

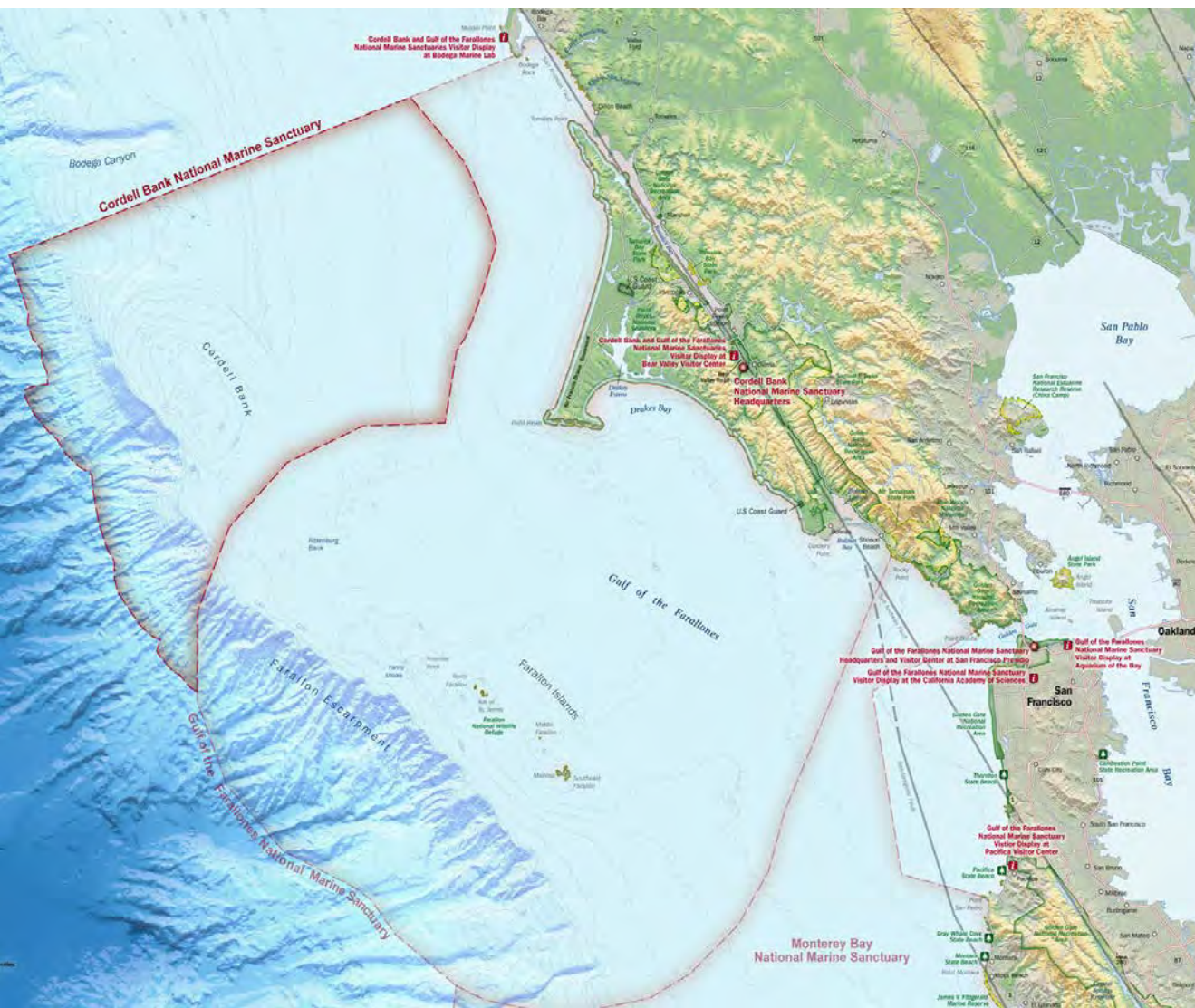


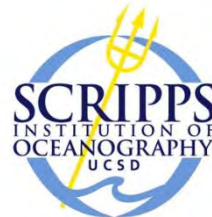
Whales, Ship Strikes & Vessel Traffic



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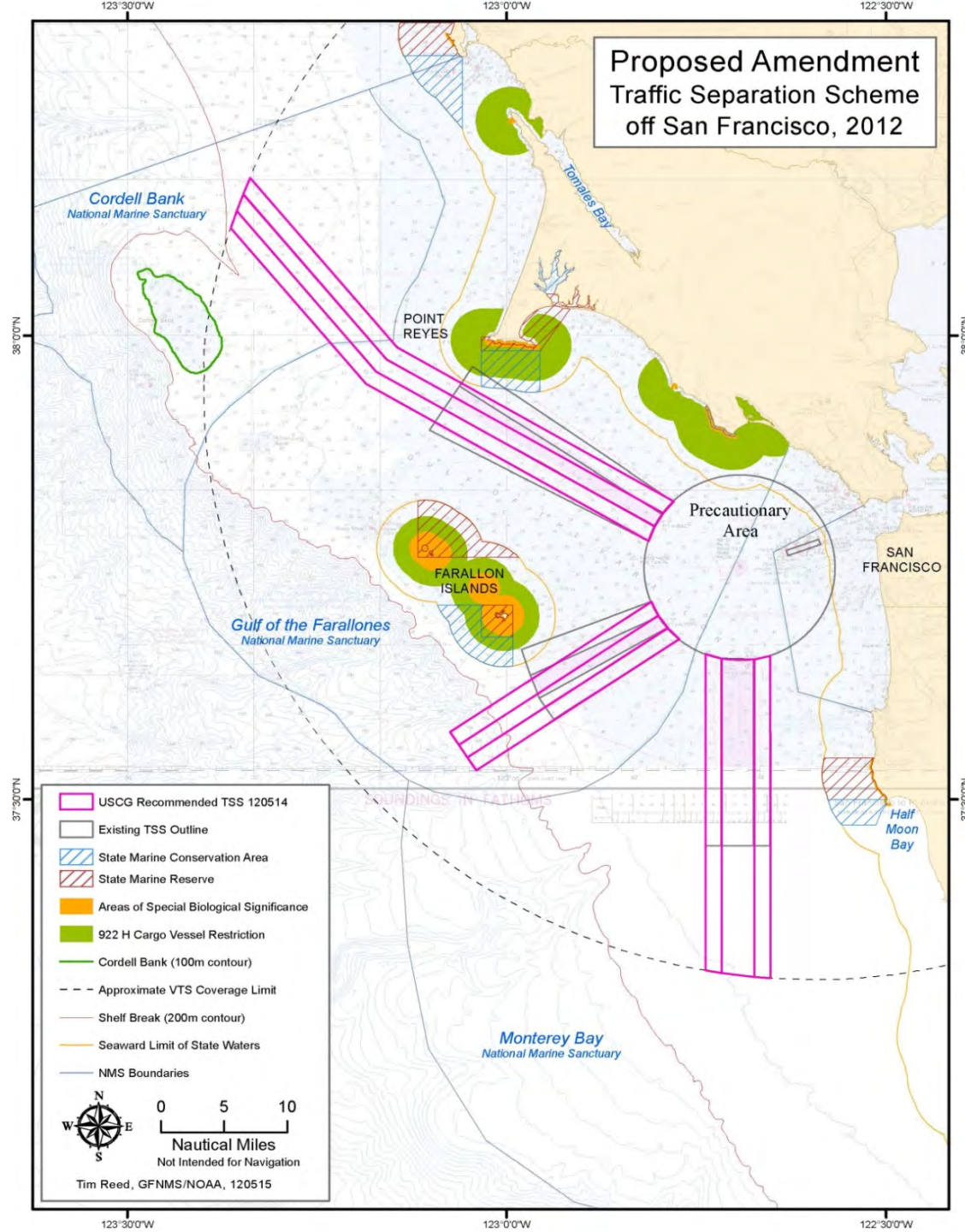
The Marine
Mammal Center.

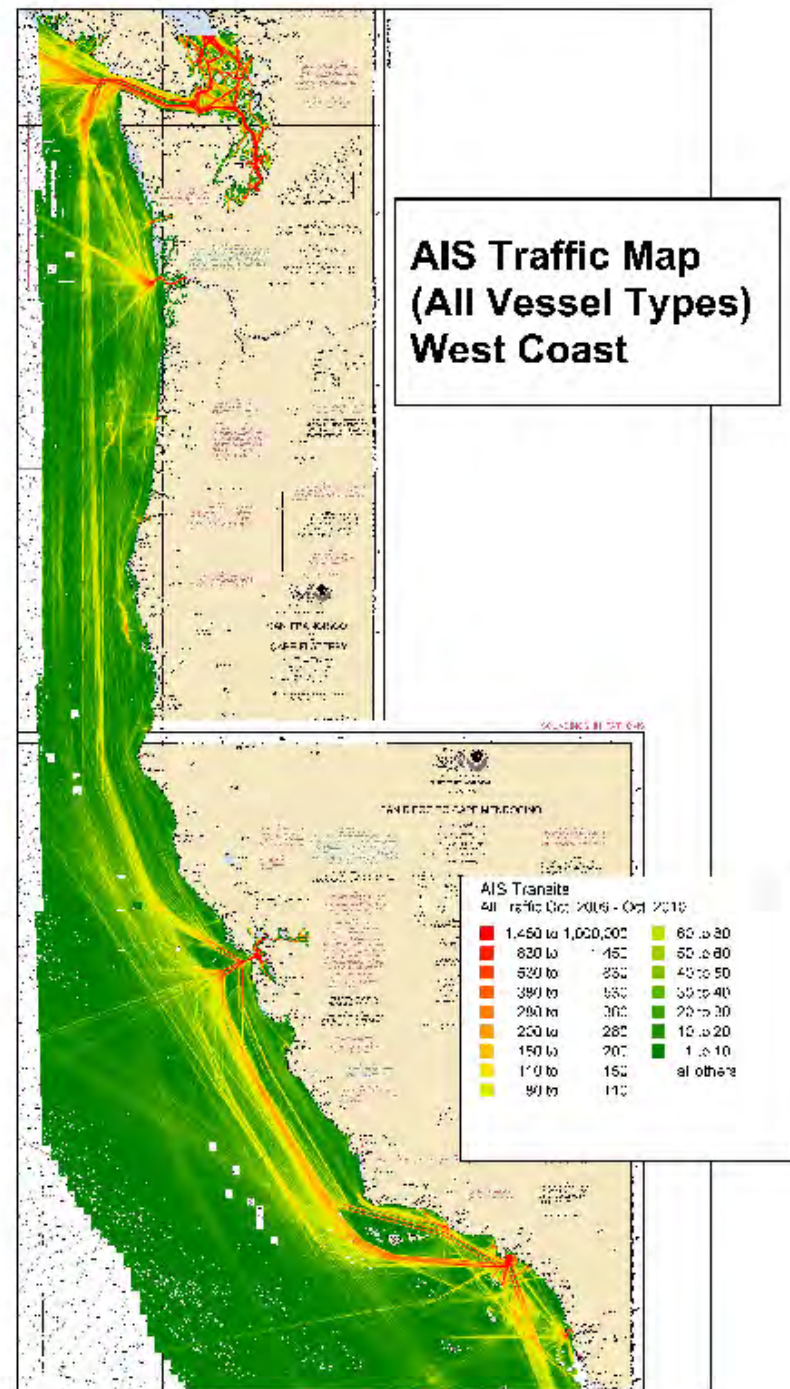
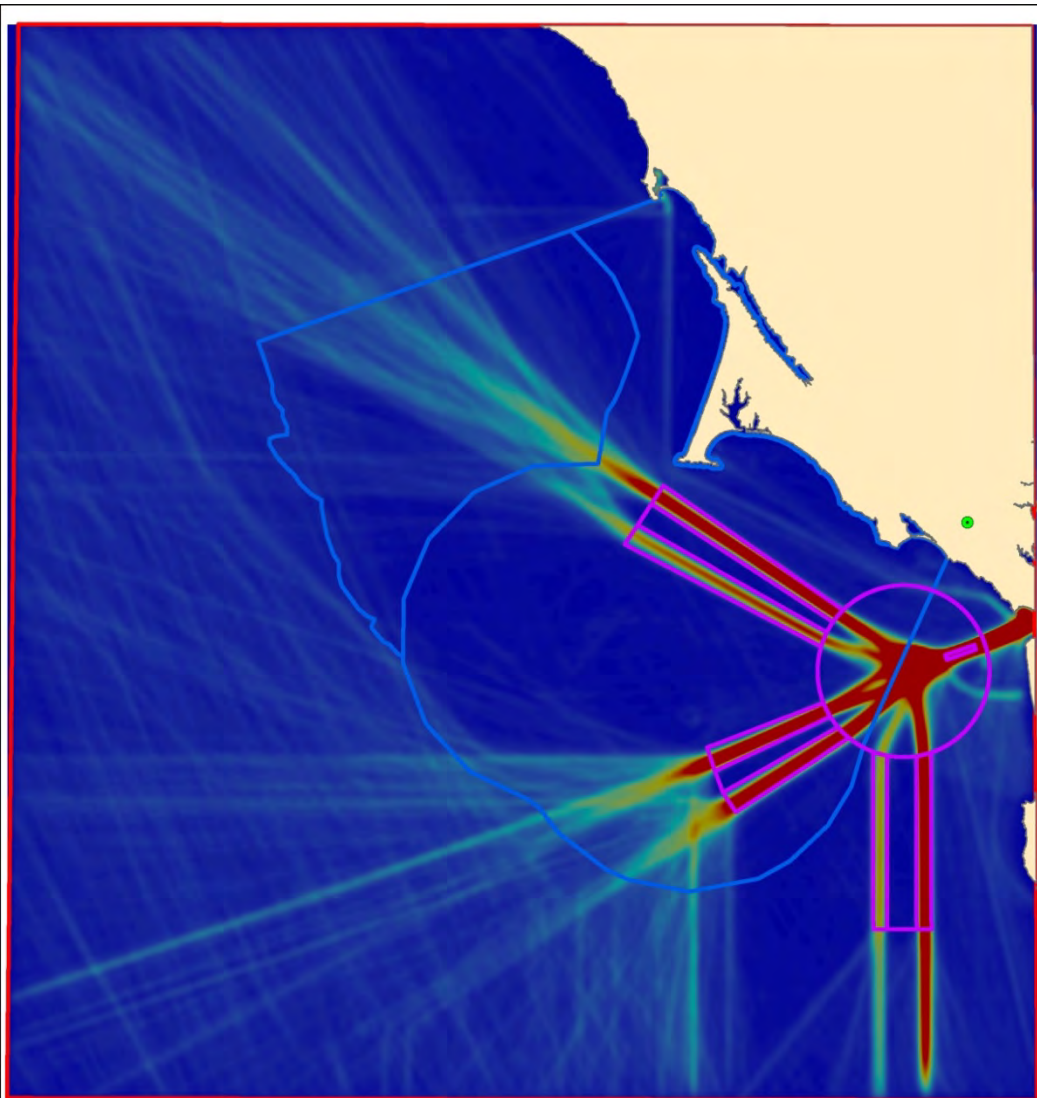


Management Recommendation #1

Modification to the shipping lanes:

“NOAA and USCG should pursue the modification of shipping lanes to avoid areas of whale concentration, such as extension of the proposed western approach lane beyond the continental shelf edge.”

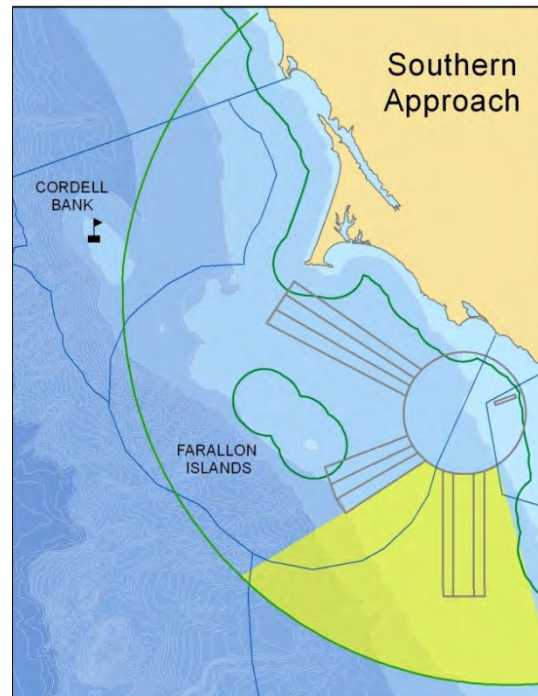
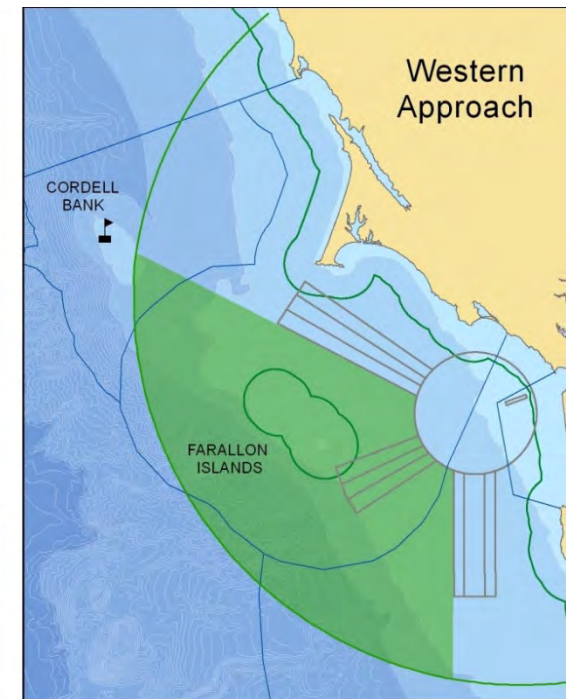
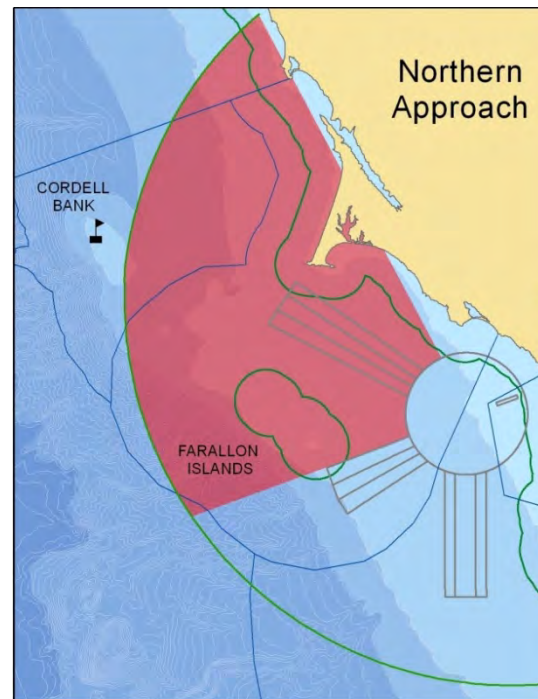




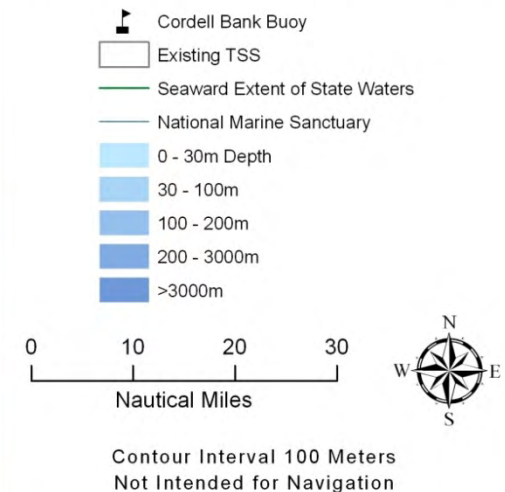
Management Recommendation #2

Dynamic Management Areas:

"The sanctuaries and NOAA's National Marine Fisheries Service (NMFS), working with external partners, should establish dynamic management areas (DMAs) at the entrance to San Francisco Bay. DMAs should be implemented in areas with high whale concentrations for at least one week or longer as the whale spatial and temporal distribution warrants. The implementation response should be that vessels slow down within the DMA, or preferably, choose alternate lanes where there would be no active DMA."



Potential Dynamic Management Areas



Management Recommendation #3

Real-time whale sighting and monitoring network:

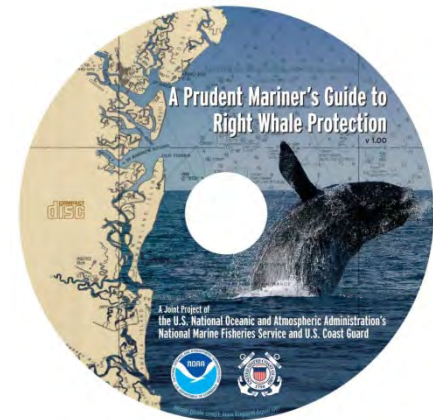
The sanctuaries and NMFS, working with external partners, should implement a real-time whale sighting and monitoring network with participation from commercial ships, to provide data on whale occurrence and inform the designation of the onset, duration and location of DMAs.



Management Recommendation #4

Education and Outreach:

“The West Coast Region sanctuaries and NMFS should develop a regional education and outreach program”



CAUTION MARINERS

PLEASE AVOID COLLISIONS WITH RIGHT WHALES

The North Atlantic right whale is the most endangered large whale – only about 400 remain. Right whales are protected in Canadian waters under the *Species at Risk Act*.

DISTINCTIVE FEATURES

- Adult length 14 – 17 metres
- Weigh up to 60 – 70 tonnes
- Slow swimmers, seldom moving faster than 3-5 knots.
- Can stay submerged for 10 to 20 minutes and may appear quite suddenly when surfacing to breathe
- Often seen alone or in small groups



SOCIAL BEHAVIOUR
At times, right whales form large courtship groups of 20 to 30+ animals.



TAIL
Black, deeply notched tail flukes are raised vertically when diving.



V-SHAPED BLOW
The whale's profile on the surface is low; they are not easily seen except for their V-shaped blow when surfacing and flukes when diving.



CALLOSITIES
Rough gray and whitish patches of raised skin on the top and sides of the head. Used by researchers to identify individuals.



NO DORSAL FIN
Smooth black back.

FLIPPERS
Short paddle-shaped.

PLEASE AVOID CLOSE APPROACHES.
RIGHT WHALES ARE DIFFICULT TO SEE AND MIGHT NOT BE AWARE OF VESSELS.

FOR MORE INFORMATION SEE CANADIAN COAST GUARD ANNUAL NOTICES TO MARINERS, WWW.RIGHTWHALE.CA AND WWW.NMFS.NOAA.GOV/PR/SHPSTRKE/.



Canada
Marine Mammal Research Program
for Species at Risk



CANADIAN WHALE INSTITUTE



New England Aquarium



right whale