



CENTRE POUR LE TRANSPORT MARITIME RESPONSABLE

Clear Seas

CENTRE FOR RESPONSIBLE MARINE SHIPPING

Combining risk assessment approaches in the
Marine Transportation Corridors Initiative to
support marine spatial planning efforts

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Overview

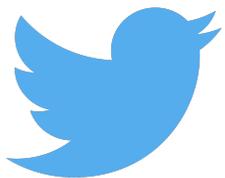


- About Clear Seas
- Marine Transportation Corridors Initiative
- Quantitative vs. Qualitative Risk Approaches
- Qualitative Example: Sensitive Coastal Areas
- Quantitative Example: Vessel Drift and Response

Clear Seas Centre for Responsible Marine Shipping

MANDATE

- Facilitate a better understanding of the risks, benefits, and best practices for safe and sustainable marine shipping
- Bring clarity to decision-making processes
- Ensure that evidence-based information and best practices are shared with Canadians and the international community



clearseas.org



Communicating Complex Issues



OIL TANKERS



UNDERWATER NOISE



MARINE SHIPPING & YOU



WHO PAYS FOR AN OIL SPILL



INVASIVE SPECIES

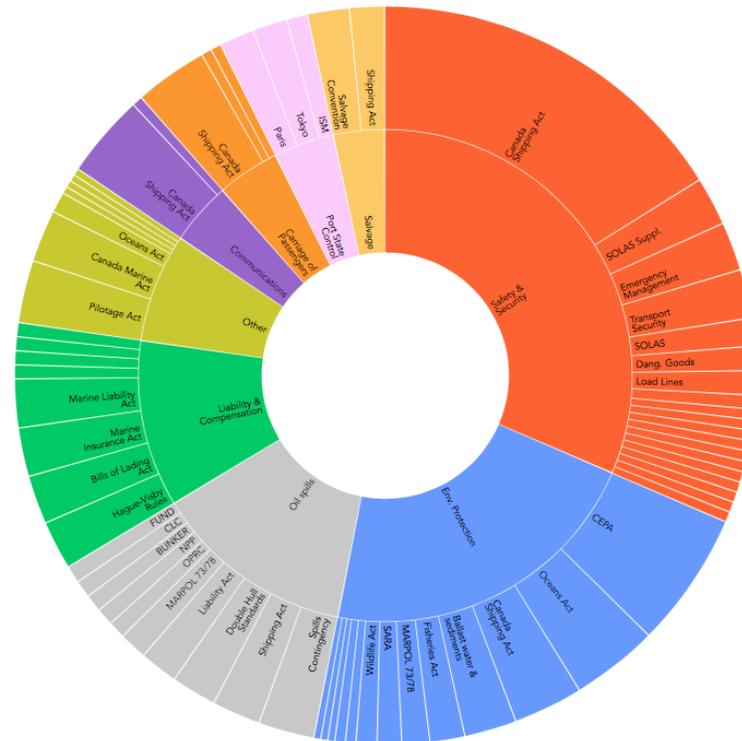


AIR POLLUTION



LNG

- 7 Key Issues Resources
- 8 Research Reports
- 13 Research Digests
- 23 Blog Articles
- Infographics
- Reference Material



July 3, 2019

RESEARCH SPOTLIGHT: DR. TONY R. WALKER

"We rely on transporting goods by ship, but we don't need to maintain the status quo. We can't maintain the status quo; there is a better way." – Tony R. Walker

[Read more](#)



May 9, 2019

10 QUESTIONS ABOUT LNG & MARINE SHIPPING

Test your knowledge! What do you know about LNG and marine shipping?

[Read more](#)



February 28, 2019

WHAT IS THE HNS CONVENTION?

The 2010 Hazardous and Noxious Substances (HNS) Convention sets out a liability regime to compensate for damage caused by incidents involving HNS transported by sea.

[Read more](#)

Marine Transportation Corridors Initiative



Geo-Spatial Deliverables

- Vessel Drift & Response Analysis [2018]
- Vessel Traffic Analysis [underway]
- Sensitive Coastal Areas [underway]

Capacity Assessments

- Emergency Towing Vessel Needs [2018]
- Availability of Tugs of Opportunity [2019]

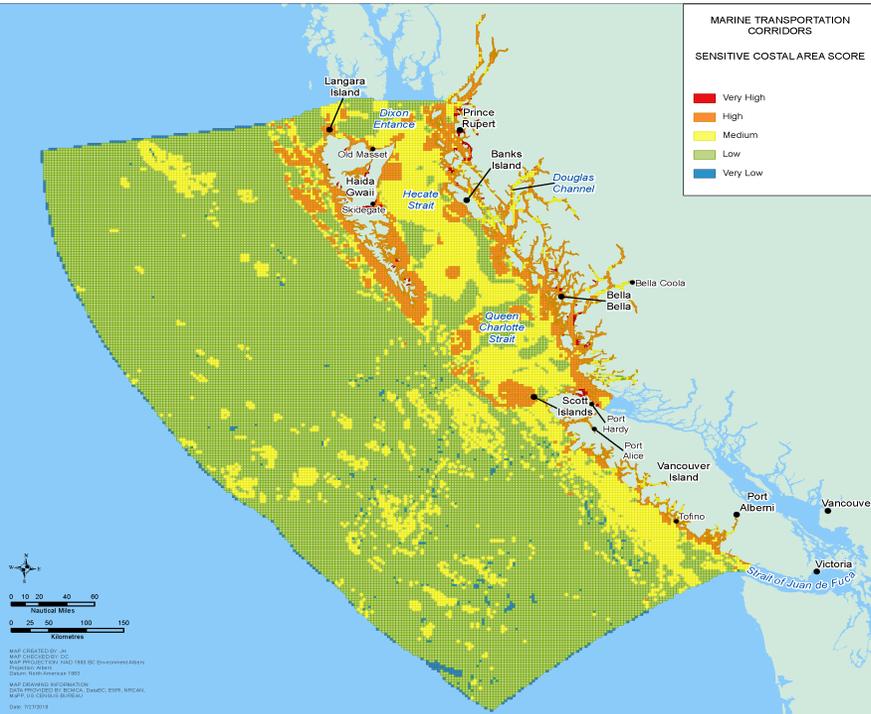
Workshop

- Priority Areas & Risk Mitigation Measures

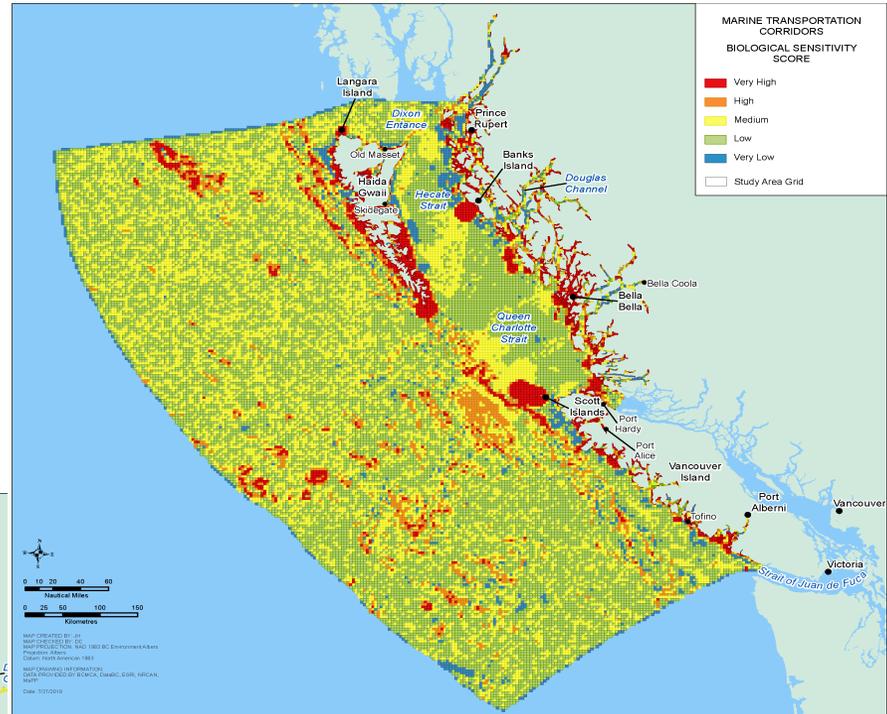
Qualitative vs. Quantitative Risk Approaches

	Qualitative Risk Assessment	Quantitative Risk Assessment
Approach	Categorize and rank project risks using a pre-defined scale	Assign a numerical or quantitative rating to potential outcomes or events
Determines	The <u>priority</u> of risks, based on their likelihood of occurrence and potential impact	The <u>probability</u> of achieving specific, uncertain outcomes, based on a quantitative approach
Requires	Subject-matter experts to guide development of the categories, rating scale, likelihood of occurrence, and potential impact	High-quality data, a well-developed project model, and specific high priority risks to focus on

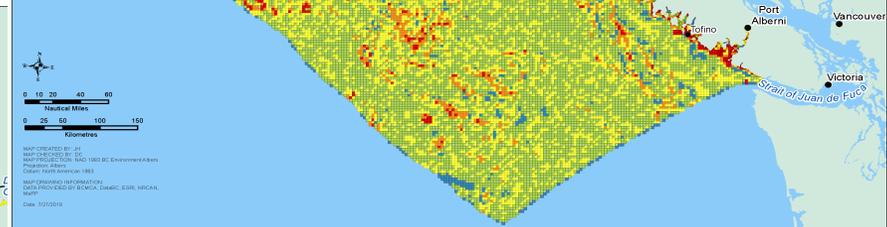
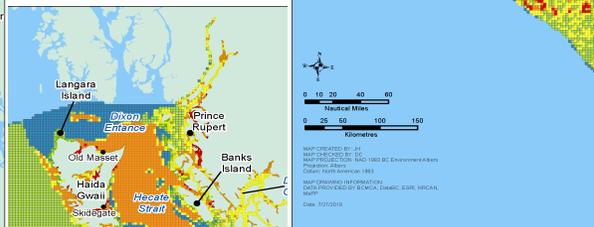
Sensitive Coastal Areas



Coastal Sensitivity Score (composite) ←



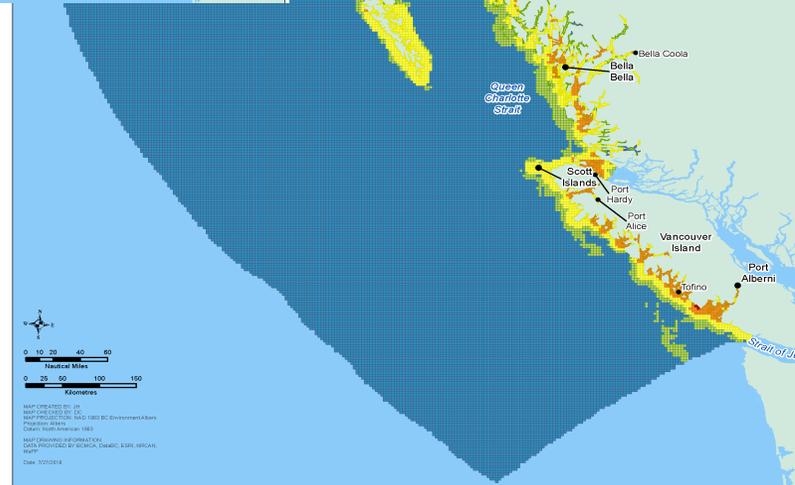
Biological Sensitivity Score ←



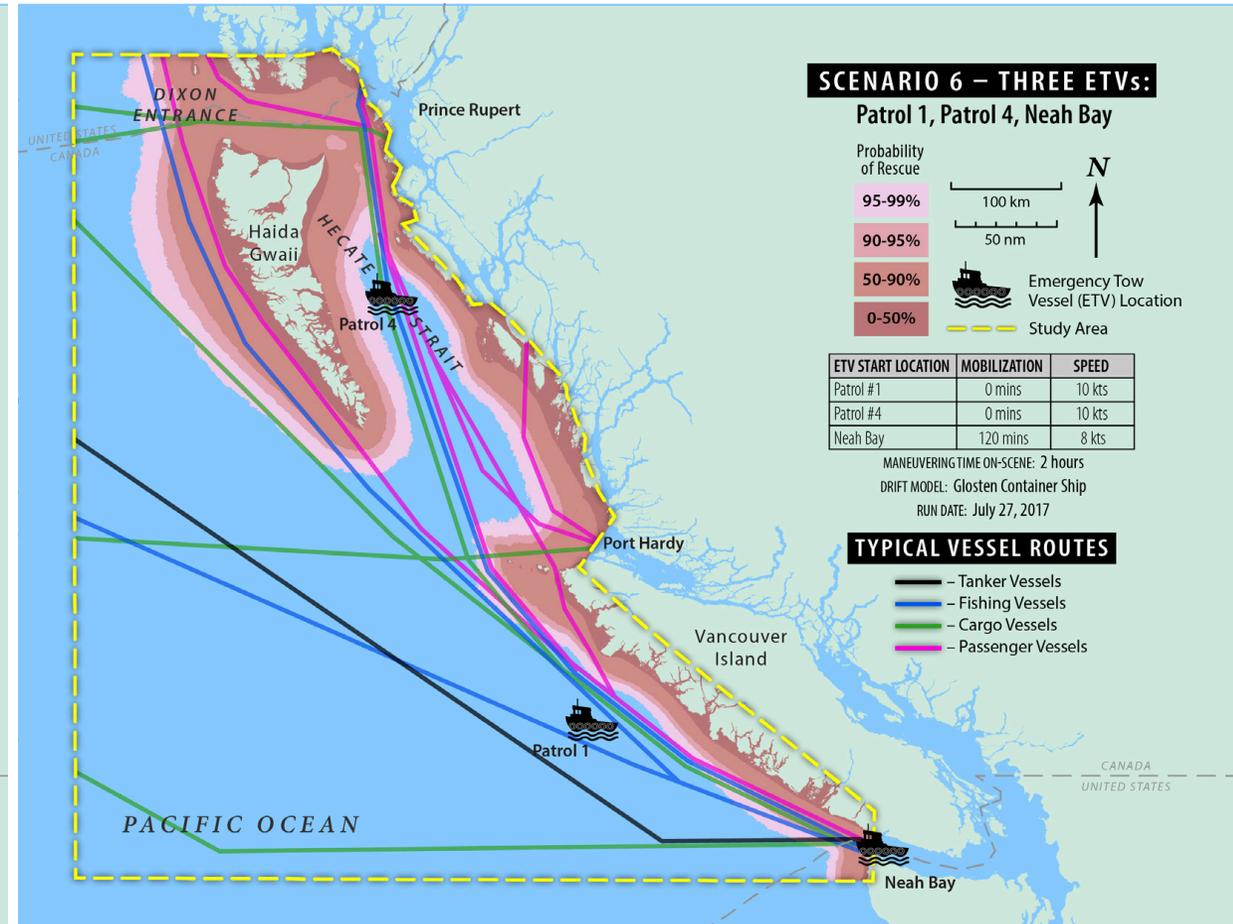
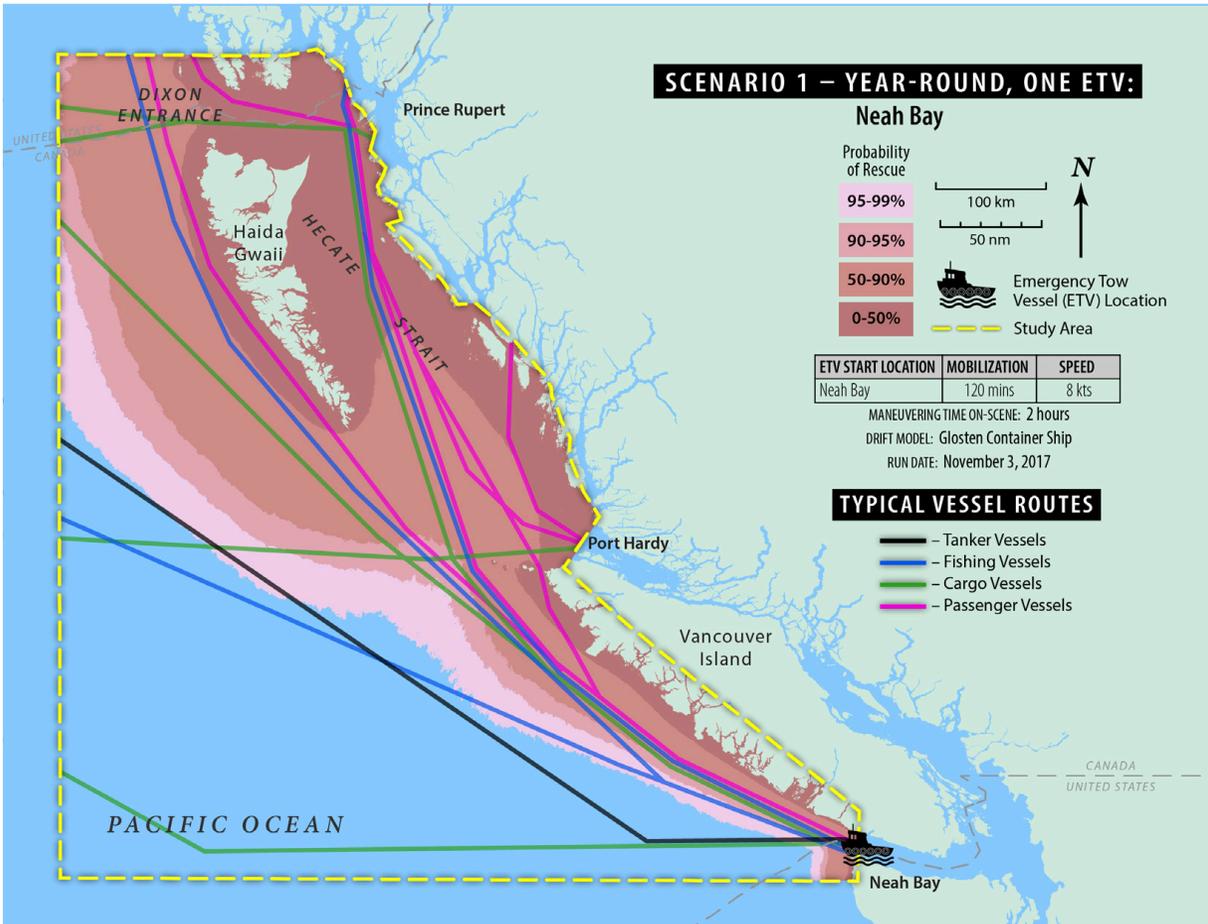
Physical Sensitivity Score →



Socio-economic Sensitivity Score →



Vessel Drift and Response Analysis





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