

2011

Geographical Statistics

www.atlas.nrcan.gc.ca/site/english/maps/environment



Marian Kreiser

SEER

9/13/2011

Climate

Total Precipitation:

<http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/precipitation/precip>

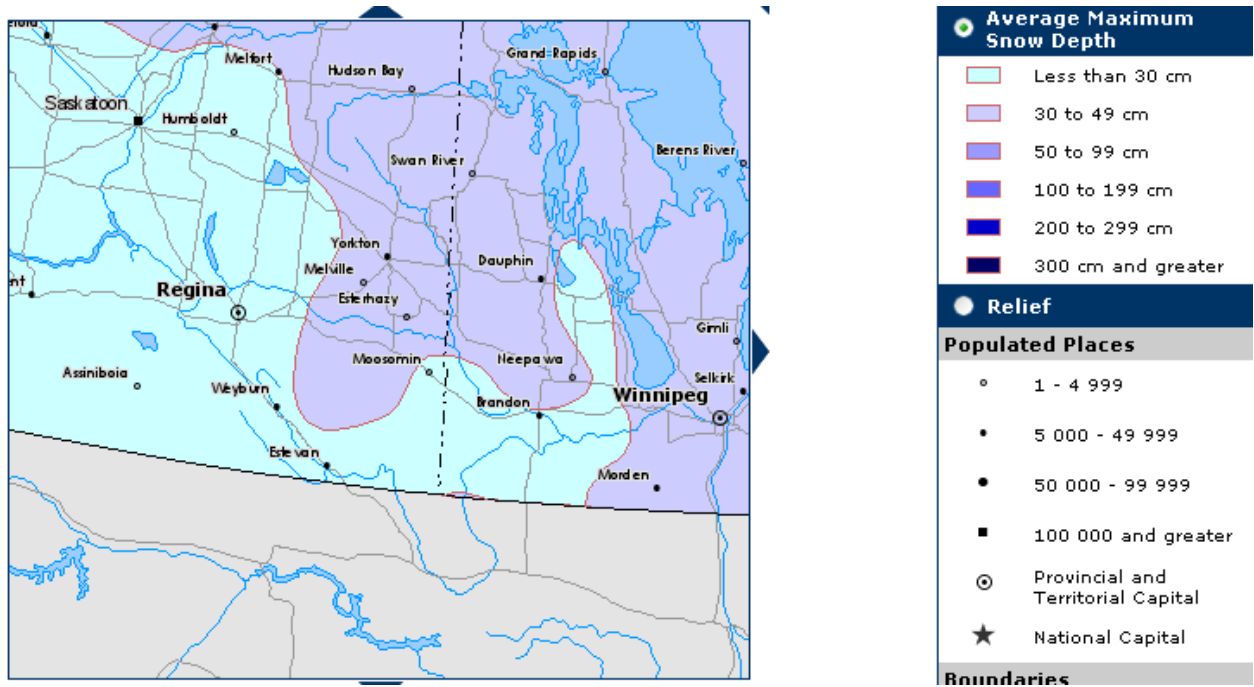
Over much of the continental interior of Canada, precipitation reaches its annual maximum in the summer months and falls as rain. **October marks the transition from mainly rain to snowfall across northern Canada.**



Maximum Snow Depth:

<http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/snowcover/snowdepth>

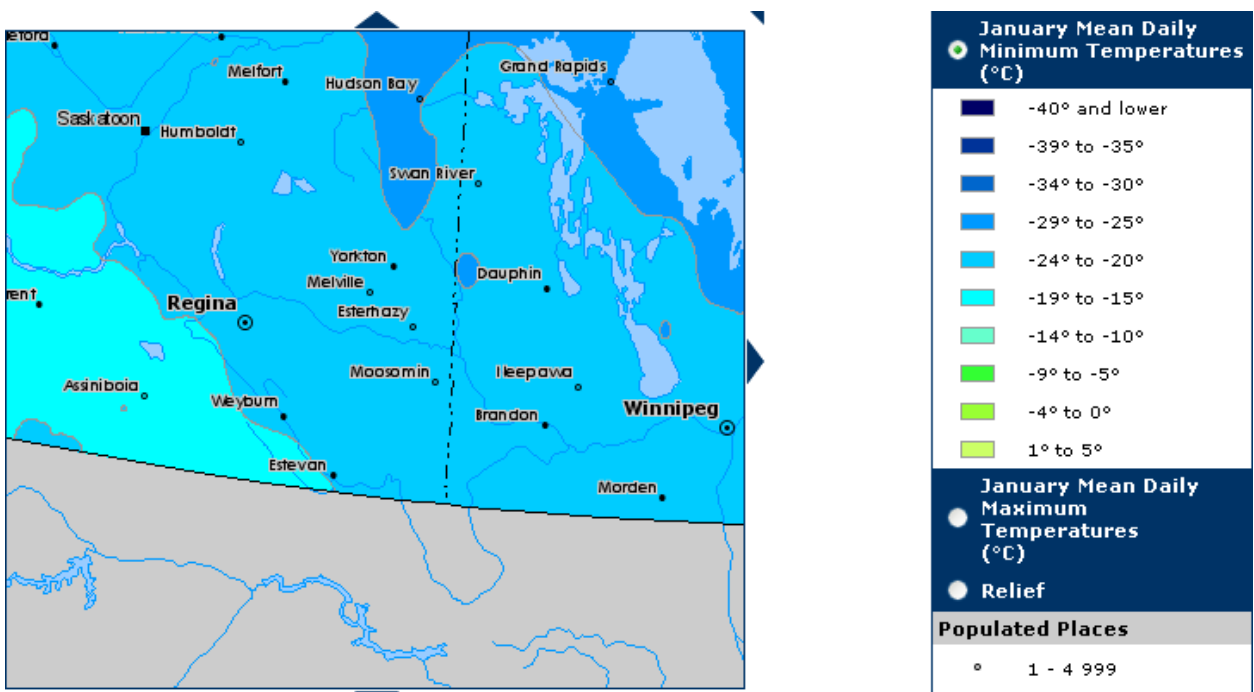
This map shows the average maximum snow depth in centimetres computed over 18 winter seasons (1979 to 1997). Over southern Canada this usually occurs in January or February, while the time of maximum accumulation occurs much later in mountain areas and in the Arctic. The main features of the map are the pronounced maximum in snow accumulation over the western Cordillera, where snow depths can exceed several metres, with a secondary maximum over Quebec and Labrador. These maxima are related to their proximity to oceans, which act as sources of moisture and winter storms, and to the **orographic** effect of the mountains in the case of western Canada. The two maxima are linked by a band of higher snow accumulation that follows the boreal forest zone; this is a preferred track for winter storms. To the north of this zone is the relatively shallow snow cover of the Arctic (low snowfall with extensive **wind packing**). To the south, the depth of snow is limited by the shorter accumulation season and the substantial **sublimation** of snow over the Canadian Prairies.

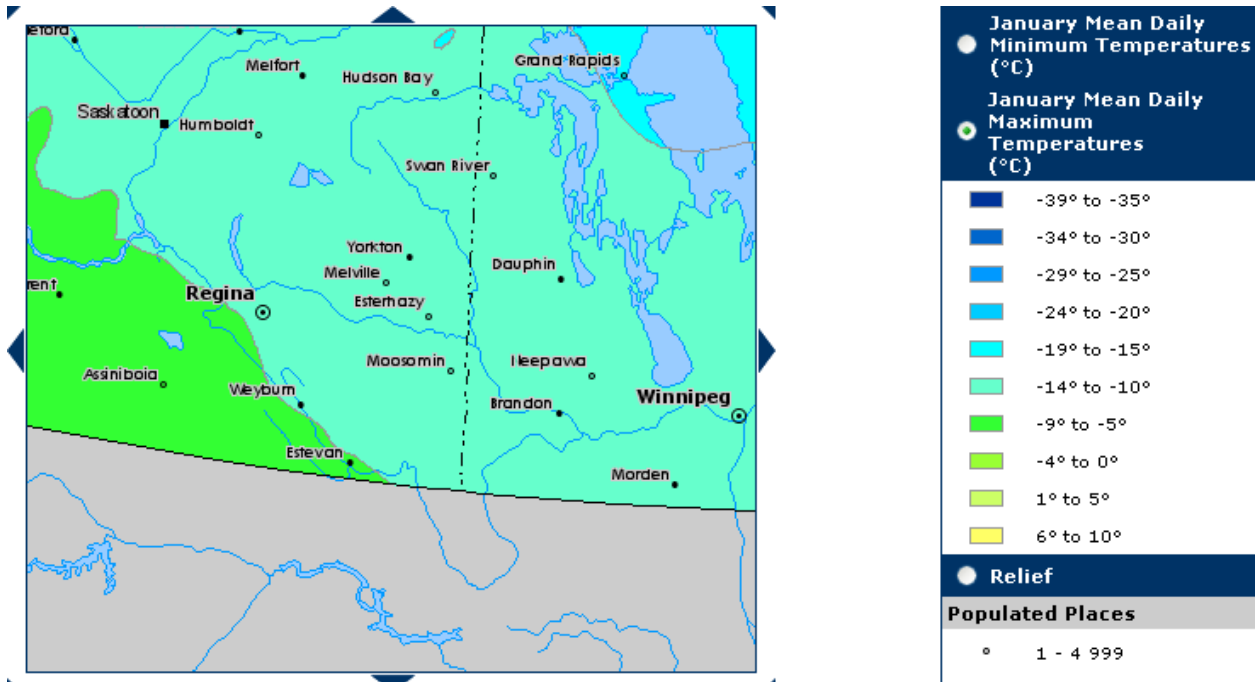


January Minimum and Maximum Temperature

http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/temperature/temp_winter

January marks the depths of winter across Canada and, with the exception of the coastal parts of southern Vancouver Island, below freezing minimum temperatures are the norm. Weak or no sunshine means there is minimal diurnal variation between the maximum and minimum temperature in January. The map shows the mean daily minimum and maximum temperatures for January.

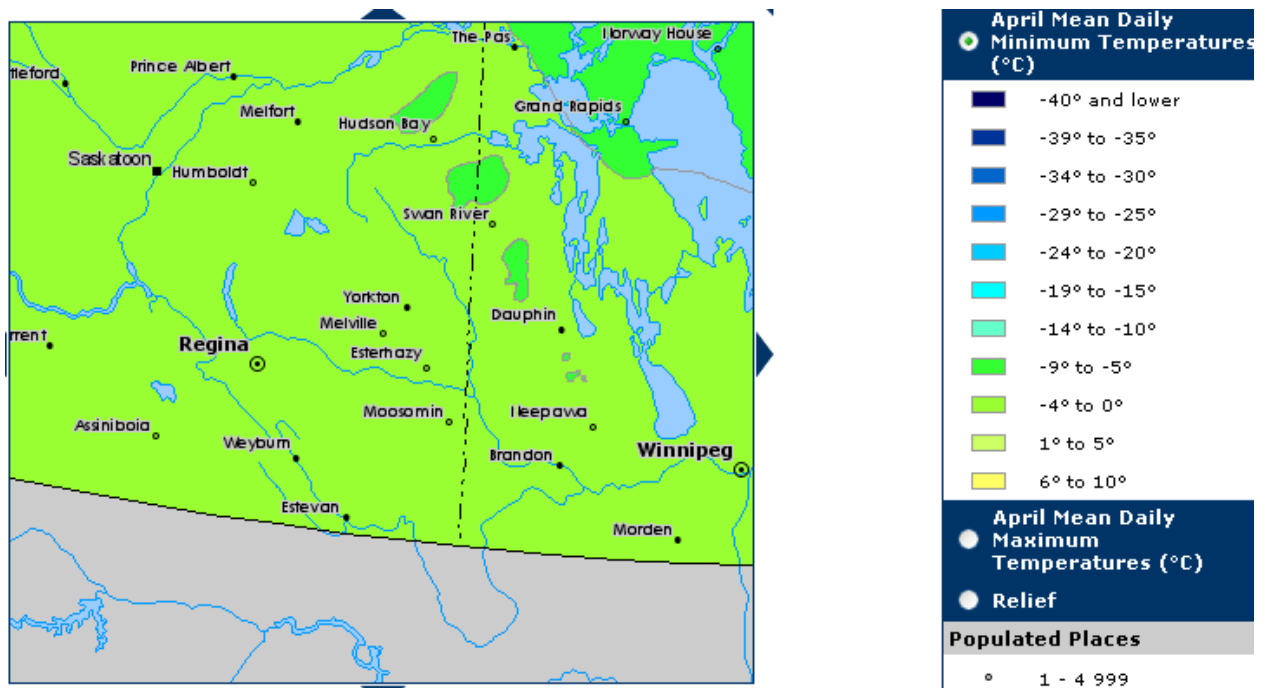


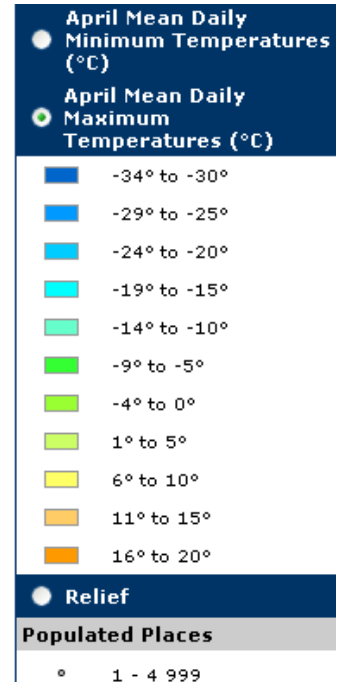


April Minimum and Maximum Temperature

http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/temperature/temp_spring

Minimum temperatures in April are below freezing for most of Canada. Below-freezing maximum temperatures in April are restricted to northern Canada and the extreme northern portions of Ontario and Quebec adjacent to Hudson Bay. The map shows the mean daily minimum and maximum temperatures for April.

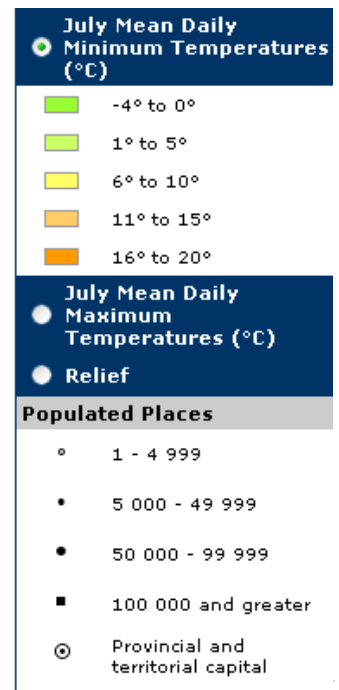
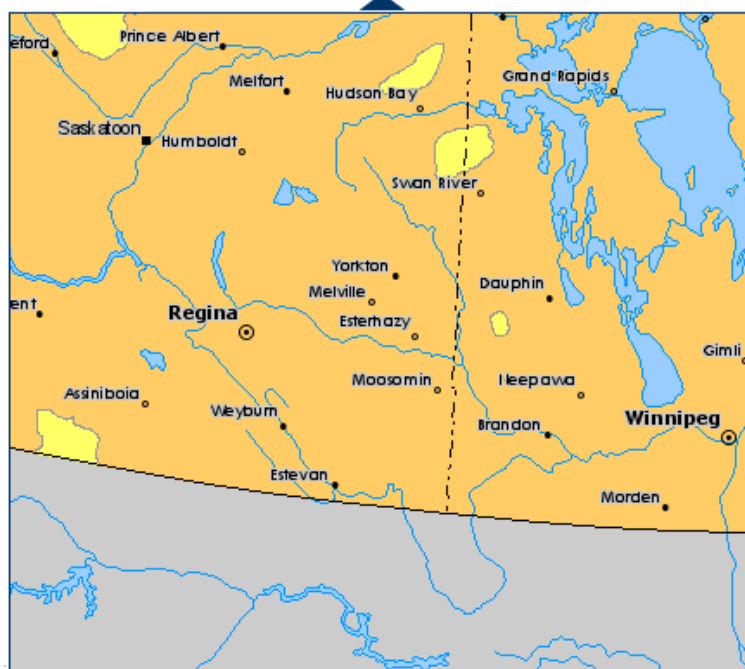


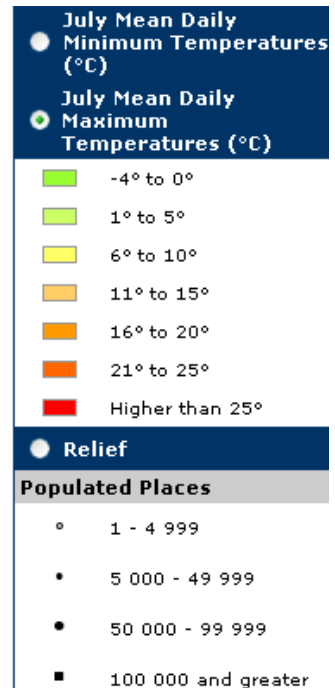
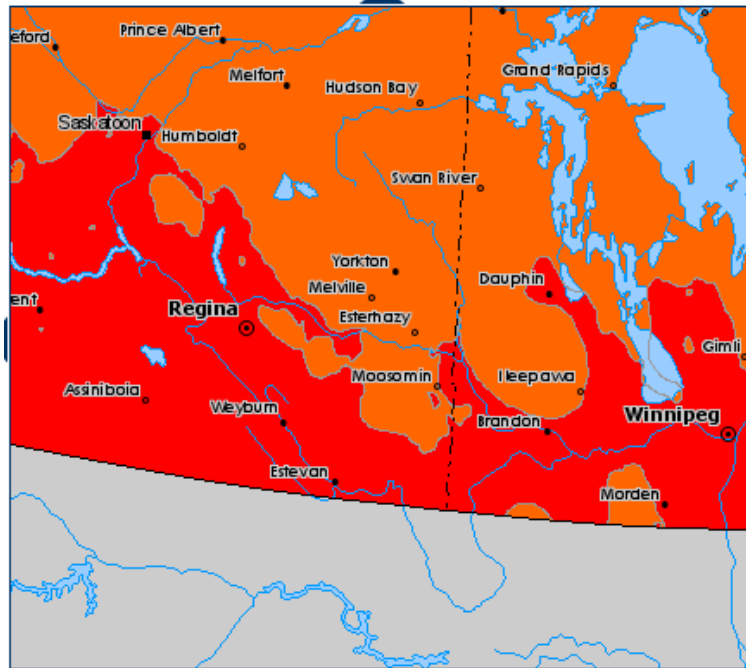


July Minimum and Maximum Temperature

http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/temperature/temp_summer

Below-freezing minimum temperatures in July are normal only for higher elevations on Ellesmere and Baffin Islands in Canada's far northeast. Much of southern Canada experiences minimum temperatures above 10°C in July. Maximum temperatures in July are above freezing across all of Canada except for high elevations on Ellesmere Island. The map shows the mean daily minimum and maximum temperatures for July.

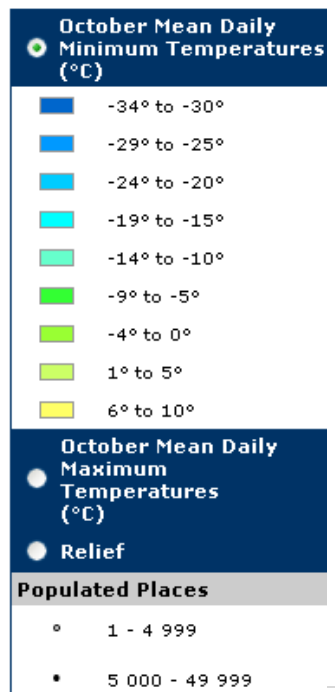
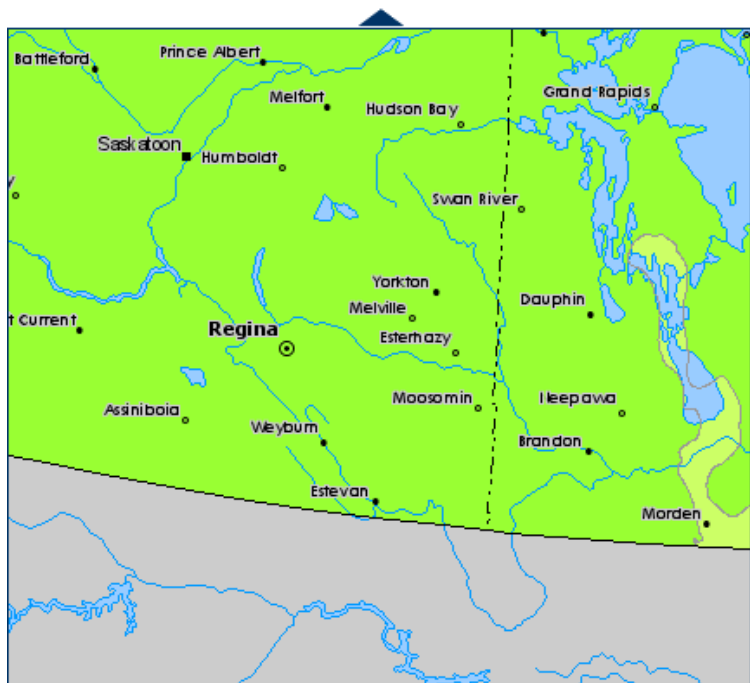


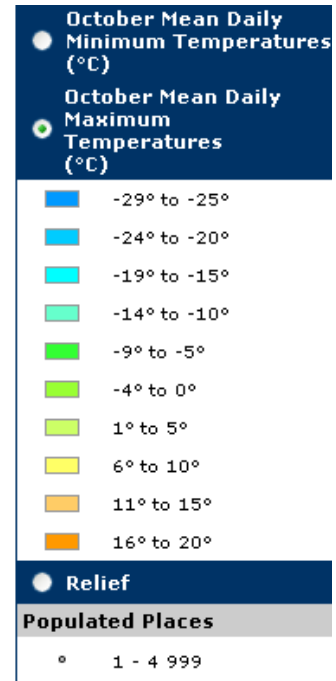
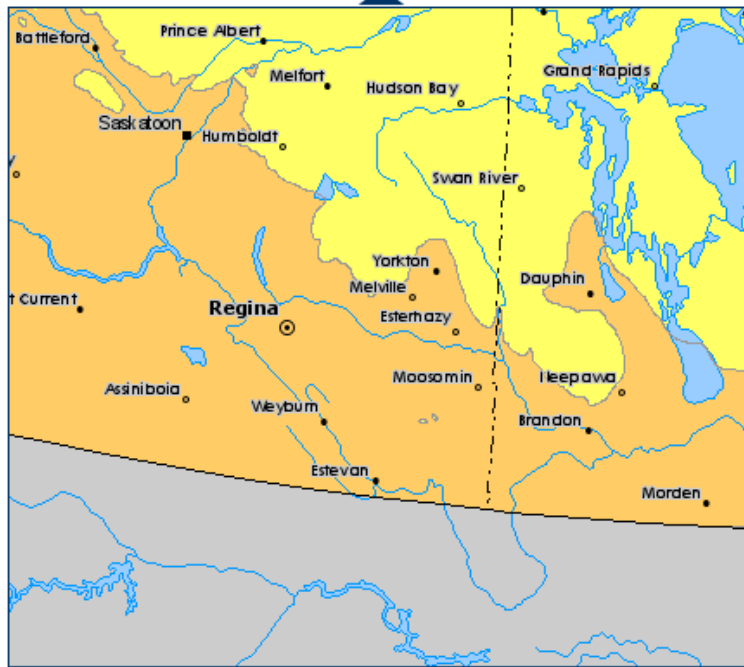


October Minimum and Maximum Temperature

http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/temperature/temp_fall

In October, longer nights and a return to below-freezing minimum temperatures is evident across most of Canada except for coastal British Columbia, southern Ontario and Quebec and most of the Atlantic Provinces. **Much of southern Canada experiences maximum temperatures in October above 10°C, whereas maximum temperatures across most of the northern territories are below zero. The map shows the mean daily minimum and maximum temperatures for October.**

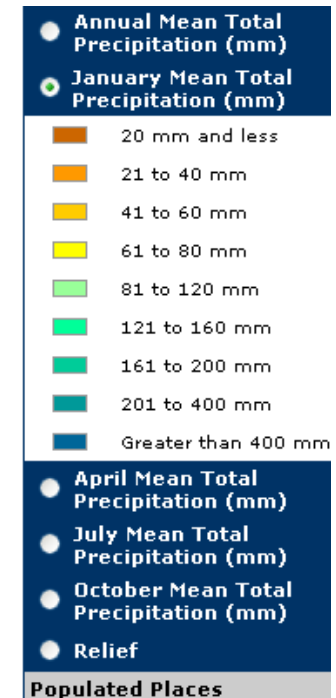
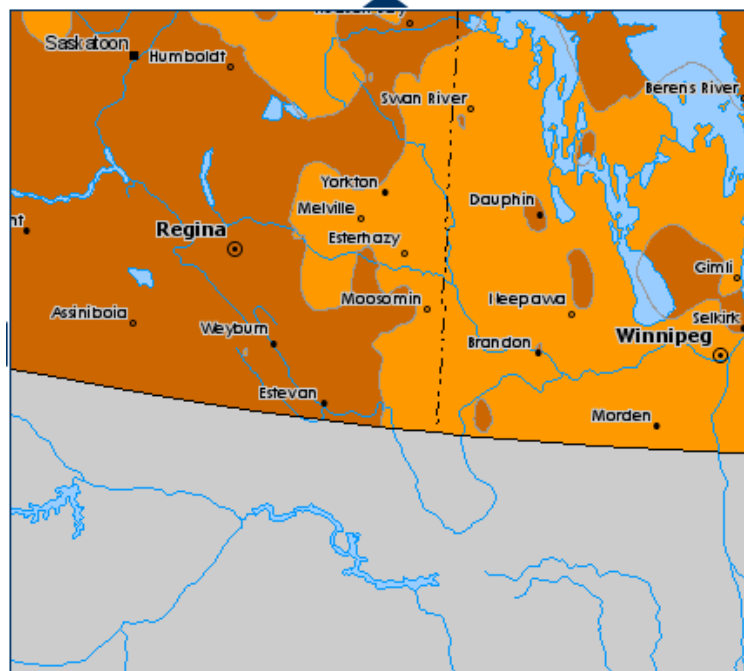


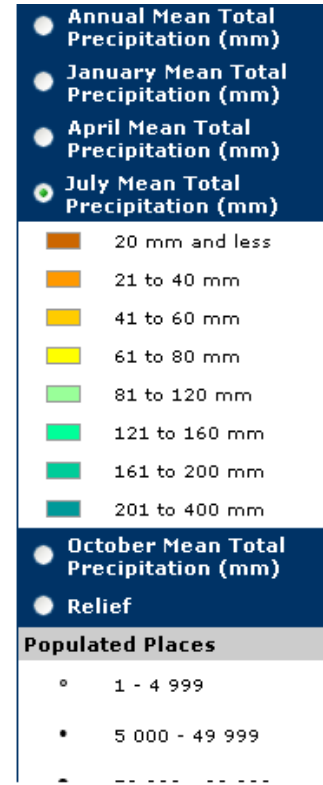
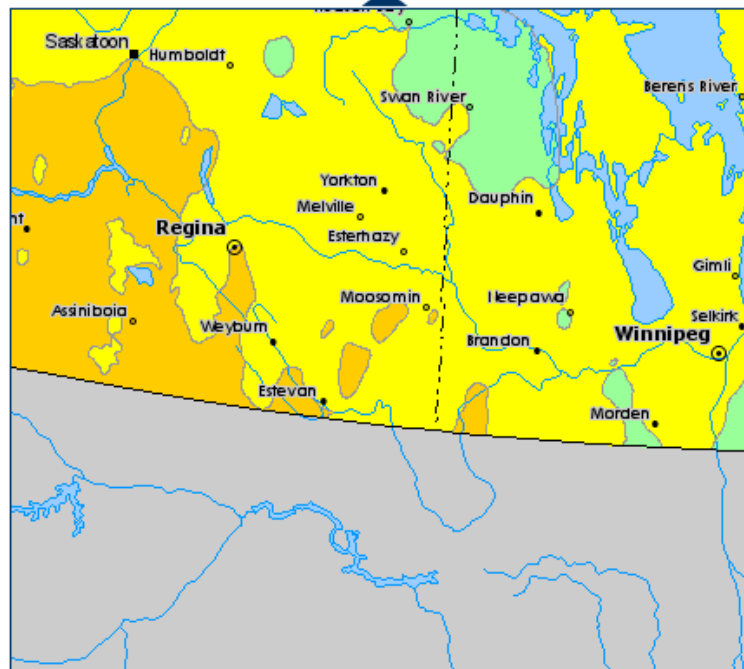
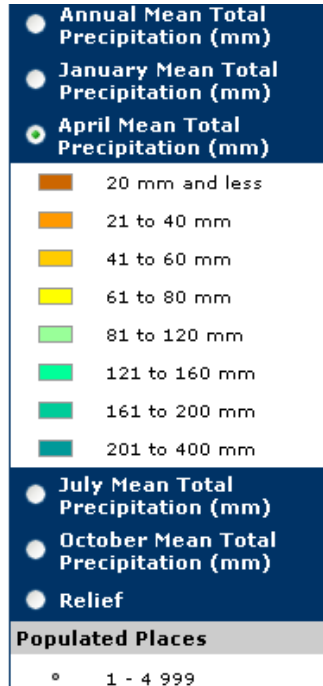
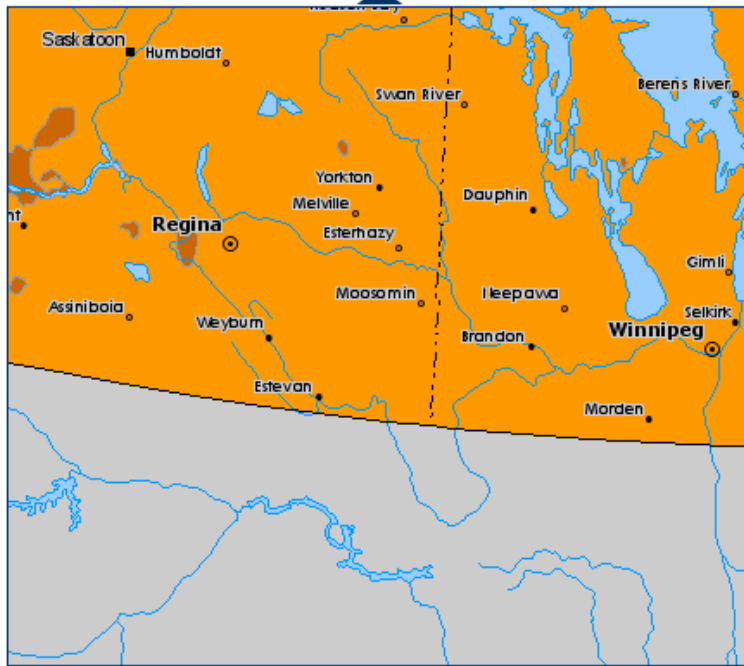


Precipitation

<http://atlas.nrcan.gc.ca/site/english/maps/environment/climate/precipitation/precip>

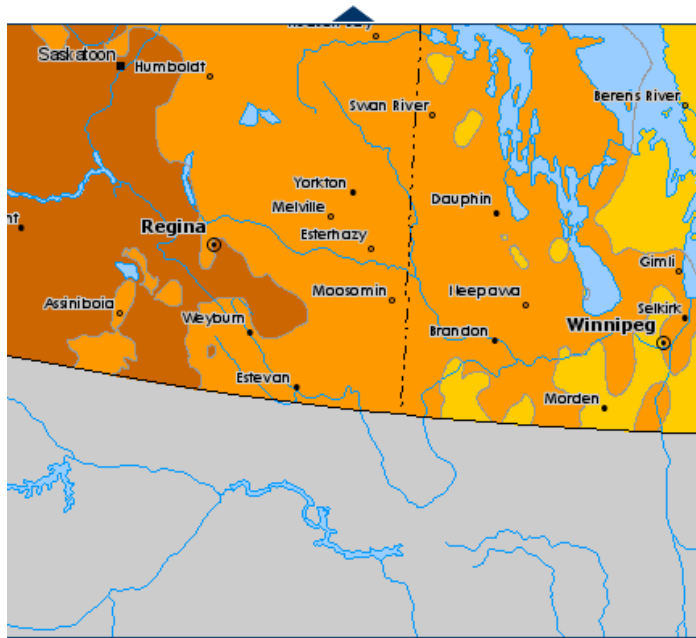
Over much of the continental interior of Canada, precipitation reaches its annual maximum in the summer months and falls as rain. October marks the transition from mainly rain to snowfall across northern Canada. The map shows the seasonal mean precipitation in the months of January, April, July and October.





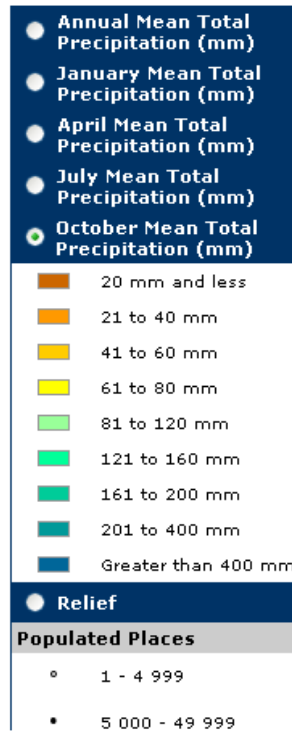
0 76 152 228 304 km

[Map Sources](#)

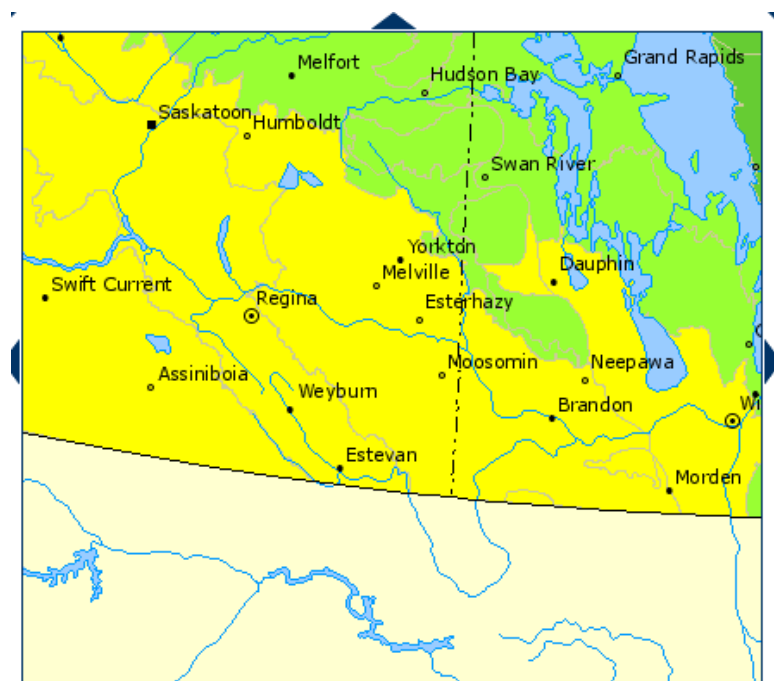


0 76 152 228 304 km

[Map Sources](#)



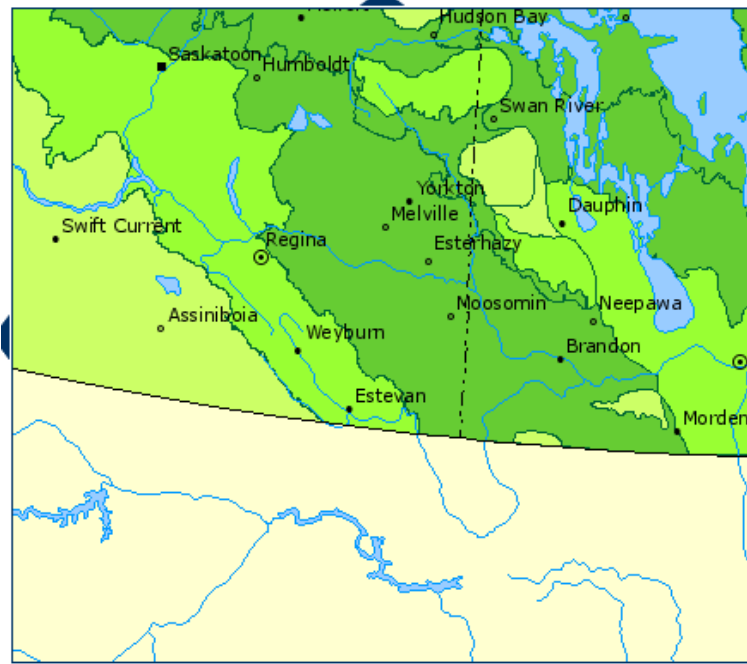
Ecology



0 76 152 228 304 km

[Map Sources](#)





0 76 152 228 304 km

[Map Sources](#)

Number of land cover types

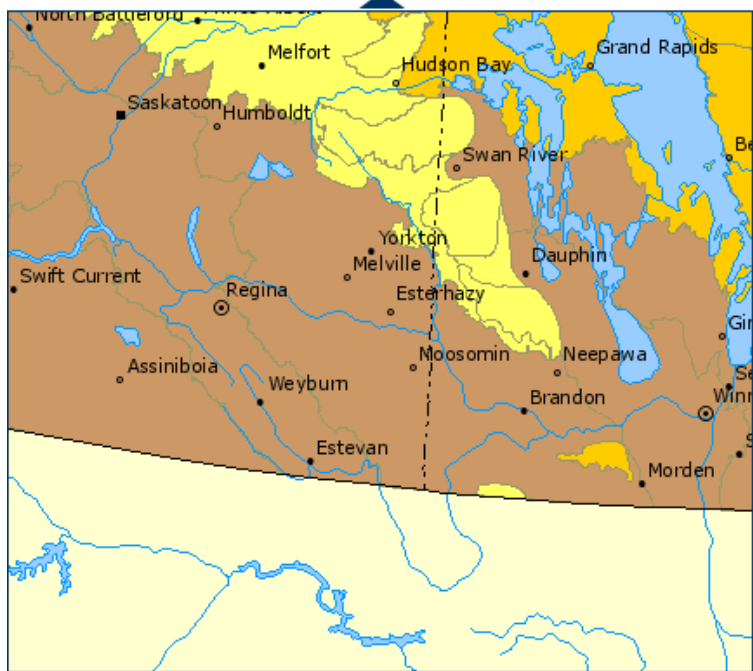
- 1 - 3
- 4 - 7
- 8 - 11
- 12 - 15
- 16 - 19

Populated Places

- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- Provincial and Territorial Capital
- National Capital

Boundaries

- International
- Provincial / Territorial
- Canada / Kalaallit Nunaat dividing line



0 76 152 228 304 km

[Map Sources](#)

Number of mining sites

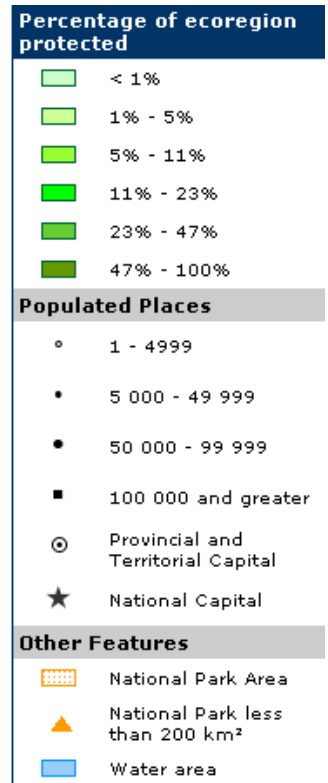
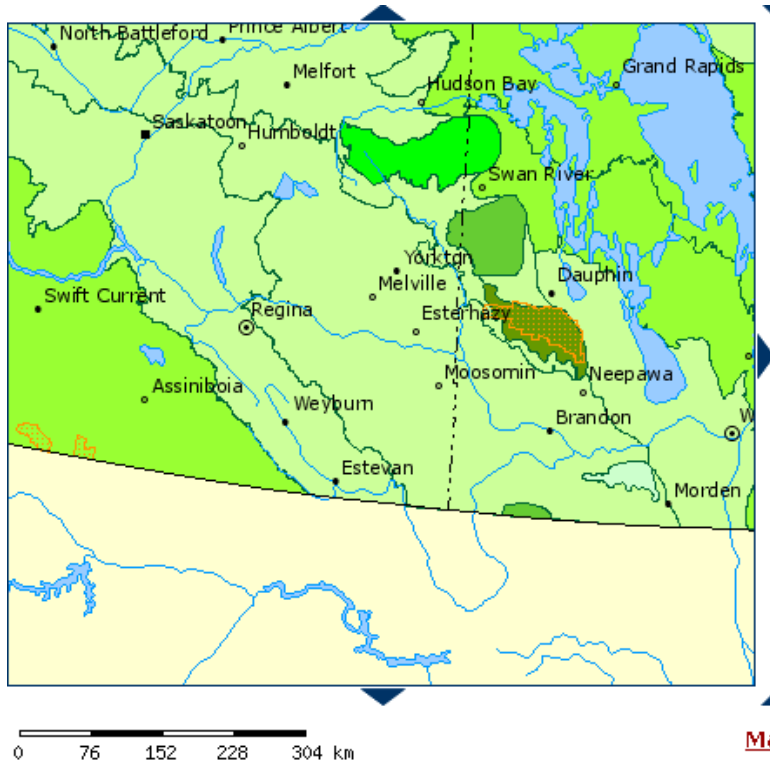
- None
- Low
- Moderate
- High

Populated Places

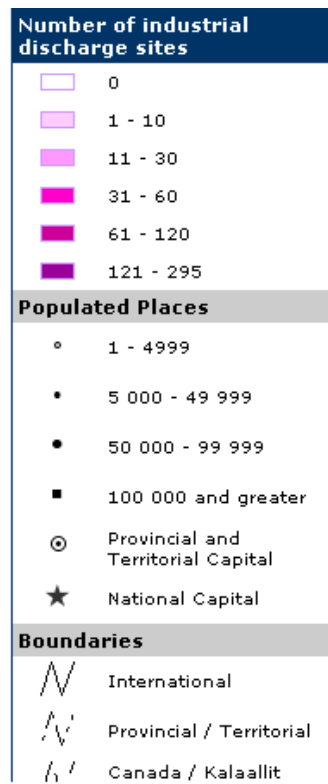
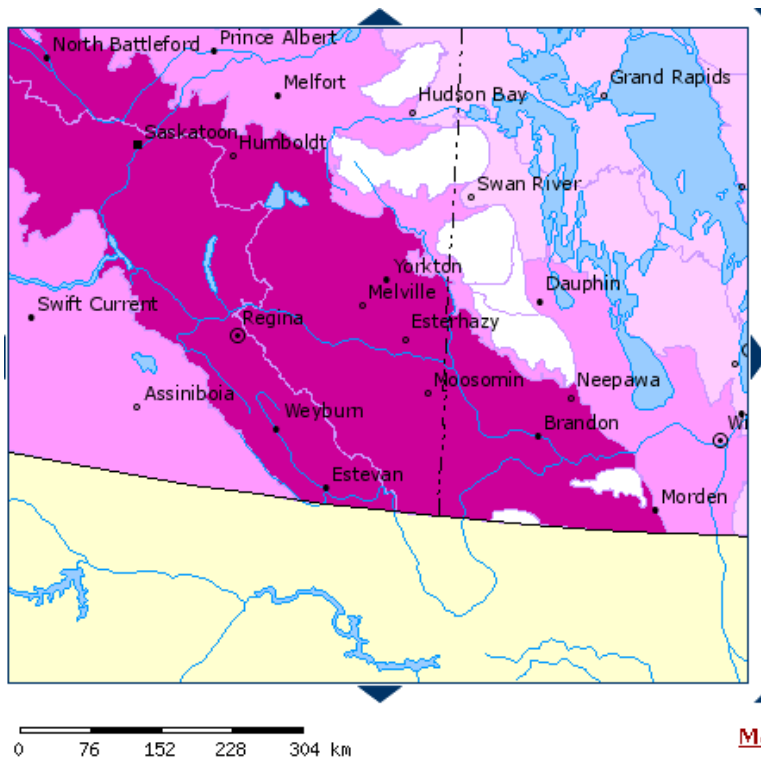
- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- Provincial and Territorial Capital
- National Capital

Boundaries

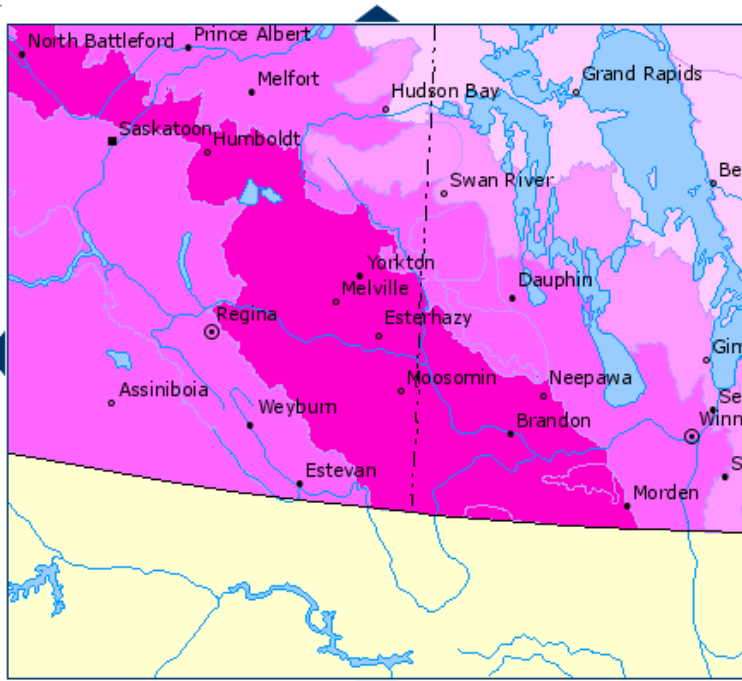
- International
- Provincial / Territorial
- Canada / Kalaallit Nunaat dividing line
- EEZ (200 mile)



Map Sources

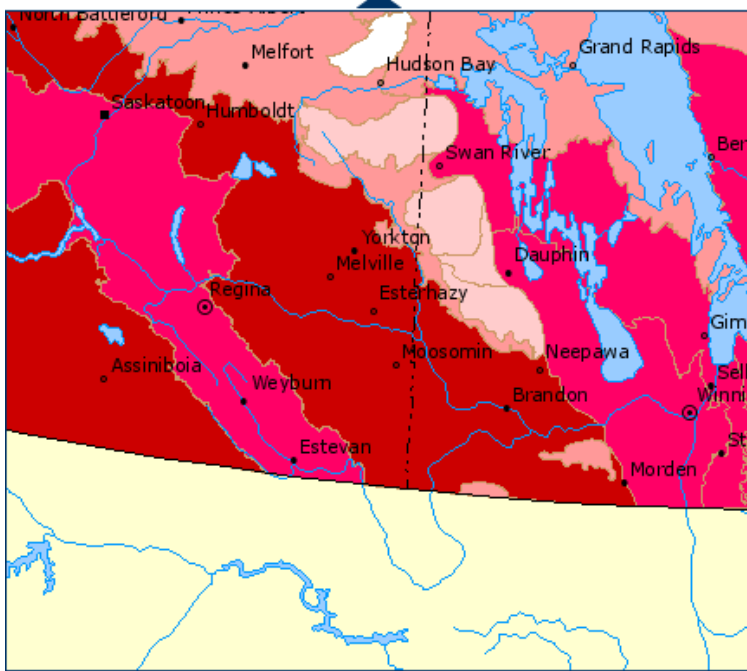
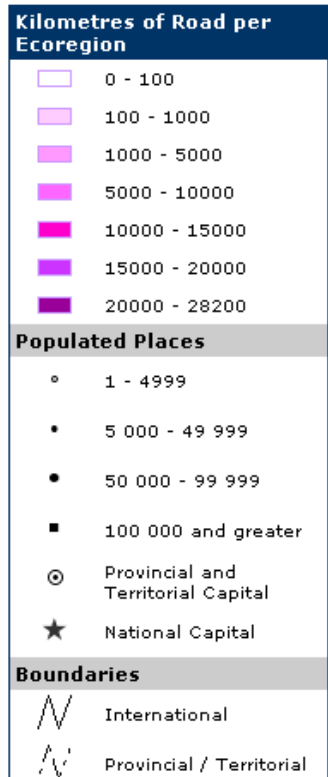


Map Sources



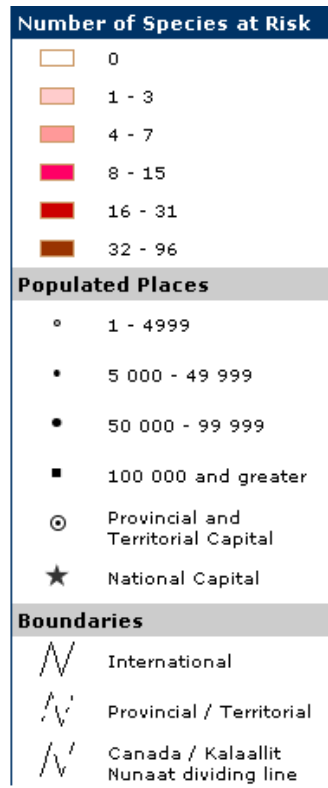
0 76 152 228 304 km

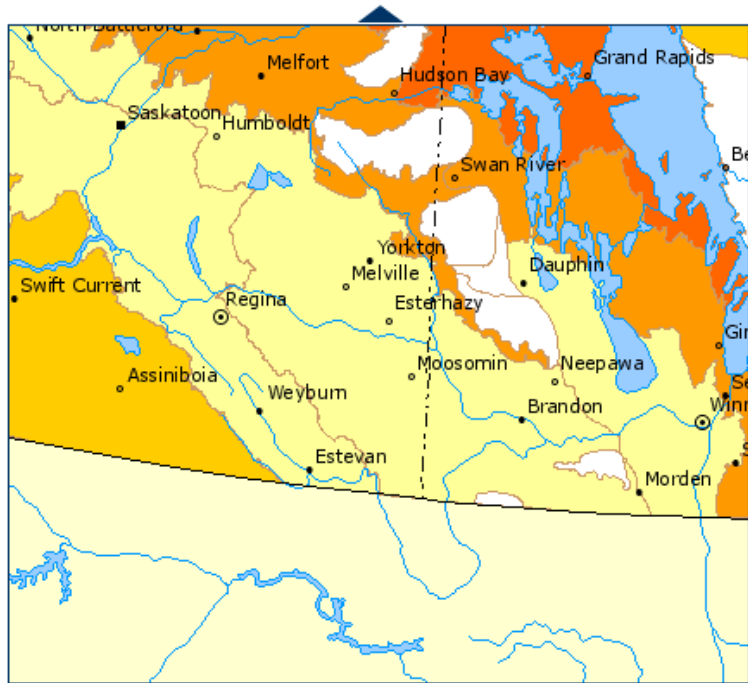
Map Sources



0 76 152 228 304 km

Map Sources





0 76 152 228 304 km

[Map Sources](#)

Percentage of population without sewage treatment

- insufficient data
- < 25%
- 25% - 50%
- 50% - 75%
- 75% - 100%

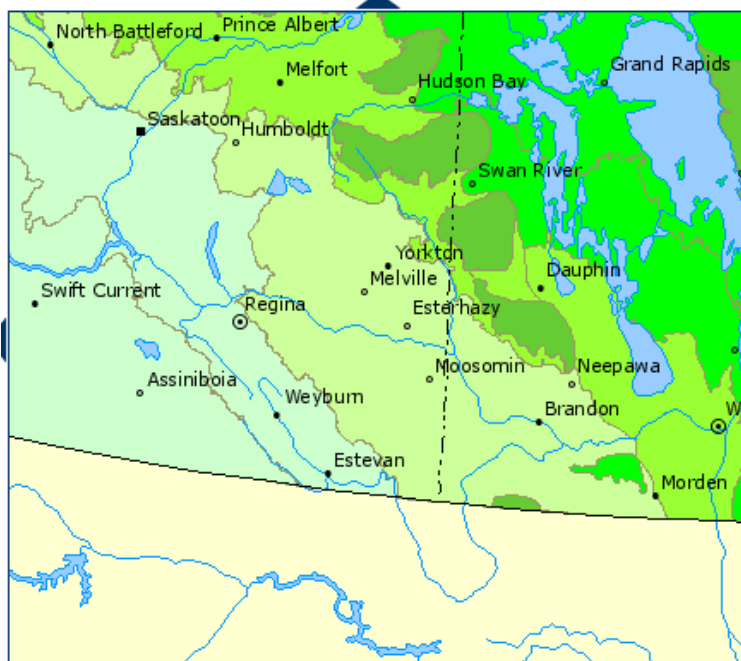
Populated Places

- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- ⊙ Provincial and Territorial Capital
- ★ National Capital

Boundaries

- International
- Provincial / Territorial
- Canada / Kalaallit Nunaat dividing line

Natural Resources



0 76 152 228 304 km

[Map Sources](#)

Percentage of productive forest

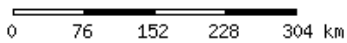
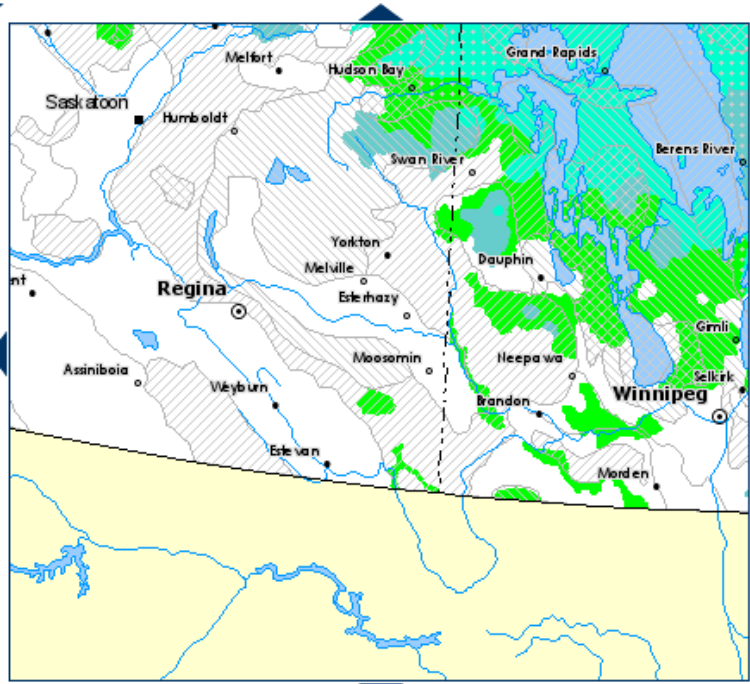
- < 1%
- 1% - 10%
- 10% - 25%
- 25% - 50%
- 50% - 75%
- 75% - 98%

Populated Places

- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- ⊙ Provincial and Territorial Capital
- ★ National Capital

Boundaries

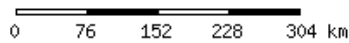
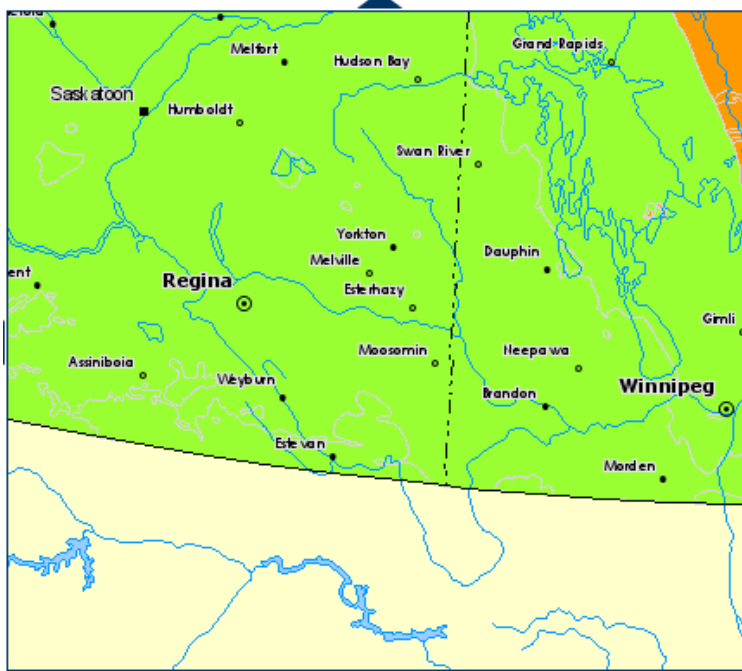
- International
- Provincial / Territorial
- Canada / Kalaallit Nunaat



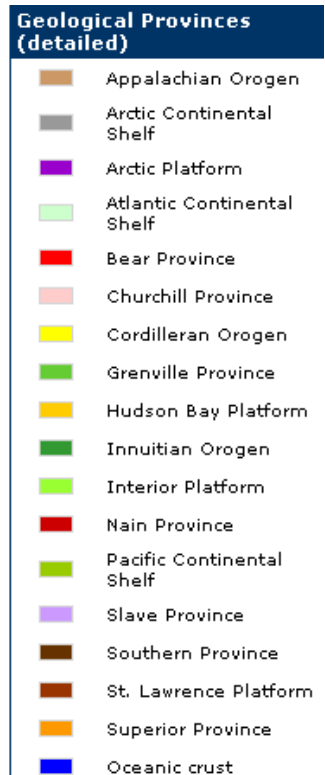
[Map Sources](#)

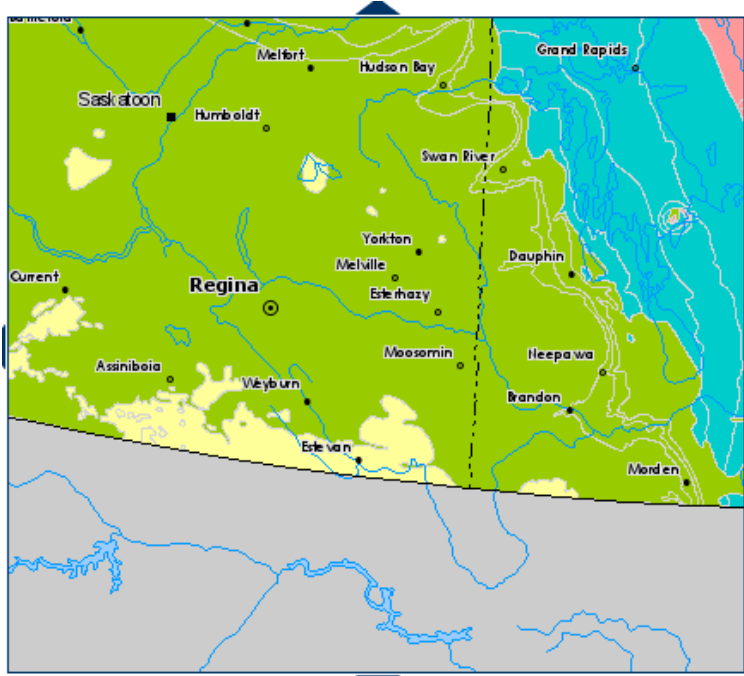


Geology



[Map Sources](#)





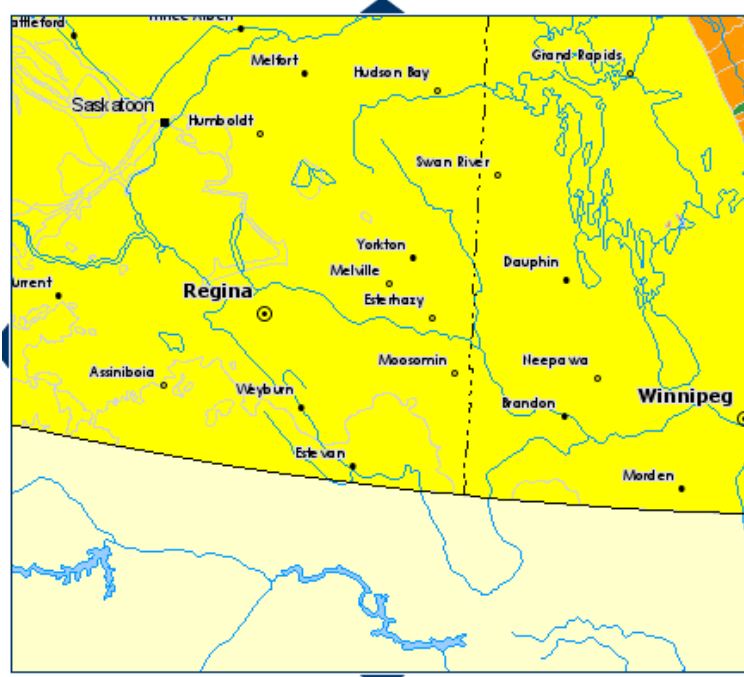
Age of Rocks (detailed)

- Cenozoic
- Mesozoic-Cenozoic
- Mesozoic
- Paleozoic-Mesozoic
- Paleozoic
- Precambrian-Mesozoic
- Precambrian-Paleozoic
- Precambrian
- Unknown
- No Data
- Water Area
- Regions outside Canada

Populated Places

- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- ⊙ Provincial and Territorial Capital

[Map Sources](#)



Rock Categories and Sub-Categories

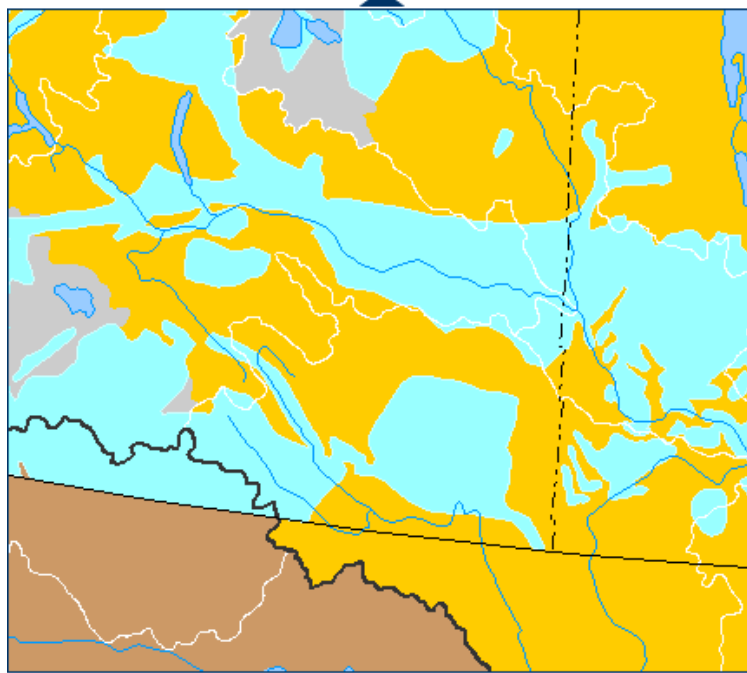
- Sedimentary
- Sedimentary and Volcanic
- Volcanic
- Metamorphic
- Intrusive
- Unknown
- No data
- Water Area
- Regions outside Canada

Populated Places

- 1 - 4999
- 5 000 - 49 999
- 50 000 - 99 999
- 100 000 and greater
- ⊙ Provincial and Territorial Capital
- ★ National Capital

[Map Sources](#)

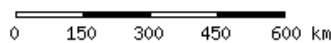
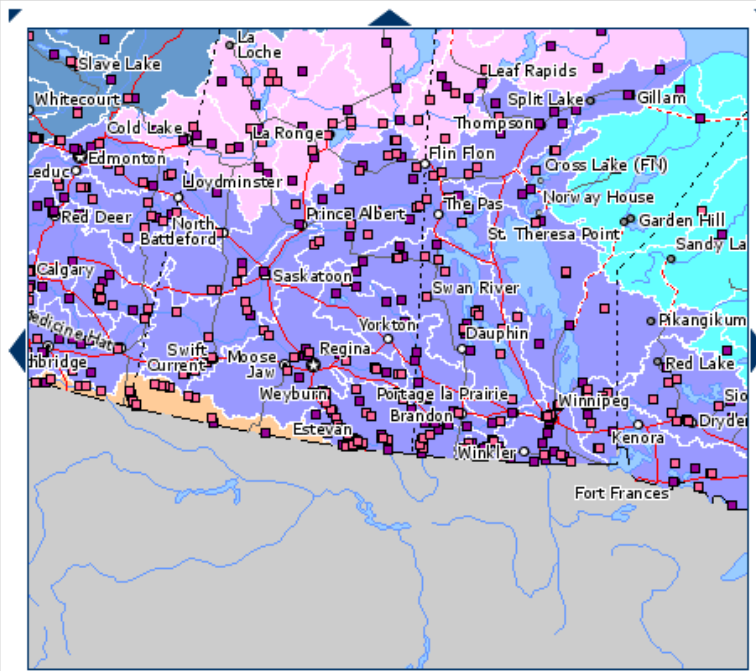
Hydrology



- ### Physical Components of Watershed (select one)
- Aquifer Areas
 - Aquifer areas with a flow rate greater than 0.4 l/sec
 - Wetland Regions
 - Glaciers and Icefields
 - Relief
 - Terrestrial Ecozones
 - Land Cover of Canada (image)
 - Forested Areas
 - Permafrost
 - Average Maximum Snow Depth
 - Plant Hardiness Zones
 - Lakes and Rivers
 - Ocean Watersheds
 - Arctic Ocean

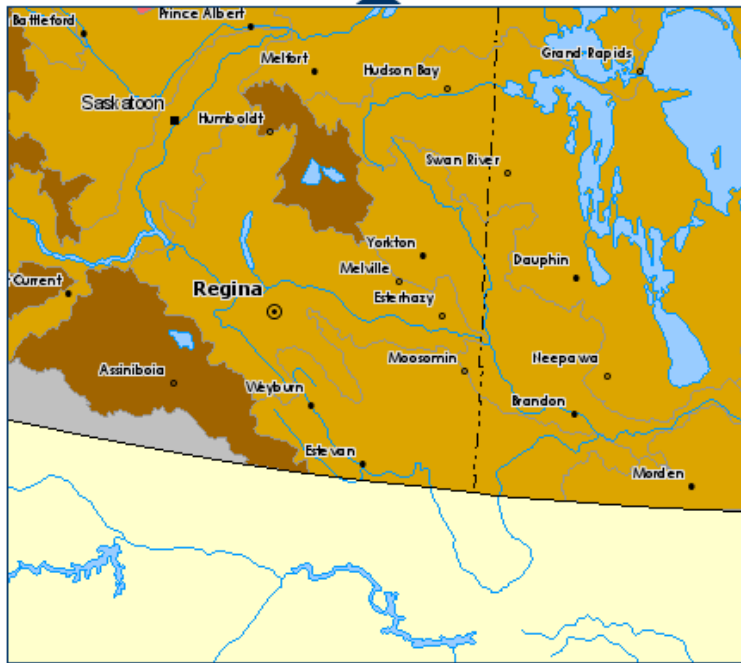
Current Water Levels

Map Size



[Map Sources](#)

- ### Hydrometric Stations
- Active Station
 - Inactive Station
- ### Major Drainage Areas
- Maritime Provinces
 - St. Lawrence
 - Northern Quebec and Labrador
 - Southwestern Hudson Bay
 - Nelson River
 - Western and Northern Hudson Bay
 - Great Slave Lake
 - Pacific
 - Yukon River
 - Arctic
 - Mississippi River
- ### Drainage Area Boundaries
- Sub-drainage Area Boundary
- ### Populated Places
- Populated Places

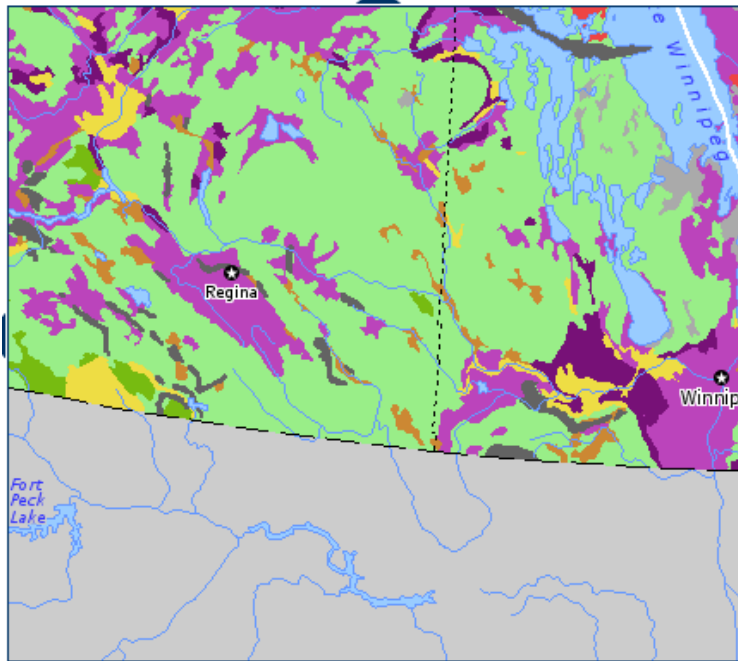


0 76 152 228 304 km

[Map Sources](#)

- Hudson Bay: Seaboard
- Hudson Bay: Nelson
- Hudson Bay: Other Major Basins
- Arctic Ocean: Seaboard
- Arctic Ocean: Mackenzie
- Arctic Ocean: Other Major Basins
- Pacific Ocean: Seaboard
- Pacific Ocean: Columbia
- Pacific Ocean: Yukon
- Pacific Ocean: Fraser
- Pacific Ocean: Other Major Basins
- Gulf of Mexico
- Internal Drainage Area
- Diverted Drainage Area
- Water Area
- Regions outside Canada

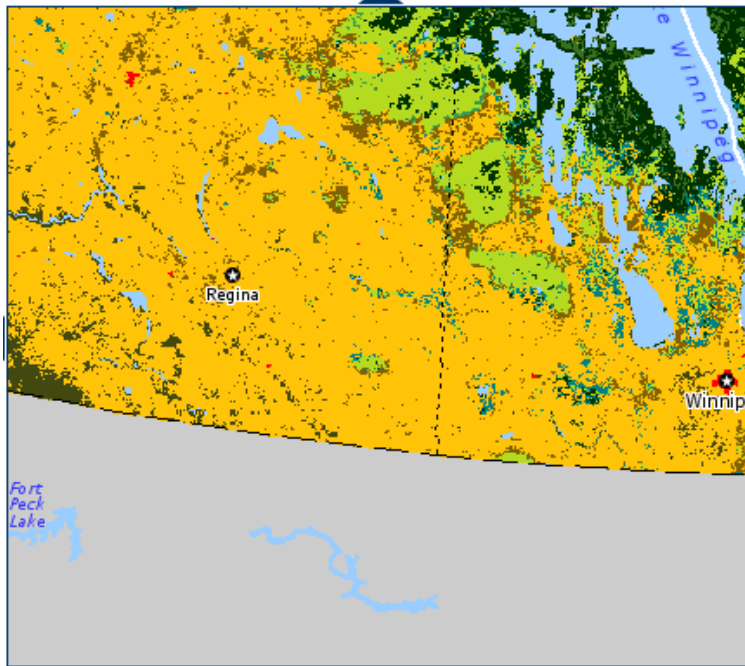
Populated Places



0 75 150 225 300 km

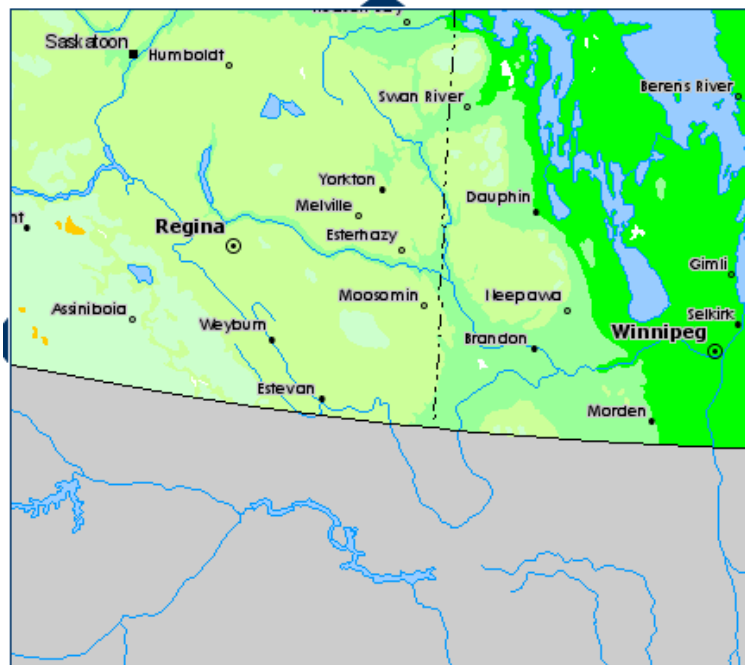
[Map Sources](#)

- Surficial Hydrogeological Materials**
 - Glaciers
 - Organic Deposits
 - Recent Deposits (mud, sand, gravel)
 - Mud (glacial lake/sea)
 - Sand, minor gravel (glacial lake/sea)
 - Sand and gravel (glacial river)
 - Till Blanket
 - Till Veneer
 - Bedrock
 - Moraine
 - Large Moraine
- Relief
 - Physiographic Regions
 - Land Cover
- Populated Places
 - Capital Cities



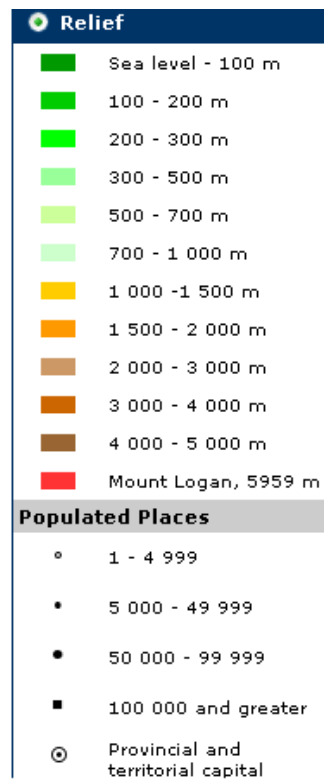
0 75 150 225 300 km

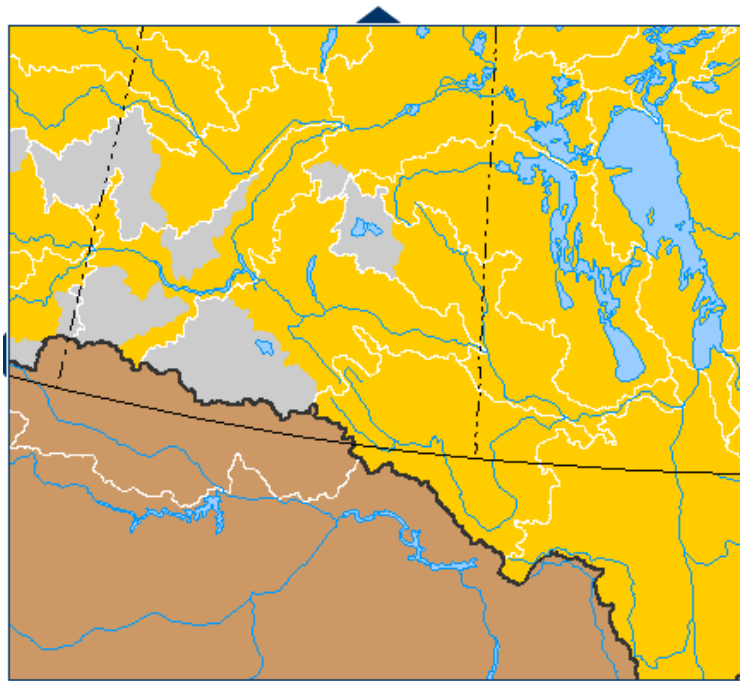
[Map Sources](#)



0 76 152 228 304 km

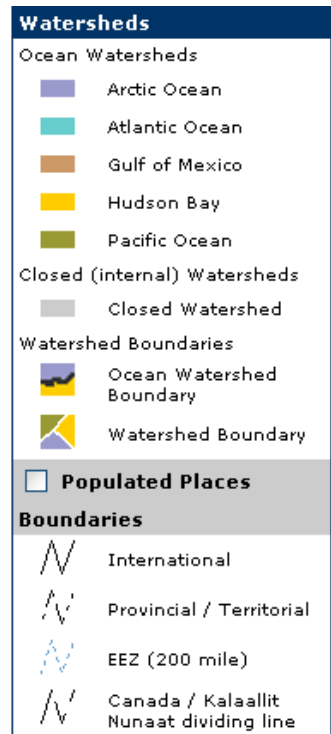
[Map Sources](#)



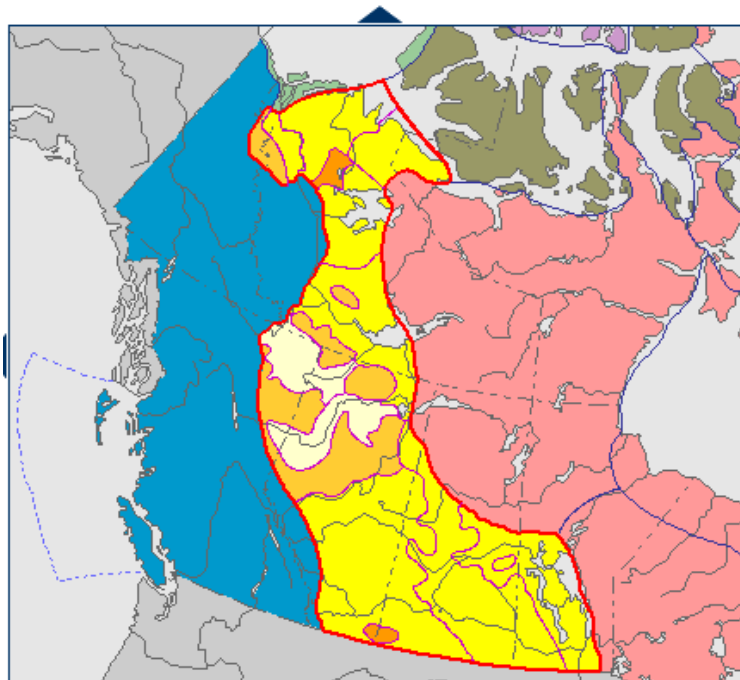


0 100 200 300 400 km

[Map Sources](#)



Land

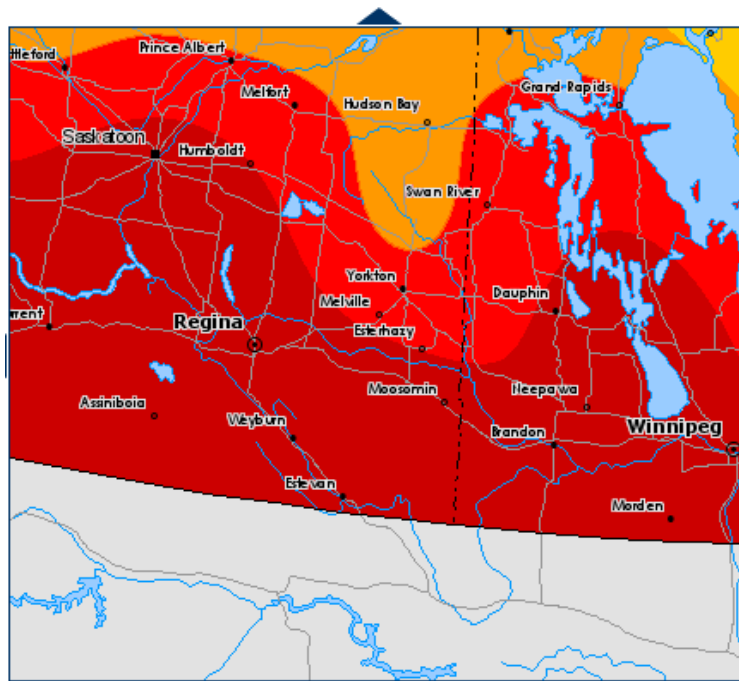


0 310 620 930 1240 km

[Map Sources](#)

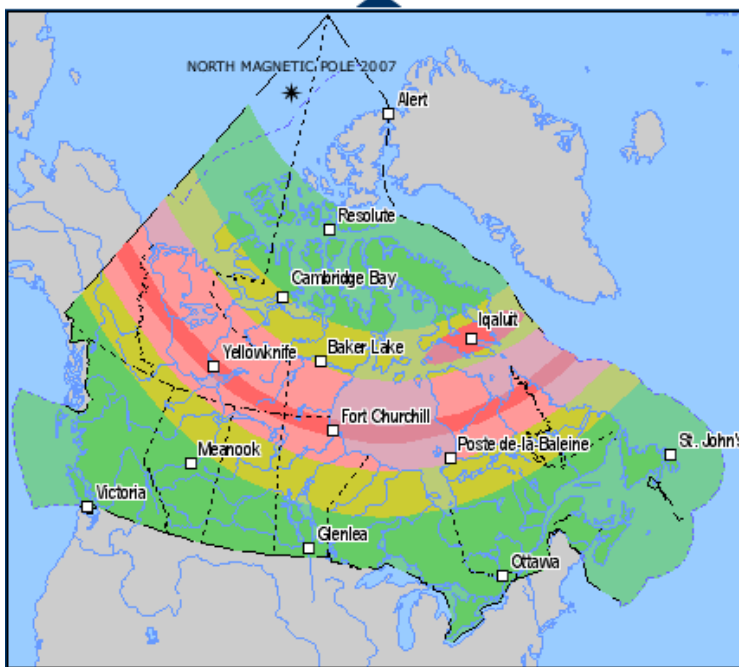
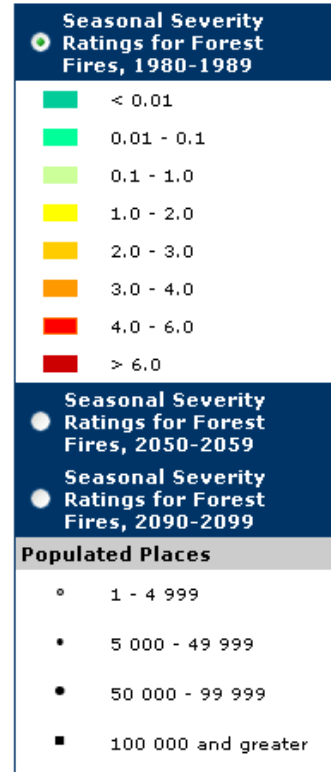


Natural Hazards



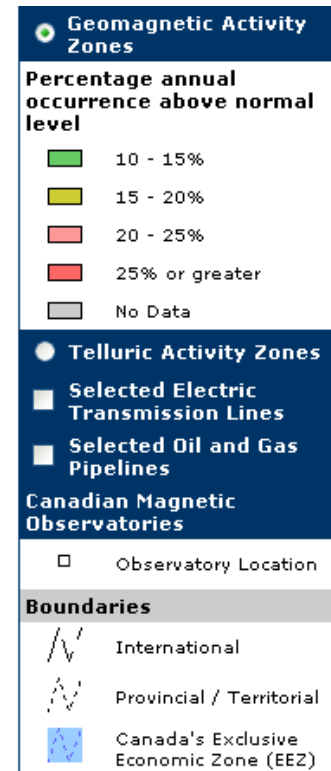
0 76 152 228 304 km

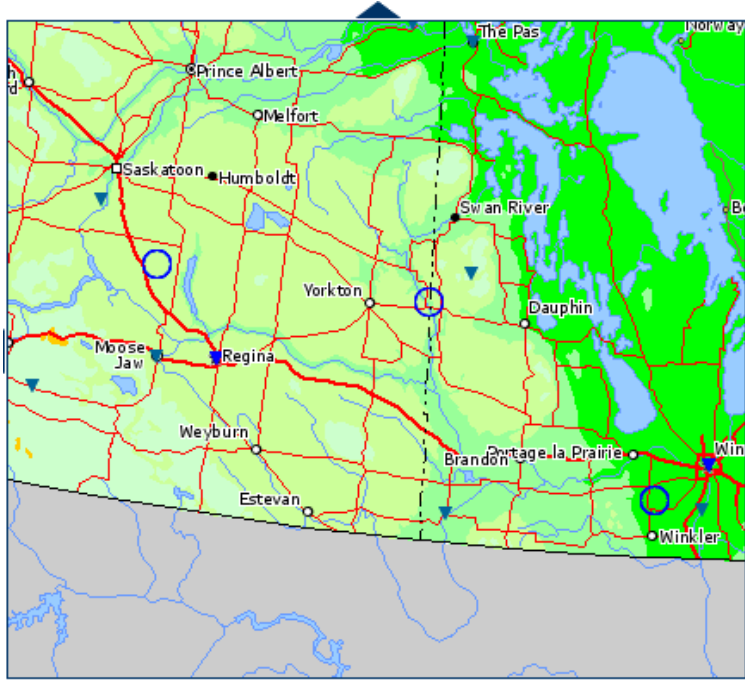
[Map Sources](#)



0 590 1180 1770 2360 km

[Map Sources](#)





0 75 150 225 300 km

[Map Sources](#)

Major Floods, 1902 - 2005

- ▼ Local Effects (single occurrence)
- ▼ Local Effects (multiple occurrences)

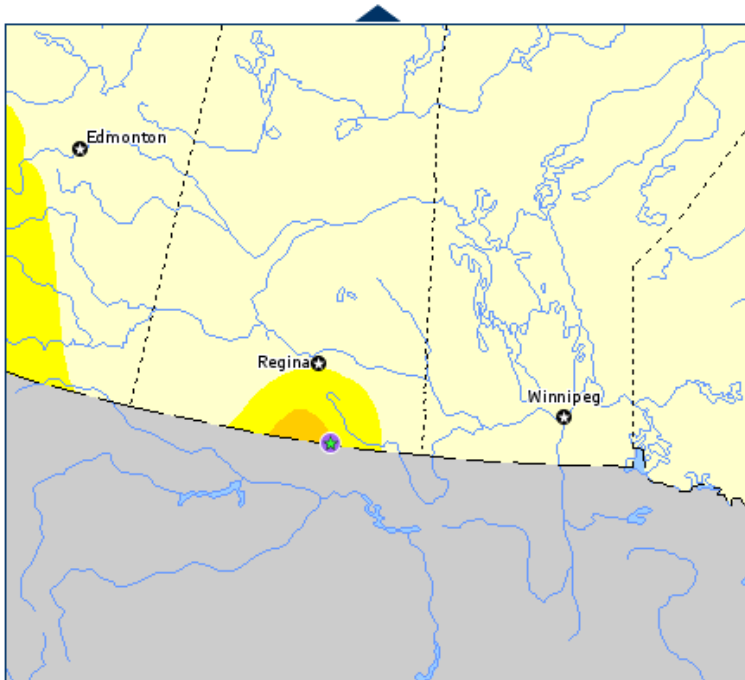
Note: Local Effect symbols indicate floods which have affected a relatively small area. They indicate the most affected location.

- Regional Effects (single occurrence)
- Regional Effects (multiple occurrences)

Note: The Regional Effect symbols represent flood disasters which have affected large areas. The symbols do not indicate the exact location or extent of the flood.

Relief

- Sea level - 100 m
- 100 - 200 m
- 200 - 300 m
- 300 - 500 m
- 500 - 700 m
- 700 - 1 000 m



0 150 300 450 600 km

[Map Sources](#)

Seismic Hazard

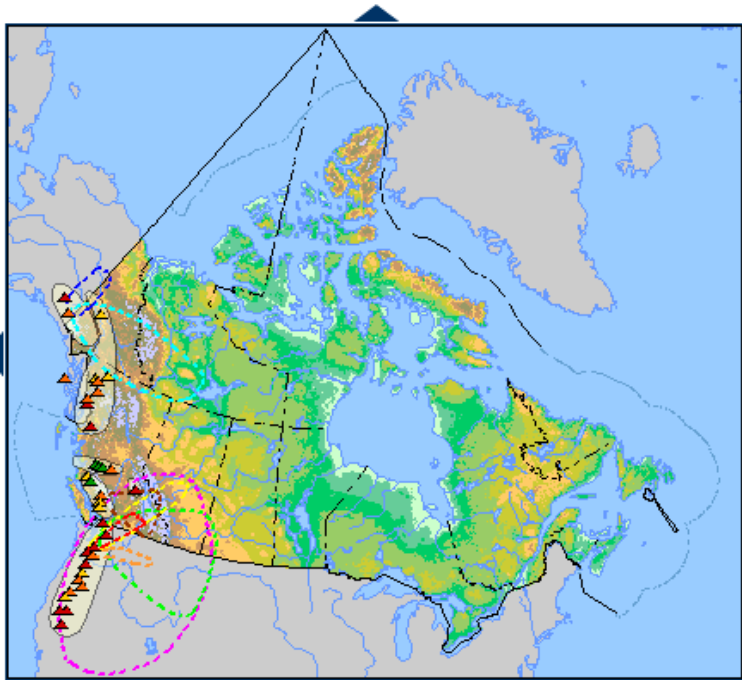
- High
-
-
- Low

Significant Earthquakes

- ★ Significant Earthquake

Magnitude of Selected Earthquakes

- 4.0 - 4.9
- 5.0 - 5.9
- 6.0 - 6.9
- 7.0 - 7.9
- 8.0 - 8.9
- 9.0 or greater



0 590 1180 1770 2360 km

[Map Sources](#)

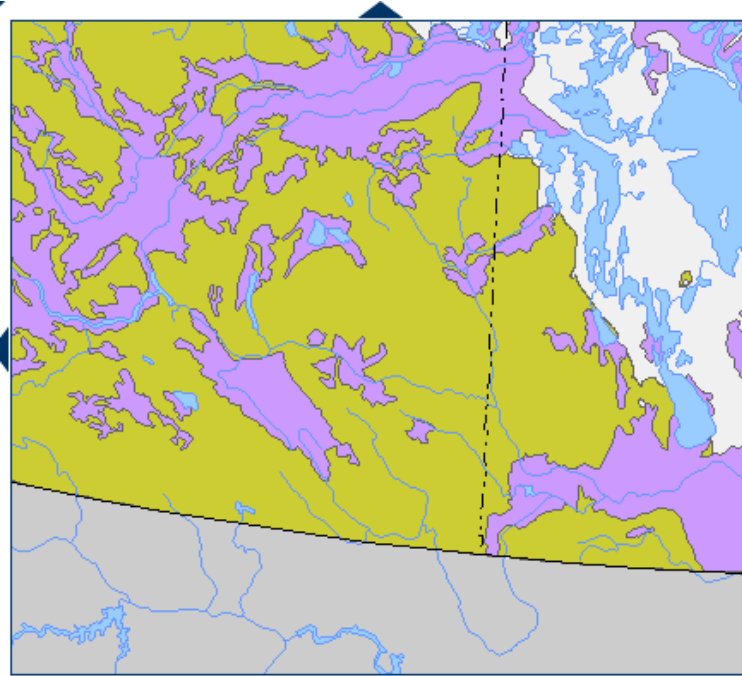
Major Volcanoes

Years Since Last Eruption

- ▲ Less than 1 000 years
- ▲ 1 000 - 9 999 years
- ▲ 10 000 - 99 999 years
- ▲ 100 000 years or more

Significant Accumulation of Volcanic Ash

- N St. Helens (1980 eruption)
- N St. Helens (508 radiocarbon years ago)
- N St. Helens (3400 radiocarbon years ago)
- N White River (1250 radiocarbon years ago)
- N White River (1890 radiocarbon years ago)
- N Bridge River (2360 radiocarbon years ago)



0 75 150 225 300 km

[Map Sources](#)

Major Landslides

- 3 to 10 deaths
- 10 to 50 deaths
- More than 50 deaths

Areas Vulnerable to Landslides

- Area of glaciolacustrine clays and fine silt
- Area of glaciomarine clays and fine silt
- Canadian Cordillera
- Areas of Cretaceous bedrock on the Plains
- Southern limit of extensive discontinuous permafrost (50%-90% of area)

Permafrost

Relief

Population Density by Census Division, 2001 (persons / square kilometre)