

Marine Spill Response on the West Coast



March 29, 2017



Agenda

- **Canada's Spill Response Regime**
 - **Tanker Safety Expert Panel**
 - **Oceans Protection Plan**
- **WCMRC**
- **Coastal Response Program**
- **Trans Mountain Expansion Project**

Canada's Spill Response Regime



March 29, 2017



1976: Burrard Clean



An aerial photograph of a large body of water, likely a fjord or a wide bay, with snow-capped mountains in the background. The water is dark blue, and there are several small, snow-covered islands or peninsulas scattered throughout. A small boat is visible in the lower right foreground, and a larger, reddish-brown vessel is visible on the left side of the image.

1989: Exxon Valdez

1990: Brander-Smith report

1993: Canada Shipping Act amendments

1995: WCMRC certified

2013: Tanker Safety Expert Panel

2016: Oceans Protection Plan

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



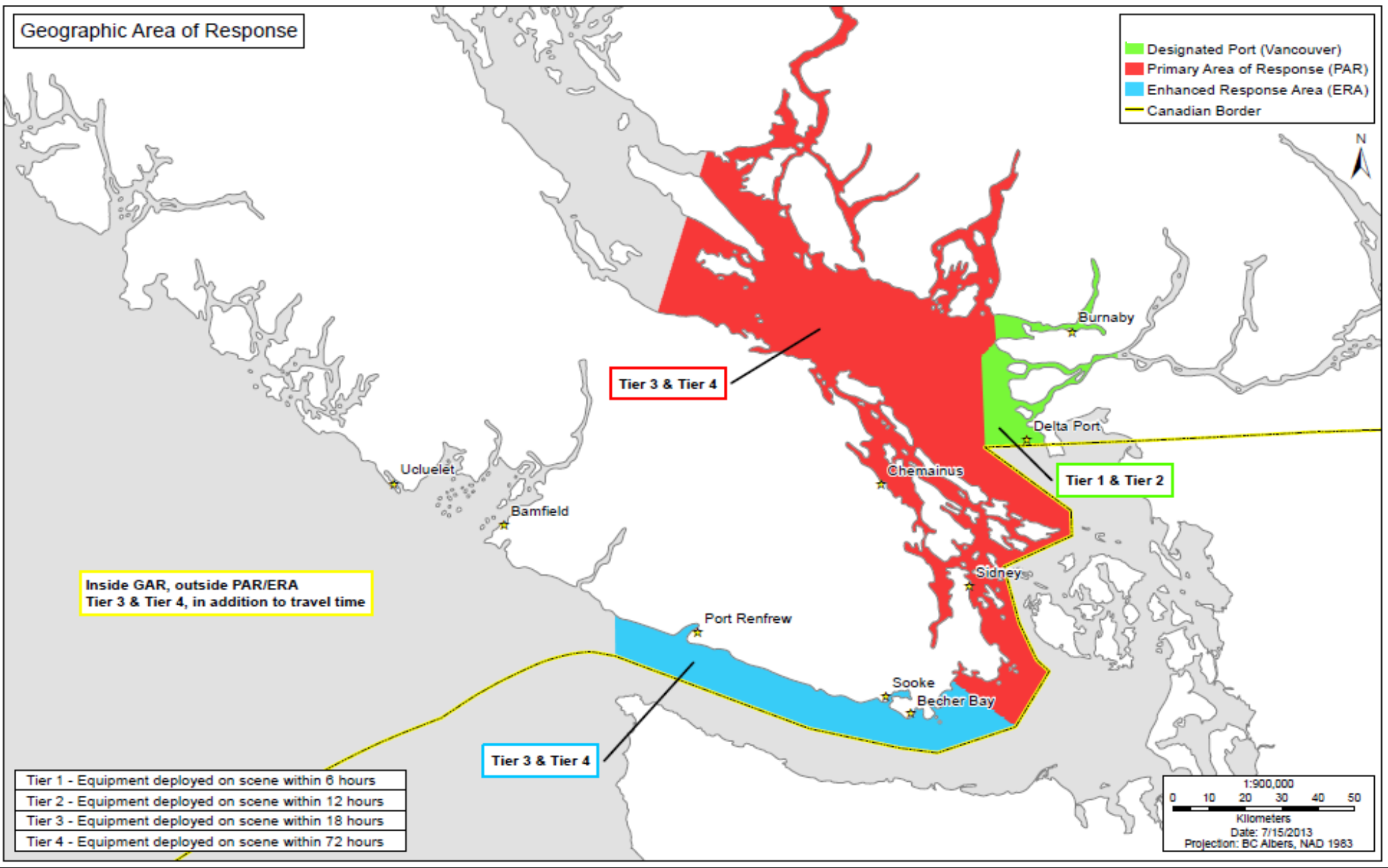
Response Organizations

- Develop response plans
- Conduct certification exercises

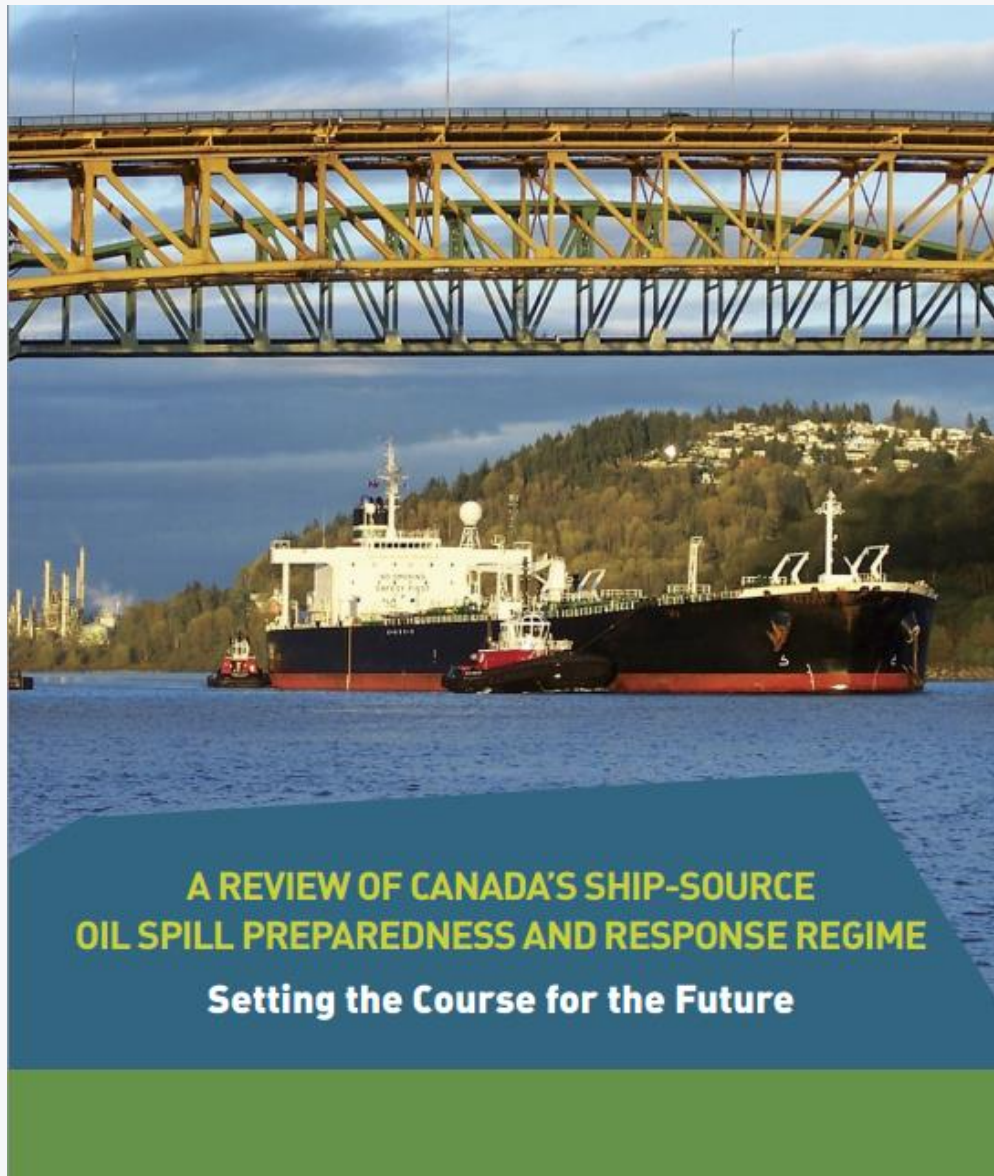


Geographic Area of Response

- Designated Port (Vancouver)
- Primary Area of Response (PAR)
- Enhanced Response Area (ERA)
- Canadian Border



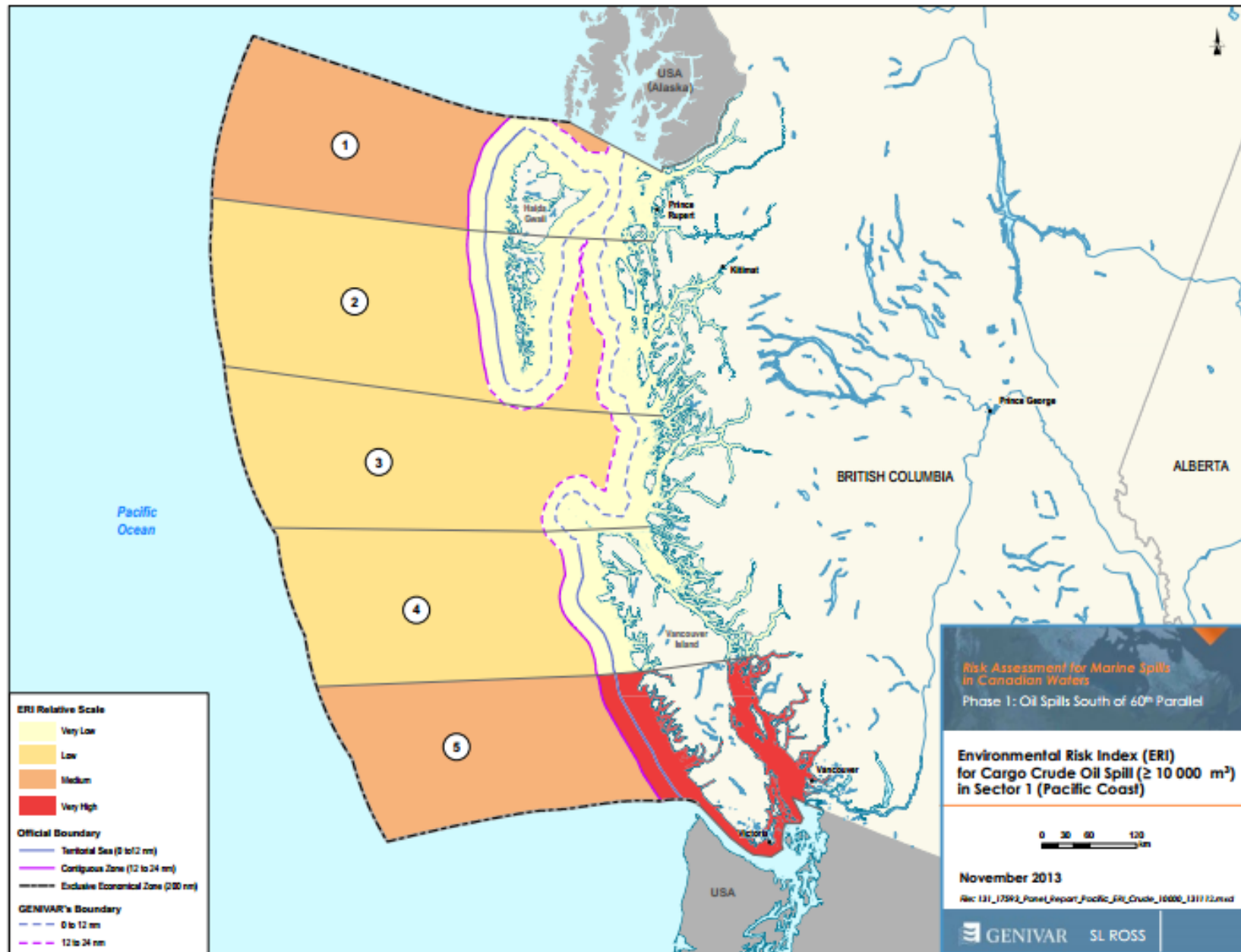
Tanker Safety Expert Panel



Transport
Canada

Tanker Safety
Expert Panel

Area Response Plans



Oceans Protection Plan

- \$1.5 billion to CCG, DFO, CHS, ECCC
- New Environmental Response Base (Port Hardy)
- Towing kits for existing vessels
- Two new towing vessels
- Additional Environmental Response Teams
- Indigenous Community Response Teams
- Changes to regulatory requirements
- Expand the CCG Auxiliary's role
- New radar & domain awareness

WCMRC: B.C.'s Spill Response Organization



March 29, 2017





**WCMRC GEOGRAPHICAL
AREA OF RESPONSE**



G.M. PENMAN

VANCOUVER, BC

SPILL RESPONSE





M.J. GREEN

G.M. PENMAN

12
10



WCMRC

AQUA-GUARD



AQUA-GUARD
OIL SKIMMING SYSTEM
WCMRC

COLUMBIA RIVER

640

449





SPILL RESPONSE

Province

CANADA

WCVRC

BlueSteelBox

NOV CURRENT BATTERIES 6

17
16
15
14
13
12
11
10
9
8
7
6
5

17
16
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4



BURRARD CLEANER No 7

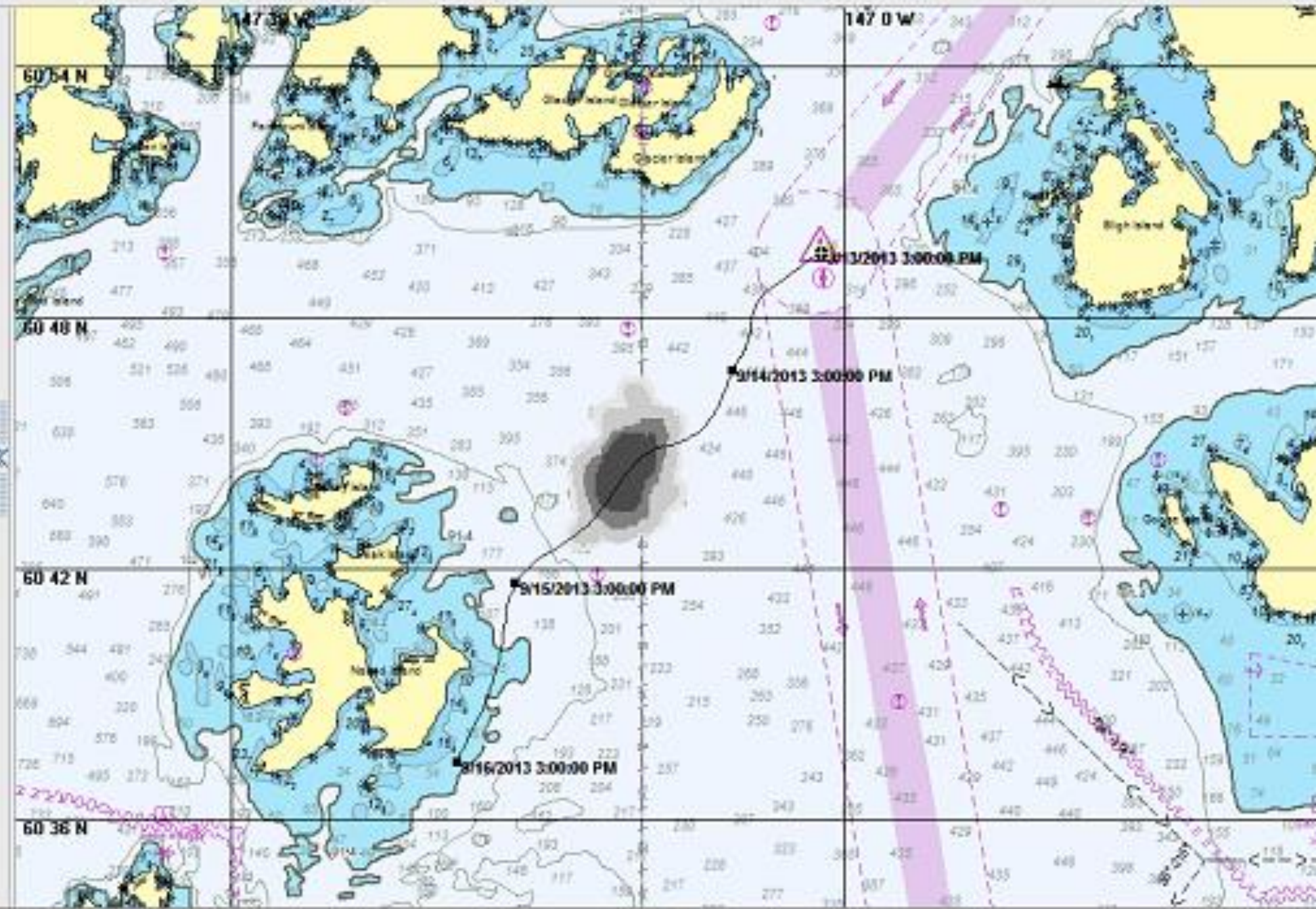
GIS Legend Live Data

Model

- Scenario - PWS_OIL1
- PWS_TT4SS - Currents
- PWS_OIL1_GFS - Winds

Geography

- Shipping Lanes
- PWS_DISPERSANT_ZONES_2
- Aerial photo locations
- Aquaculture Sites
- Bald Eagle Nest Sites
- Commercial fishing areas-
 - Drift gill net
 - Drift gill net and purse
 - Purse seine
- Communities
 - Communities
- Community Sensitive Sites
- Ecological site
- Harvest Area
- Marine mammal
- Salmon index stream





WCMRC Vessel Design Scheme
Concept 2 R2





GIL SENTINEL

SPILL RESPONSE

WCMRC

GIL SENTINEL

SPILL RESPONSE

WCMRC

Funding

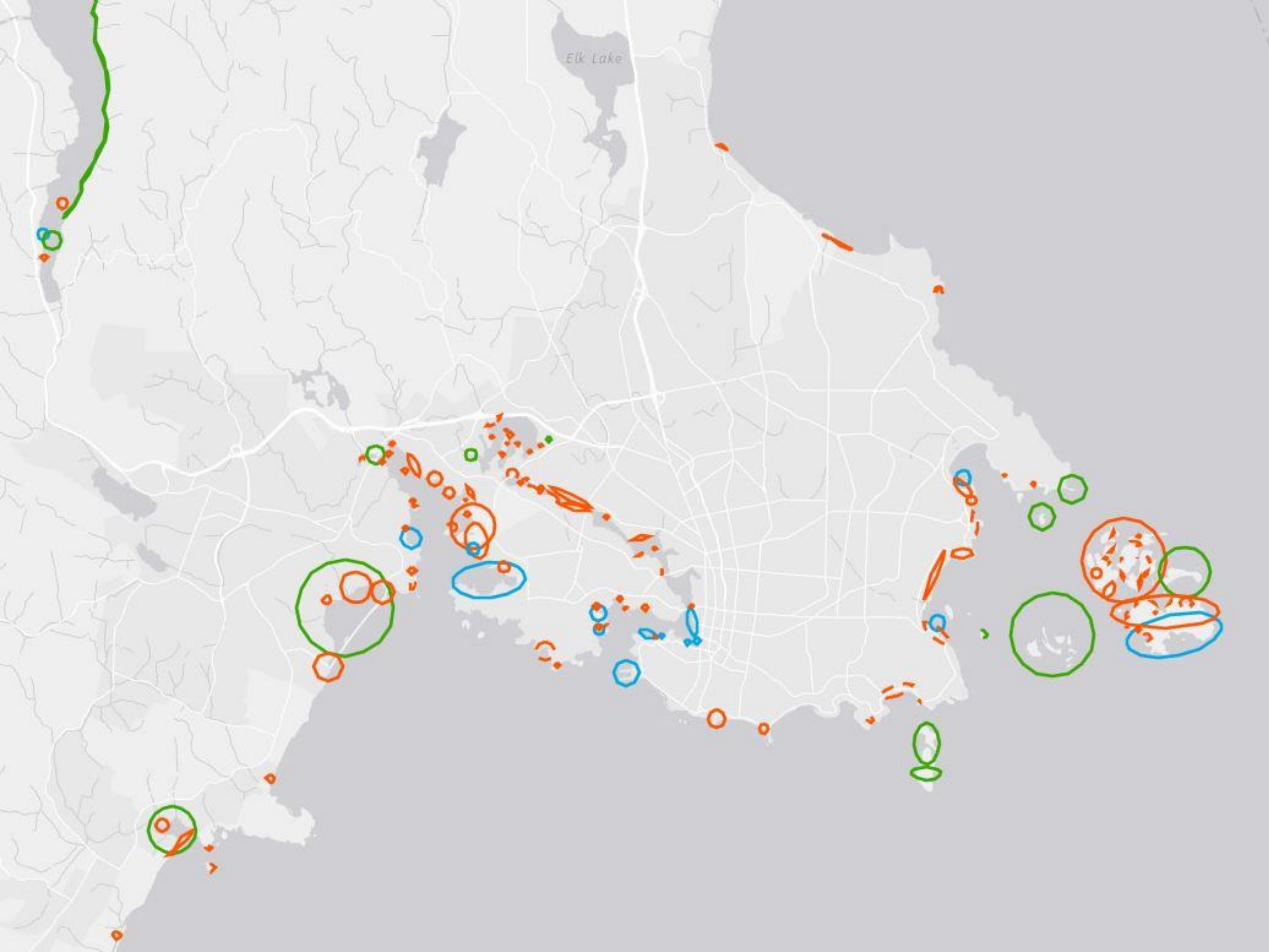
- +2,200 Members
 - Vessels
 - Oil Handling Facilities
- Subscribers
- 3rd Parties

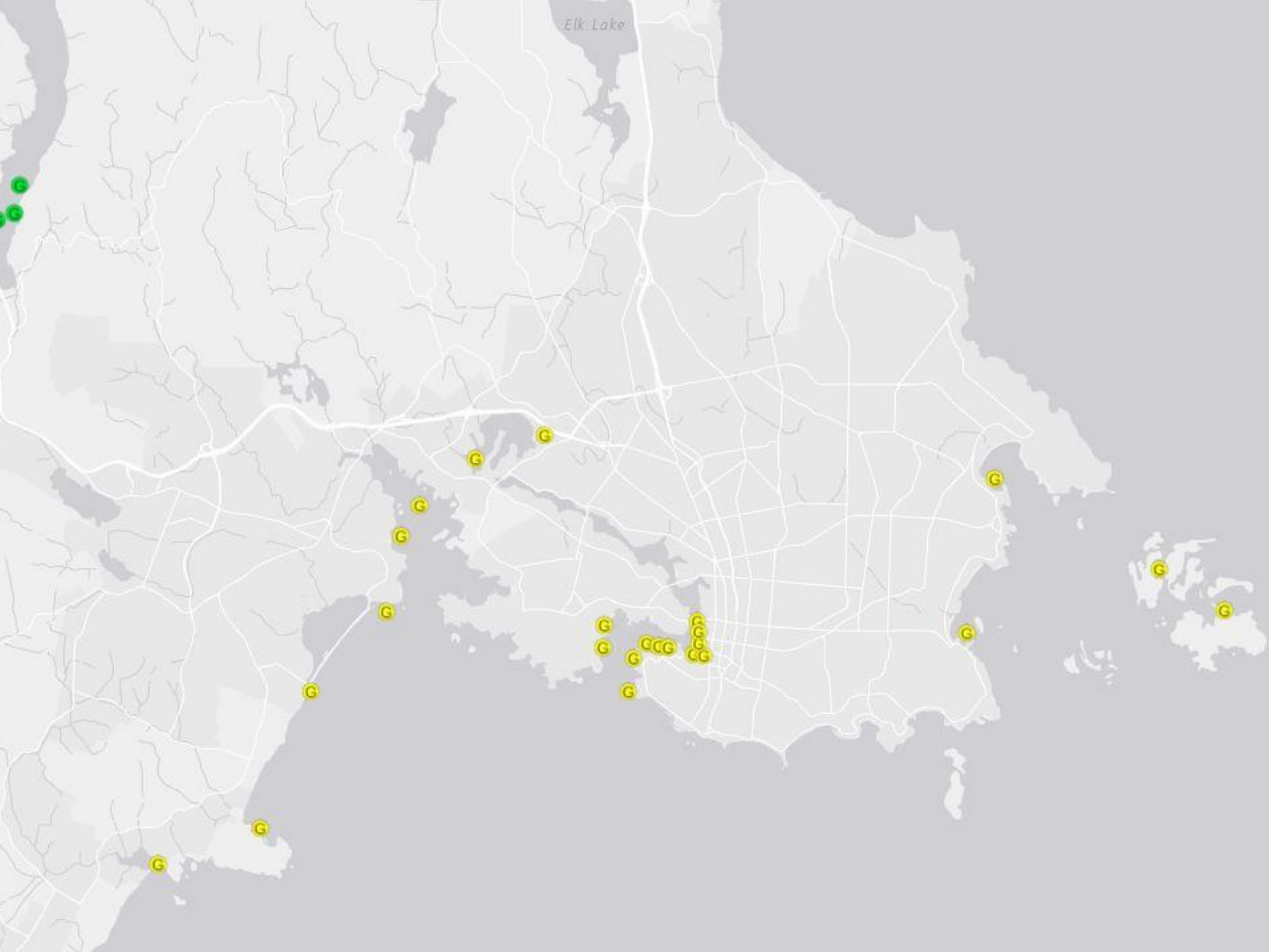




COASTAL RESPONSE PROGRAM



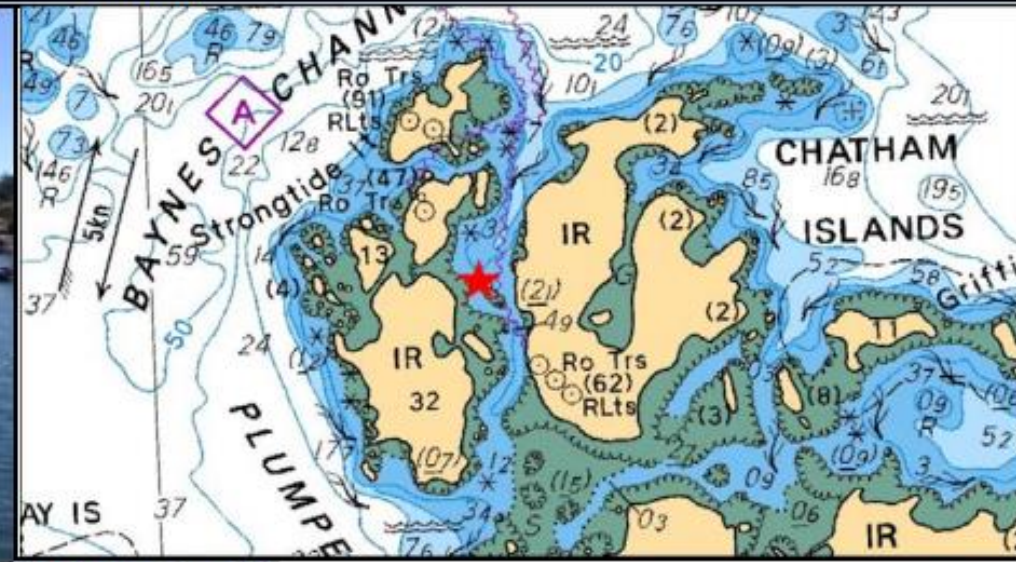




Chatham Islands

GRS # 07-04-070

Site Access	Boat Only	Restrictions	Songhees First Nation
Implementation	Anchor each boom end to shore, between islands and secure with deep water anchors as required to boom off inner inertial area.		
Staging Area	Victoria Harbour - Fleming Beach Boat Launch, 1101 Munro St, or James Bay Anglers Association, 75 Dallas Rd 250 389-6123.		
Safety Notes	Slips, trips and falls. High wind and strong currents. Shallow, rocks, kelp, eelgrass.		
Field Notes	Extremely exposed, may not be possible in high wind/current. Partial deployment to protect lagoon/estuary/saltmarsh may be possible depending on location of spill and tides. Protected areas - avoid landing.		



Site Contact Information		Navigation Direction	
Songhees First Nation 250-386-1043		Remote site located to south east of Victoria Harbour in Juan De Fuca Strait near Haro Strait. This area is remote and exposed. Staging is from Victoria Harbour and boat access only. Sail east outside of Victoria Harbour to site. Note that tides, currents and wind action can make this area treacherous and may not be possible to boom.	
Nearest Address			
Offshore location, no local address.			

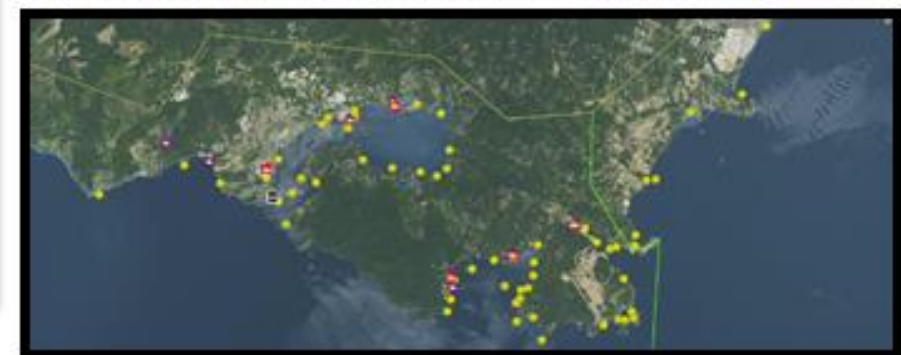
Logistics Staging Area Plan

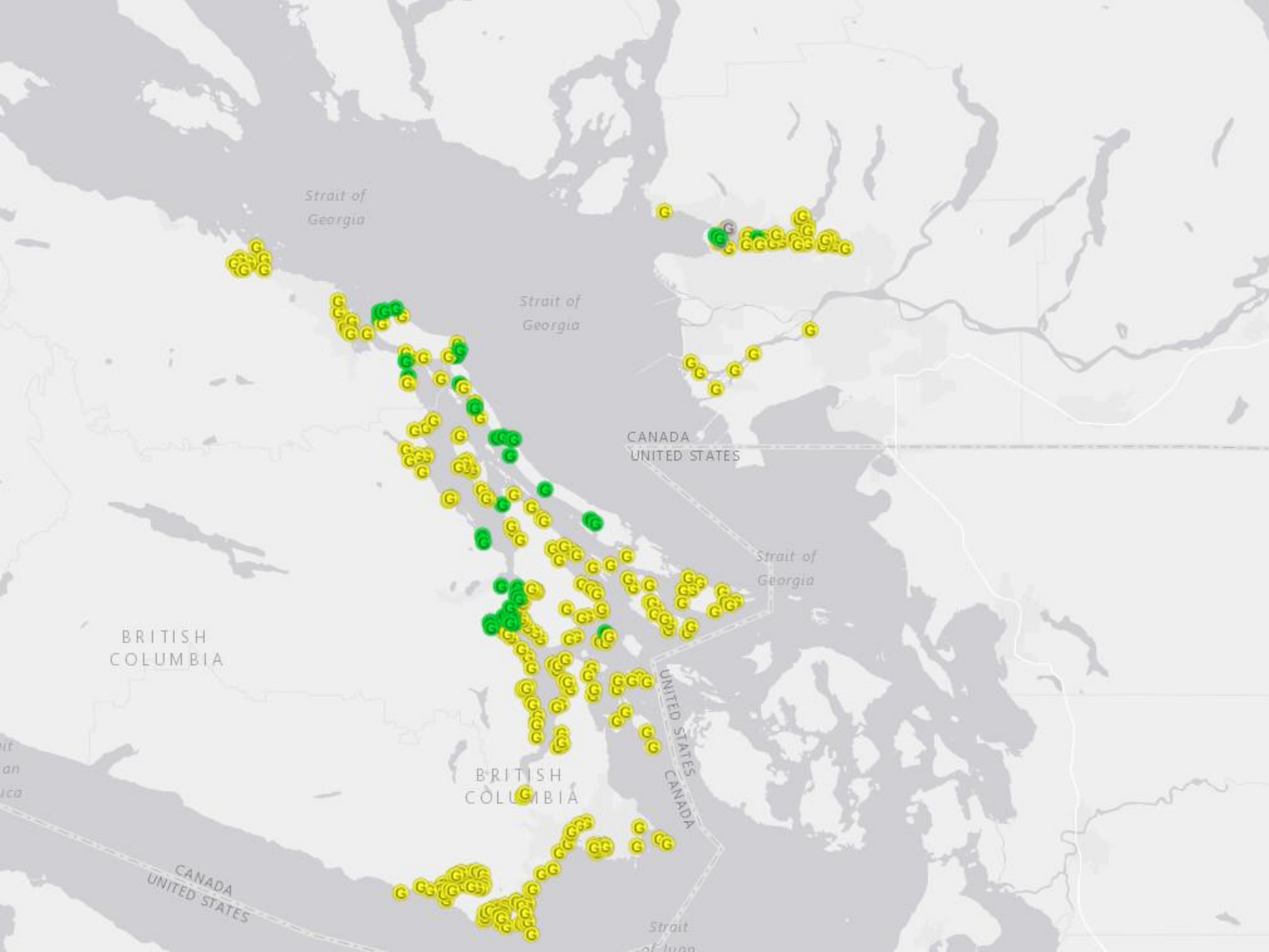
Logistics Staging Area: Tier 1	LSA Name: Pedder Bay Marina	LSAP #: LSA 07-05-02
Site Latitude/Longitude: 48°20'54.5"N 123°34'22.9"W	Area Response Plan Zone: Area Plan – 7 Juan de Fuca Strait	Geographic Response Plan Zone: GRP Area 5



Site Info			
Asset:	Type/Status	Amount	Info
Boat Ramp	Yes	3 Lane	
Boat Ramp Type	Pavement	~40 ft.	Wide
Boat Dock	Yes	100-150'	Two docks
Boat Refueling	Yes	-	-
Restrooms	Yes	1-2	Marina
Power	Unknown	-	Marina
Water	Unknown	-	Marina
Parking (Car)	Yes	~5,000 ft ²	Pavement
Parking (Trailer)	Yes	~10,000 ft ²	Gravel/Dirt
Waste Disposal	No	-	McRae's
Telephones	No	-	Lodge
Cell Phone Coverage	Yes	-	Local
Estimated Lot Size	Parking Lot	~15,000 ft ²	Paved
Lot Cover	Pavement	95%	Solid
Covered Space	Yes	1 Building	Marina
Perimeter Fenced/Gated	No	~700 ft	
User Fees	Yes	-	Boat Launch

Geographic Response Strategies Served:
Geographic Response Strategies within Area Plan 7, GRP 5





Trans Mountain Expansion Project

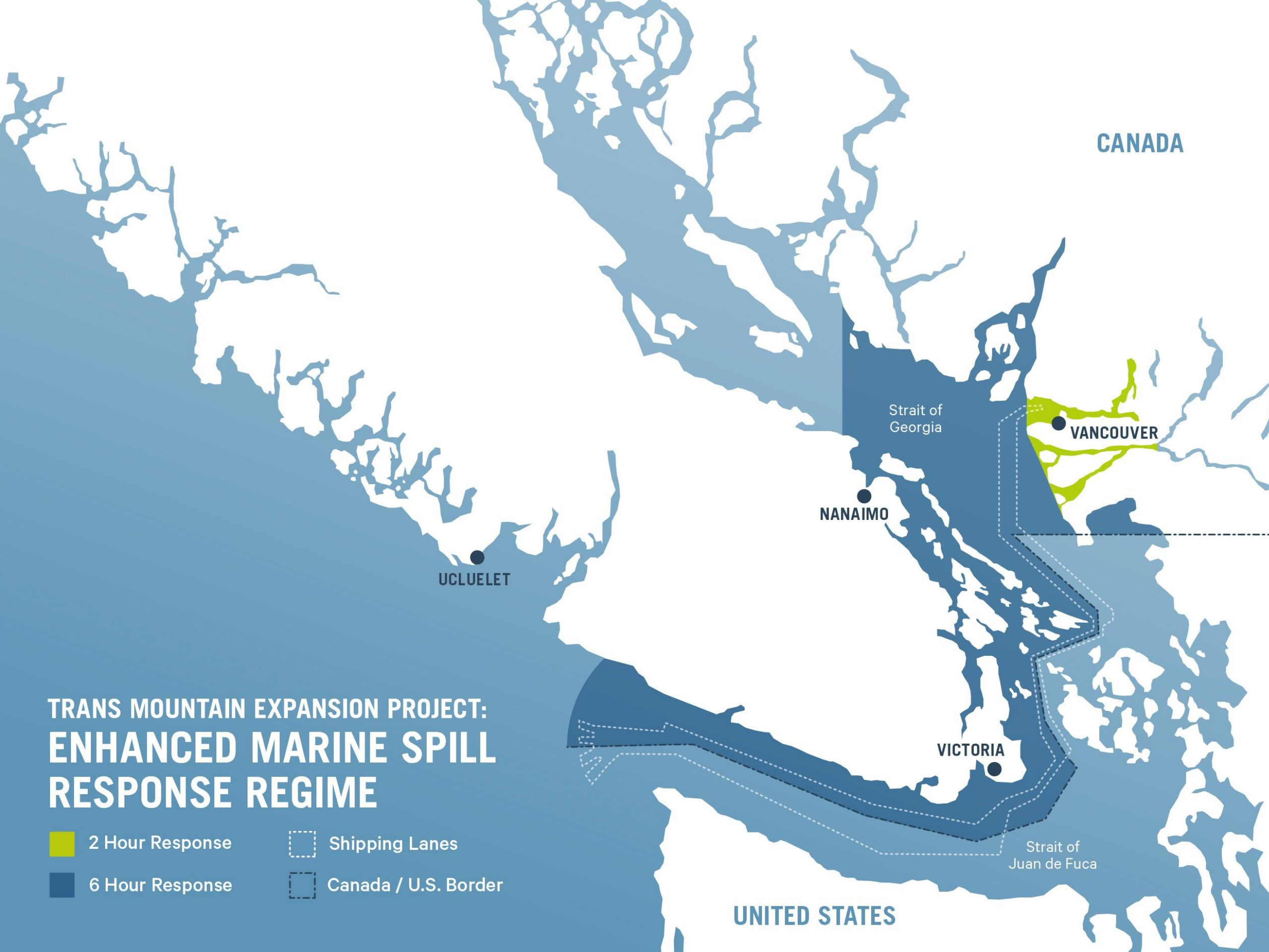


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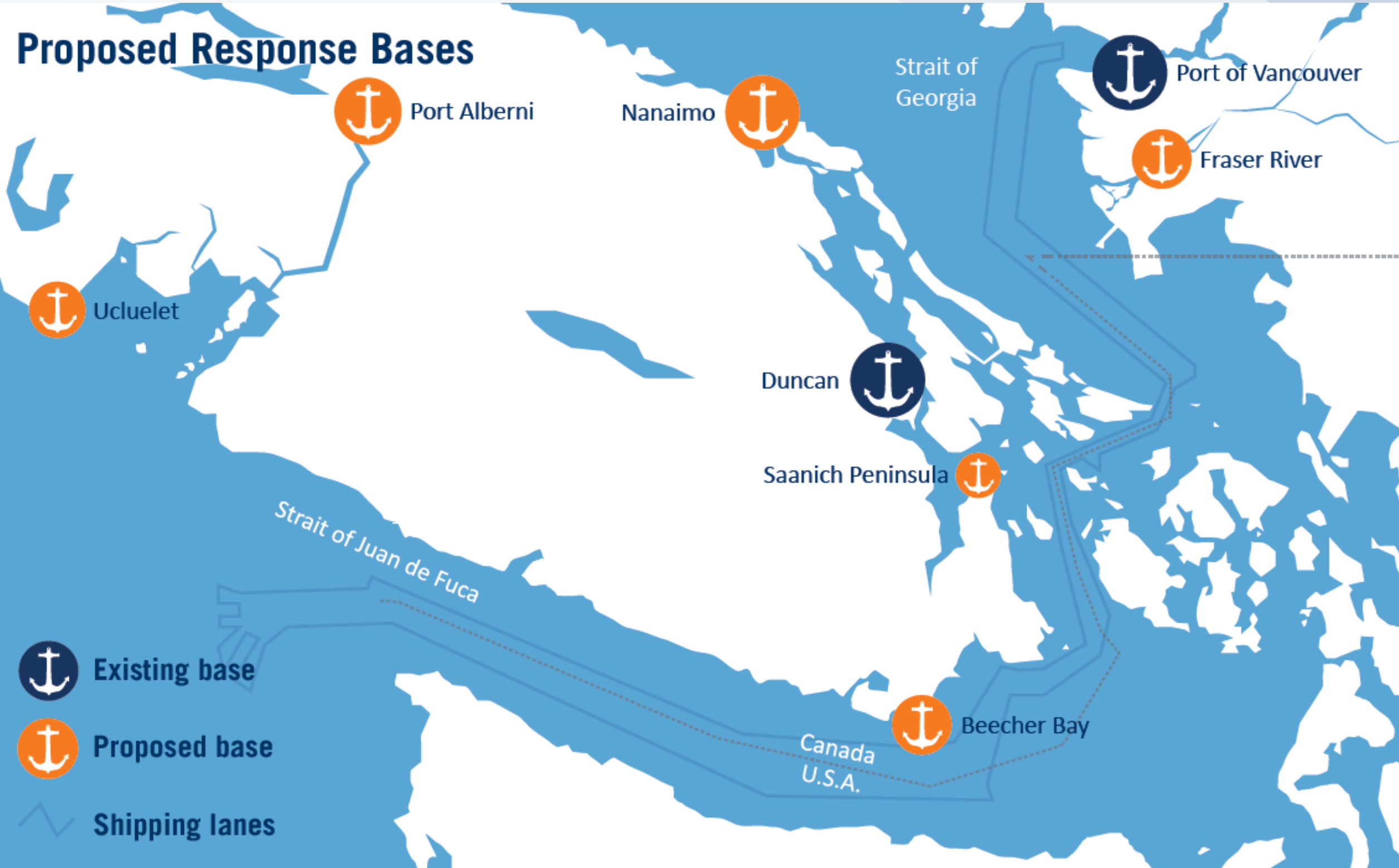


TRANS MOUNTAIN EXPANSION PROJECT: ENHANCED MARINE SPILL RESPONSE REGIME

-  2 Hour Response
-  6 Hour Response
-  Shipping Lanes
-  Canada / U.S. Border



Proposed Response Bases





WCMRC Potential Growth (estimates only)

	Personnel	Vessels	Bases
Current	65	42	3
Trans Mountain Enhancements	115	26	5-6
Total:	180	68	8-9



Thank-you!

