

Sat March 18, 11am-1pm

Bring cleats for packed trails

Contact: gees@unbc.ca

UNBC Geography, Earth, and Environmental Club Presents:



Pot O' Gold Orienteering Race



Who: Everyone of all ages is welcome to join and learn to read a map and use a compass!

When: March 18th, 2023 11am – 1pm

Where: Moore's Meadow Nature Park (Meet at Zimmario Park Playground on Zimmario Ave)

What to bring: Warm layers, good shoes, and a compass if you have one

Cost: \$10/race entry + \$5 for each teammate

Bring your friends and family as there will be prizes and lots of fun to be had!

Email: gees@unbc.ca



Geog 205 Project 2023 (20+5%)

The intent of the GEOG 205 project is to complete a map from data collection to finished product, related to your program of study or areas of interest.

The project fills the last 3.5 weeks of the term lab periods.

We suggest you divide your time approximately as follows:

March 13-17:	Data collection and assembly
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March 20-24:	Symbolisation and design
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March 27-31:	Layout and ancillary info
April 3-6:	final report/project due

1. Type of Map

The project is **completely open** but you could use labs 4-8 as 'models' of the type of map you prefer to make

a. Qualitative thematic / location map

b. Thematic - quantitative

c. Topographic

See below to view previous project maps.

2. Content ?

- **Personal interests** e.g. hiking, biking, dancing, dining
- **Home area or favourite travel location**
- **Related to your major study or other courses**
- **Wish you were there instead of here**
- **Neat place in the news**

3. Geographic area:

a. PG / BC

b. Other province

c. Other country

d. World / Other planet / other worlds ..

It could be anywhere / anything, but some data are easier to find

4. Scale / extent

... this determines the data to seek

a. Municipal (1:5k-10k)

b. Local (1:25k-50k)

c. Regional (1:250k-500k)

d. National (~ 1:1,000,000)

e. Global (~ 1:10,000,000)

5. Size and shape (plan ahead)

Online publishing could be any shape/size, but assume you'd like to print

Size Options:

- **Tabloid 11 x 17"**
- **Letter 8.5 x 11"**
- **Legal 8.5 x 14"**

Shape options

- **Landscape (often better)**
- **Portrait**

Square is less cool

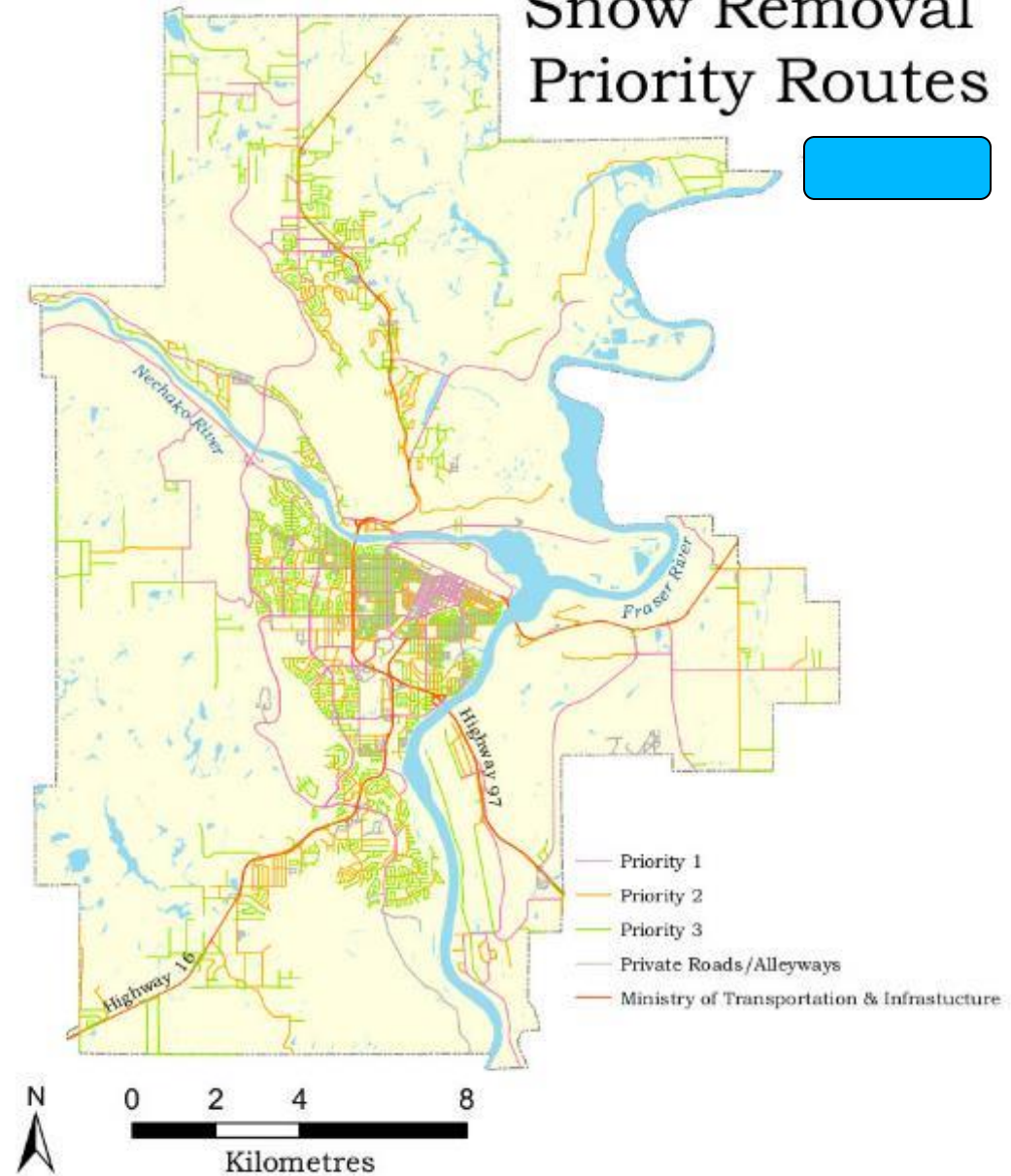
Location maps

‘general /
qualitative’

municipal

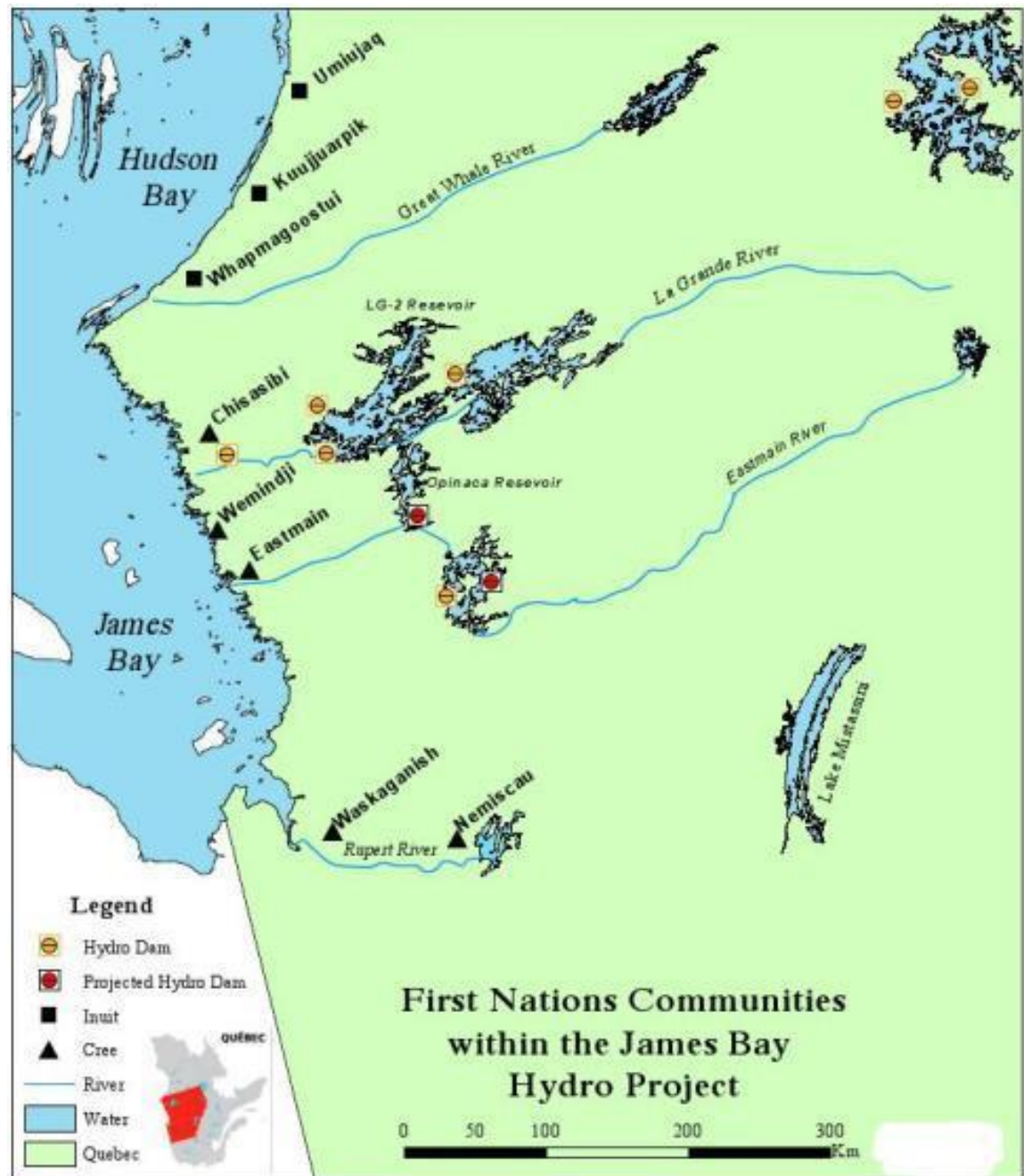
Way too much
white space

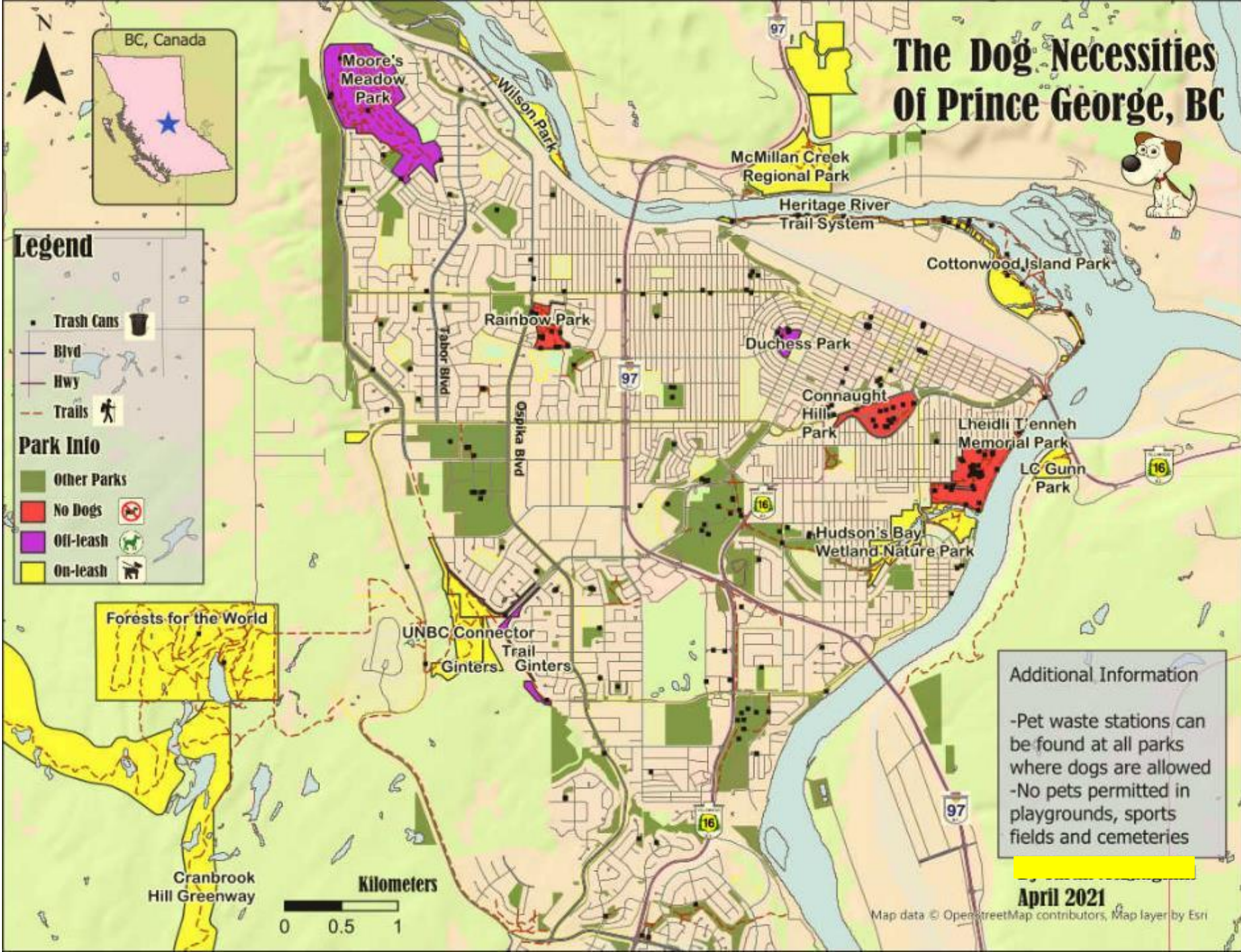
Prince George Snow Removal Priority Routes



Regional

Lakes are too detailed
And attract attention





Fraser Lake: Sightseeing and Activities

Go exploring!

Hop on the side by side and go for a ride. Or, ask Doug for one of his lake tours on a seadoo. If you're lucky, your vehicle won't even break down on you.



Find yourself in town looking for a bite to eat?

Here are some restaurants to look for:

Fan favorite, Senior Duggies!
Fraser Lake's own, Tony's Restaurant
The old reliable, Subway

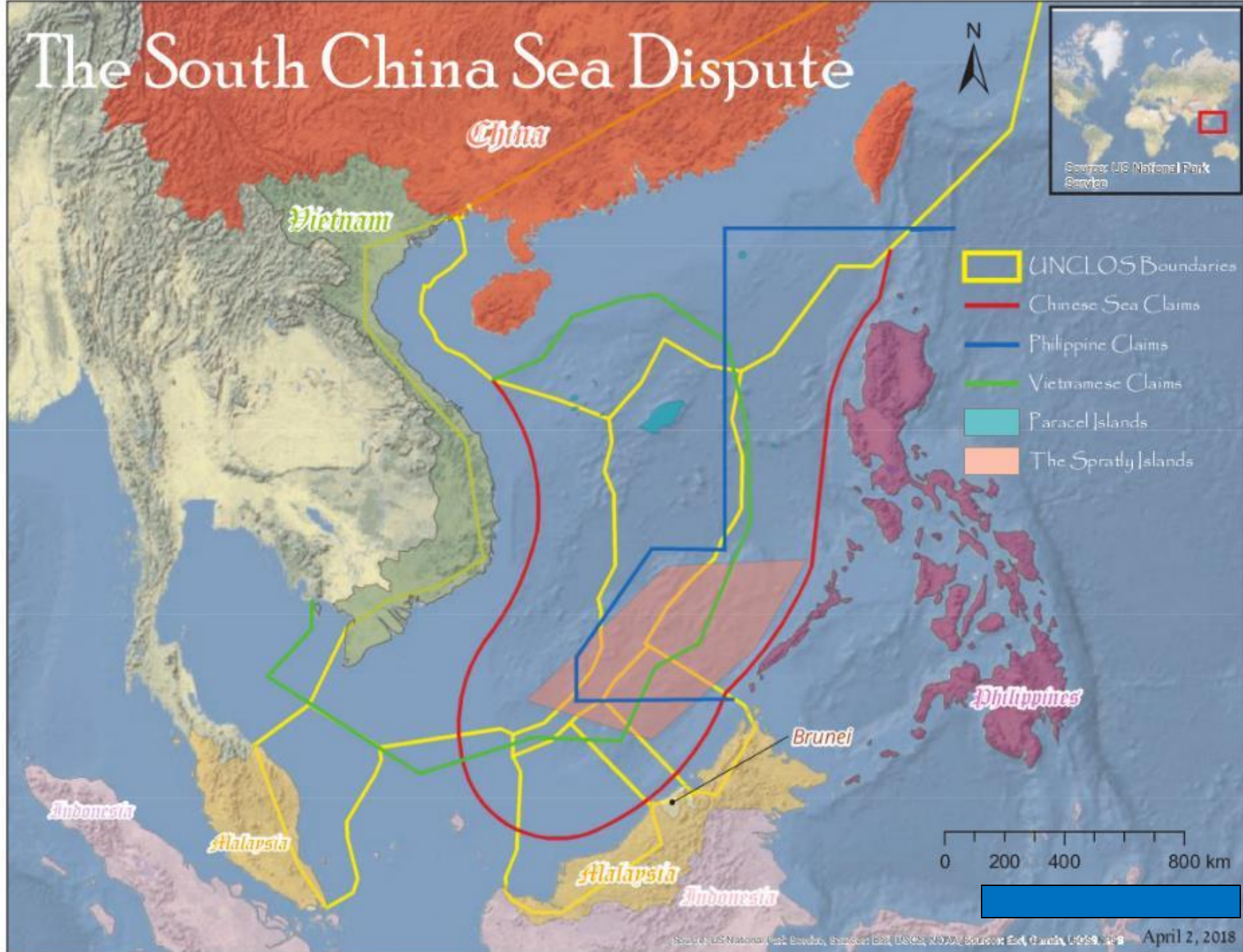
If you have the misfortune of getting kicked out of our cabin. Don't worry! Fraser Lake has these hotels and lodges for you to stay:

The Fraser Lake Inn
Cataline Motor Inn
Piper's Glenn Resort
Uwe's Loghouse

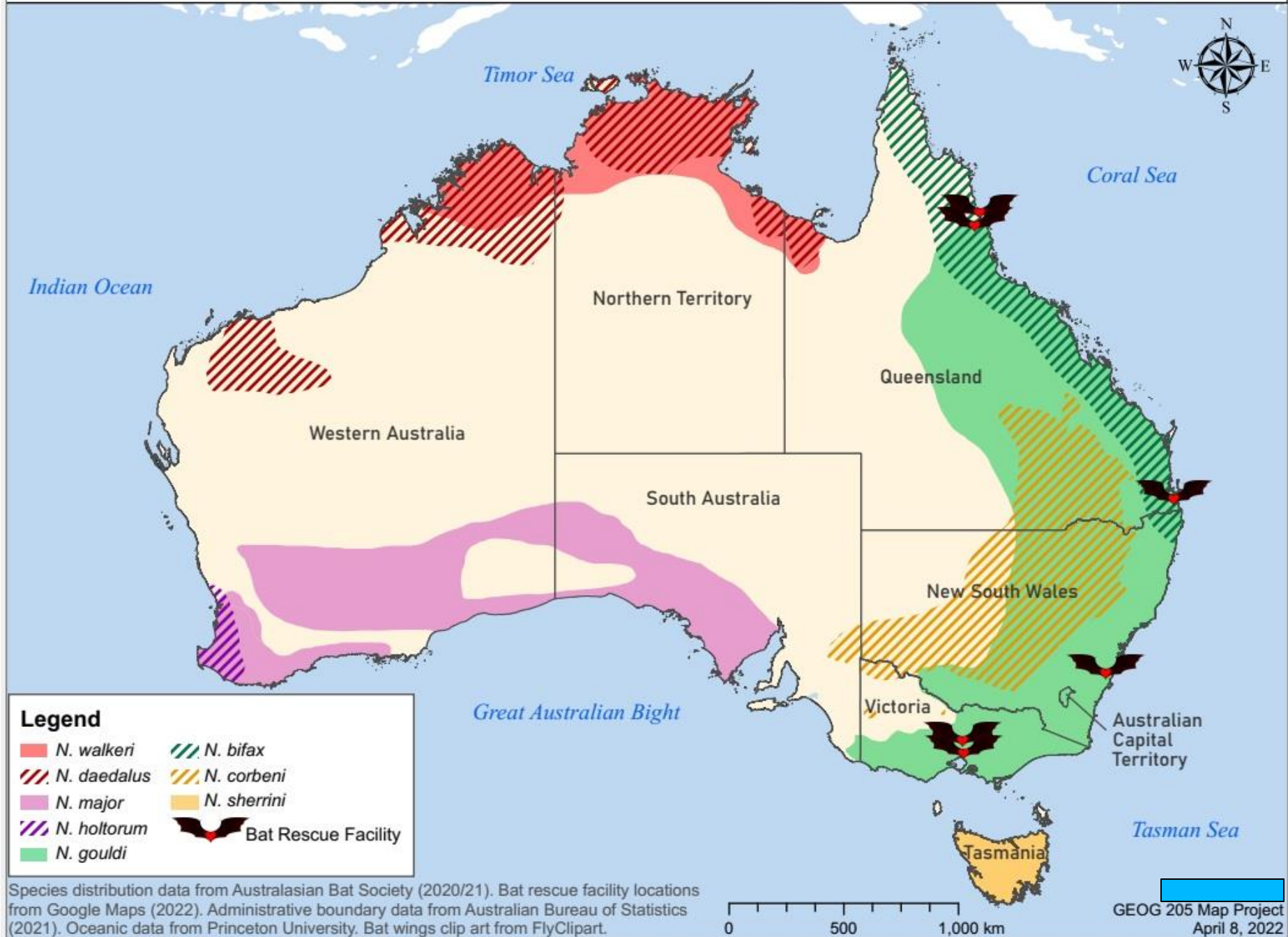
**Feel free to crash with one of the neighbors if these locations don't suit you.

0 1 2 4 6 Kilometers

The South China Sea Dispute



Distribution of big-eared bats (*Nyctophilus* spp.) and bat rescue facilities in Australia

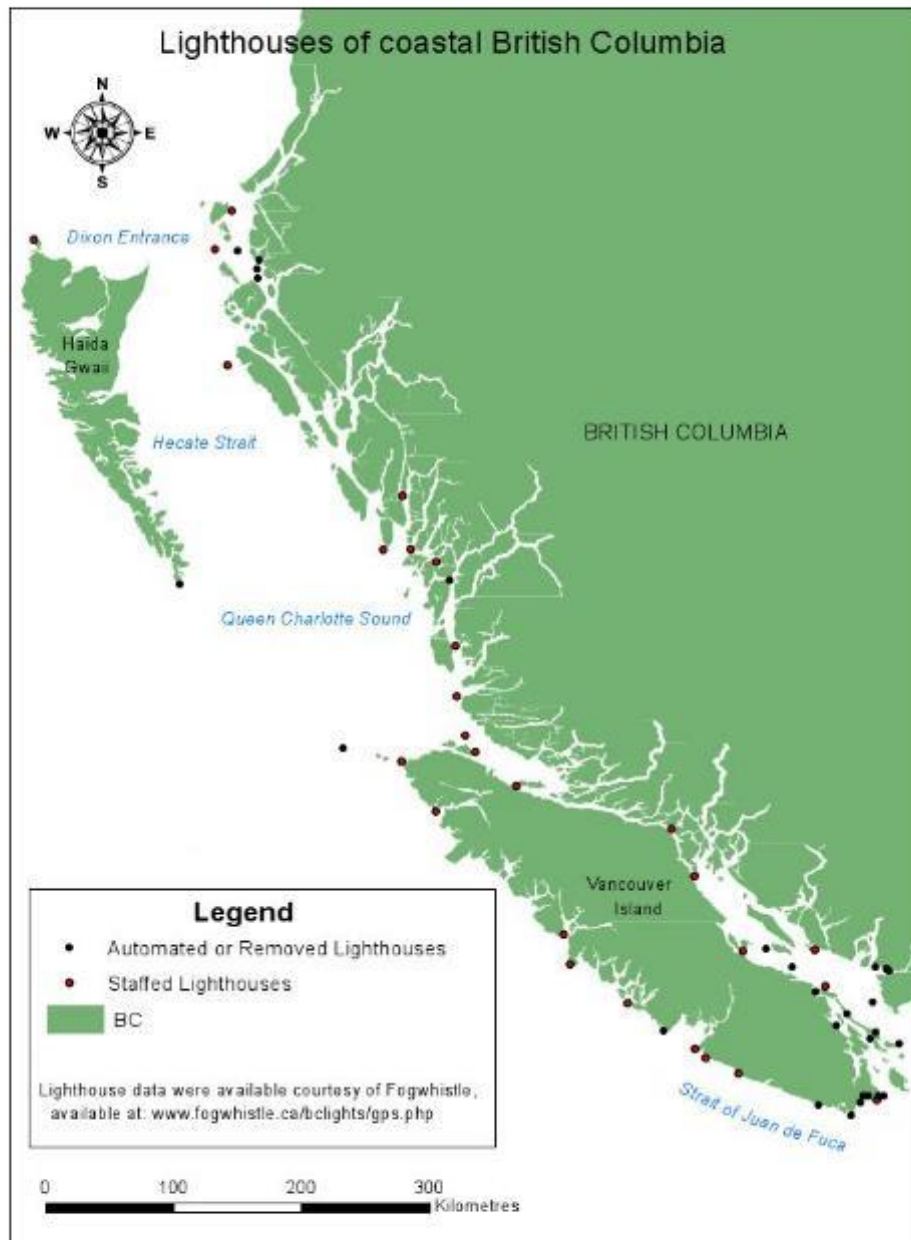


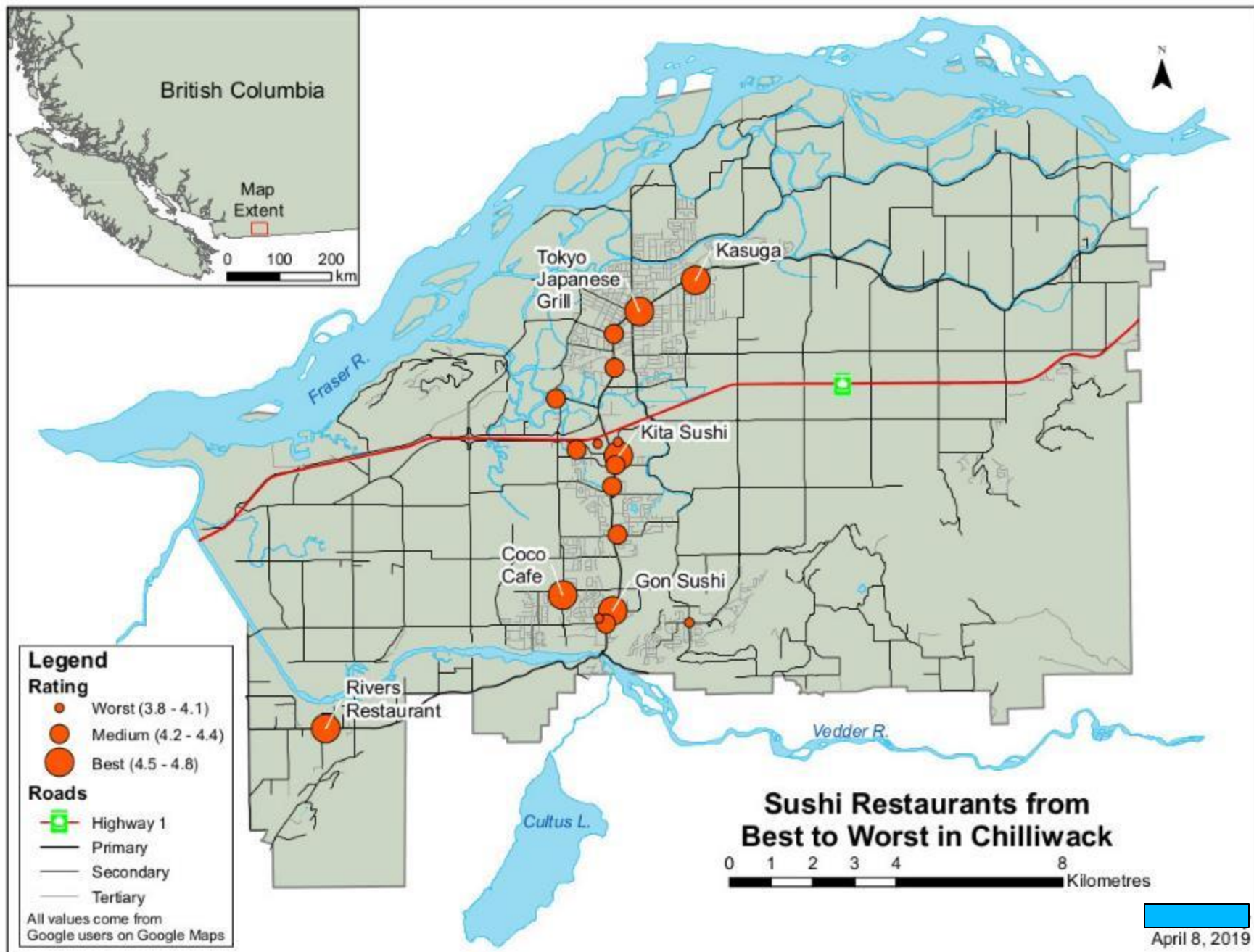
Thematic

Quantitative

‘Dot map’

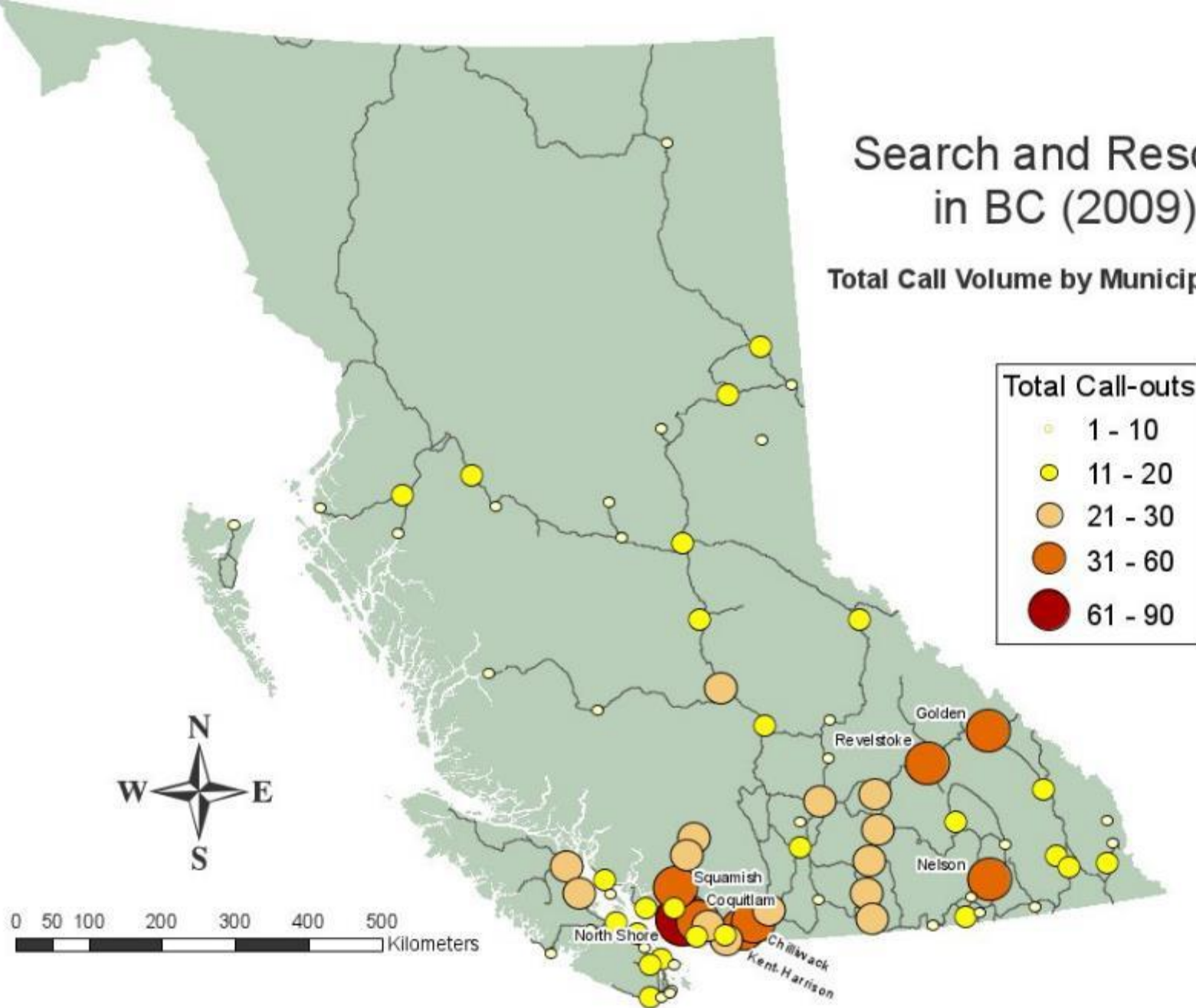
regional





Search and Rescue in BC (2009)

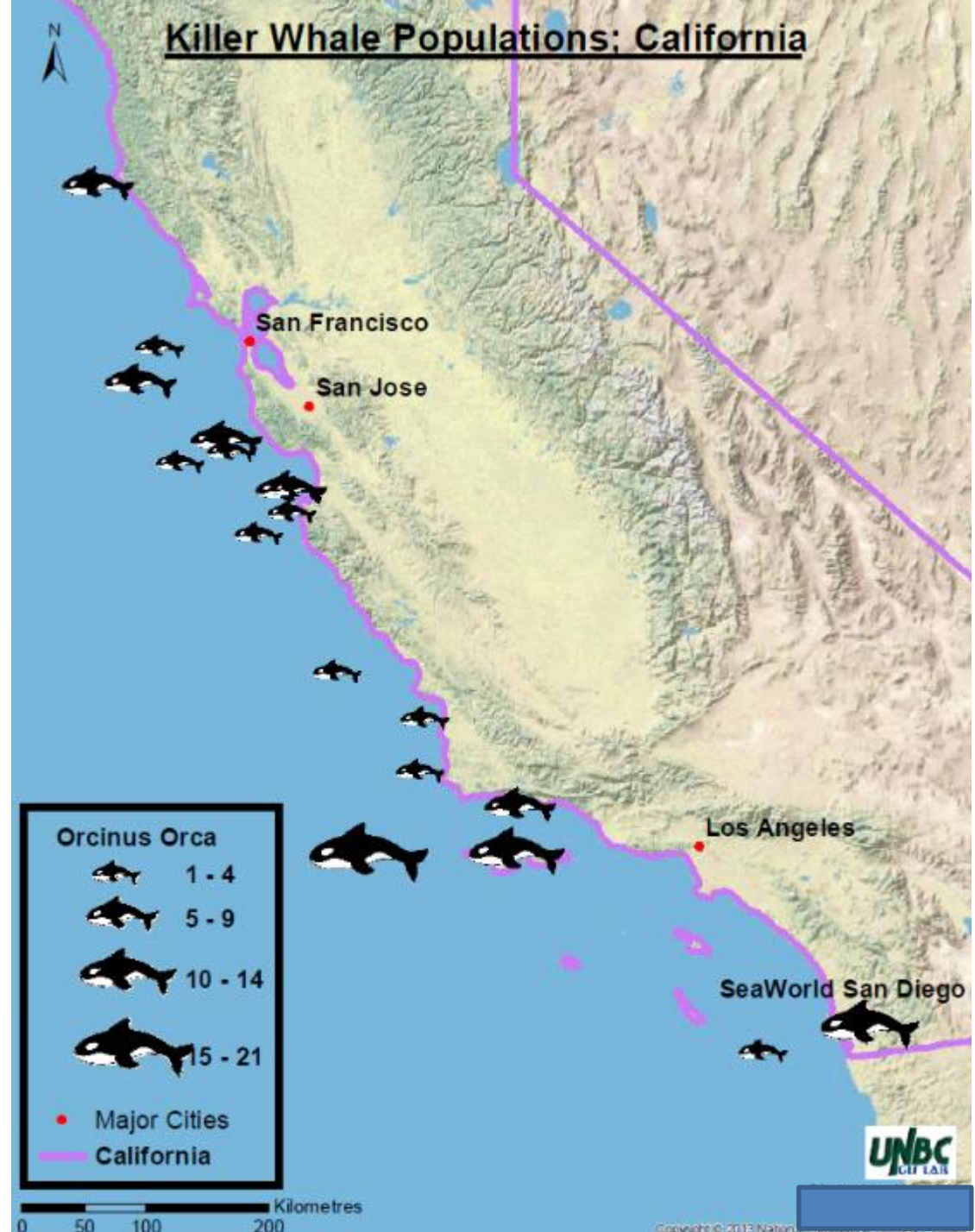
Total Call Volume by Municipal Groups

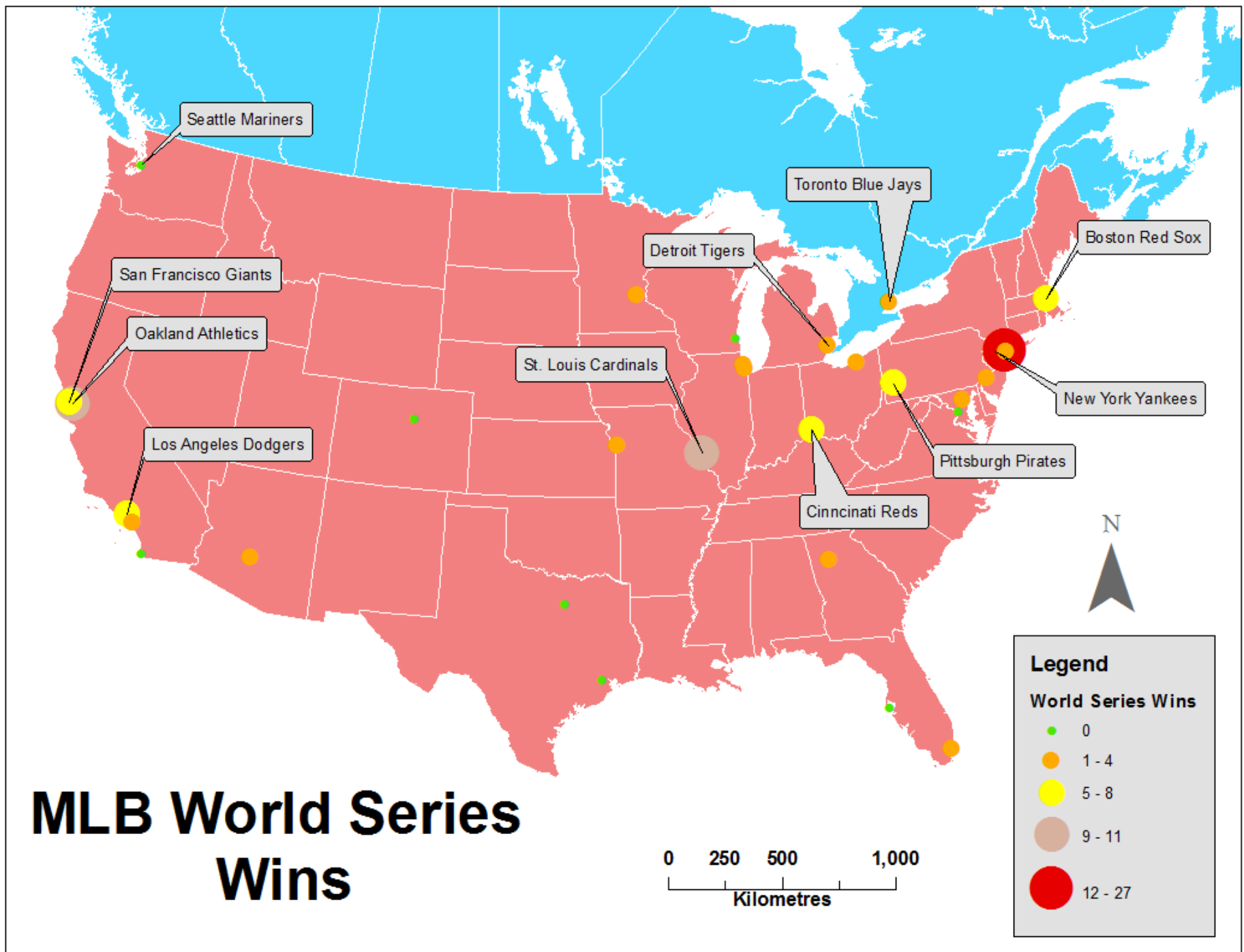


**Thematic:
quantitative**

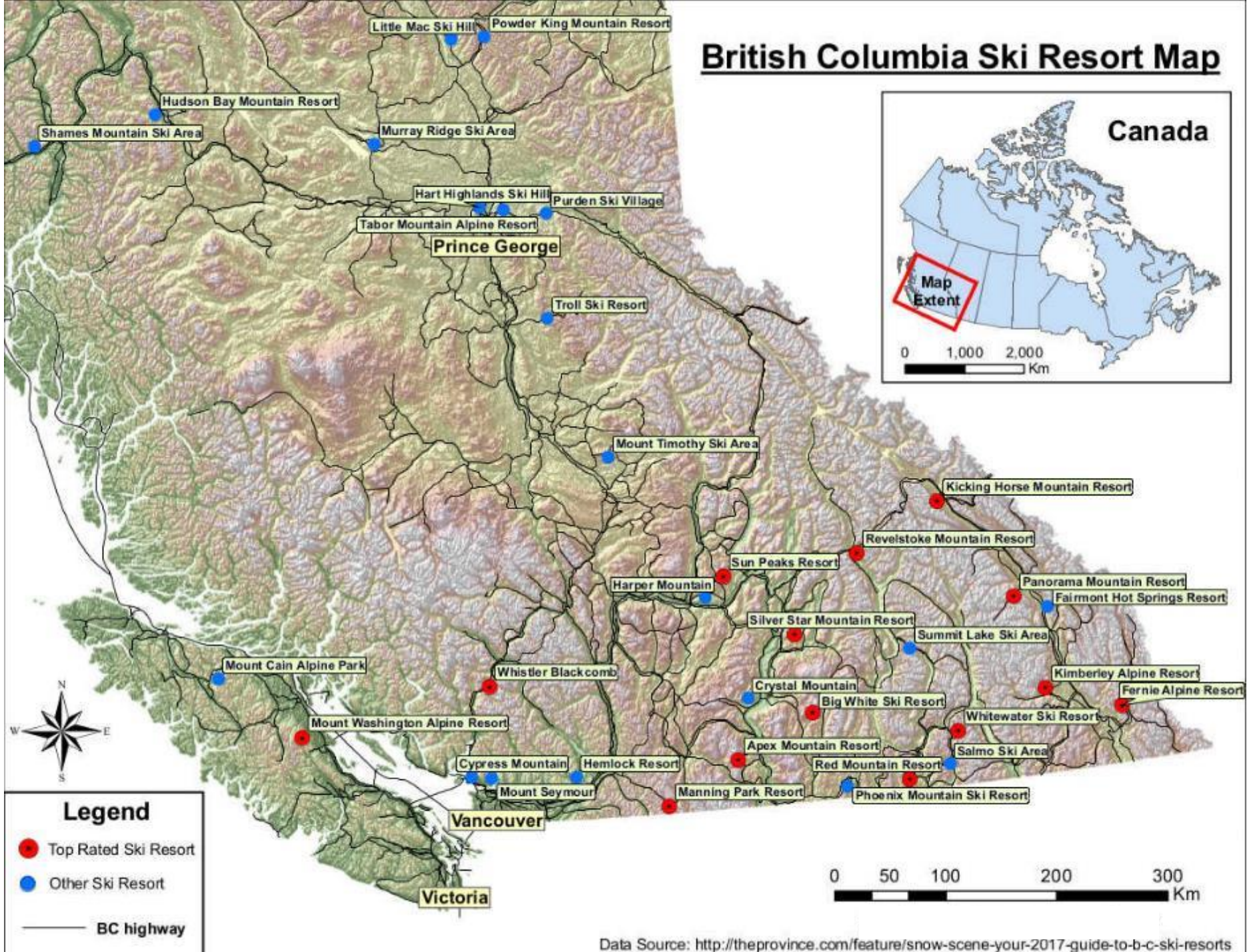
‘Graduated Orcas’

Background
terrain added
from ArcGIS
online





British Columbia Ski Resort Map



Hot Springs of BC

Ordered by Road Distance from Prince George

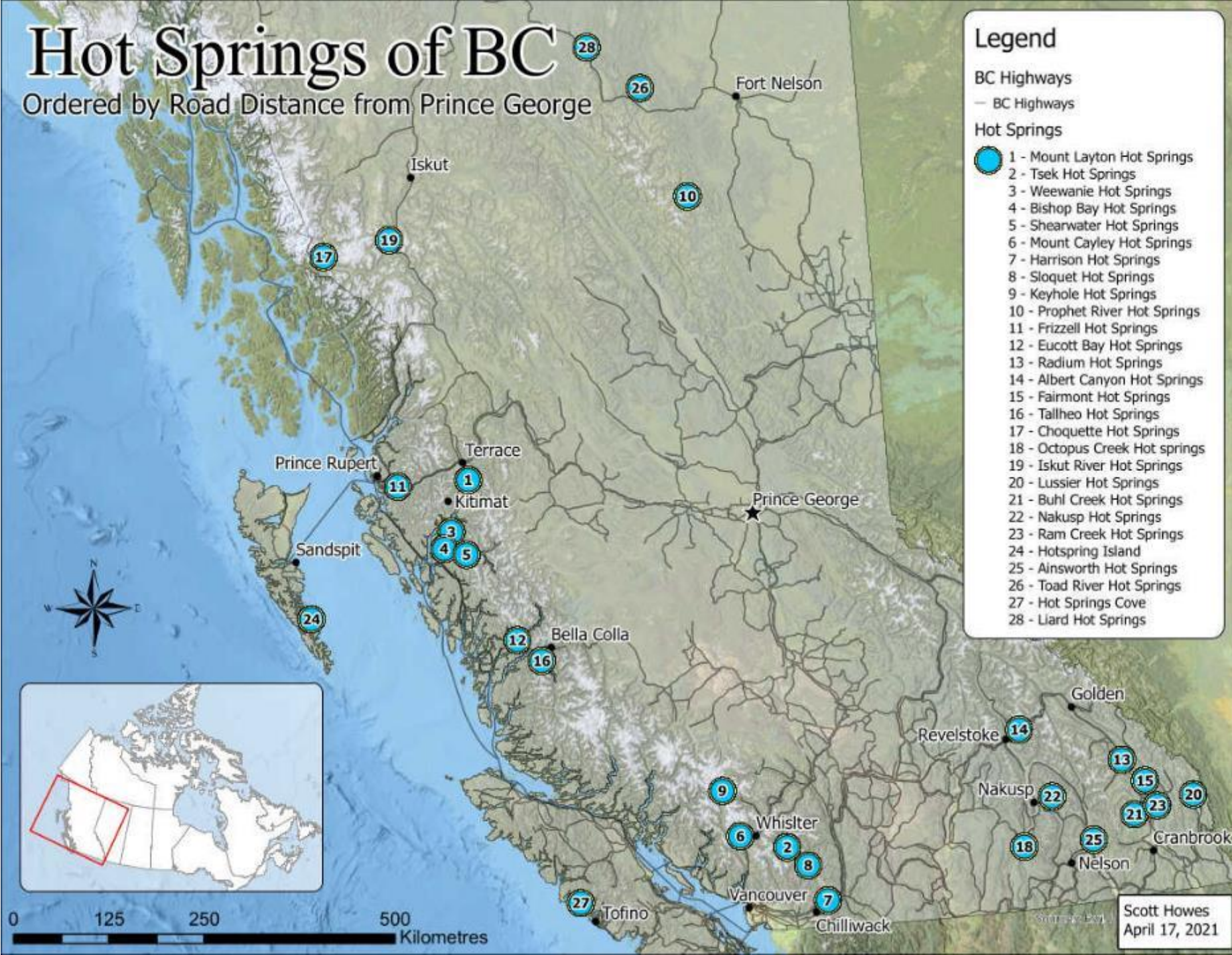
Legend

BC Highways

— BC Highways

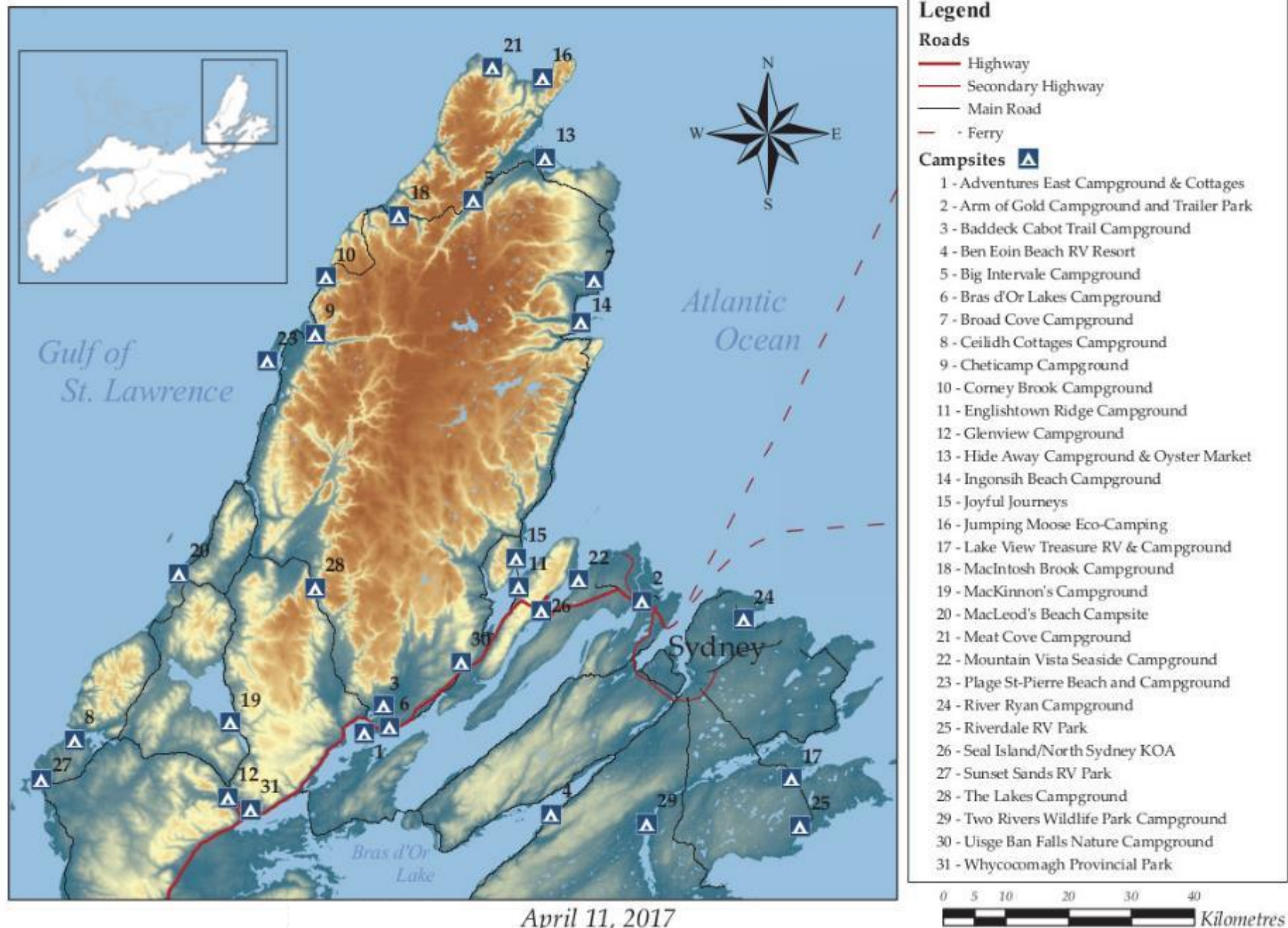
Hot Springs

- 1 - Mount Layton Hot Springs
- 2 - Tsek Hot Springs
- 3 - Weewanie Hot Springs
- 4 - Bishop Bay Hot Springs
- 5 - Shearwater Hot Springs
- 6 - Mount Cayley Hot Springs
- 7 - Harrison Hot Springs
- 8 - Sloquet Hot Springs
- 9 - Keyhole Hot Springs
- 10 - Prophet River Hot Springs
- 11 - Frizzell Hot Springs
- 12 - Eucott Bay Hot Springs
- 13 - Radium Hot Springs
- 14 - Albert Canyon Hot Springs
- 15 - Fairmont Hot Springs
- 16 - Talheo Hot Springs
- 17 - Choquette Hot Springs
- 18 - Octopus Creek Hot springs
- 19 - Iskut River Hot Springs
- 20 - Lussier Hot Springs
- 21 - Buhl Creek Hot Springs
- 22 - Nakusp Hot Springs
- 23 - Ram Creek Hot Springs
- 24 - Hot Spring Island
- 25 - Ainsworth Hot Springs
- 26 - Toad River Hot Springs
- 27 - Hot Springs Cove
- 28 - Liard Hot Springs

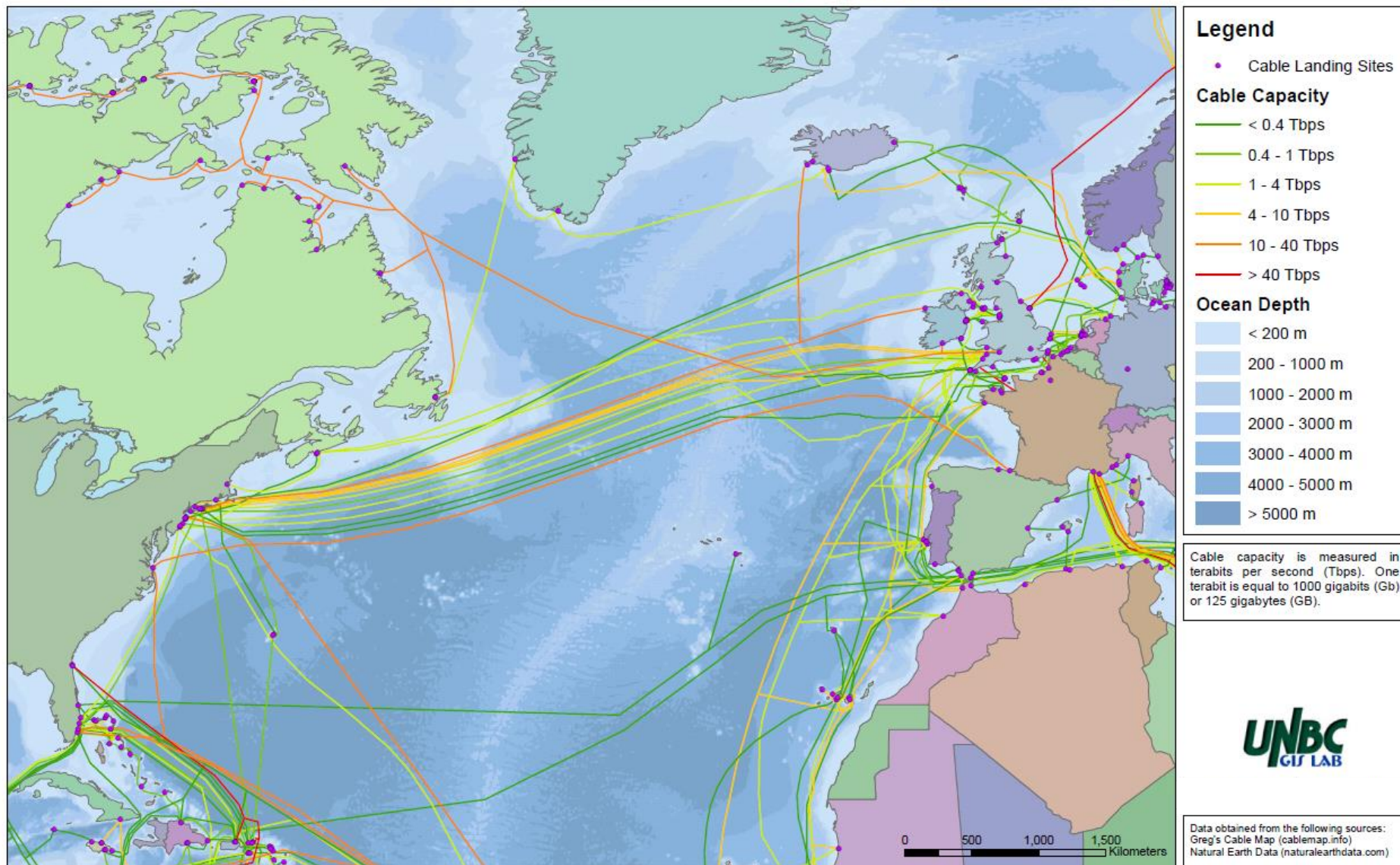


Scott Howes
April 17, 2021

Campgrounds of Cape Breton Island, Nova Scotia

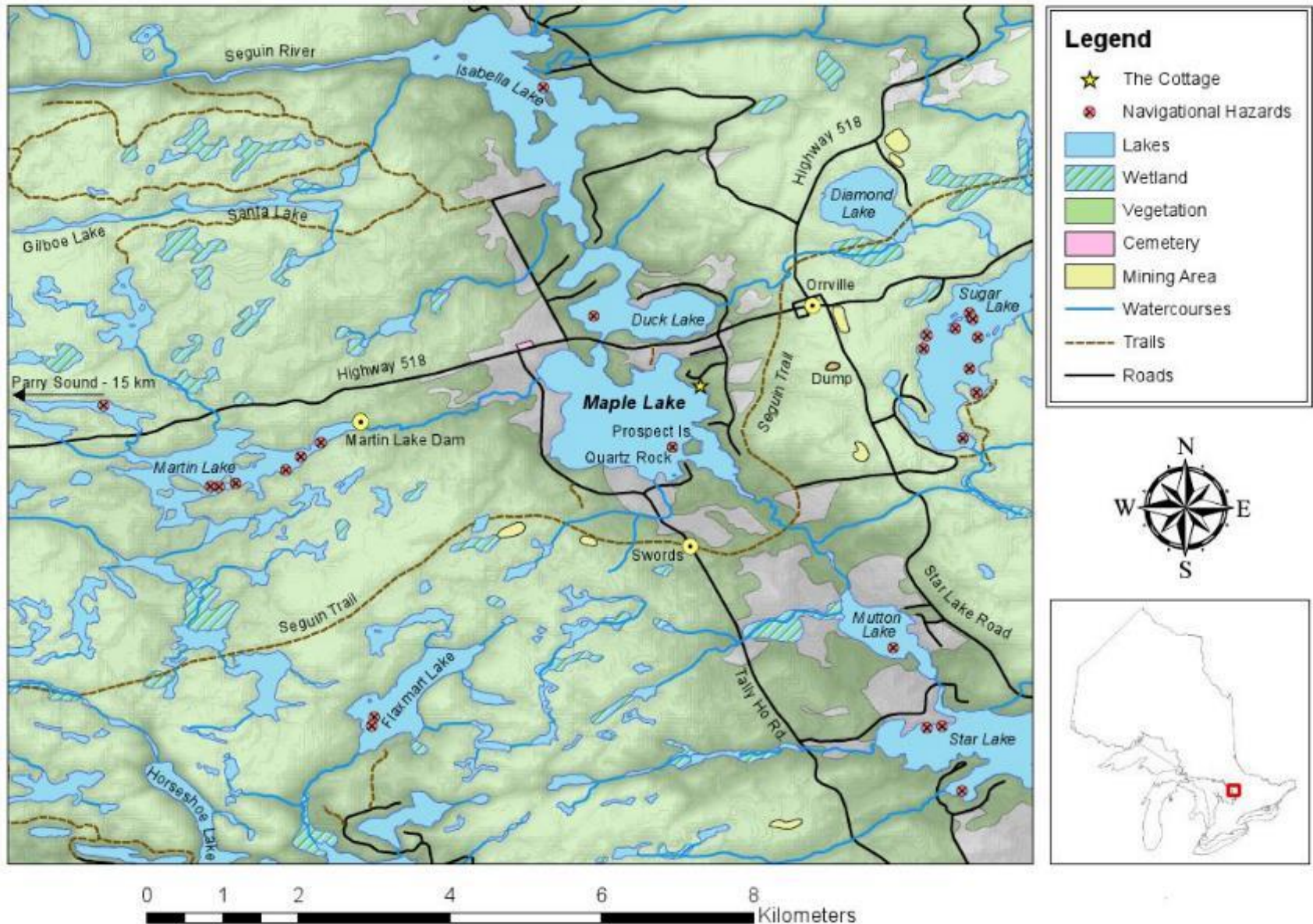


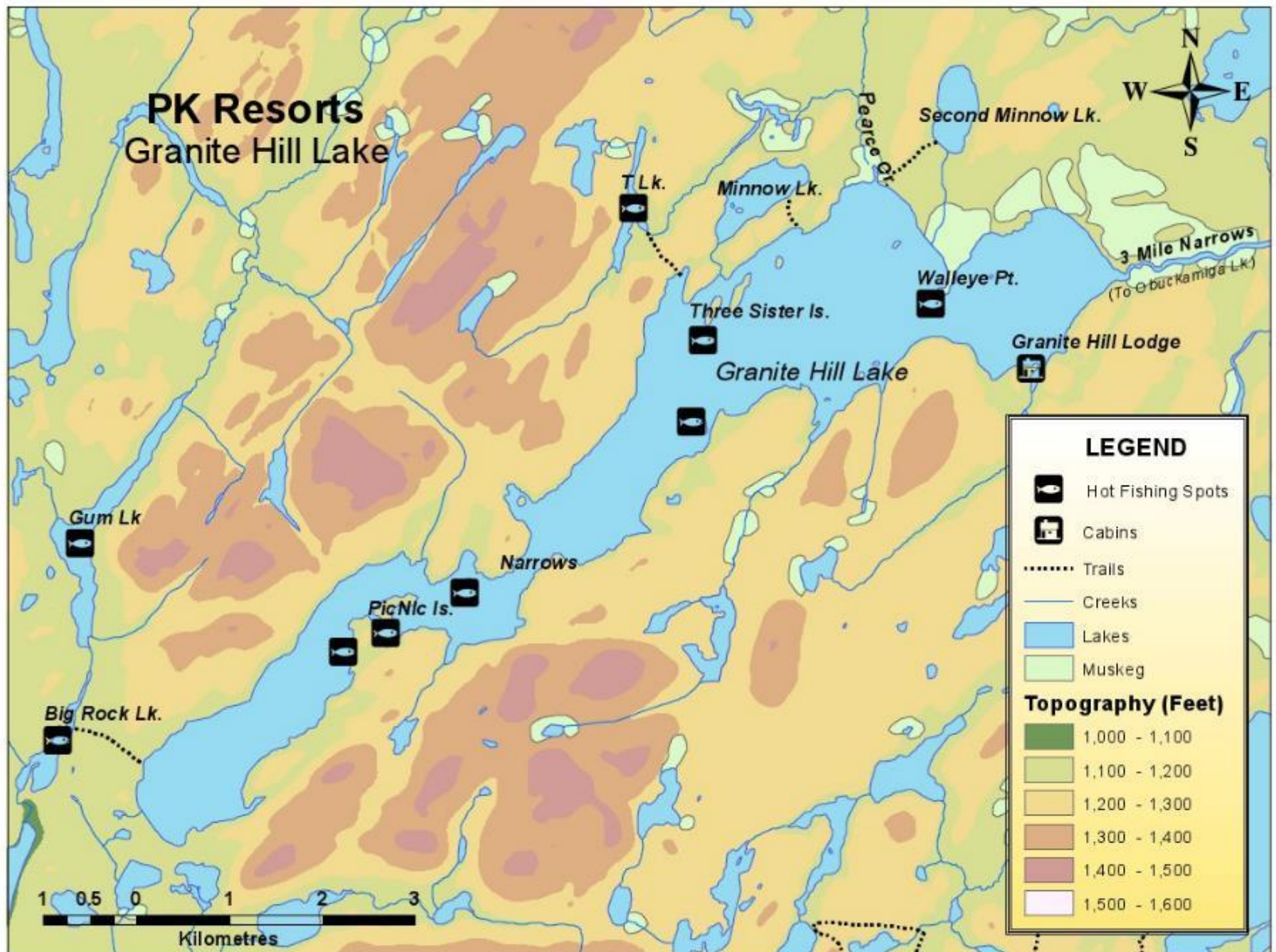
Undersea Communication Infrastructure in the Northern Atlantic Ocean (2015)



Topographic maps

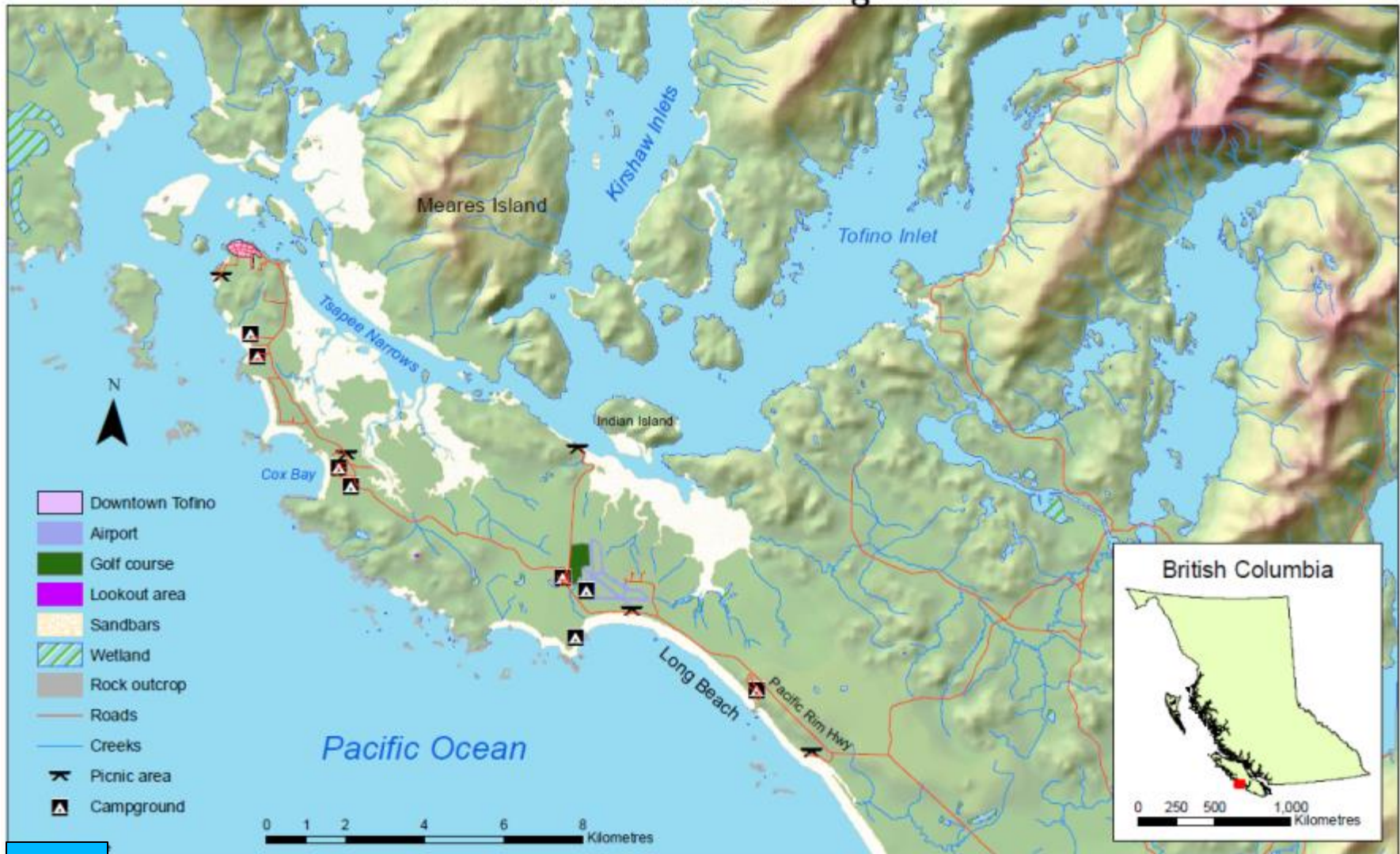
MAPLE LAKE AND THE SURROUNDING AREA





Hillshading ?

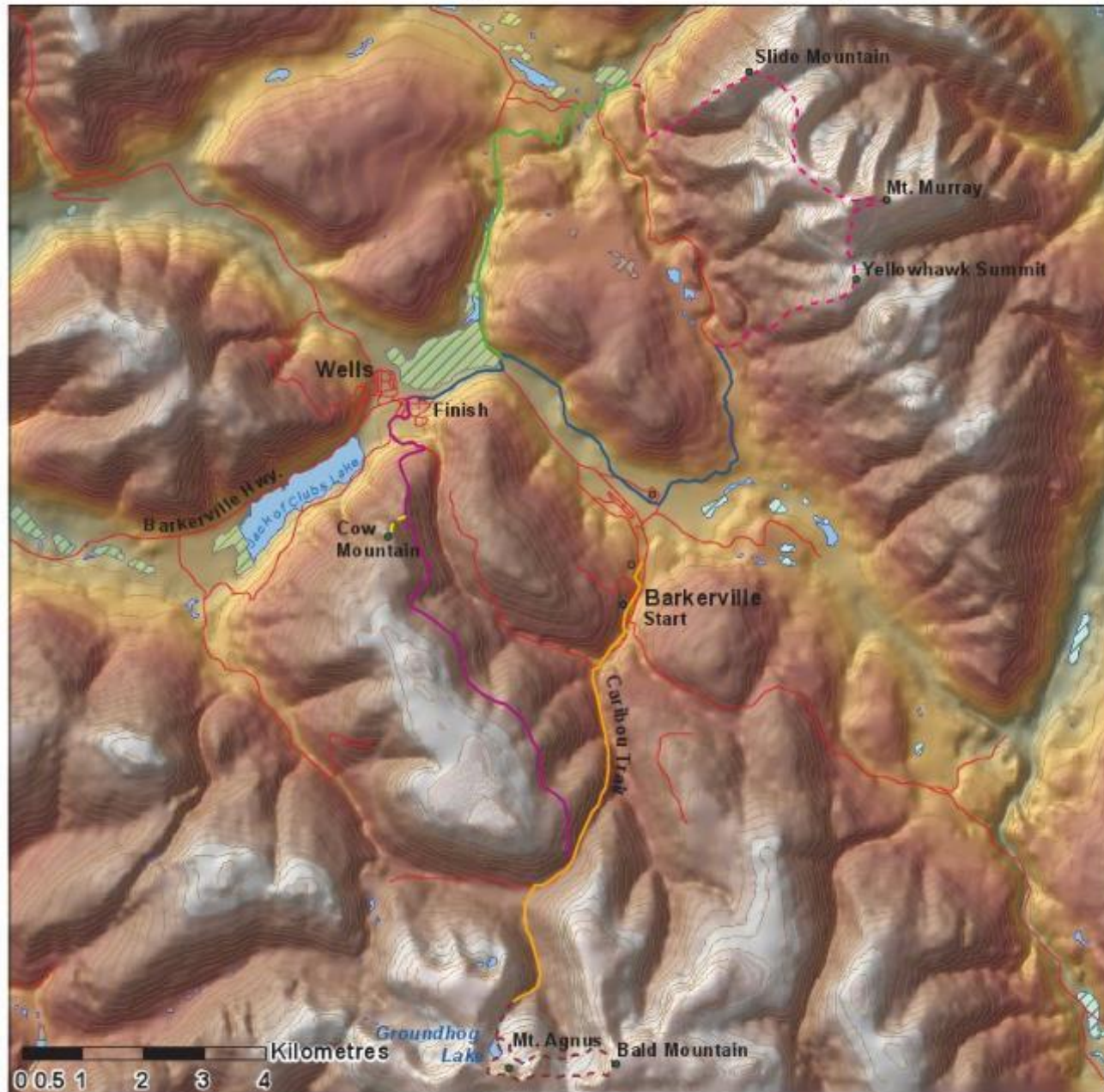
Tofino and the Surrounding Area



Nice balance

7 Summits Challenge Route 2010 (Bakerville/Wells)

Tints too heavy



Legend

- Campgrounds
 - Mountain Summits
 - Barkerville
- Bike 2
 - Bike 2 Cont.
 - Hike 2

Trails

- Bike 1
- Hike 1
- Bike 3
- Bike 4
- Bike 5
- Roads
- Wetland

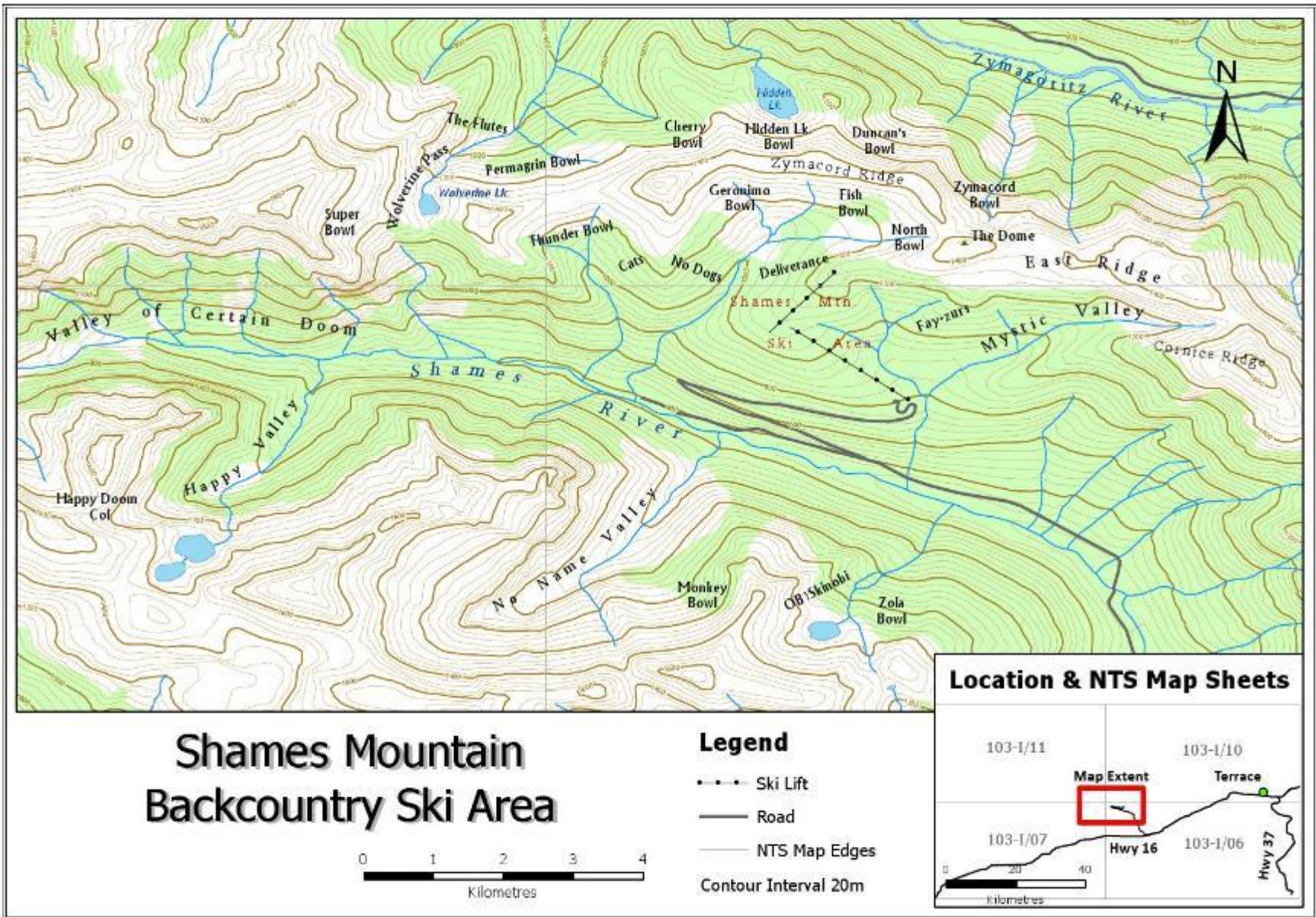
Note: This route is approximate as many "trails" were unmarked.

BC, Canada



0 250 500 1,000 Kilometres

Data Source:
Collected from www.geogratis.com
and <http://www.whitegold.ca/biking.html>



Solid effort, but could use hillshading, data not projected ?

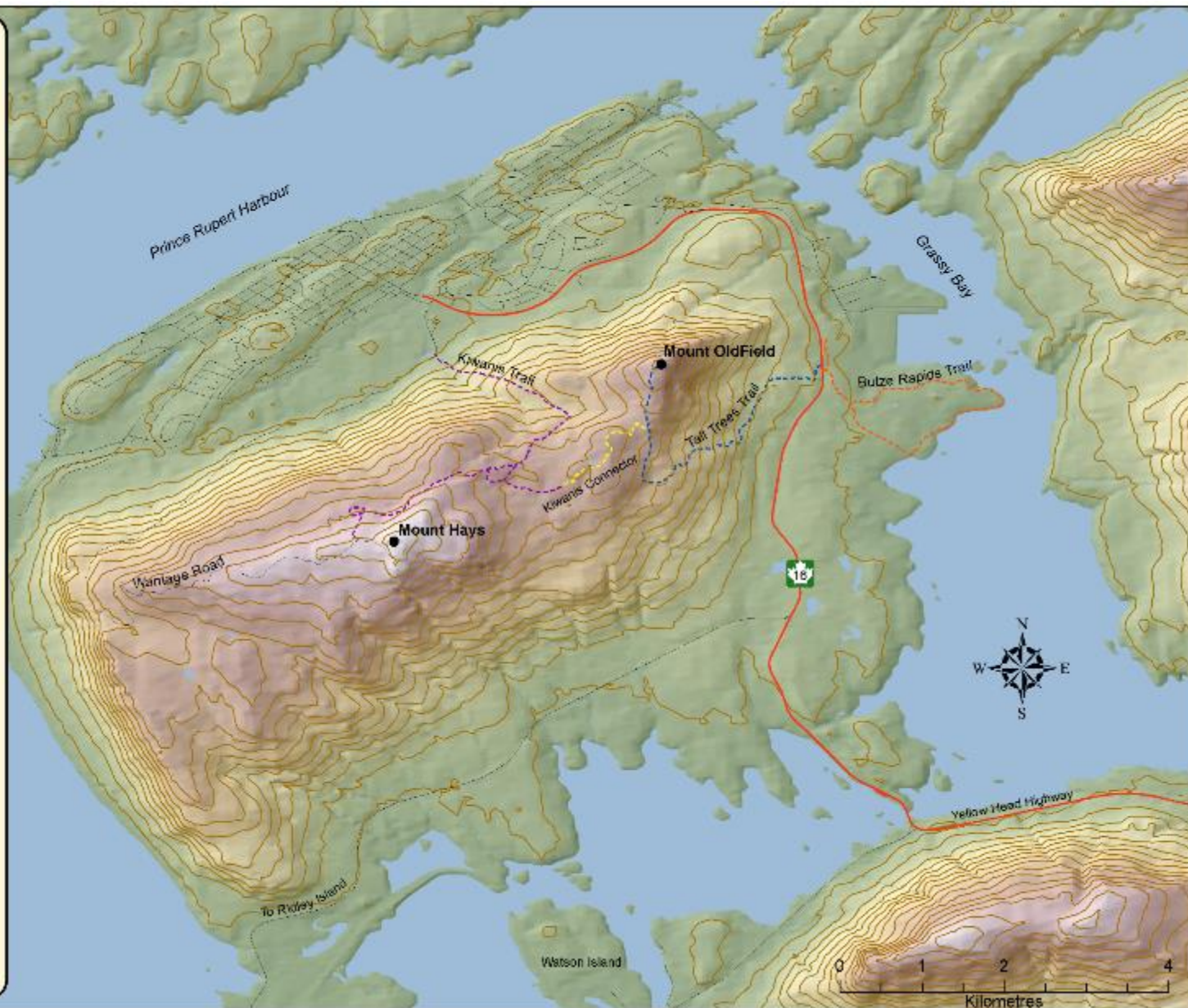
Kaien Island Trails Prince Rupert, B.C.

The small coastal city of Prince Rupert is home to some of the best trails for beginner and experienced hikers. Prince Rupert is situated on Kaien Island just below the Alaskan Panhandle in North West British Columbia. Kaien Island is dominated by two mountains, Mount Hays and Mount Oldfield. These mountains give Prince Rupert a variety of topography for hikers to explore.



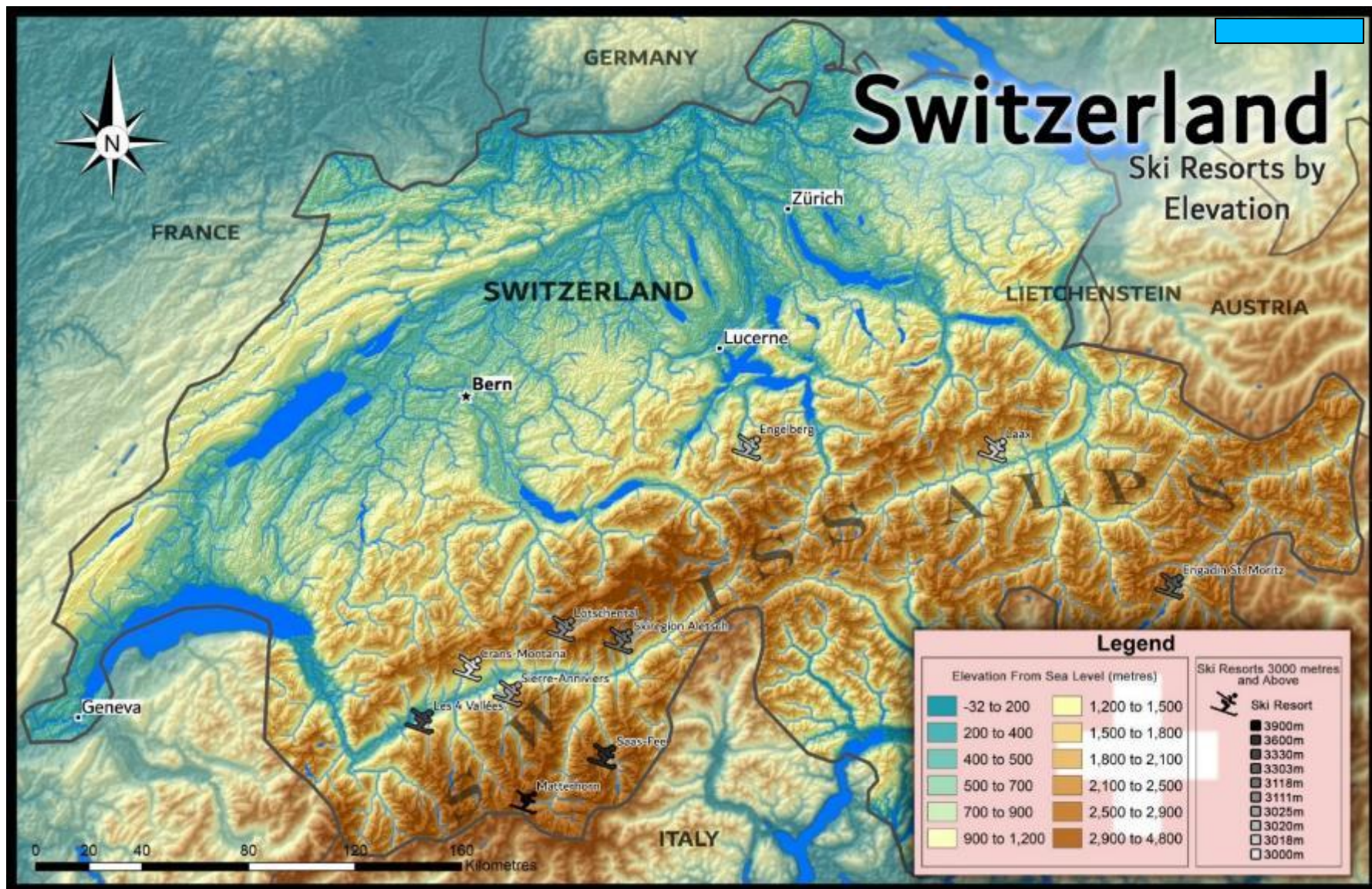
Butze Rapids is a wonderful beginners hike and introduction to the coastal waters of Kaien Island. The hike is an easy walk through 1.8km of looping old growth forest. You can head to the lookout to view the rapids or take a rest at Grassy Bay and take in the coast.

Tall Trees Trail and the Kiwanis Trail are scenic hikes for more experienced hikers. It is recommended to do this trail when rain has been scarce as the terrain can become quite difficult. Once at the top a stunning view of Prince Rupert from atop of either Mount Oldfield, or if you are willing to do a bit of bushwacking, Mount Hays.



Sunshine Coast Trail





Vegetation Resource Inventory (VRI) data

Potential Moose Habitat in The Naltesby Lake Forest Region



Canada summary

Municipal data: sometimes available

Municipalities and provinces: <http://canadiangis.com/data.php>

Provincial 1:20,000 mapping (Bold = free download)

BC, AB, MB, ON (south = 50°N), **QC** (south), **NS, NB, PEI**

Canada (NTDB) provinces /territories:

<http://maps.canada.ca/czs/index-en.html>

NTDB mapping only

SK, NL, ON (north), **QC** (north) **NT, NU, YT ***

•Yukon Geomatics: <http://www.geomaticsyukon.ca/>

Other countries: highly variable - from free download to military only

<http://www.diva-gis.org/Data>

Project Data sources

This page only loads on campus

<https://gis.unbc.ca/support/access-datasets>

copy of BC Roads here:

<https://arc.gis.unbc.ca/portal/home/item.html?id=69c263e9f07c4766b755f650574ab728>

Major roads only (for faster loading)

<https://arc.gis.unbc.ca/portal/home/item.html?id=473f96ebe3bc4e229a73867f0ad11580>

<https://data-cityofpg.opendata.arcgis.com>



Access Datasets

Table Of Contents

- In the Lab:
 - BC TRIM
 - QGIS:
 - ArcGIS Pro:
 - Open Street Map
 - WMS Tiles
 - Vector Features
 - BC DEM (1:20,000)
 - World DEM (3")
 - World Administrative Boundaries
- External Sources:
 - Municipal Data
 - Prince George
 - Kamloops
 - Earth Explorer
 - Open Data Hub
 - British Columbia Data
 - National Topographic System (Canada)

Common project errors to avoid

- Project data (from geographic) if needed
- Avoid nonsense scale bars
- Avoid silly defaults e.g. striped tie – wetlands
- Typos in name labels and ancillary info
- Maximise use of space for the map content
- Don't include other maps as background (some layers OK)
- Don't overdo use of text halos
- Don't leave it all to the last week ...