

Vessel Traffic in the Salish Sea



Photo credit: Chris Teren

*Stephanie Buffum, Exec. Dir. Friends of the San Juans
Northwest Straits Commission
November 7, 2015*

Friends of the San Juans

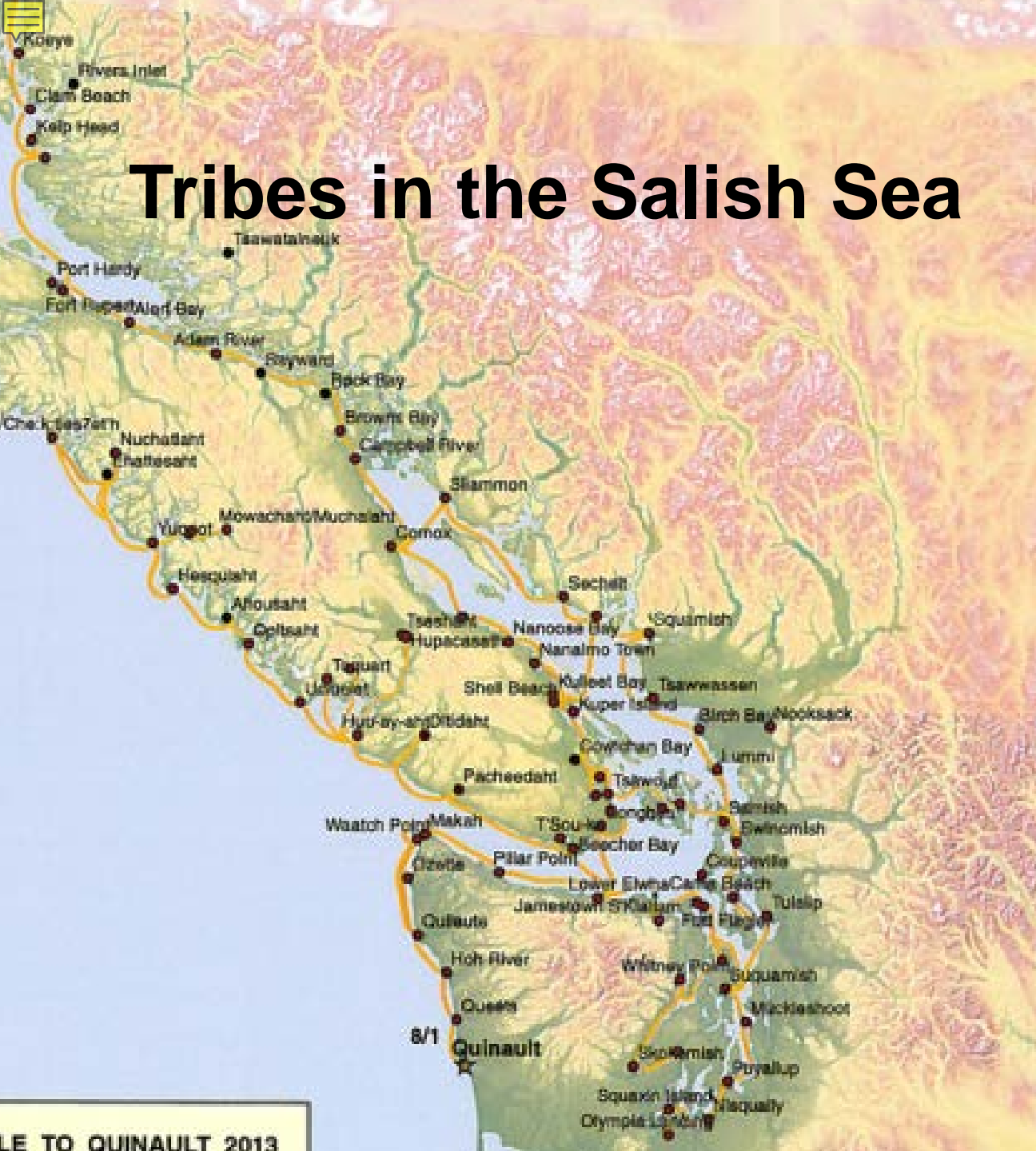
Protecting and restoring the San Juan Islands and the Salish Sea for people and nature since 1979.



Salish Sea Supports Environment Culture and Economy



Tribes in the Salish Sea



SCALE TO QUINAUT 2013



Cultural Risk of an Oil Spill

- First Nations: Food, medicine, and cultural practices
- Non tribal people: recreational fishing and boating, aesthetic
- Recognition of these values: San Juan Islands National Monument, 2012





Environmental Risk of an Oil Spill

- 37 species of mammals
- 172 birds
- 300 fish
- 3000 invertebrates
- 113 endangered, threatened or species of concern



Economic Risk of an Oil Spill

- Fishing
- Tourism
- Property value

“A major spill would have a significant impact on Washington state’s maritime economy worth \$30 billion and supports 148,000 jobs.

– *US Senator Maria Cantwell*
April 9, 2014



Traffic The Rotary

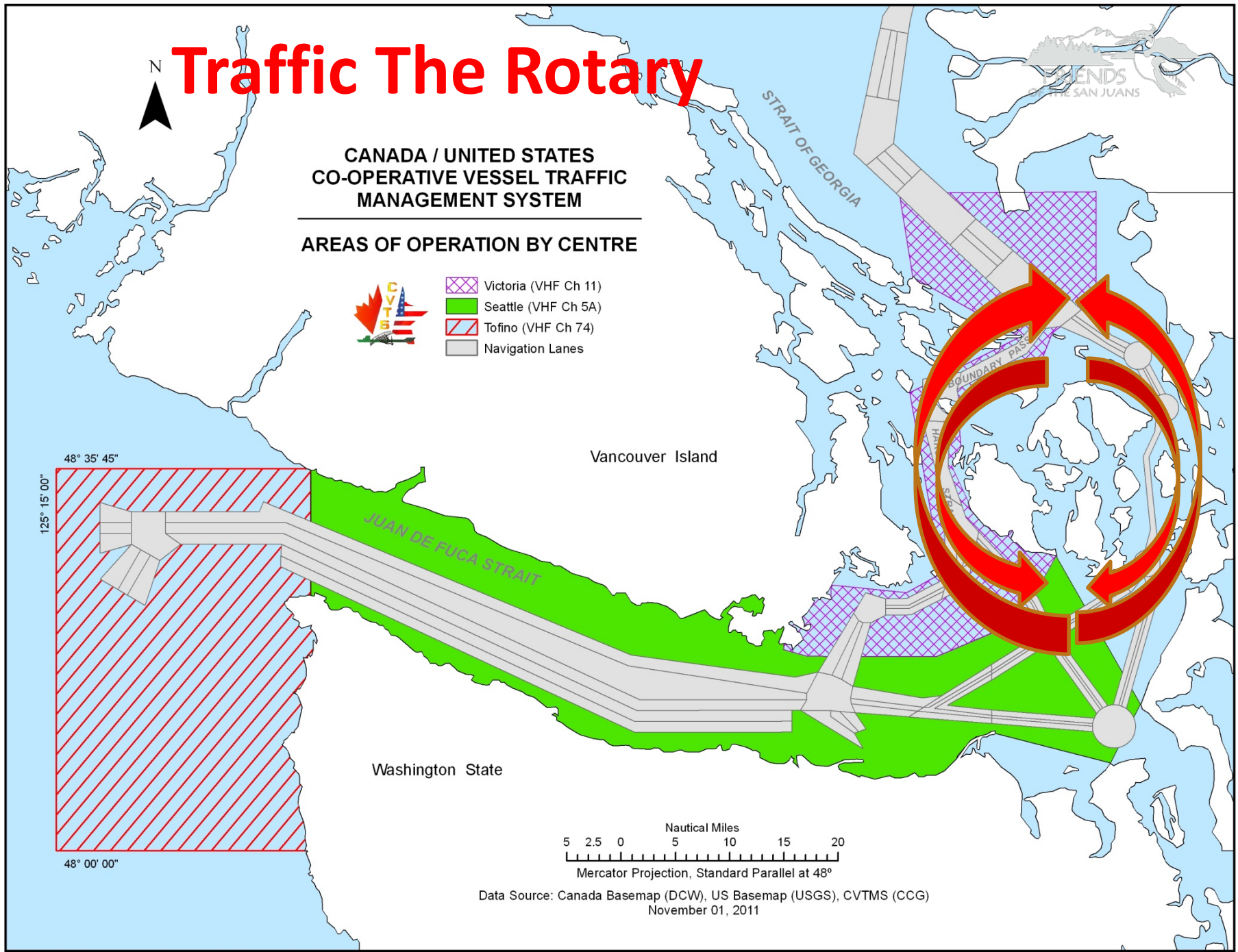


CANADA / UNITED STATES CO-OPERATIVE VESSEL TRAFFIC MANAGEMENT SYSTEM

AREAS OF OPERATION BY CENTRE



- Victoria (VHF Ch 11)
- Seattle (VHF Ch 5A)
- Tofino (VHF Ch 74)
- Navigation Lanes



48° 35' 45"

125° 15' 00"

48° 00' 00"

Vancouver Island

JUAN DE FUCA STRAIT

Washington State

STRAIT OF GEORGIA

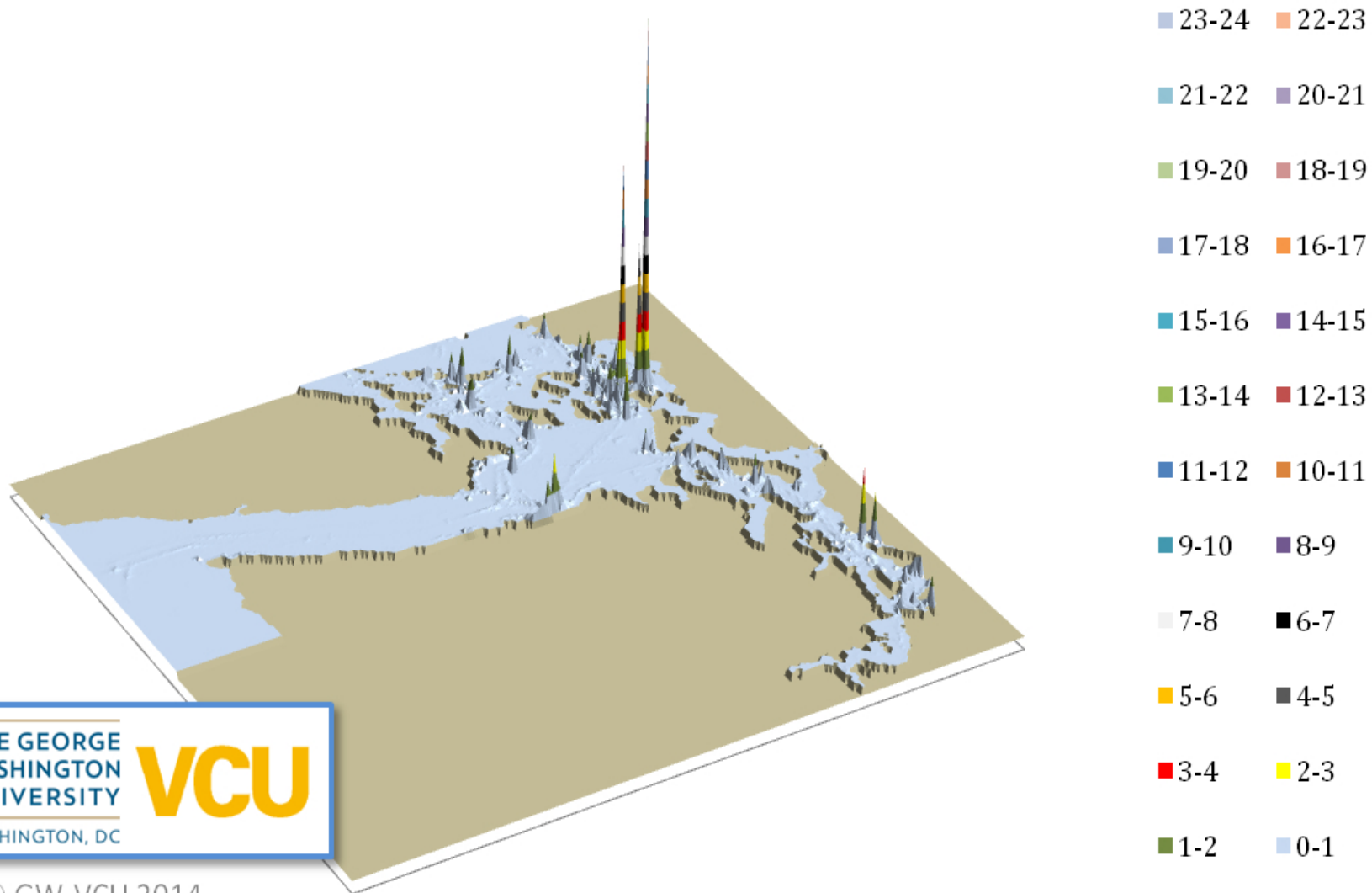
BOUNDARY PASS

Nautical Miles
5 2.5 0 5 10 15 20

Mercator Projection, Standard Parallel at 48°

Data Source: Canada Basemap (DCW), US Basemap (USGS), CVTMS (CCG)
November 01, 2011

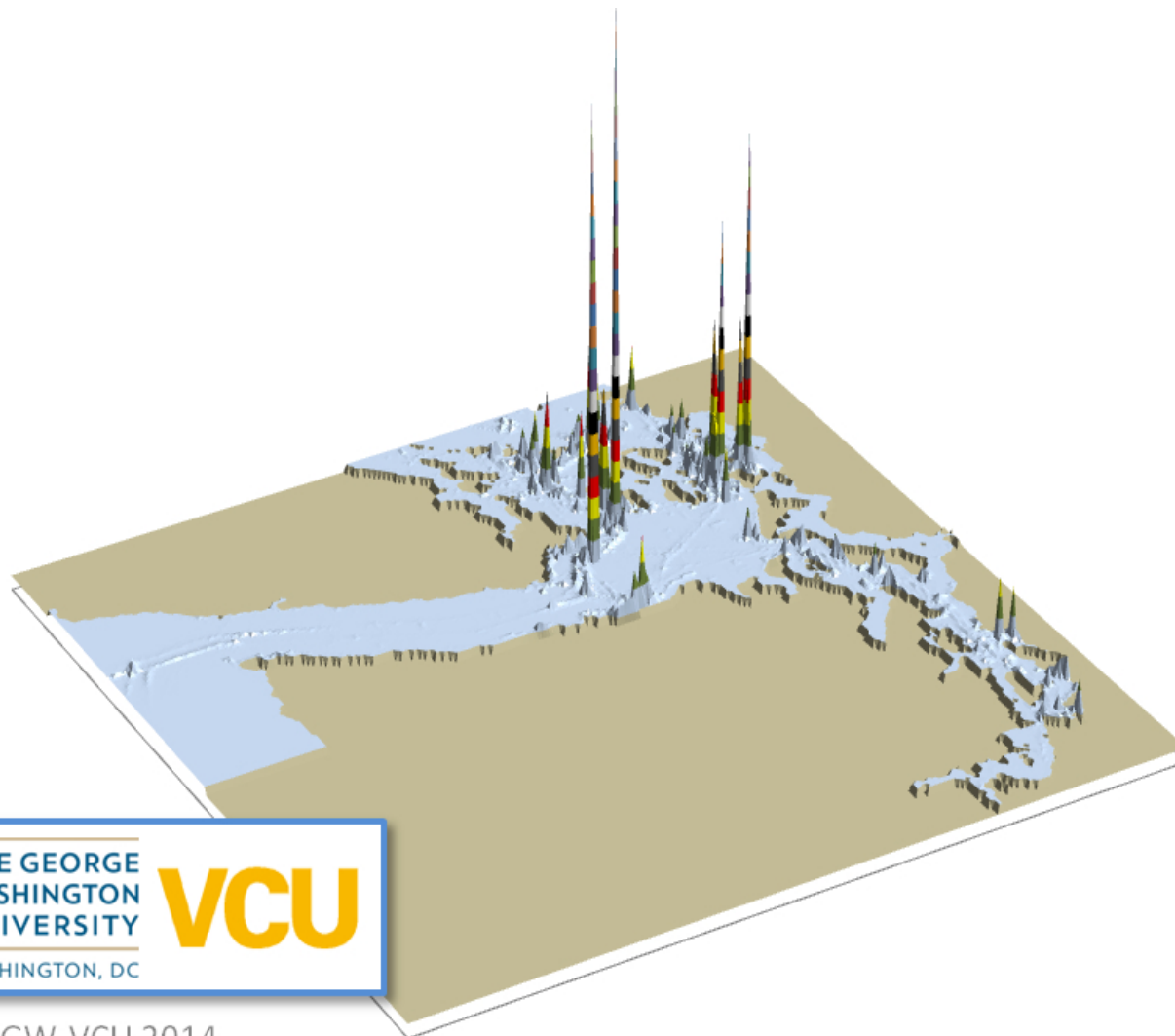
Vessel Traffic Risk Assessment (VTRA) Final Report: Preventing Oil Spills from Large Ships and Barges in Northern Puget Sound & Strait of Juan de Fuca 3 D Risk Profile



THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON, DC

VCU

Vessel Traffic Risk Assessment (VTRA) Preventing Oil Spills from Large Ships and Barges in Northern Puget Sound & Strait of Juan de Fuca 3 D Risk Profile

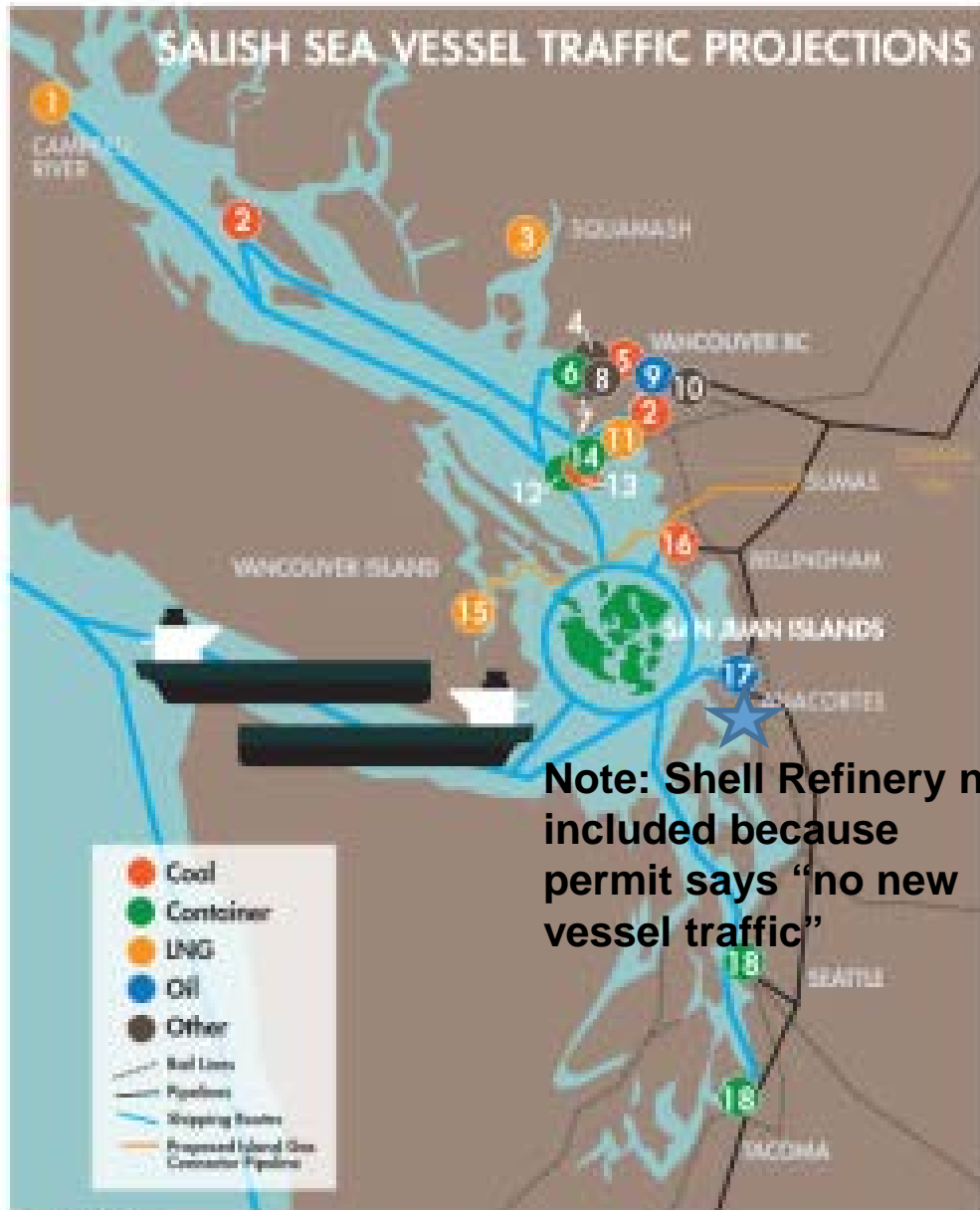


- | | |
|-------|-------|
| 23-24 | 22-23 |
| 21-22 | 20-21 |
| 19-20 | 18-19 |
| 17-18 | 16-17 |
| 15-16 | 14-15 |
| 13-14 | 12-13 |
| 11-12 | 10-11 |
| 9-10 | 8-9 |
| 7-8 | 6-7 |
| 5-6 | 4-5 |
| 3-4 | 2-3 |
| 1-2 | 0-1 |





**Increase in commercial shipping traffic
above 2013 levels = 43% - 48%**



NEW ANNUAL VESSEL TRANSITS

1	Discovery	760
2	Fraser Surrey	160
3	Woodfibre	80
4	Richardson Int'l (increase in vessel size)	
5	Neptune	352
6	Centerm	130
7	W. Coast Reduction	22
8	Viterro	144
9	Westridge	696
10	Pacific Coast	134
11	WesPac	244
12	Roberts Bank 2	520
13	Westshore	86
14	Deltaport	86
15	Malahat	228
16	GPT	974
17	Tesoro	120
18	Seaport Alliance	564
TOTAL NEW TRANSITS		5,300
2013 TRANSITS		12,394
TOTAL 2013 + NEW TRANSITS		17,694



San Juan Islands for Light Shipping

September 2013

See reverse side for more information.
For more details and sources: www.sanjuan.org/salishshipping/

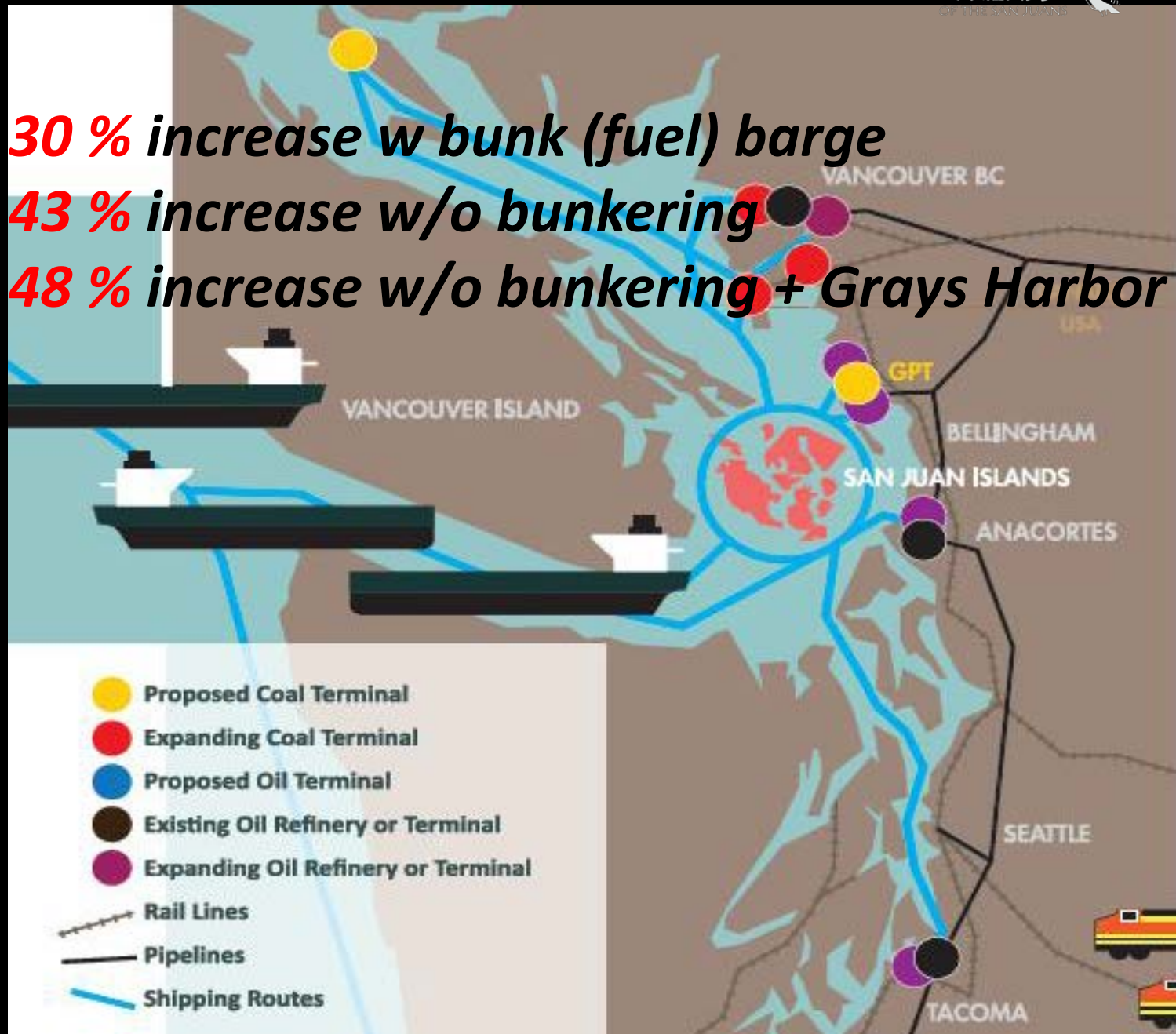


Increase in commercial shipping Traffic
2013 = 30% in 2015 = 43% - 48%

Salish Sea Vessel Traffic

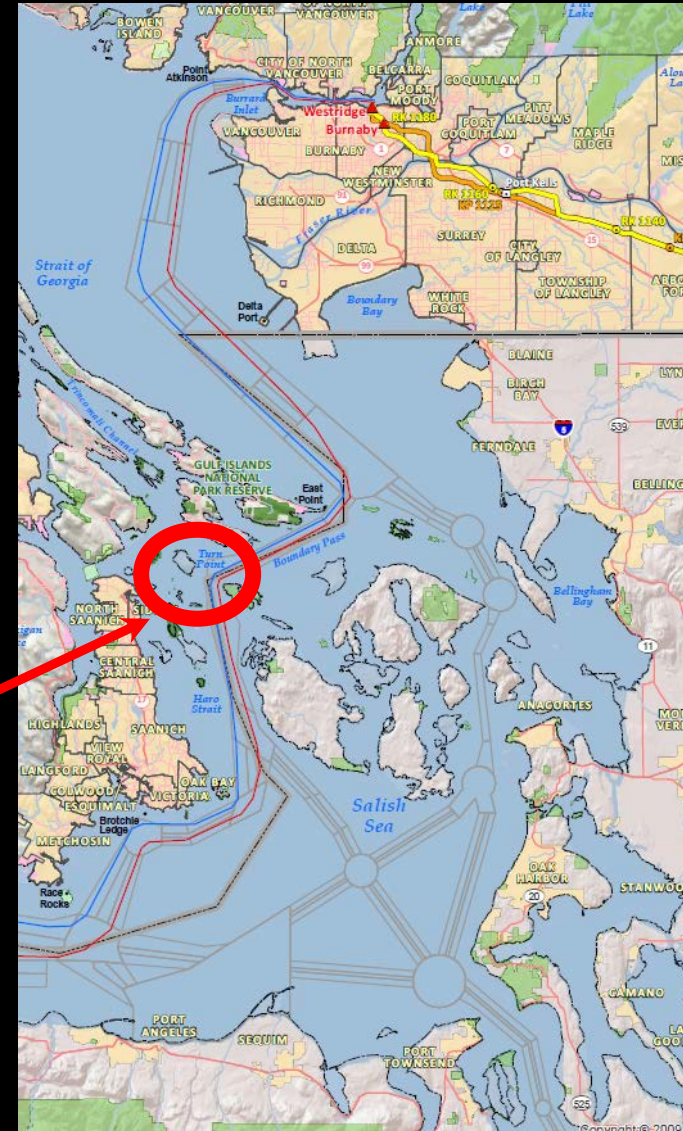


2013 30 % increase w bunk (fuel) barge
2015 43 % increase w/o bunkering
2015 48 % increase w/o bunkering + Grays Harbor



Accident and Oil Spill Risk

- Accident frequency could increase by 18%
- Potential oil spill loss could increase by 68%
- Potential oil spill loss in Haro Strait increases by 375%



Source: 2014 VTRA



Urgent and critical need

A Multitude of Risks:

“As heavier sediment settles out and sinks, our technology is not as sophisticated when you have tar sands that are heavier than water and settle on the ocean bottom...It is a challenge for us.”

*- US Coast Guard
Vice Admiral Zukunft*



Oil spill in English Bay,
Marathassa Grain Ship
Vancouver B. C.
April 8, 2015



Particularly Sensitive Sea Areas Designation



“A PSSA is...an area that needs special protection through action by the International Maritime Organization because of significance for recognized ecological, socio-economic or scientific reasons and because it may be vulnerable to being damaged by international shipping activities.”

- Based on best international practice.
- Notice to mariners that a designated area is of global importance and additional protective measures are required.



14 PSSAs globally, 2 in USA



Bold new venture





PSSA Criteria:

- ✓ PART I: Ecological, Social and/or Cultural Threat (*One must be met, ideally, throughout the entire area...The Salish Sea meets all three!*)
- ✓ PART II: Vulnerability to Impacts from International Shipping
- ✓ PART III: Associated Protective Measures (APMs)



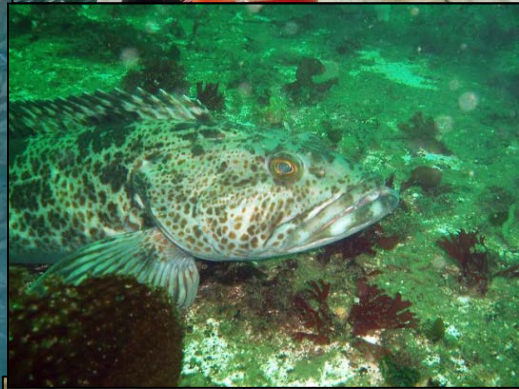
PSSA: Types of Protective Measures

- Improved spill prevention, equipment, and personnel
- Increased pilotage in designated areas
- Traffic separation / vessel traffic management
- Discharge controls
- Spill prevention on bunkering
- Establish no anchor/no bunker areas
- Implement new standard of care for barges
- Standards to diminish underwater noise



NWS/MRC ACTION OPPORTUNITY

Support the PSSA Nomination





Thank you

**Stephanie Buffum Stephanie@sanjuans.org
360.378.2319 www.sanjuans.org**

Vancouver, BC

April 8, 2015 – Marathassa Grain Ship

“The response to the spill was "totally inadequate.”
Vancouver Mayor Gregor Robertson

