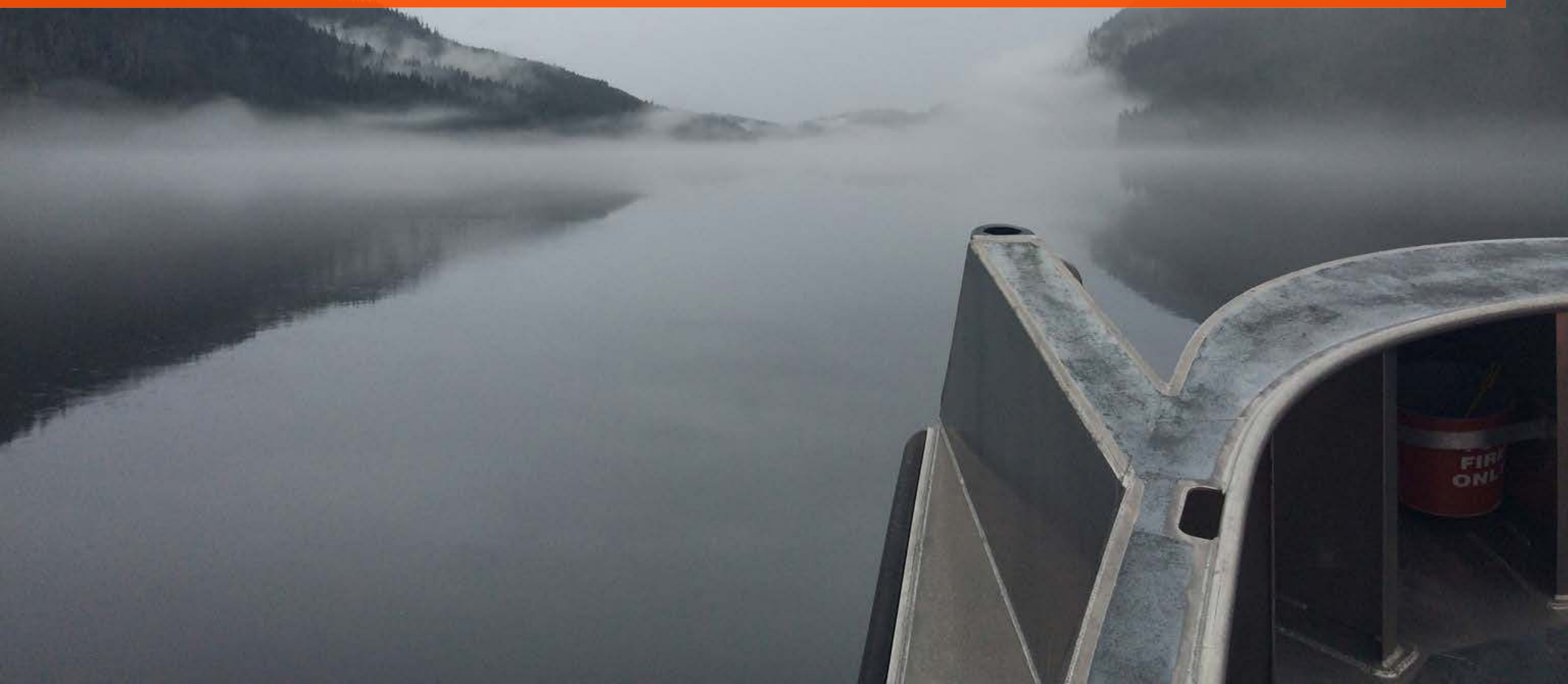


Marine Spill Response on the West Coast



May-12-16



Agenda

- **Canada's Spill Response Regime**
 - **Regime Review**
- **WCMRC: B.C's Spill Response Organization**
- **Trans Mountain Expansion**

An aerial photograph showing a massive oil spill in a coastal region. The dark, viscous oil has spread across a large area of the water, creating a thick, dark layer. In the background, there are rugged, snow-capped mountains and a body of water. A small oil tanker is visible on the left side of the image, and a long, thin object, possibly a pipeline or a small boat, stretches across the lower part of the frame.

1989: Exxon Valdez

1990: Brander-Smith report

1993: Canada Shipping Act amendments

1995: WCMRC certified

2013: Tanker Safety Expert Panel

Roles & Responsibilities

Transport Canada

- Lead regulatory agency; regime review
- Certification of Response Organizations (ROs)



Canadian Coast Guard

- Respond to minor spills
- Lead cross-border exercises (CANUSDIX, CANUSPAC)
- Federal Monitoring Officer (FMO) during an incident



Environment Canada/B.C. Ministry of Environment/D.F.O.

- Provide assistance with mapping and shoreline assessment
- Assist in identifying environmental, cultural and economic priorities

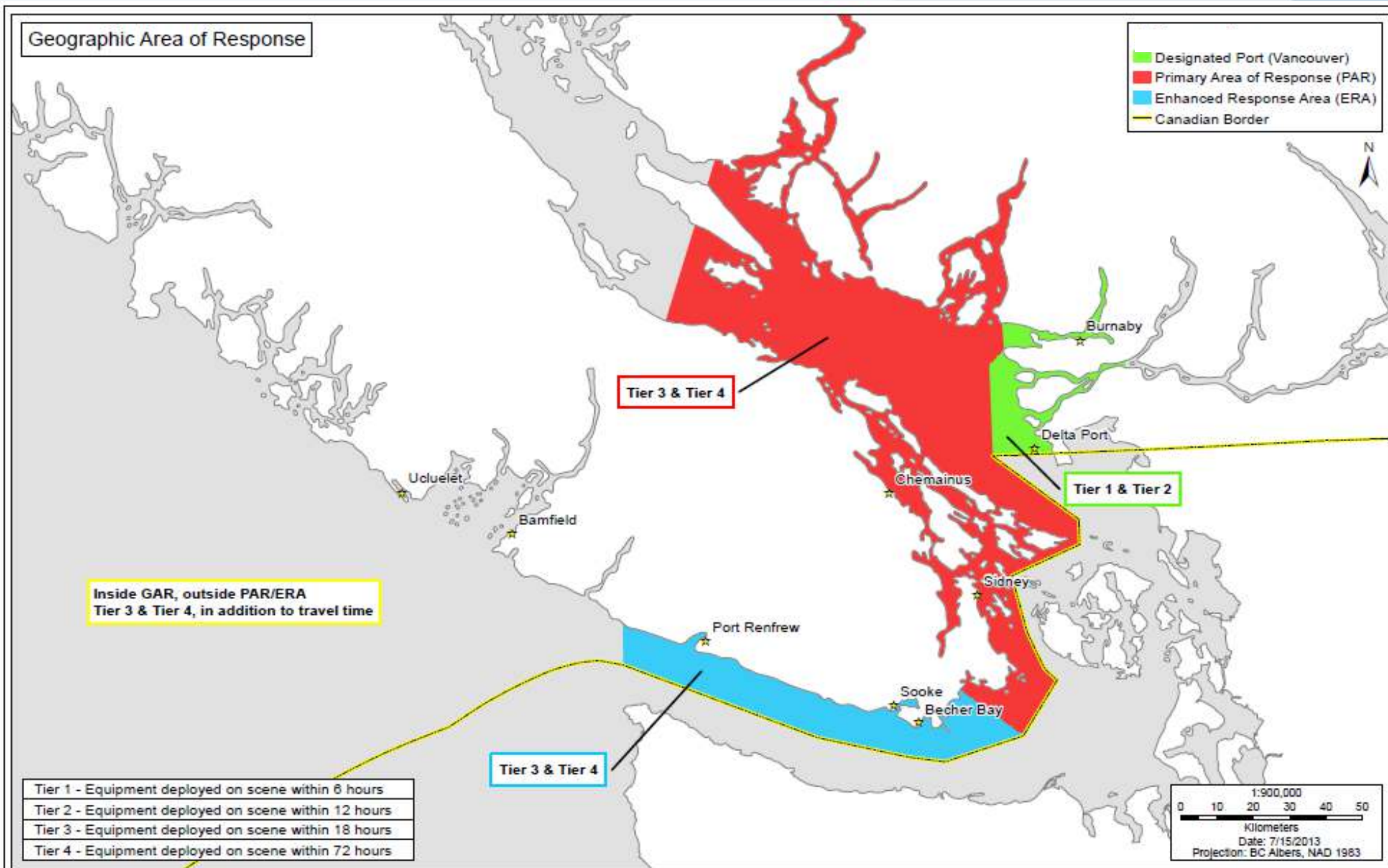


Response Organizations

- Develop response plans
- Conduct certification exercises



Geographic Area of Response



WCMRC: B.C.'s Spill Response Organization



May-12-16





WCMRC GEOGRAPHICAL AREA OF RESPONSE



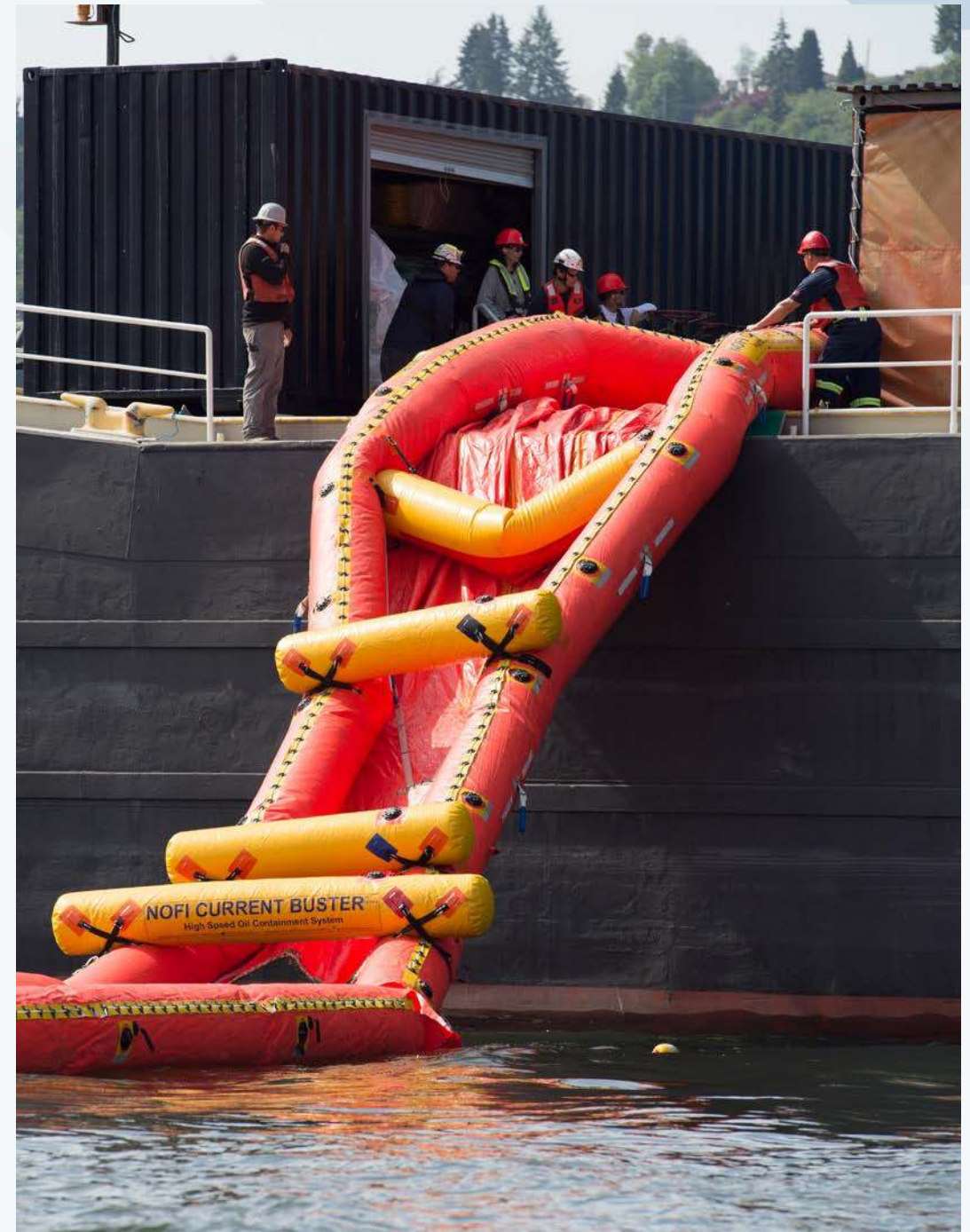
Funding

- +2,200 Members
 - Vessels
 - Oil Handling Facilities
- Subscribers
- 3rd Parties



WCMRC Response Equipment

- 32 vessels, including
 - 7 barges
- 3 mobile command centres
- 33,500 m of boom
- 80 portable skimmers
- 50+ response trailers
- Over 26,000 t of capacity
- 11 coastal caches + 3 bases





G.M. PENMAN

VANCOUVER, BC

SPILL RESPONSE





Oil Detection K9-SCAT Teams



Raptor Hazing



Coastal Protection Program



May-12-16





Lat/Long: 48.972, -123.862

Scale: 288895
Earthstar Geograph

Protection Strategies







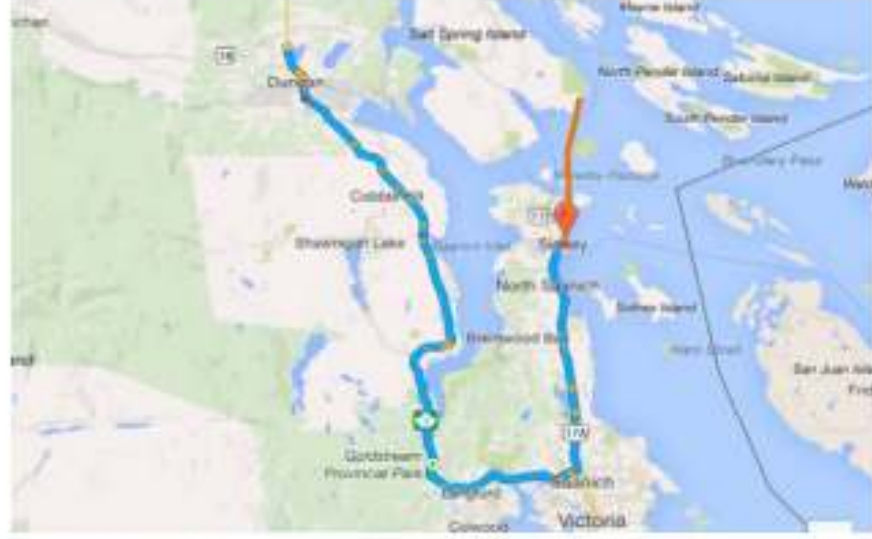


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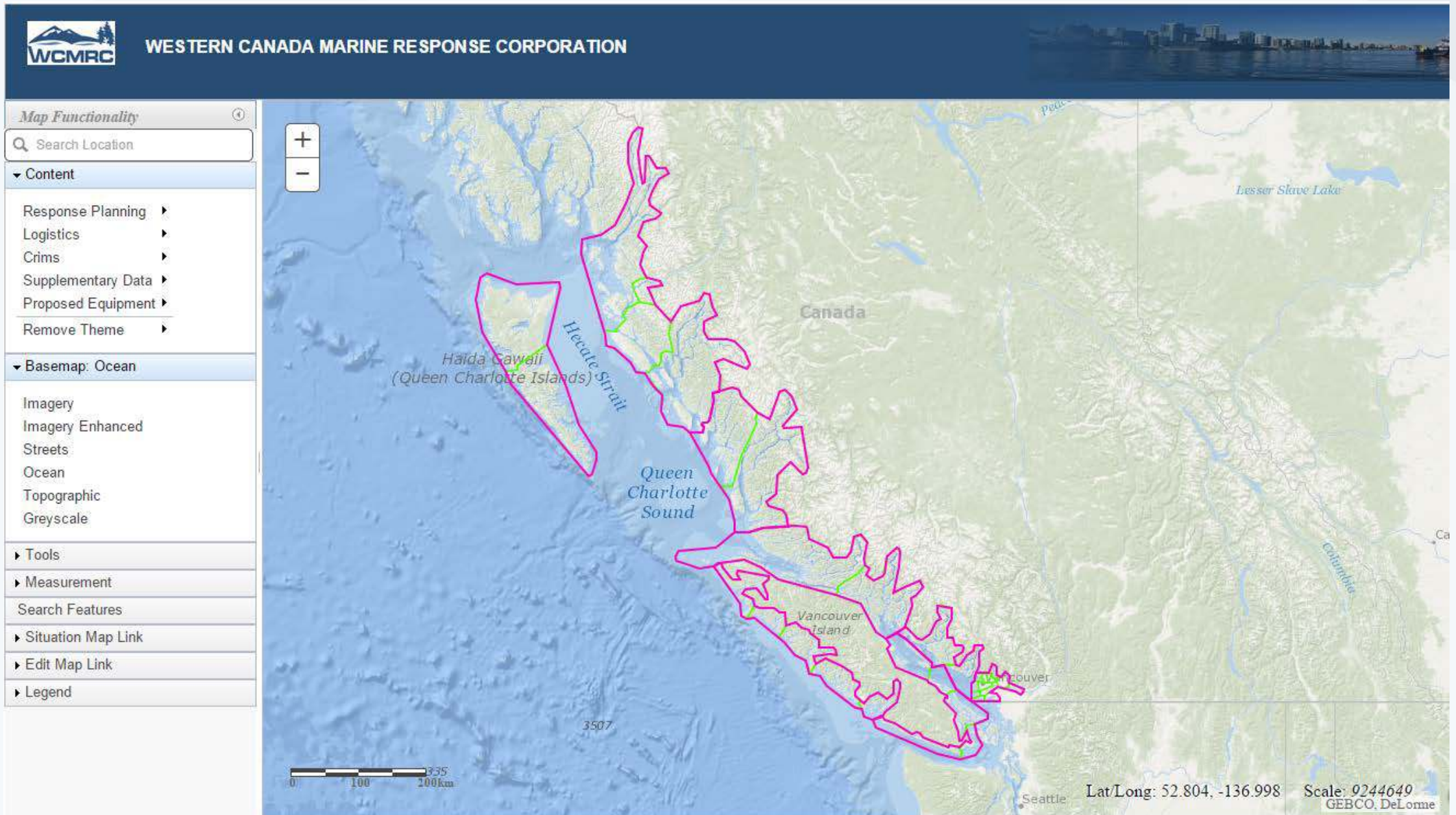
Scale: 288
Earthstar Geo

Beaver Point 2				GRS # 07-03-015								
Location		48° 46.15'N 123° 22.71'W		Seasonality		All Seasons						
Site Status		Provincial Park										
Waterbody		Beaver Point - Bay										
Resources at Risk		Beaches and provincial park										
Strategy Objective		Exclusion		Protect resources								
				Boom 1 - 550 feet								
				Anchor	Lat	Long	Anchor	Lat	Long	Anchor	Lat	Long
				1	48° 46.02'	123° 22.67'						
				2	48° 46.05'	123° 22.55'						
				3	48° 46.03'	123° 22.61'						
Anchor	Boom		Anchor	Boom		Anchor	Boom					
	Lat	Long		Lat	Long		Lat	Long				
Recommended Equipment				Recommended Personnel								
Amount	Description			Number	Personnel							
550 feet	General Purpose Boom			1	Supervisor							
100 feet	1/2" Polysteel			2	Labourers							
2	Danforth Anchor kits and 2 shoreline ties			1	Vessel Operator							
1	Landing Craft			1	Vessel Operator							
1	Broadwater Craft											

GRS: Sample Strategy (cont'd)

Beaver Point 2		GRS # 07-03-015	
Site Access	Boat	Restrictions	No nearby staging area. Shallow - caution required for boat use.
Implementation	Recommend starting with shoreline anchor. String to next shoreline anchor and then establish deepwater anchors.		
Staging Area	No upland staging. Staging in Sydney Harbour or potentially Fulford Harbour.		
Safety Notes	Usual Slips, trips and falls. May experience high winds from SE.		
Field Notes	No specific notes - no staging in area.		
			
Site Contact Information		Driving Directions	
Potential Contact through the Capital Regional District Parks and Environmental General Manager - (250) 360-3085 Planning and Protective Services - General Manager - (250) 360-3285		1. Take the BC-17 N ramp to Sidney/Airport/Ferries 1.1 km 2. Merge onto Patricia Bay Hwy/BC-17 20.1 km 3. Turn right onto Beacon Ave 900 m 4. At the roundabout, take the 3rd exit onto Seaport Pl 5. Boat from Sydney harbour to Beaver Point	
Nearest Address			
No nearby addresses			

Geographic Response Planning Tool



Trans Mountain Expansion

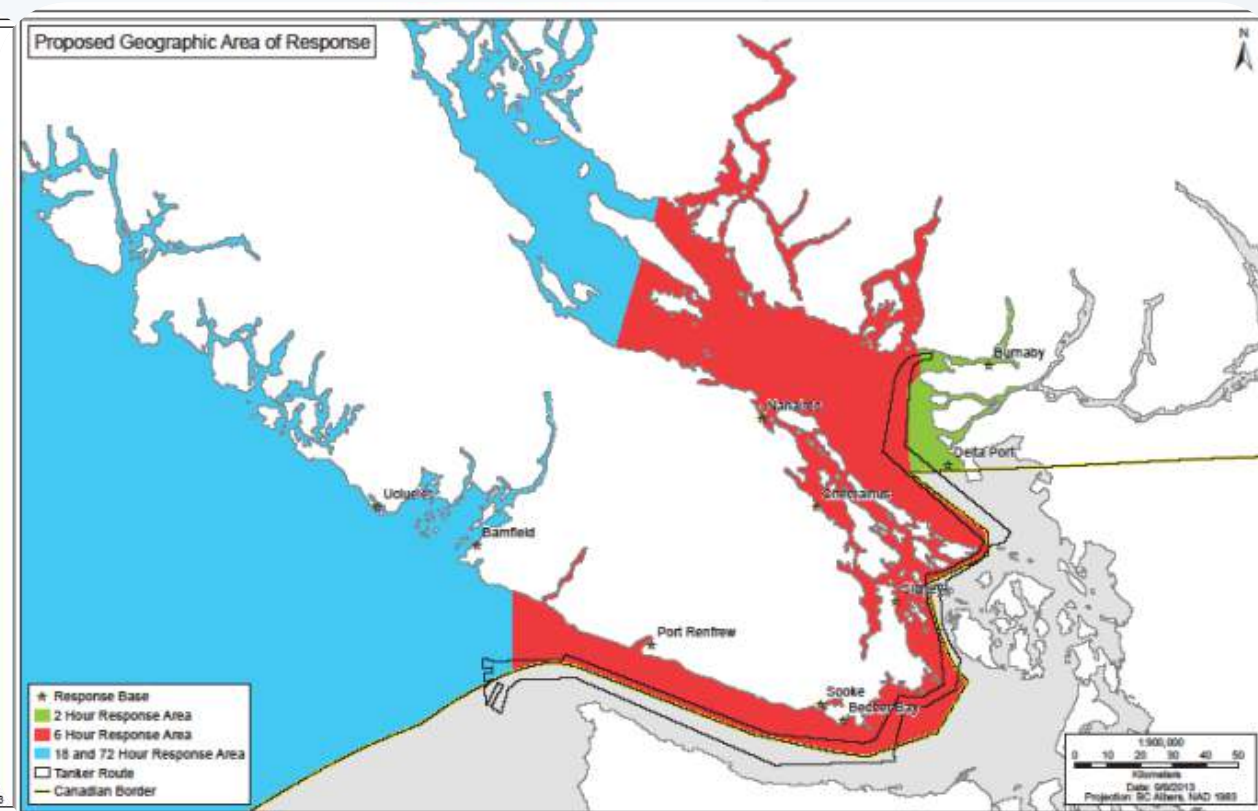
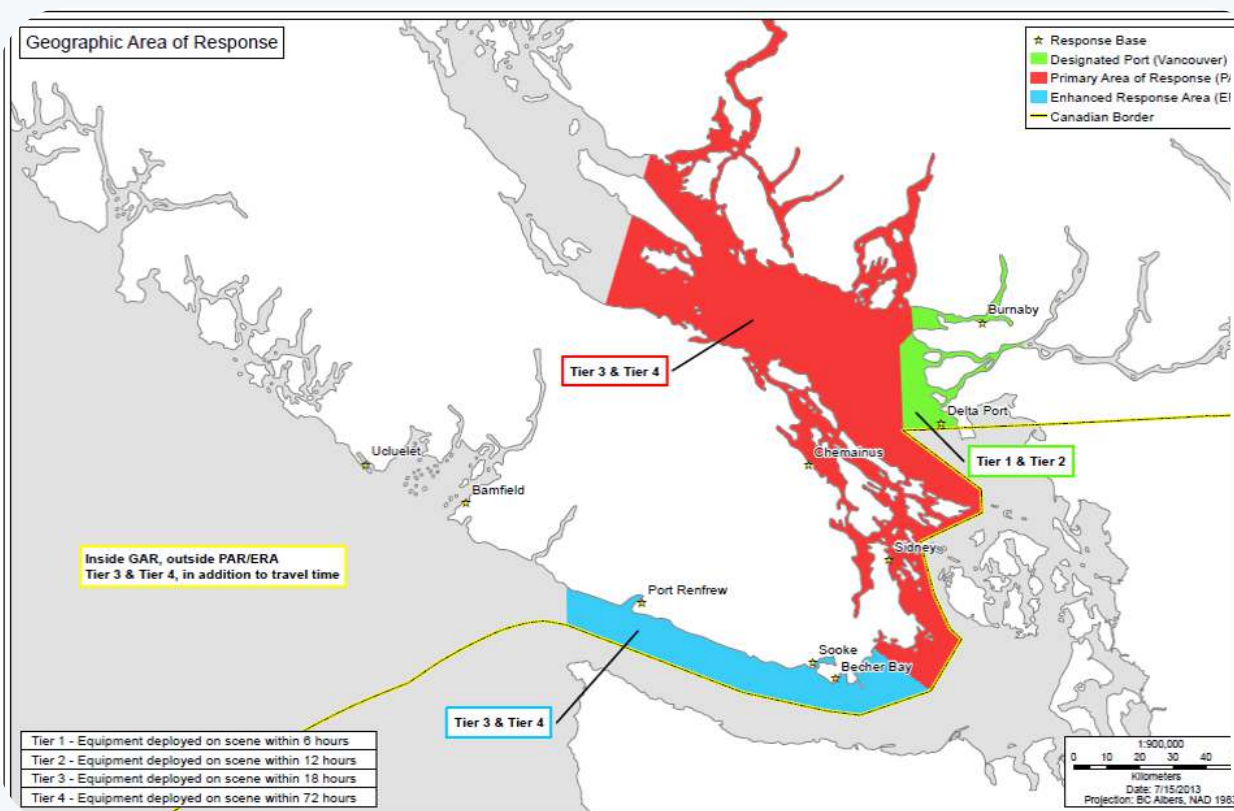


May-12-16

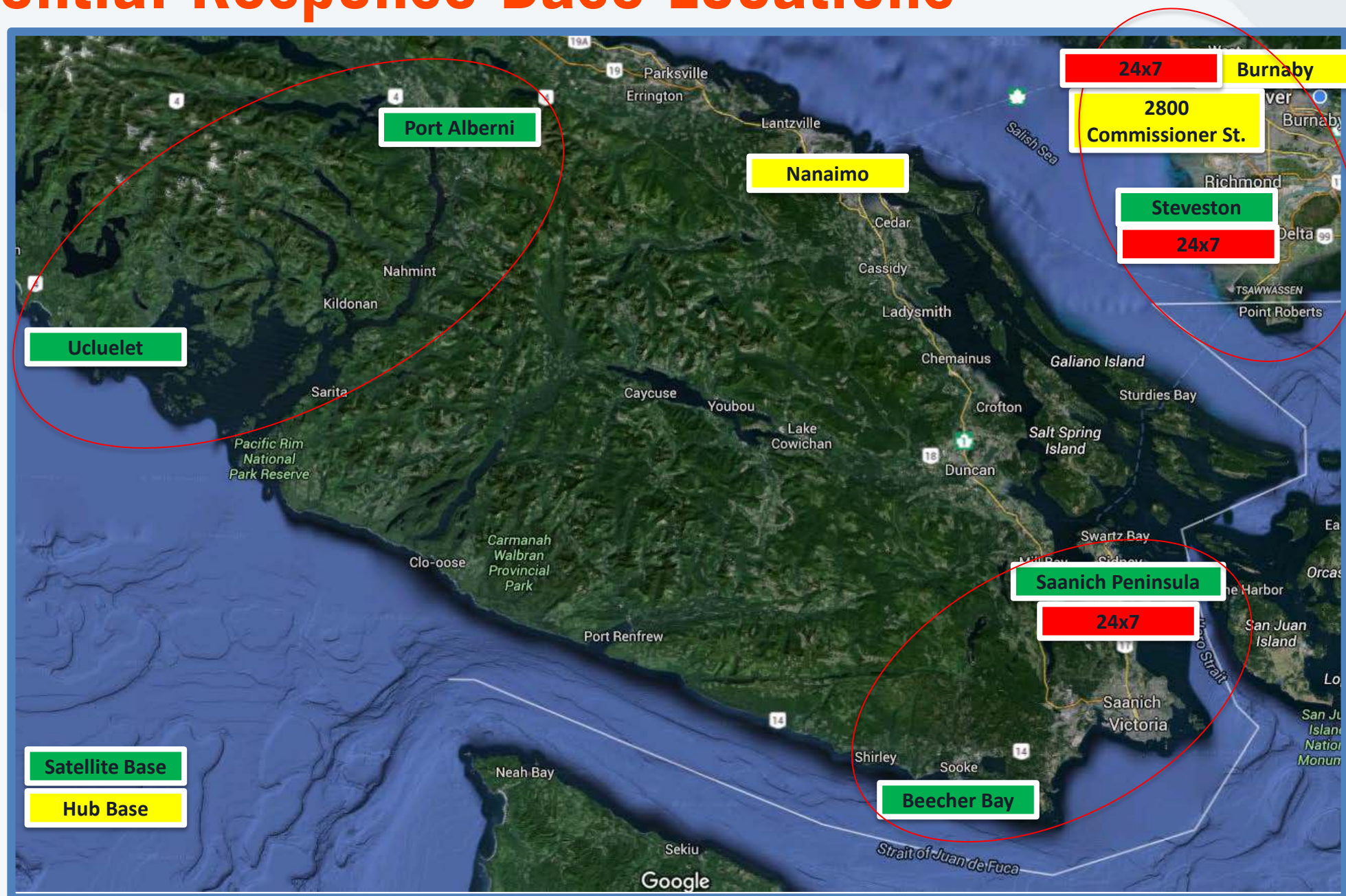


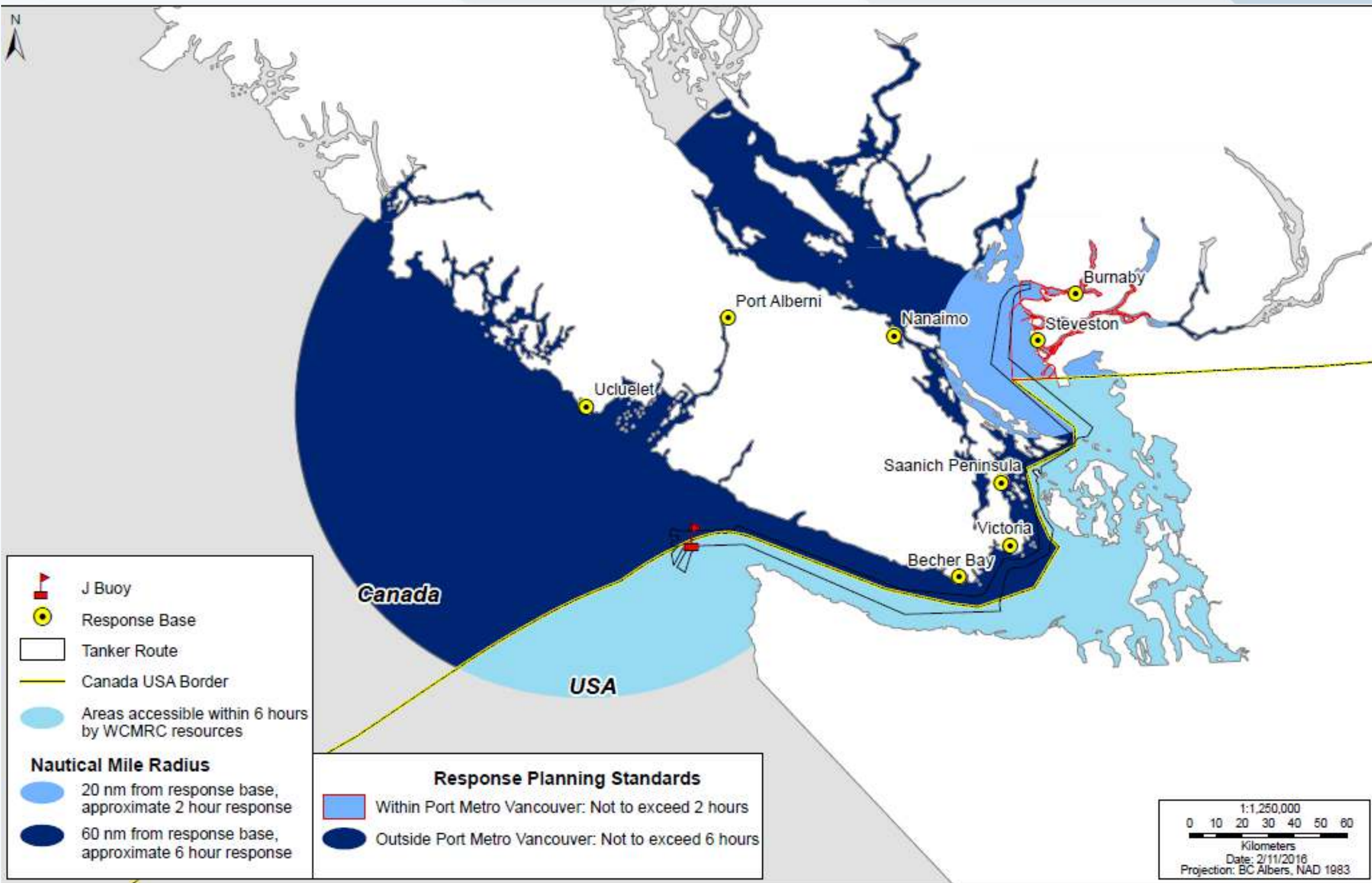
Existing Response Time Requirements

Table 5.5.3 Response Time Requirements



Potential Response Base Locations





WCMRC Potential Growth (estimates only)

	Personnel	Vessels	Barges	Mini Barges	Bases
Current	50	32	3	5	3
Business as Usual Growth	15	5	1 Refit	2	----
Trans Mountain	90-100	26	3	10	4 plus enhancements to 2 bases
Total:	155 - 165	62	6	17	8 - 9

WCMRC Capacity

	Canada Shipping Act Requirements	WCMRC 2016	WCMRC + TMEP Enhancements
Boom (m)	14,300	36,050	89,930
Skimming (t/hr)	27	550	840
Shoreline clean-up (m/day)	500	1,500	3,000
Storage (t)	3,040	8,100	25,260
Sweep systems	2	4	11
Total Capacity (t)	10,000	26,000	62,890

Questions...