

Geog 205 Project 2024 (25%)

The intent of the GEOG 205 project is to complete a map from data collection to finished product, maybe 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 11-15:	Data collection and assembly
March 18-22:	Symbolisation and design
March 25-28: (no Friday lab)	Layout and ancillary info
April 2-5:	final report write-up
April 8-9:	No labs, but finish up and submit by April 10

1. Type of Map

The project is **completely open** but you could use labs 4-6 as 'models' of the type of map you prefer to make e.g.

a. Qualitative thematic / location map

b. Thematic – quantitative (data may be harder to find)

c. Topographic

See following slides to view some previous project maps.

I've given them general 'A' or 'B' with some comments in red

General content may be helpful this week, and designs next week

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**
- **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"** - strongly recommended for best effect

Shape options

➤ **Landscape** (usually better, unless area is tall and narrow)

➤ **Portrait**

Square is less cool

B

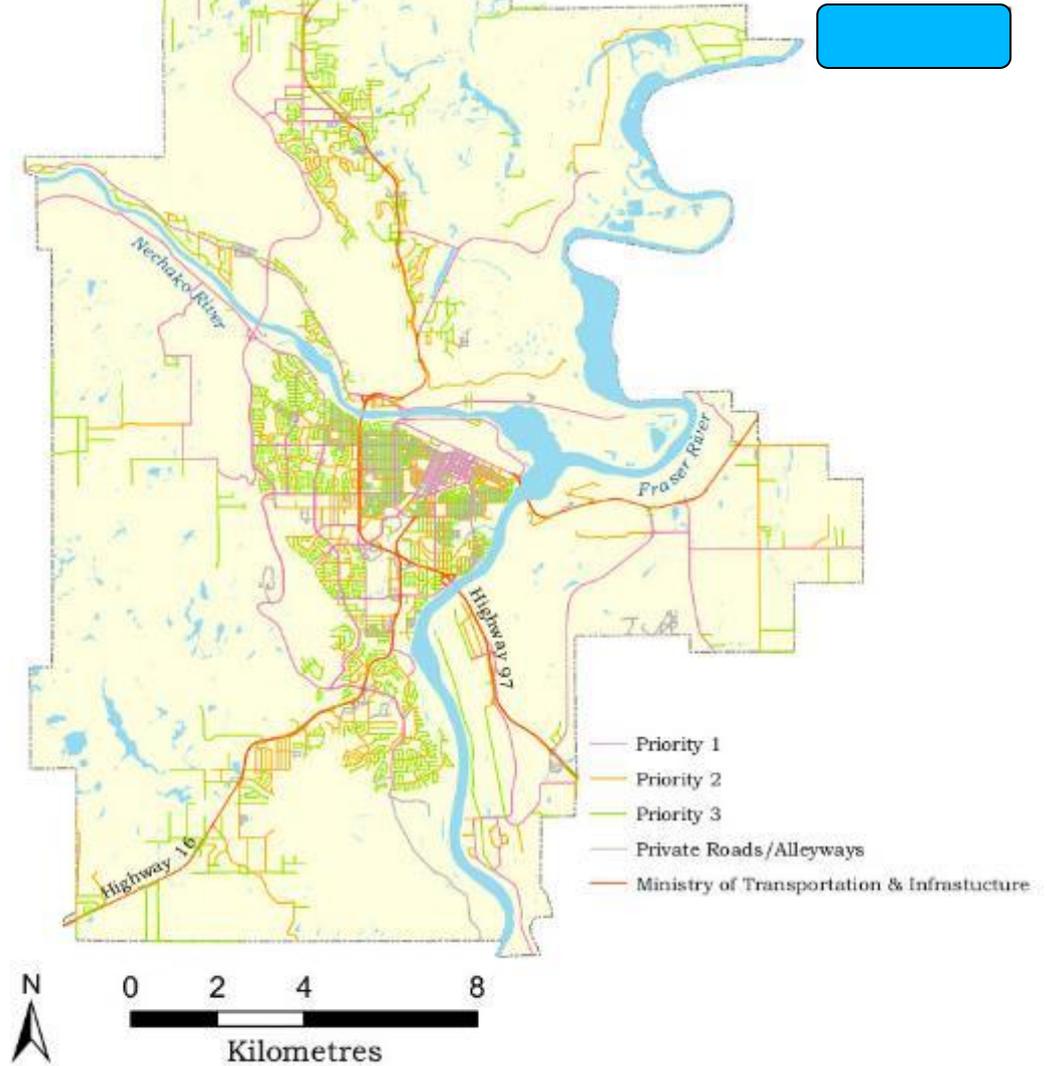
Location maps

‘general /
qualitative’

municipal

**way too much
white space, not
enough labels*

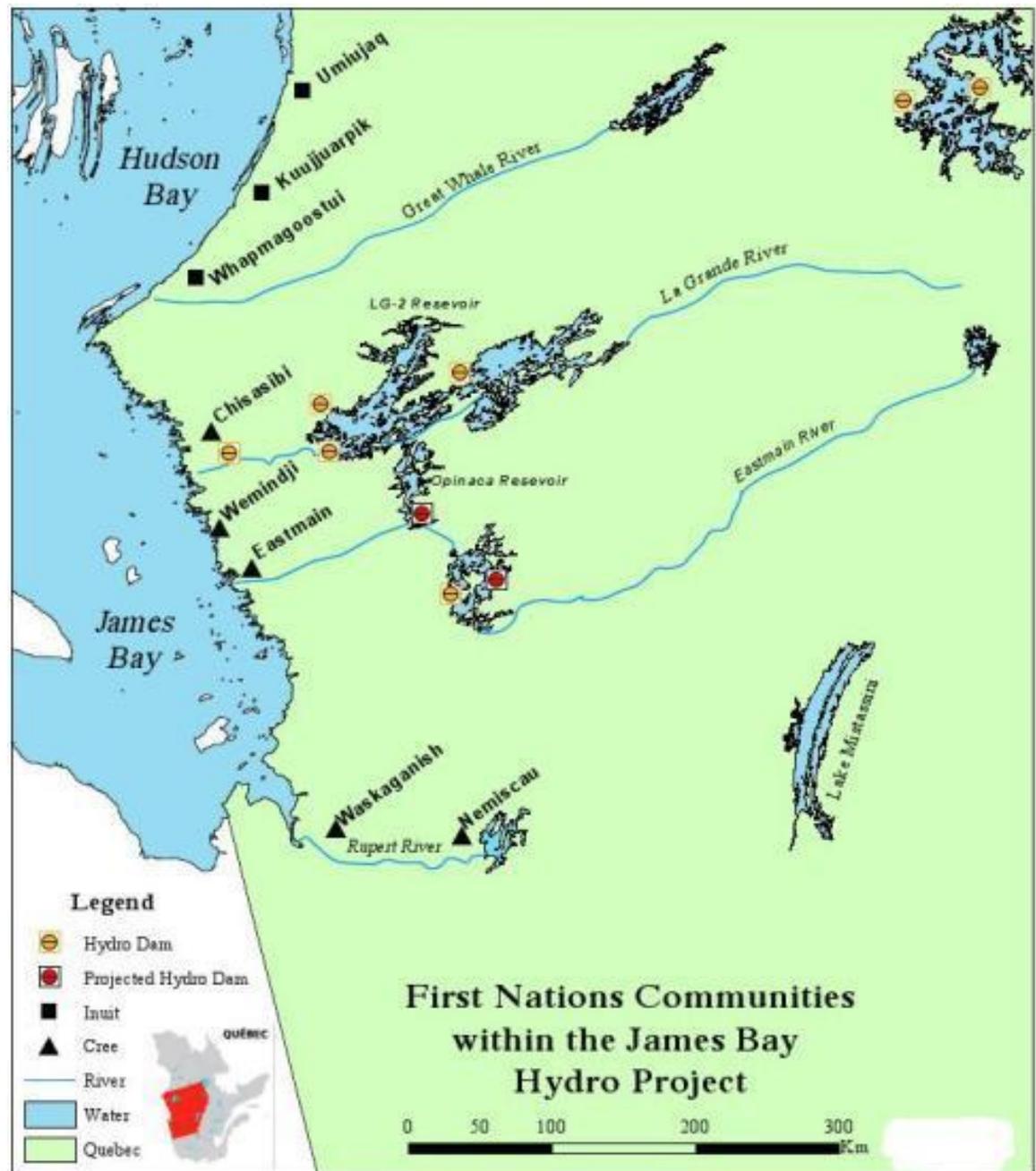
Prince George Snow Removal Priority Routes



B

Regional

** Lakes too detailed
and attract attention
River and water
names not in blue*



The Dog Necessities Of Prince George, BC



Legend

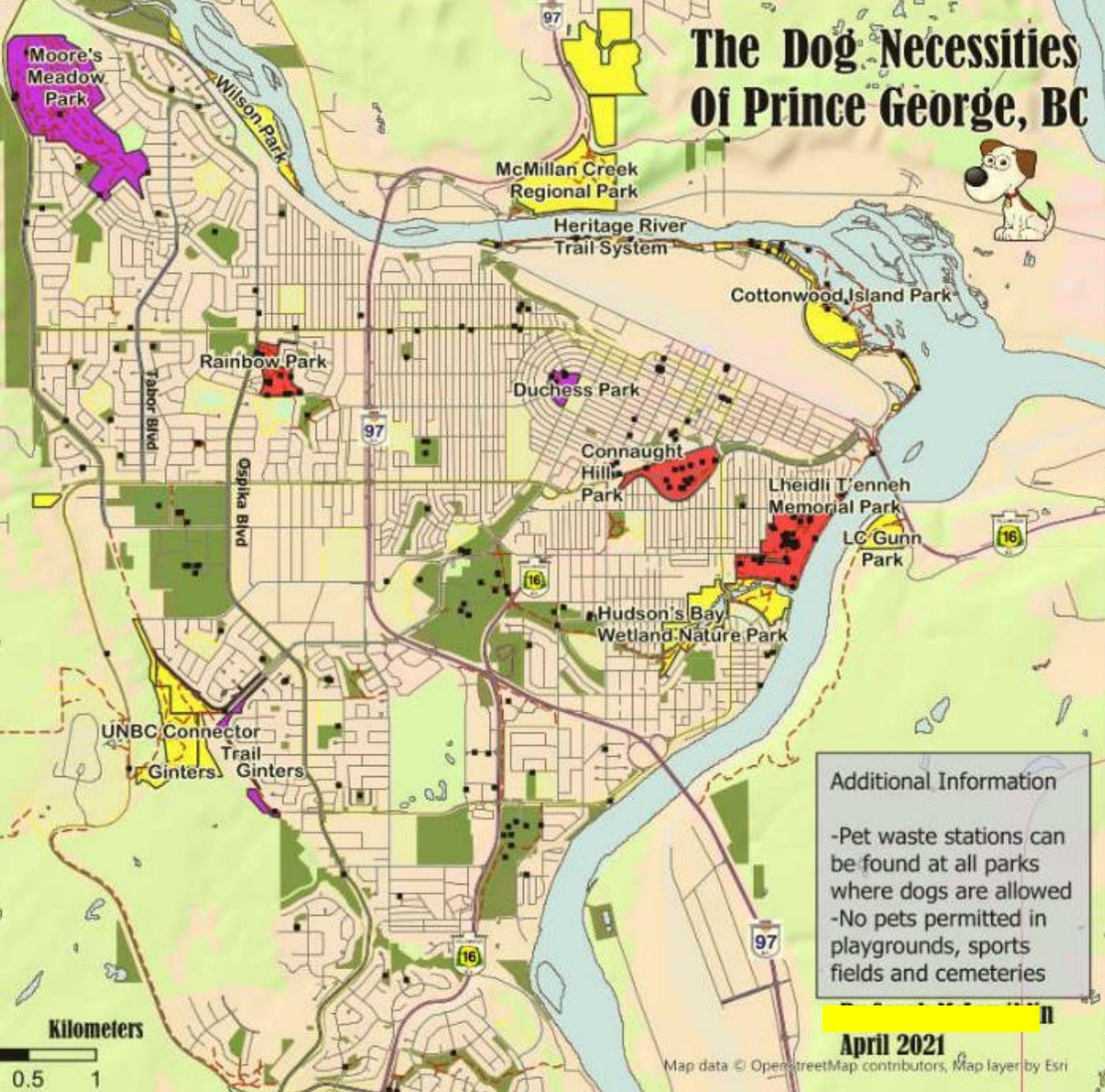
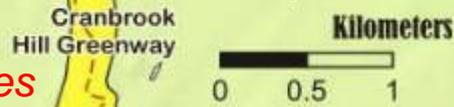
- Trash Cans
- Blvd
- Hwy
- Trails

Park Info

- Other Parks
- No Dogs
- Off-leash
- On-leash



A: nice but missing river names



Additional Information

- Pet waste stations can be found at all parks where dogs are allowed
- No pets permitted in playgrounds, sports fields and cemeteries

April 2021

Map data © OpenStreetMap contributors, Map layer by Esri

A : good area of local interest, a few minor issues e.g. Beaumont PP label position

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:

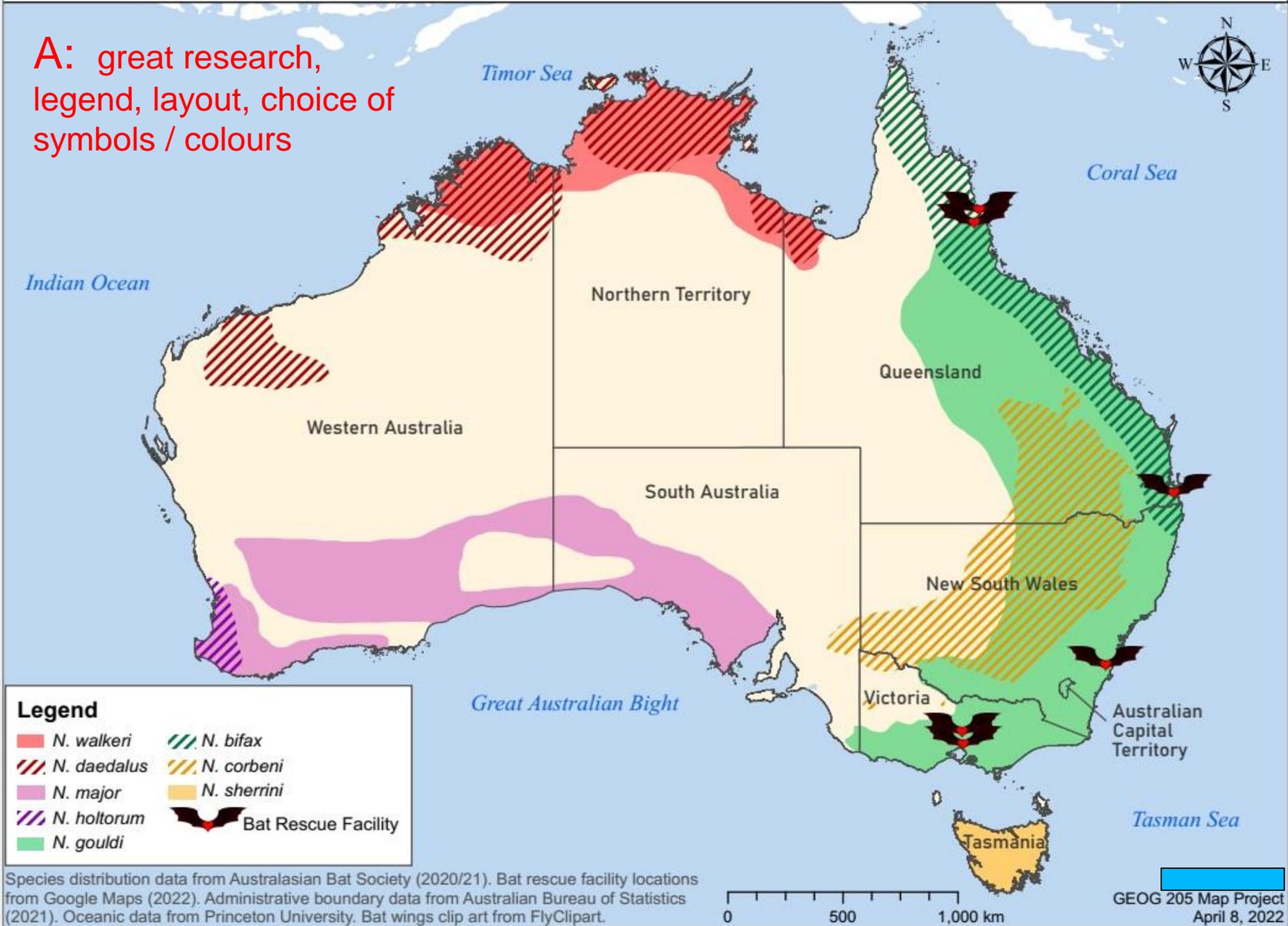
The Fraser Lake Inn
Cataline Motor Inn
Piper's Glenn Resort
Uwe's Loghouse

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

0 1 2 4 6 Kilometers

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

A: great research, legend, layout, choice of symbols / colours



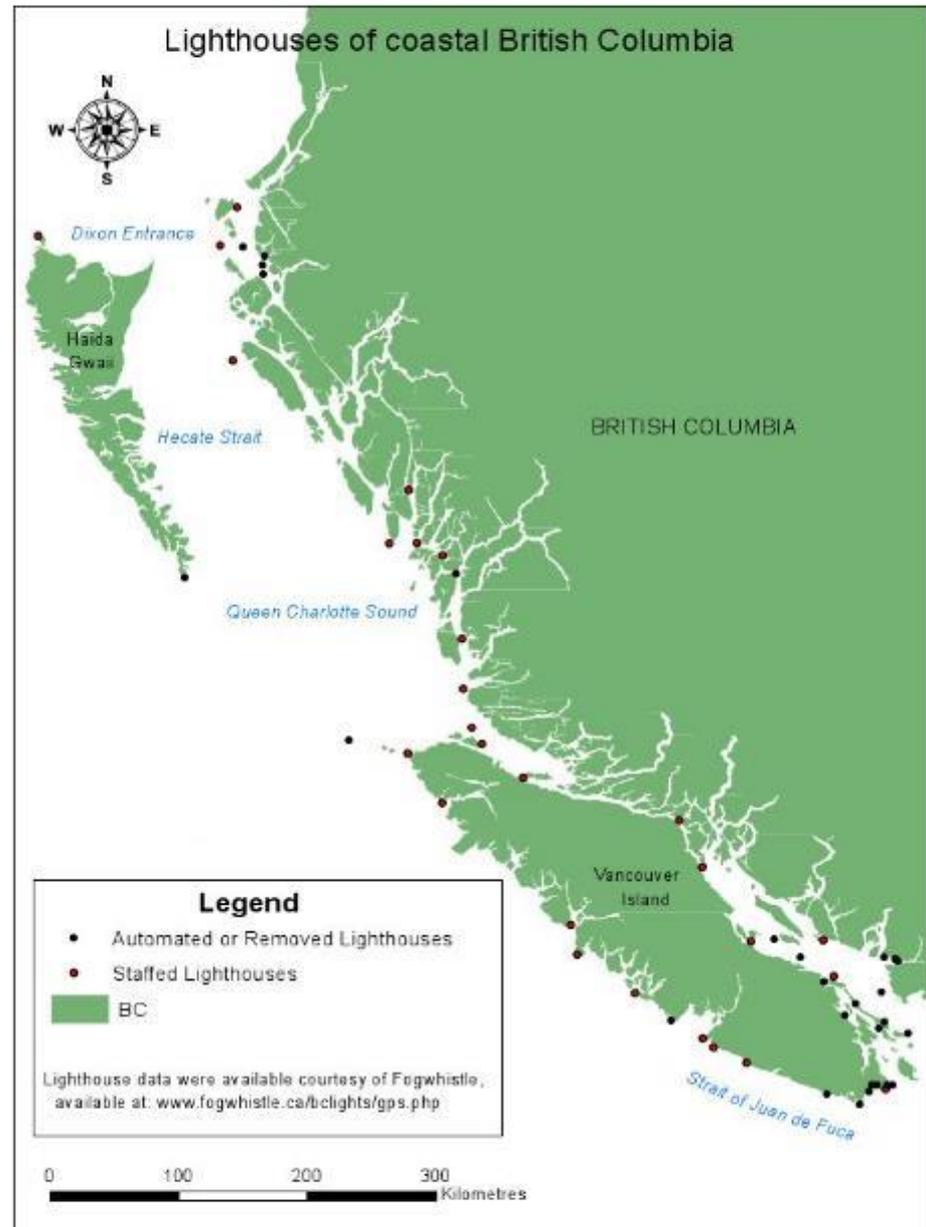
Thematic

Quantitative

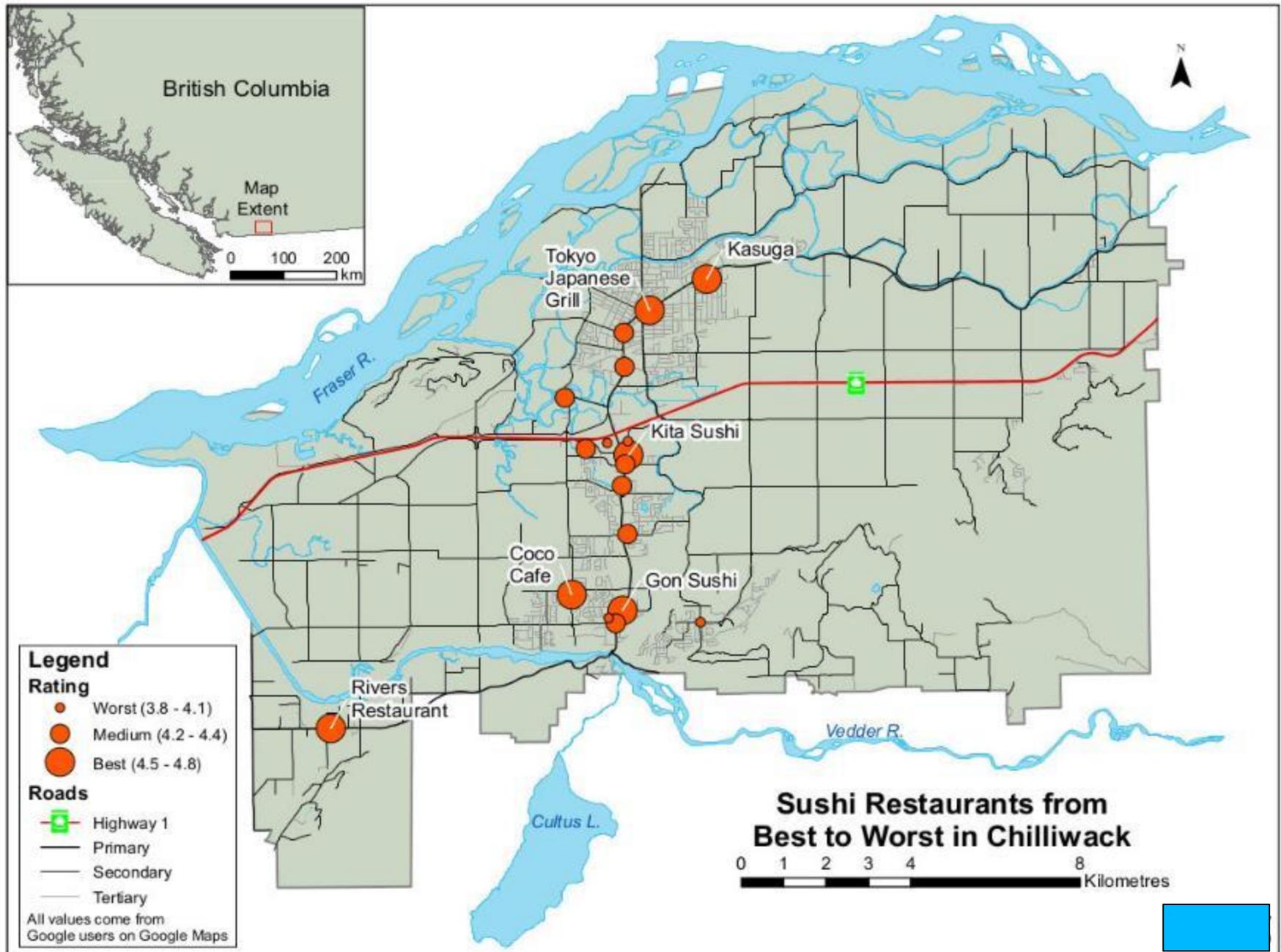
'Dot map'

Regional

A: *good theme, needs a bit more – more land details, villages, maybe a bigger symbol – can't easily see two types*



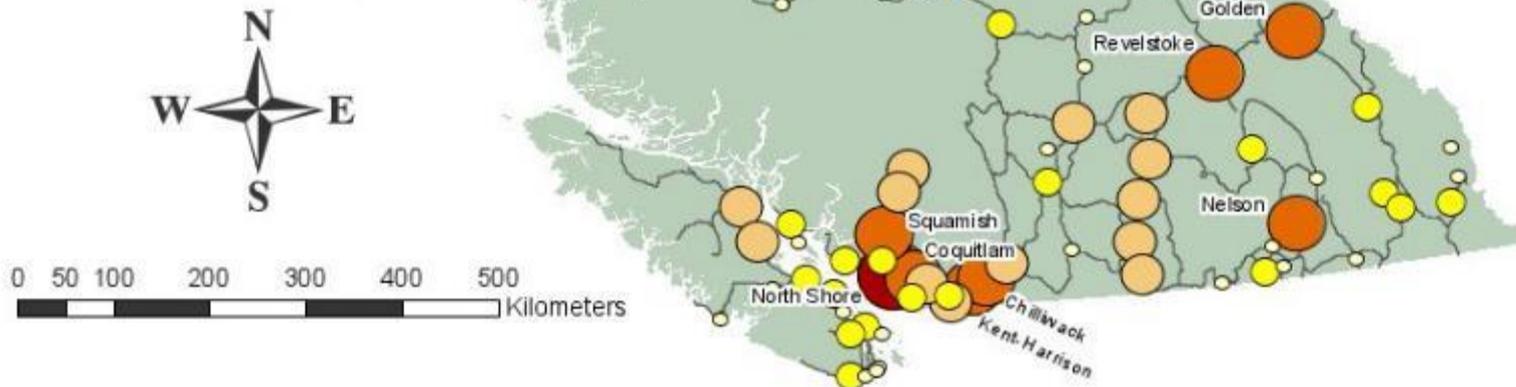
B: good idea to acquire google data; solid effort



A: good thematic map well thought out, needs a bit more e.g. more labels; missed roads in legend – maybe major lakes would add more context

Search and Rescue in BC (2009)

Total Call Volume by Municipal Groups



Call-out Volume Data retrieved from 2009 yearly incident reports.

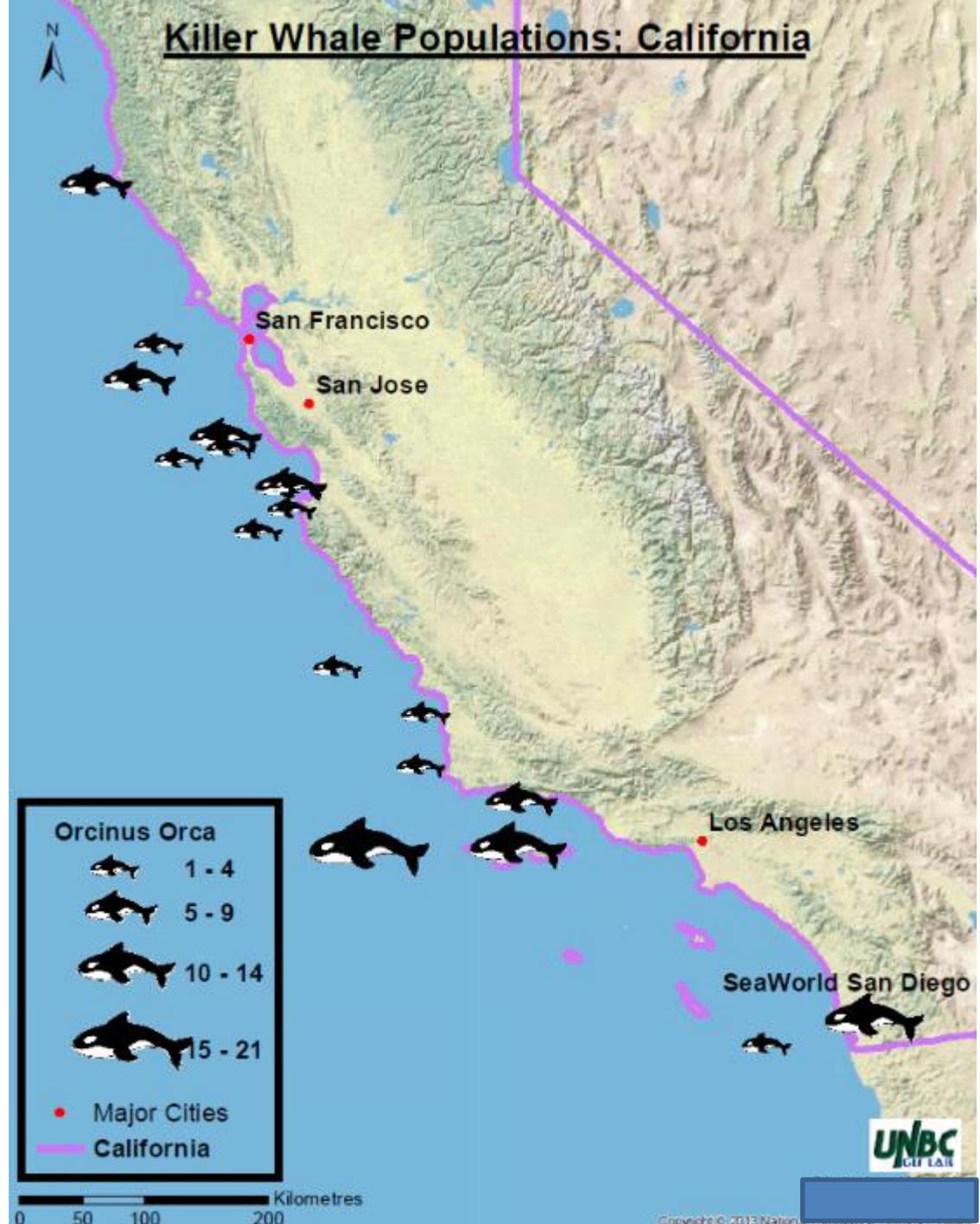
Provincial Emergency Program. (2010). Weekly Incident Summaries - 2009[Data file]. Retrieved from <http://www.pep.bc.ca/incidents/index-2009.html>

Thematic: quantitative

'Graduated Orcas'

Background terrain from
ArcGIS online

*B: great symbols, scale
bar cramped despite
having lots of space. Don't
underline titles – make it
bigger or upper case.
Move whale to show San
Diego location.*





B: simple but it works
Use of colour +size for symbols
is effective, good classes

MLB World Series Wins

Legend

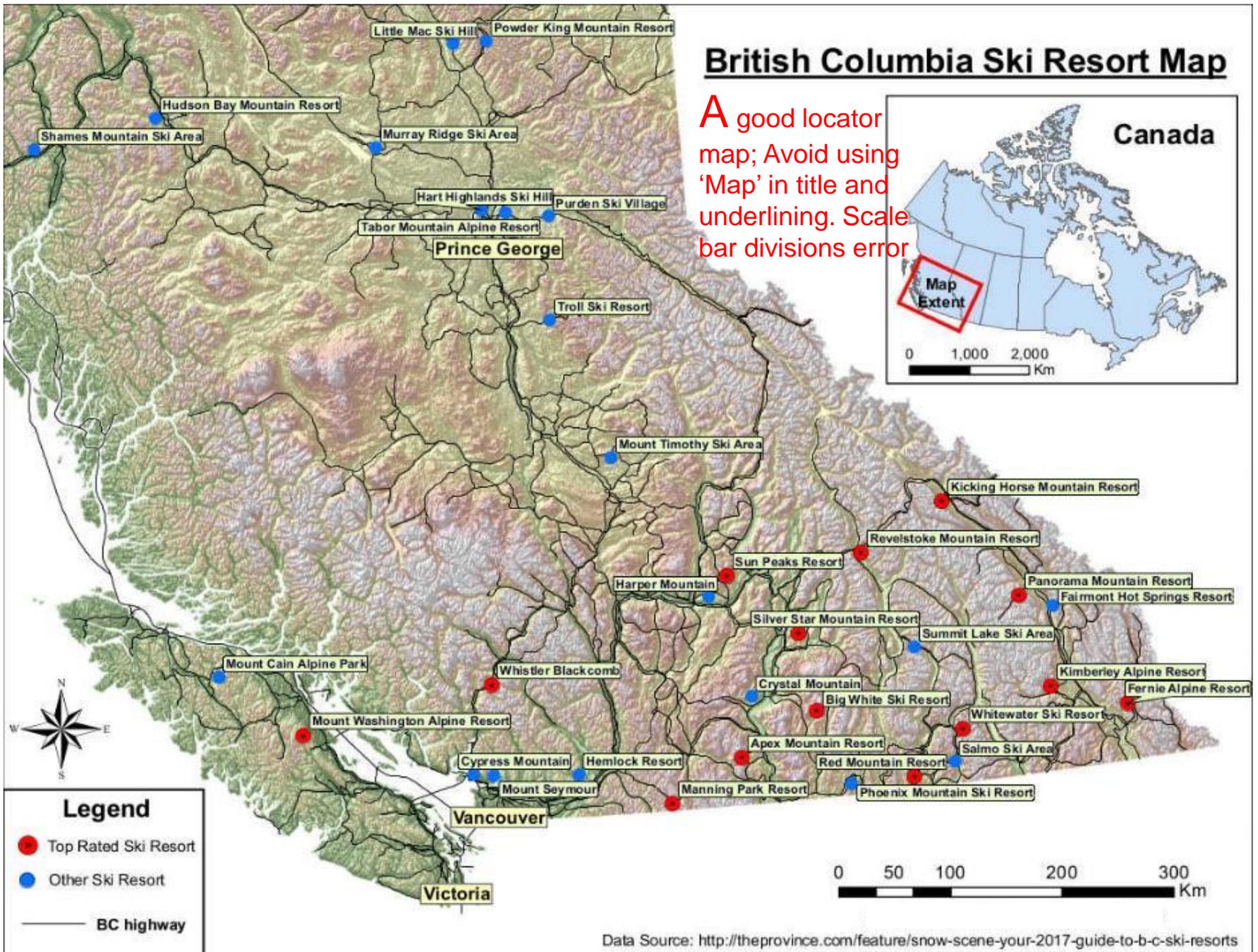
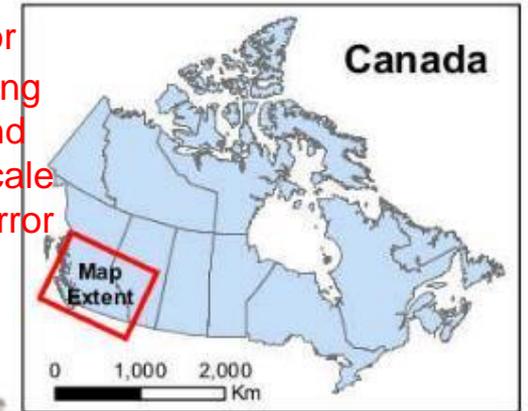
World Series Wins

- 0
- 1 - 4
- 5 - 8
- 9 - 11
- 12 - 27

0 250 500 1,000
 Kilometres

British Columbia Ski Resort Map

A good locator map; Avoid using 'Map' in title and underlining. Scale bar divisions error

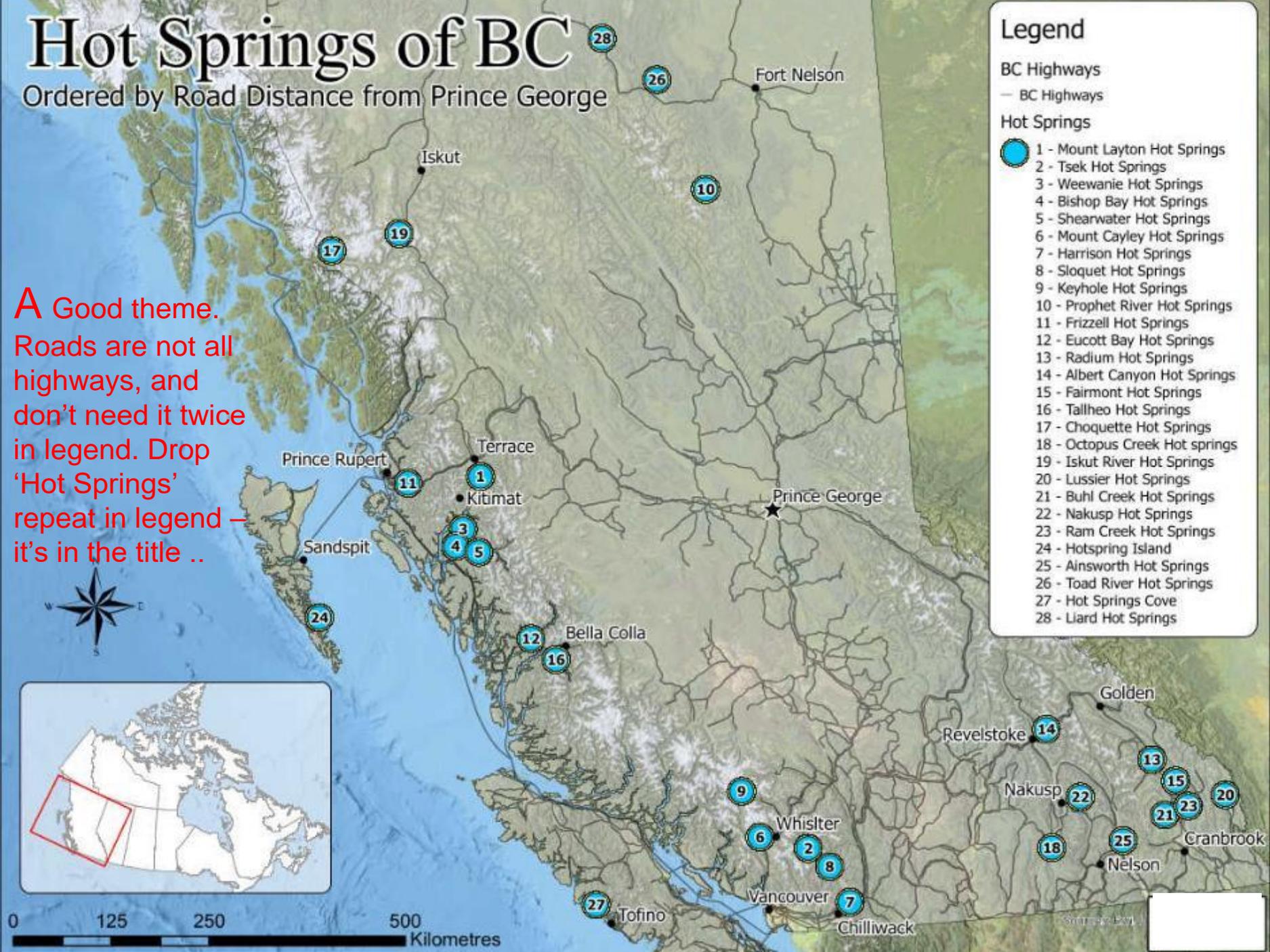
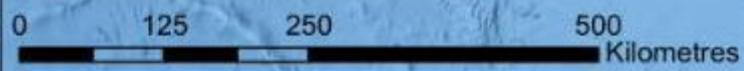


Hot Springs of BC

Ordered by Road Distance from Prince George

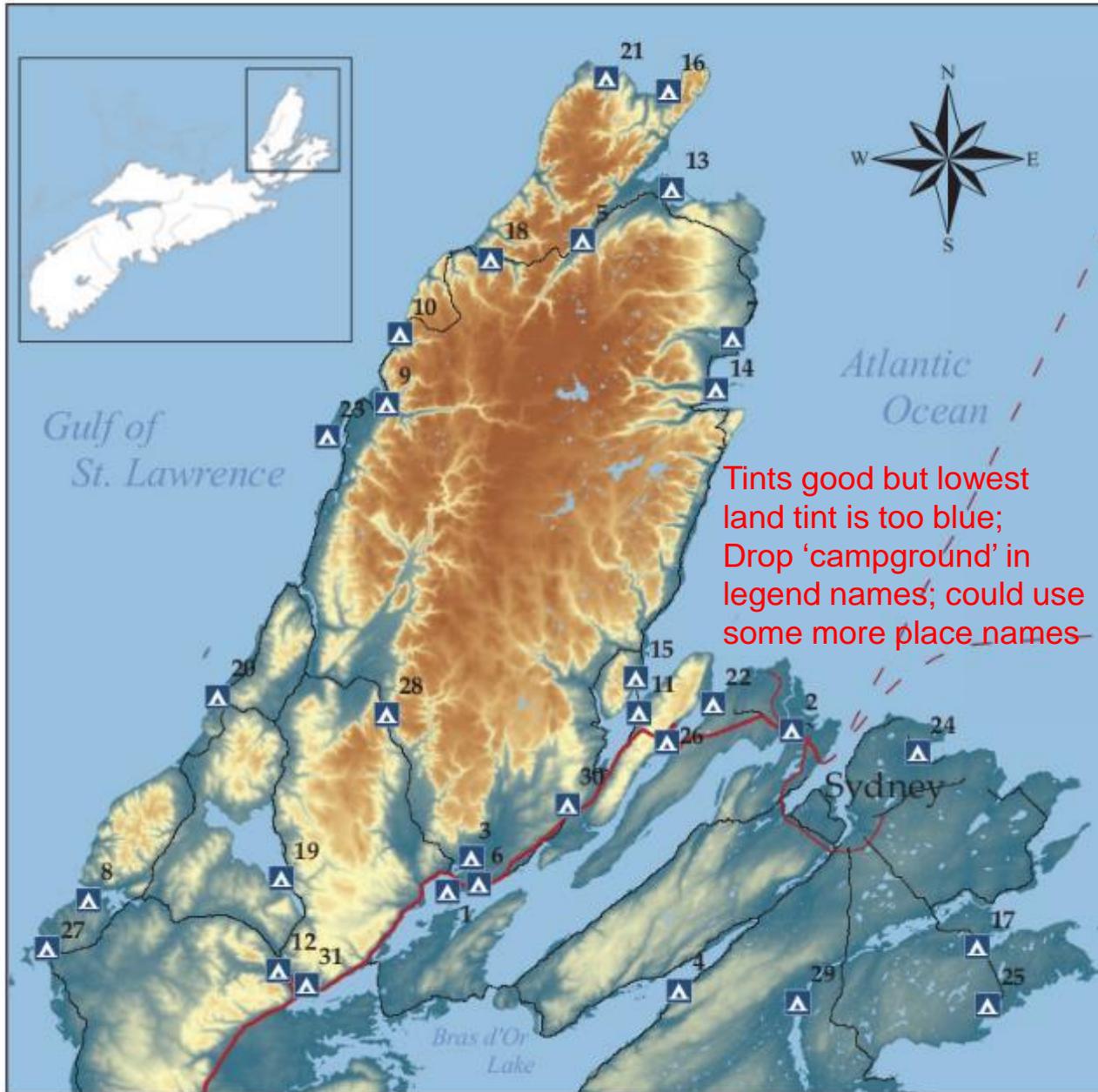
- ### Legend
- BC Highways
— BC Highways
- ### Hot Springs
- 1 - Mount Layton Hot Springs
 - 2 - Tsek Hot Springs
 - 3 - Weewanie Hot Springs
 - 4 - Bishop Bay Hot Springs
 - 5 - Shearwater Hot Springs
 - 6 - Mount Cayley Hot Springs
 - 7 - Harrison Hot Springs
 - 8 - Sloquet Hot Springs
 - 9 - Keyhole 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 - Tallheo 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 - Hotspring Island
 - 25 - Ainsworth Hot Springs
 - 26 - Toad River Hot Springs
 - 27 - Hot Springs Cove
 - 28 - Liard Hot Springs

A Good theme.
Roads are not all
highways, and
don't need it twice
in legend. Drop
'Hot Springs'
repeat in legend —
it's in the title ..



A

Campgrounds of Cape Breton Island, Nova Scotia



Tints good but lowest land tint is too blue;
Drop 'campground' in legend names; could use some more place names

Legend

Roads

- Highway
- Secondary Highway
- Main Road
- Ferry

Campsites

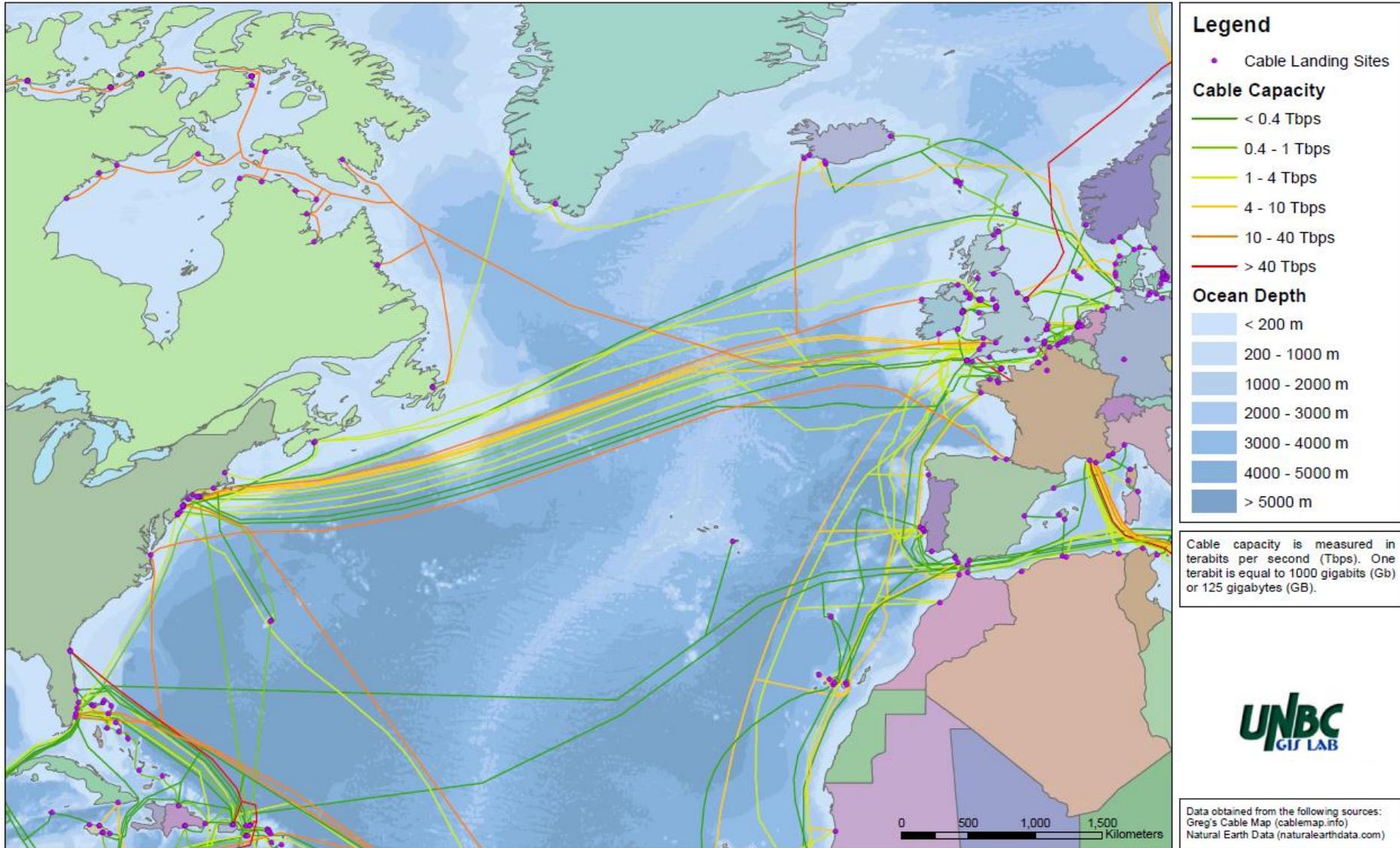
- 1 - Adventures East Campground & Cottages
- 2 - Arm of Gold Campground and Trailer Park
- 3 - Baddeck Cabot Trail Campground
- 4 - Ben Eoin Beach RV Resort
- 5 - Big Intervale Campground
- 6 - Bras d'Or Lakes Campground
- 7 - Broad Cove Campground
- 8 - Ceilidh Cottages Campground
- 9 - Cheticamp Campground
- 10 - Corney Brook Campground
- 11 - Englishtown Ridge Campground
- 12 - Glenview Campground
- 13 - Hide Away Campground & Oyster Market
- 14 - Ingonsih Beach Campground
- 15 - Joyful Journeys
- 16 - Jumping Moose Eco-Camping
- 17 - Lake View Treasure RV & Campground
- 18 - MacIntosh Brook Campground
- 19 - MacKinnon's Campground
- 20 - MacLeod's Beach Campsite
- 21 - Meat Cove Campground
- 22 - Mountain Vista Seaside Campground
- 23 - Plage St-Pierre Beach and Campground
- 24 - River Ryan Campground
- 25 - Riverdale RV Park
- 26 - Seal Island/North Sydney KOA
- 27 - Sunset Sands RV Park
- 28 - The Lakes Campground
- 29 - Two Rivers Wildlife Park Campground
- 30 - Uisge Ban Falls Nature Campground
- 31 - Whycomomagh Provincial Park



April 11, 2017

A

Undersea Communication Infrastructure in the Northern Atlantic Ocean (2015)

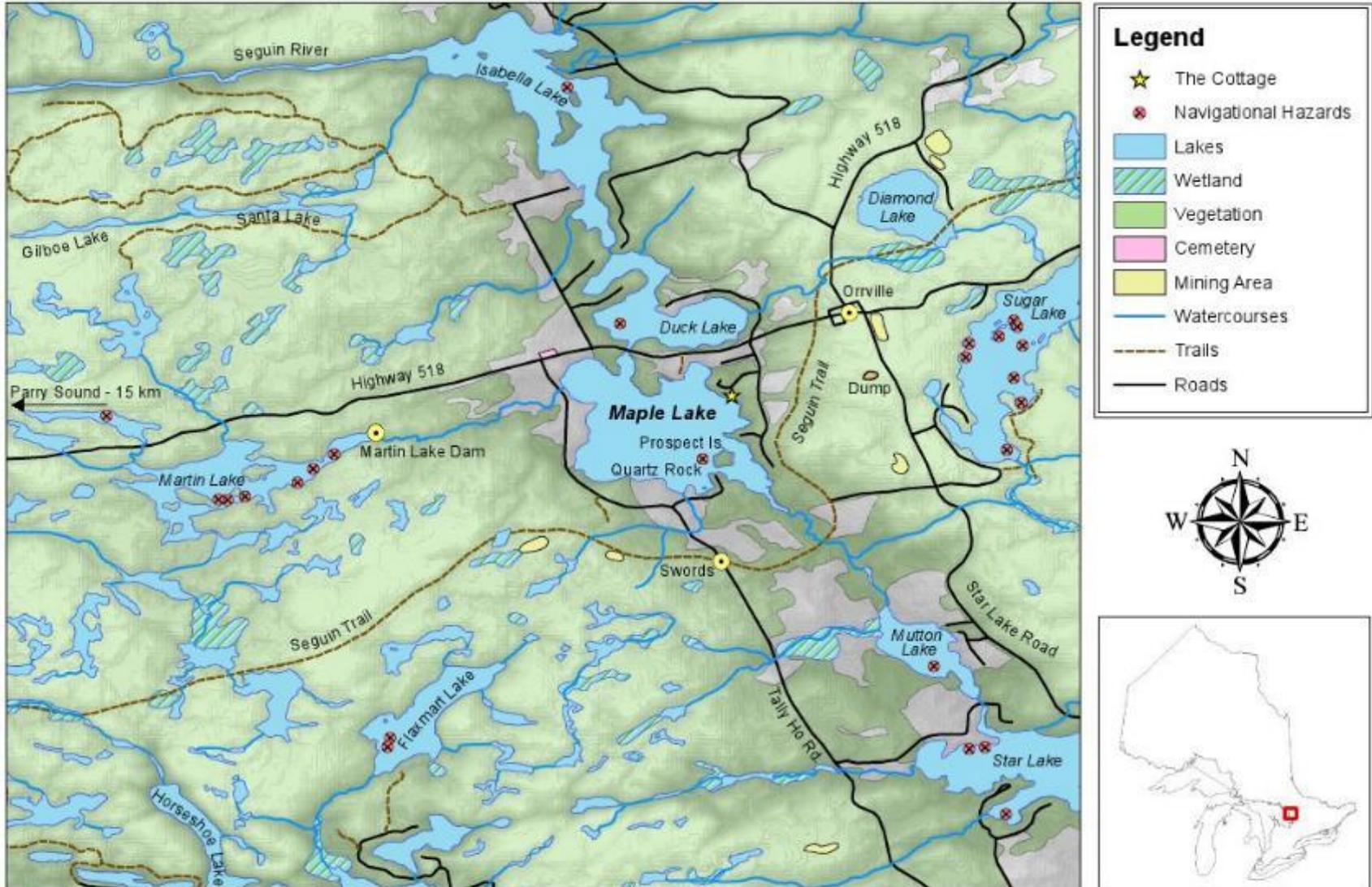


Interesting theme – good colours for cables, water depths and countries

B

Topographic maps

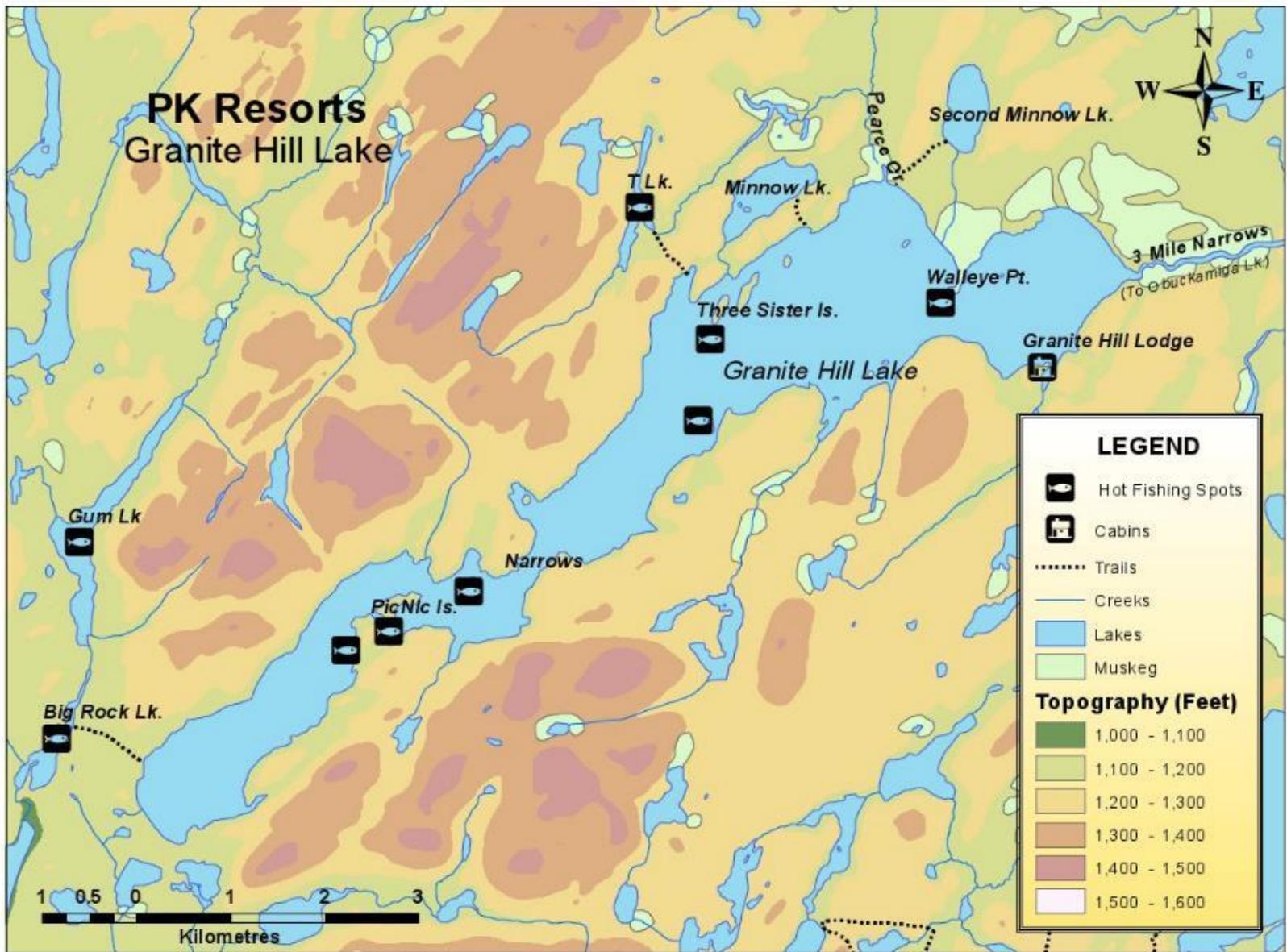
MAPLE LAKE AND THE SURROUNDING AREA



0 1 2 4 6 8 Kilometers

Solid effort and clean output; Don't need Lakes in legend, labels should be blue What are the gray areas, where is the cemetery? wetland symbol!

B



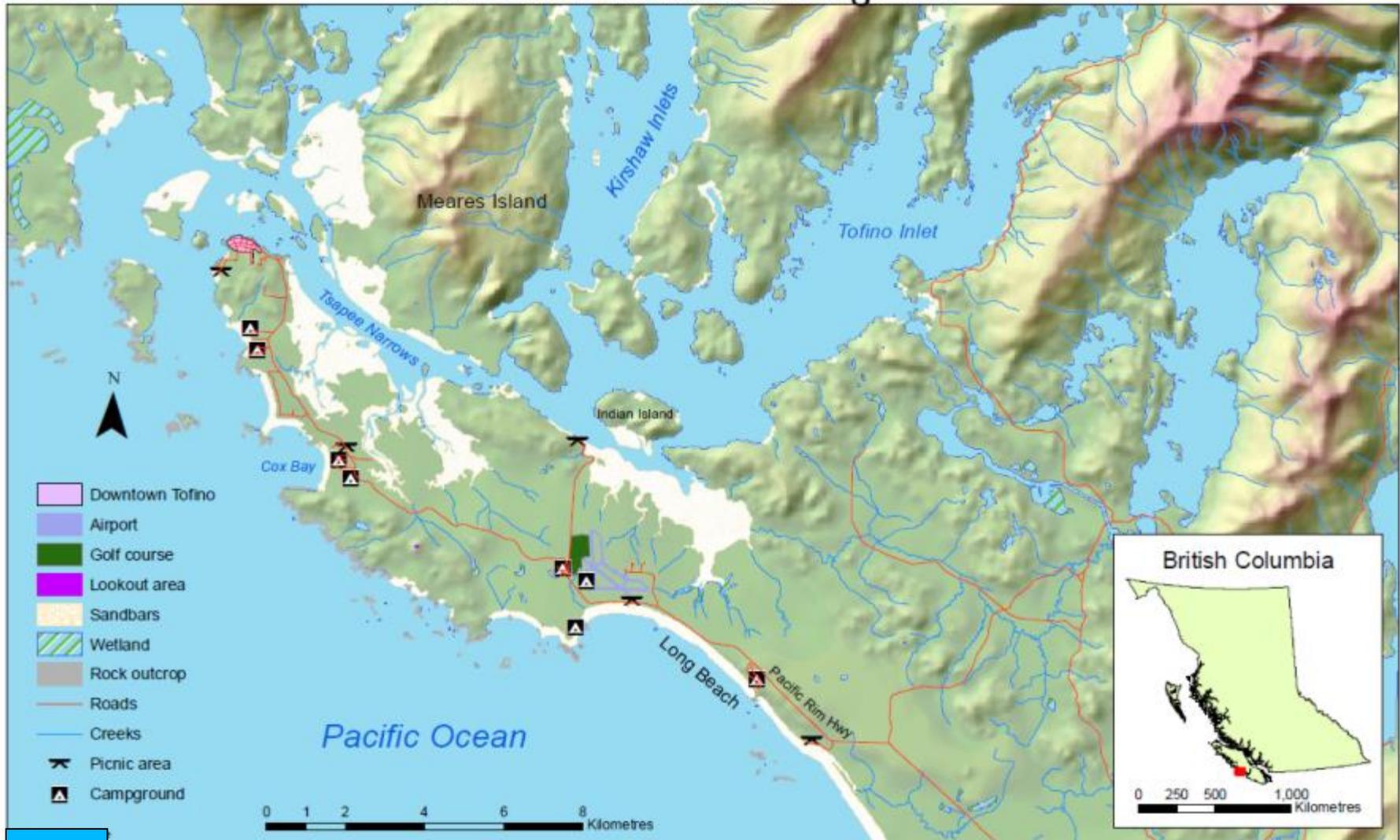
Northern Ontario Map Sheet 042F03

GE OG 205

*This could use Hillshading to show relief better, but nice round values and good colours for tints
All water lable should be in blue; nice simple scale bar; lakes in legend is optional;
Maybe box title to make it stand out more; good point symbols; white for highest elevation ?*

A

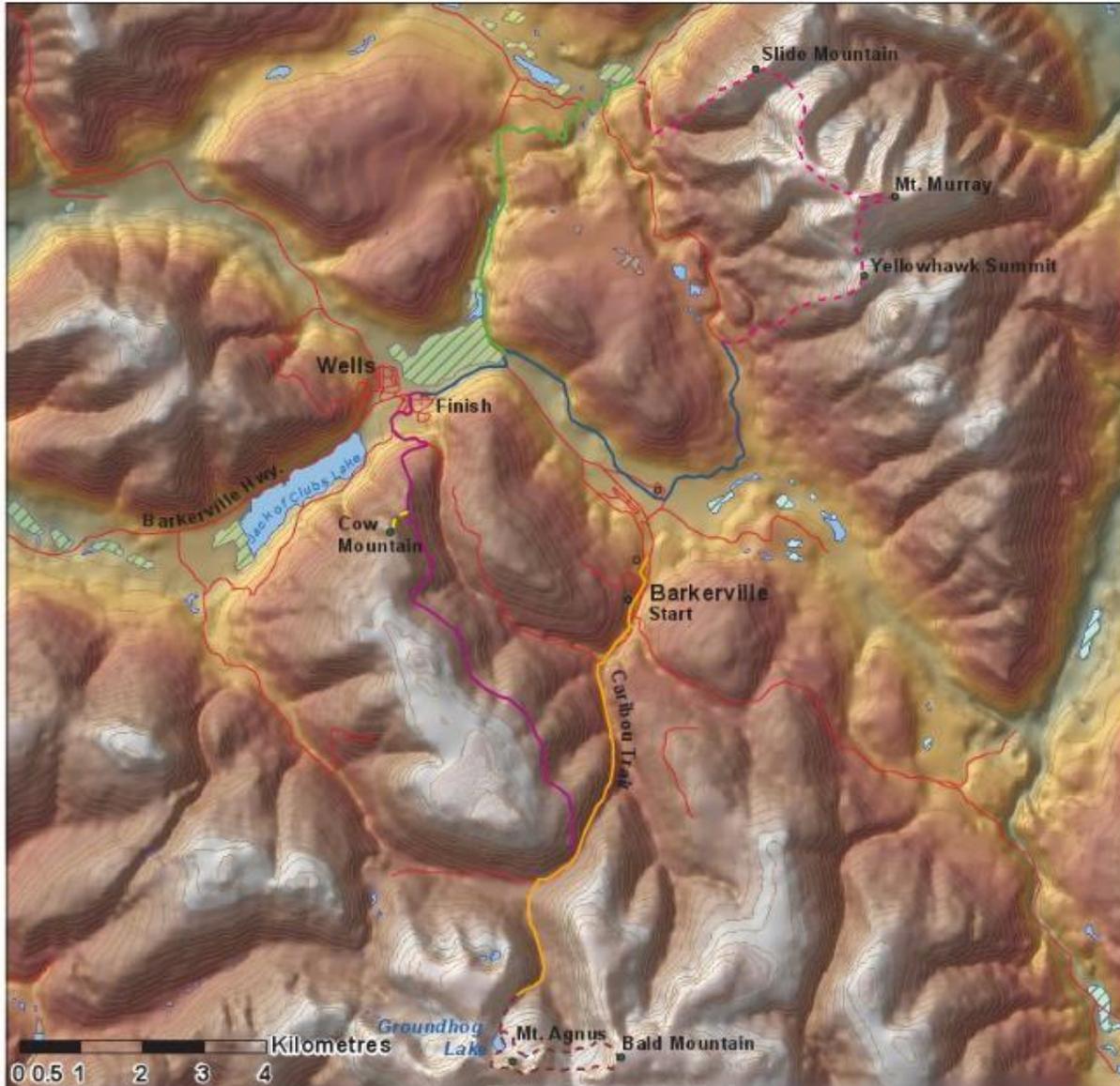
Tofino and the Surrounding Area



*Nice balance, good symbols (apart from the wetlands!)
Tofino needs a label, not just in legend– locator map a bit too much*

B

7 Summits Challenge Route 2010 (Bakerville/Wells)



Legend

- Campgrounds
- Mountain Summits
- Barkerville

Trails

- Bike 1
- - - Hike 1
- Bike 2
- Bike 2 Cont.
- Hike 2
- Bike 4
- - - Hike 3
- Bike 5
- Roads
- ▨ Wetland

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

BC, Canada

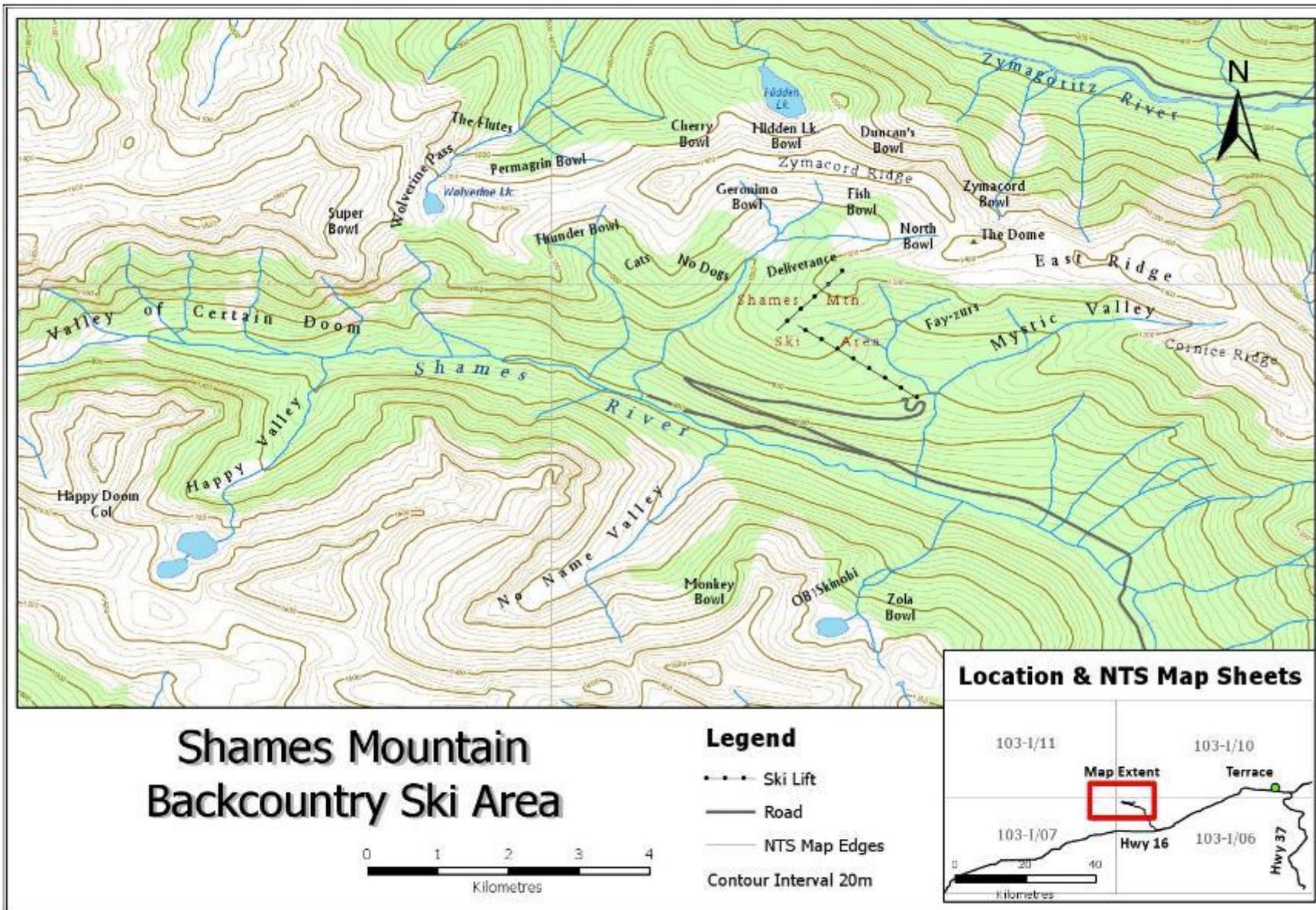
Kilometres
0 250 500 1,000

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



*Great idea but Tints much too heavy. Wetlands again; typo in title
Colours for trails lost and low contrast; silly scale bar design*

B



*Solid effort, but could use hillshading, and contour labels
Possibly the data are not projected – stretched E-W; good name placements*

A

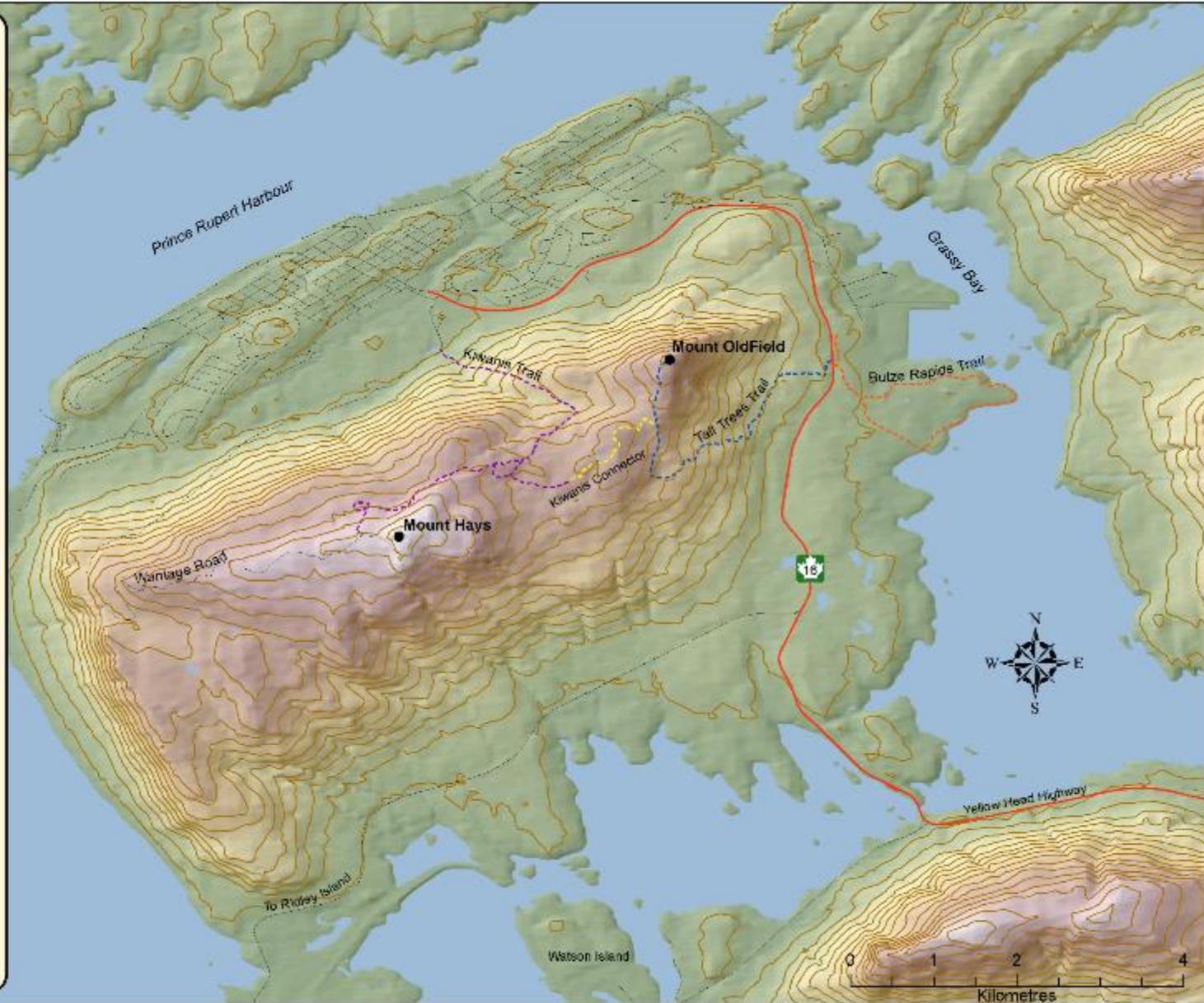
Kaien Island Trails Prince Rupert, B.C.

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.



Visually appealing – great tints and trails; but can barely see P. Rupert; scale bar better in water

A



Overall excellent, could be lightened a bit for legibility. What's with the scale bar ?

Glacier National Park - Illecillewaet



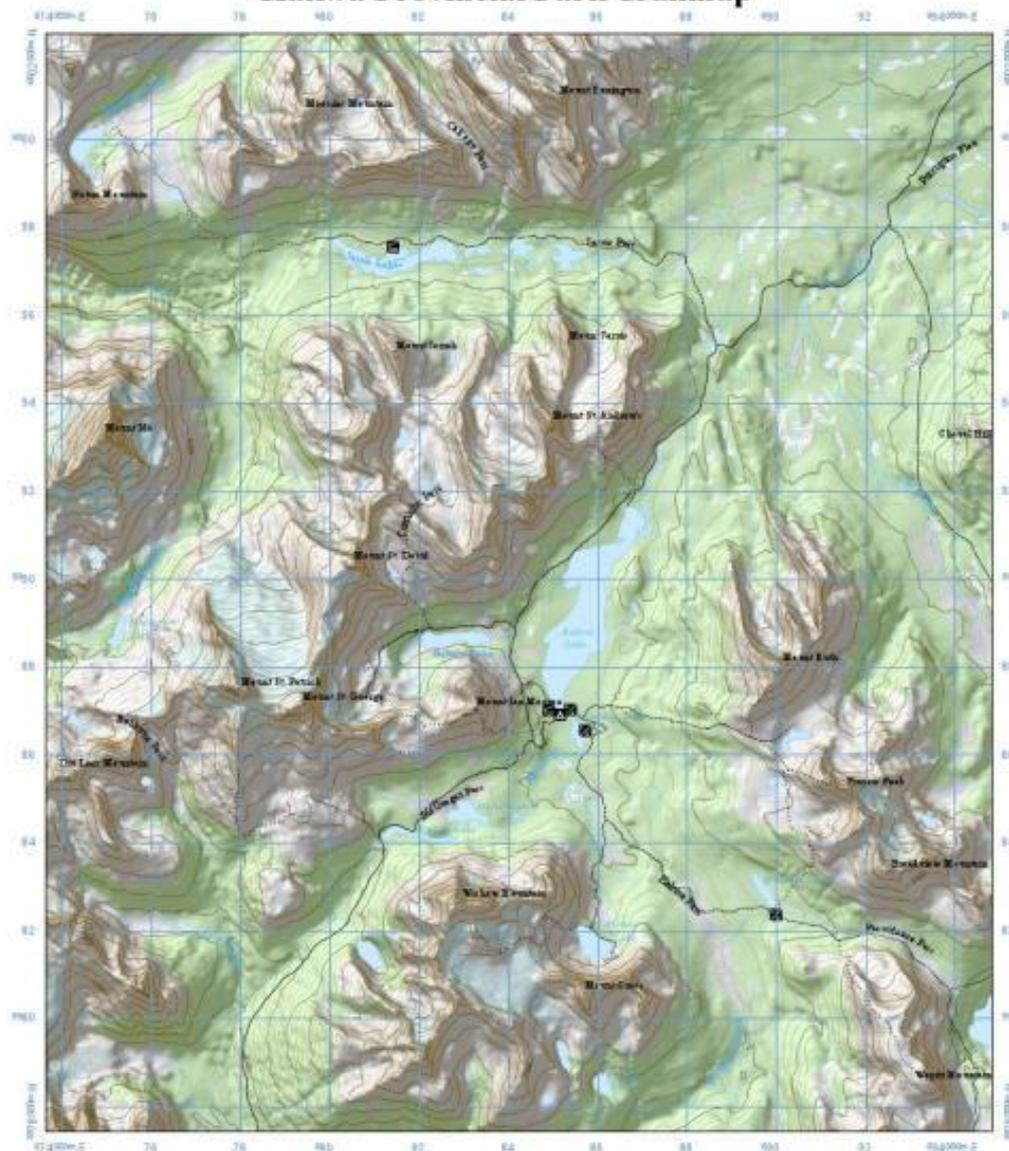
0 2 4 km

■ Vegetation ■ Lakes — Rivers
■ Snow — Trail

UNBC
GJL LAB

GEOG 201
Emery Ben
April 8, 201

Kakwa Provincial Park Trailmap



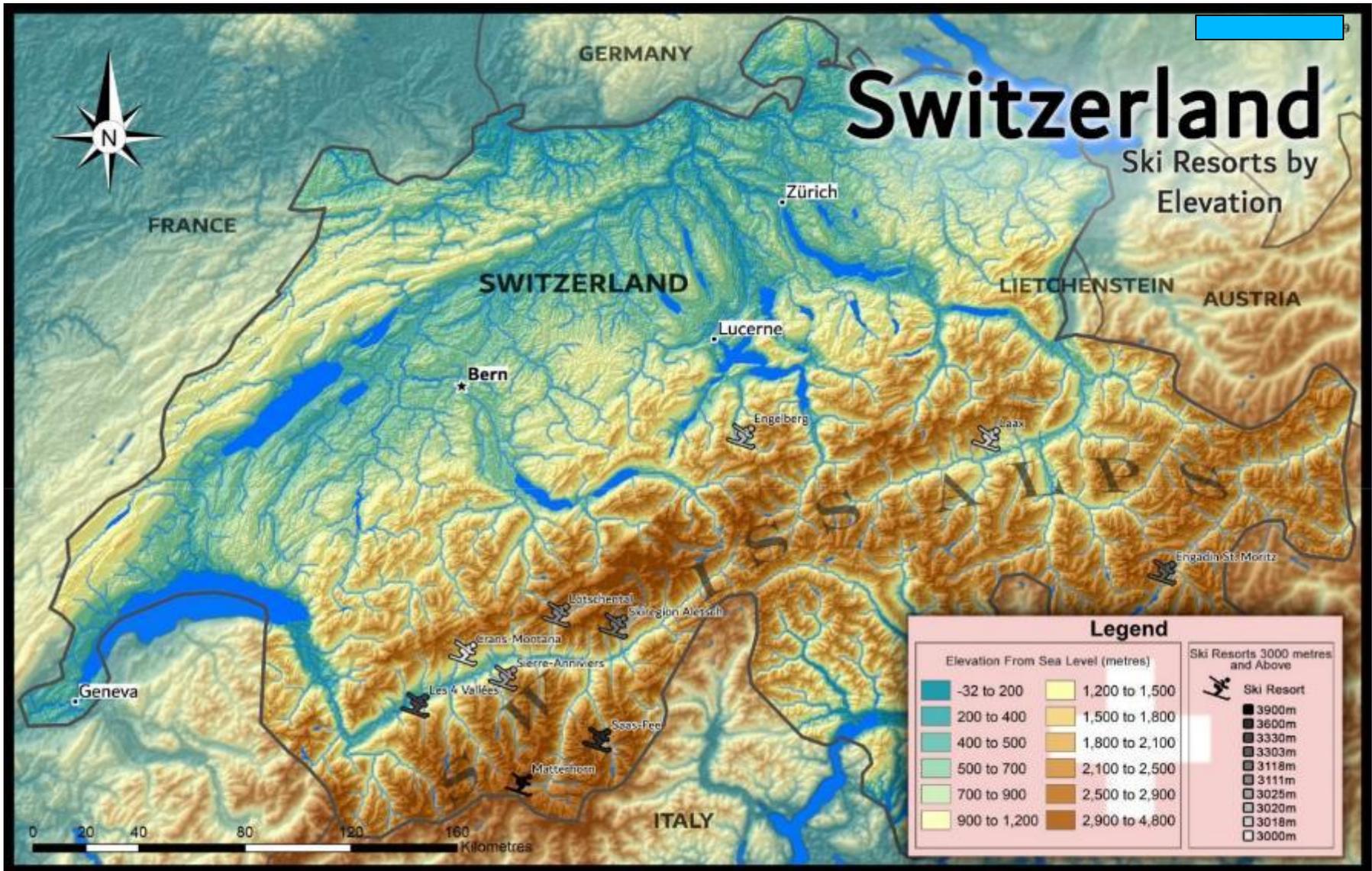
Agreement: Mapa De Cartas in 2010 is a map made with contour lines of 10'. The grid only is not. Created November 2010. Datum: North American Datum 1983. North America Datum 1983.

■ Cabin - - - - - Route ■ Wetland
■ Camping - - - - - Trails ■ Glaciers
■ Horse camp — Tote Trail ■ Vegetation

0 1 2 3 4 5 km
 113° 11' 12" W 50° 11' 12" N
 © 2010 UNBC

A both: addition of hillshade to NTDB data, and excellent labelling

A

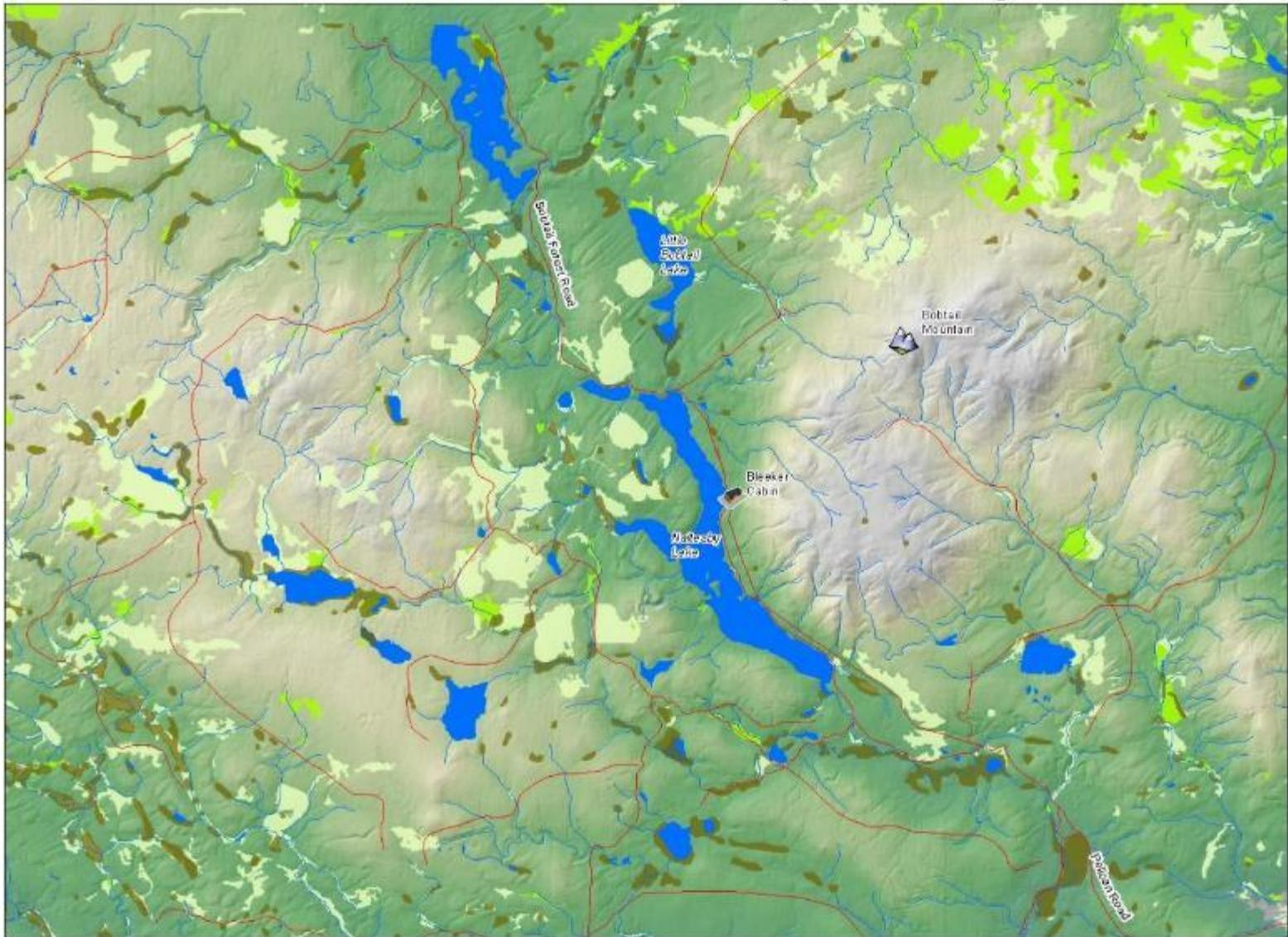


Great idea – found ski / topo data for Europe / Alps – one minor typo – can you find it ?

Vegetation Resource Inventory (VRI) data

B: Lettering is messy (overuse of halo);
legend column needs a box to hold it together

Potential Moose Habitat in The Naltesby Lake Forest Region



To locate potential habitat for moose in the Naltesby Lake Region analysis was performed on the vegetation based on shrub height (1.0-3.0m). To further add to the map wetland locations have been added. The forest service roads are the primary routes that are followed during limited entry hunts, and play a crucial role in the access to Naltesby lake and its peripherals. By having this analysis it allows for a more informed decision as to which areas to apply for limited entry hunts (LEH)

Note: Naltesby Lake is the proper NTS name for the lake but has since been known for decades by locals and foresters as Bobtail Lake, or, Big Bobtail Lake, due to its smaller neighbour lakes name being Little Bobtail Lake

Produced by Cody Birch. All information current as of 1982.
Created on: April 22/2014.
UNBC GIS Laboratory



Canada summary

Municipal data: often available for cities / towns

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

Other countries: highly variable: small scale: <http://www.diva-gis.org/Data>

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>