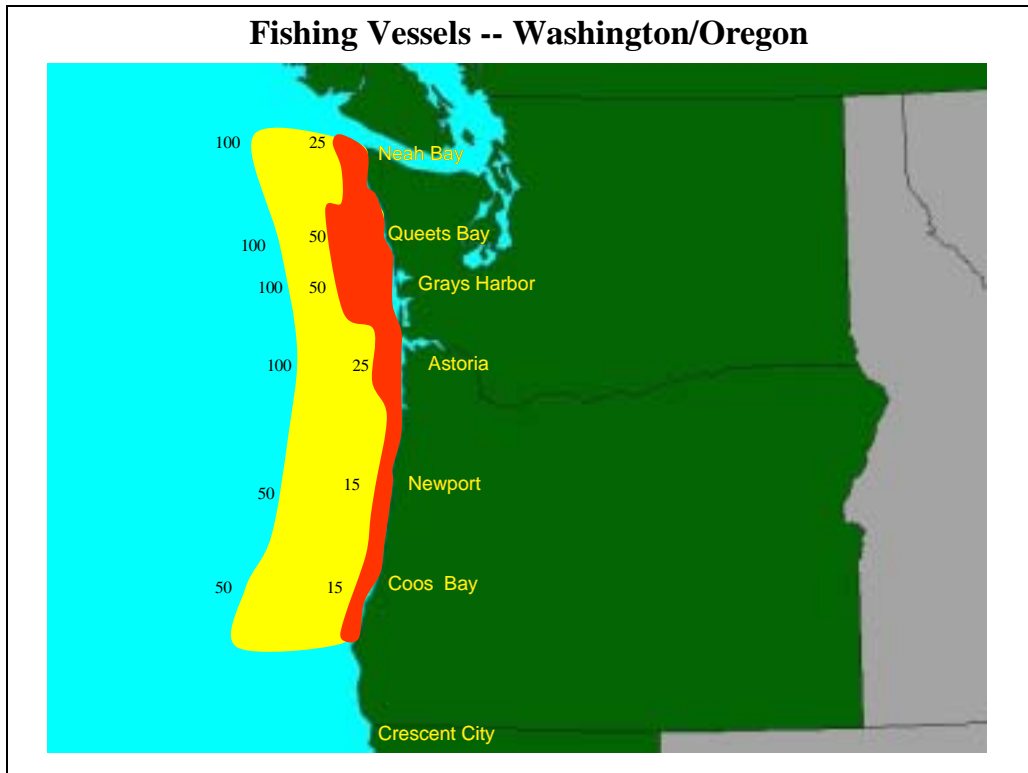
In California, laden tank barges were at higher risk off San Francisco and between Point Arguello and San Diego due to these areas being busy intersection/high traffic areas.



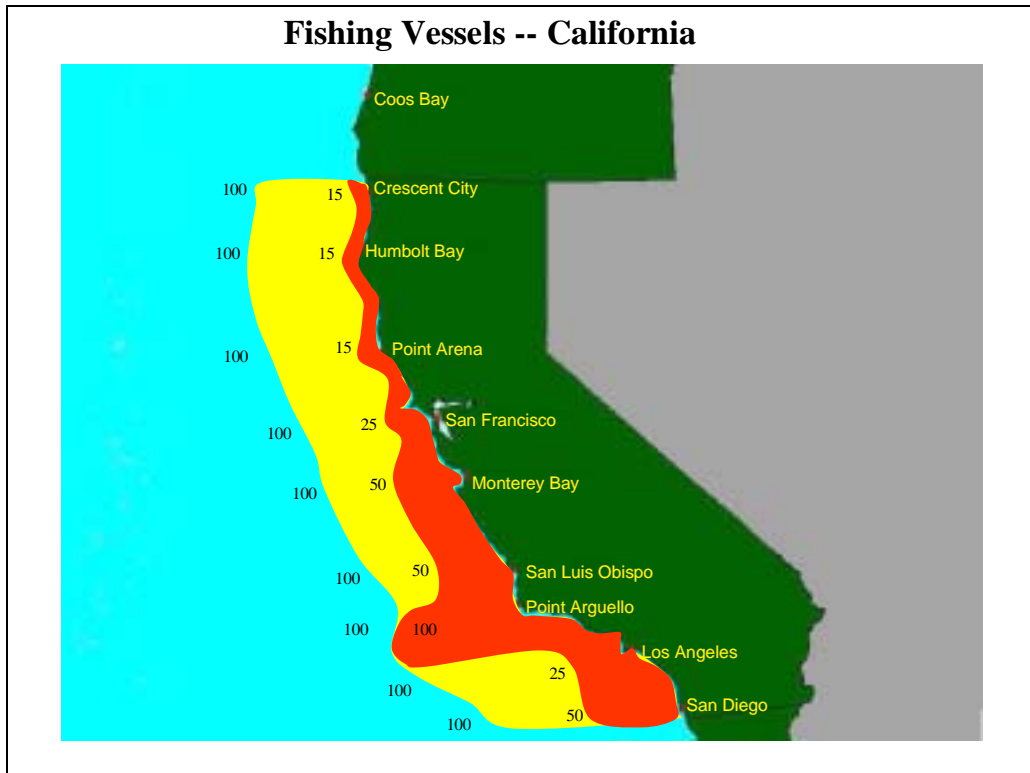
Fishing vessels made up the last category of vessels graphed by the Workgroup. Fishing vessels generally had a greater relative risk overall compared to other vessel categories, due to their historic casualty rates. Fishing vessels showed higher risk off the entire coast of Alaska generally due to rescue vessel response times being high.



In the British Columbia area, fishing vessels were at higher risk approximately 50 miles off the entire coast, narrowing to 12-25 miles in the southern region of Vancouver Island. Contributing factors were fishing vessels' higher casualty rates and tug response times for remote areas.



In the Washington/Oregon area fishing vessels incurred higher risk along the entire corridor, especially from Neah Bay to Astoria, with the highest risks off of Queets Bay and Grays Harbor, mainly due to higher rescue tug response times.



In California, the higher risk areas for fishing vessels are similar to those for tanker/cargo/passenger vessels, with the same contributing factors: higher density and transition zones, and slower rescue tug response times off Point Arguello.