Phyllis Beaulieu NWB3WHA

From: "Michelle Johnson" <johnsonmi@inac.gc.ca>
To: <rbecker@polarnet.ca>
Cc: <DeGrootJ@DFO-MPO.GC.CA>
Sent: July 23, 2002 2:23 PM
Attach: WHALECOV.WPD; WHALECOV.WPD
Subject: Attached Files

Good afternoon,

I've attached a copy of the CEAA screening report and cover letter for the Hamlet of Whale Cove Water Licence. Please call me if you have any questions or concerns, thank you.

-Michelle

Michelle Johnson, M.Sc.
Kitikmeot and Kivalliq Regional Coordinator
Department of Indian Affairs and Northern Development
P.O. Box 2200
Iqaluit, NU X0A 0H0
ph: 867-975-4548 fx: 867-975-4560

020723 NWB3WHA DIAND CEAA Report - ILA E

Water Resources Division
Qimugjuk Building
P.O. Box 2200
Iqaluit, Nunavut
X0A 0H0

Your file - Votre référence

NWB3WHA

Our file - Notre référence

July 23, 2002

Ms. Phyllis Beaulieu
Acting Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut
X0E 1J0

Dear Ms. Beaulieu:

Re: Whale Cove - Environmental Assessment

Pursuant to Section 5 of the Canadian Environmental Assessment Act (CEAA), the Department of Indian and Northern Affairs Canada (INAC) has completed an environmental assessment of the Hamlet of Whale Cove's water licence application.

The Project proposal was reviewed by INAC's Water Resources Management Division in collaboration with the Department of Fisheries and Oceans, Environment Canada, and Health Canada. Based of the results of the screening, INAC has concluded that the project is not likely to cause significant adverse environmental effects. The incorporation of appropriate conditions in the new water licence will help mitigate the current environmental effects of Whale Cove's waste disposal facilities. Suggested licence conditions and mitigative measures are as follows:

General

- locate all waste, sewage contaminants, and fuel caches a minimum of 30 meters from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that deleterious substances do not enter any water body
- locate all waste disposal areas at least 450 metres from any building used for human habitation or for the storage of food, as per the *General Sanitation Regulations, Public Health Act*.
- prepare and submit an Operation and Maintenance Plan for all water treatment and waste disposal facilities that includes a procedure to implement and maintain sediment and erosion control measures prior to, and during work to prevent

...2

sediment entry into the water during a spring thaw; upon completion of work, all disturbed areas should be stabilized and re-vegetated as required, and restored to a pre-disturbed state

- control all activities, including maintenance procedures and refueling, to prevent the entry of petroleum products or other deleterious substances into the water
- report all spills of oil, fuel, or other deleterious material immediately to the 24-Hour Spill Line at (867) 920-8130
- ensure that materials are removed from the ice prior to spring break-up to minimize the potential for that material to enter the water

- ensure compliance with the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO, 1995), available upon request from DFO.
- ensure that appropriate training of municipal staff is completed to ensure quality control in sampling collection and preparation

Solid Waste Disposal Site

- develop and implement an Operation and Maintenance Plan that outlines procedures for the safe handling, storage and disposal of waste oil and other hazardous wastes, storage and disposal/removal of bulky items and scrap metal, trench filling, compacting and covering
- assess contaminants in the abandoned solid waste site, submit an abandonment and restoration plan that summarizes these results and outlines the steps required to restore this site in a manner that will mitigate environmental impacts
- install and maintain fencing to prevent scattering of solid waste
- consider mechanical compaction as an alternative to open burning to reduce the volume of solid wastes, open burning can result in the release of contaminants as products of incomplete combustion
- prepare and submit an Abandonment and Reclamation Plan for the waste disposal site, specifically the bagged sewage pit that can be closed if the Hamlet deems this practicable (based on the need and number of houses requiring retrofitting with storage tanks), assess the content of drums in the bagged sewage pit and determine whether they should be removed

Sewage Lagoon

- sample lagoon effluent monthly, during periods of flow, as per the *Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories* (1992), the effluent must meet the following criteria:

  Total Suspended Solids - 120 mg/L
  BOD - 100 mg/L
  Total Coliforms - 10,000CFU/100 mL
  pH - 6-9
  Oil and Grease - no visible sheen

Ammonia - monitor only

The full CEAA screening report is attached and relevant correspondence is available upon request. Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4548 or by e-mail at johnsonmi@inac.gc.ca.

Sincerely,

Michelle Johnson
Kitikmeot/Kivalliq Regional Coordinator

c.c.: Jordan DeGroot, Department of Fisheries and Oceans
Paula Pacholek, Environment Canada
Maria Ooi, Health Canada

CEAA SCREENING FORM
Indian and Northern Affairs Canada
Nunavut Region

1. General File Information on Screening

File Number: NWB3WHA
Can be permit or licence number

*FEAI I.D. Reference Number:
A number assigned by the Agency; to be inserted here upon receipt of number from Agency

*Project Title: Whale Cove Water Licence
Title of project

*Alias Project Title: None
Alternate project name (if any)

Proponent: Hamlet of Whale Cove
Company/Applicant

Type of proponent: Municipal Government
(e.g., Industry, Government, Other private)

*Subject Descriptors: Inland Waters
See Appendix A

*EA Type: Screening
Screening, Class Screening or Comprehensive Study

*EA Start Date: July 9, 2002
Date application received

Proposed Date of Activity: Open - 2002

*EA Determination: 20 (1)(a) Water Licence Application may proceed (see attached letter for comments)
Final screening determination from subsection 20(1) and section 23 -- see # 13 of Screening Form and insert number here

Project Abandoned Yes N/A
Explain reason for abandonment

*EA Determination Date: July 23, 2002
Date of screening decision

Follow-up program required:
Annual INAC Water Licence Inspections

Yes/No If Yes, by NAP or proponent (or both)

*Estimated Follow-up program termination date: N/A

* Means this is a required field for a public registry

*Lead RA Responsible Authority (RA) Information — INAC - Water Resources

Division of DIAND (e.g. Water Resources, Land Administration, etc.)

Lead RA Contact: Michelle Johnson, (867) 975-4548
Name and telephone # of Regional Manager or Screener

NAP District: Nunavut

*Lead RA Trigger Types: Inclusion List (Part X, Item 69)
(e.g., proponent, funding, land disposition, law list approvals)

Type of Application: Water Licence
(e.g., water licence, land use permit, quarry permit, lease, reserve, OIC)

Type of Approval being sought: Renewal
(e.g., new, renewal, amendment, cancellation)

Present licence/permit/lease number: None

Other RAs or Screening Divisions: None
If yes, is there an Integrated Screening underway?

*Other RA Trigger Types: None

Other RA Types of Approval: None

Project File Location:
NAP office where project file is located

*Region: Project Location — Nunavut

Province/Territory

Topographic Map Sheet Number:
1:50,000 map sheet number

*Geographic Place Name: Whale Cove
(e.g., nearest place name or geographic feature)

Latitude / Longitude: 62° 10'N, 92° 36'W
(e.g., degrees, minutes, seconds)

*Drainage Region: Peace Athabasca Arctic Coast Islands Lower Mackenzie ***Keewatin***

Watershed: Fish Lake
(nearest creek, river or lake system)

Street Name: N/A
(complete address of project if it occurs in a municipality)

*Nearest Community: Whale Cove

Surrounding Land Status: Crown Land
(e.g., private, Commissioner's, crown land, settlement land)

Special Designation: No
(Yes / No – e.g. heritage river system)

4. Project Description

*Physical Work Being Assessed: Municipal Infrastructure: water use and waste disposal

(e.g. road, bridges, etc.)

*Multiple Activities?: ___ Yes ___ No

*Physical Activity as identified from Inclusion List: Water Use

(e.g., water use, etc.)

*Project Category Code: ***Point*** Linear Areal circle one

*Phase of Project / Primary Undertaking: Operation/ maintenance of water use and waste disposal facilities

(e.g., construction, modification, operation, abandonment, decommissioning, repair, maintenance, installation, or expansion)

Project Description: Describe thoroughly (e.g. duration of project, size of project, related physical activities, machinery used, fuels and chemical use and storage, etc.)

Water Supply - water is pumped from the Fish Lake and chlorinated

Sewage - bagged sewage is no longer produced but the 'honey bag' pit site has not been restored, all buildings have holding tanks that are pumped out, these wastes are discharged to a wetland lagoon system

Solid Waste - collected by truck and deposited at a site located 1.1 km southeast of the community, the site is not fenced which leads to scattered refuse in the area of the site and towards the shoreline; hazardous materials are stored separately near the bulky metal wastes but there is no procedure to contain these wastes and mitigate environmental impacts; drainage problems in the vicinity of the wastes have been noted in the past, the abandoned solid waste site has not been properly abandoned and restored

Future Modifications - the Hamlet is investigating purchasing a sealift container for hazardous waste storage, no significant changes are planned at this time

What sources of information did you use?

__ other government data

___ historical maps

___ scientific reports

___ personal information

___ CEAA public registry system

___ contour maps

__other; Water Licence Application and supporting documentation

5. Description of Environment

*Ecozone: #14 - Northern Arctic

See Appendix B for zone names

Description of Biophysical Environment:

- Whale Cove is located at the tip of Term Point on the west coast of Hudson Bay, it is approximately 80 kilometers south of Rankin Inlet
- the overburden of coarse gravel and sand varies in depth to a maximum of one meter, the active layer of permafrost extends to approximately one meter
- Whale Cove receives an average of 134.1 centimeters of precipitation annually, 16.0 centimeters as rain and 118.1 centimeters as snow

Description of socio-economic and cultural environment:

- predominantly Inuit population with some non-Inuit residents
- hamlet level of government, local infrastructure includes an airport, RCMP office, community health center, school, and government offices
- major activities include hunting, fishing, trapping; local businesses include meat product and food sales, cartage, general retail, outfitting, restaurants, amusement centers, and vehicle rentals

Past and Current Land Use Activities in the Area

__ Historical Maps (expired permits and licences)

__ Running Maps (current permits and licences)

___ Interference Maps (other land dispositions)

___ Public Registry System

___ GIS

___ Indian Land Registry

___ Land Transition Management Style

6. Consultation/Referral of Application

Was public consultation deemed appropriate? ___ Yes _ No

Date application referred to government departments: June 12, 2002

Date application referred to public: N/A

Deadline date for public comments: N/A

Referral sent to:			Date comments received:
Federal Government	Contact Person		
DIAND	Water	Michelle Johnson	July 23 , 2002
	Lands		
	Minerals		
	Ec. Dev.		
	Env'nt		
	I&I		
	D.M.		
	R.M.O.		
DFO		Jordan DeGroot	July 9, 2002
DOE		Paula Pacholek	July 19 , 2002
Health Canada		Maria Ooi	July 15, 2002
DOT			
Coast Guard			
Nunavut Government			
CG&T		Director	None received
Health			
DSD		Director, Env. Protection	None received
Tourism			
CLEY		Leah Otak	None received
Other:			
Institutions of Public Government			
NIRB			
NWB			
NWMB			
NPC			
NSRT			
Inuit Organizations			
NTI		Manager of Lands	None received
QIA/*KIA*/KIA		Manager of Lands	None received
QWB			
Public/Interested Parties			
HTO (Whale Cove)			None received
Hamlet			None received

record of comments attached to screening form

7. Identification of Project Components and Environmental Effects

Identify all components of the project under screening and their potential adverse environmental effects.

Project Components
(✓ check all the items appropriate to this project)

__ access road
  __ construction
  __ abandonment/removal
  __ modification e.g., widening, straightening
__ automobile, aircraft or vessel movement
__ blasting
__ building
__ burning
__ burying
__ channelling
__ cut and fill
__ cutting of trees or removal of vegetation
__ dams and impoundments
  __ construction
  __ abandonment/removal
  __ modification
__ ditch construction
__ drainage alteration
__ drilling other than geoscientific
__ ecological surveys
__ excavation
__ explosive storage
__ fuel storage
__ garbage
  ___ disposal of hazardous waste
  ___ disposal of sewage
  ___ waste generation
__ geoscientific sampling
  __ trenching
  __ diamond drill
  __ borehole core sampling
  __ bulk soil sampling
__ gravel
__ hydrological testing
__ site restoration
  __ fertilization
  __ grubbing
  __ planting/seeding
  __ reforestation
  __ scarify
  __ spraying
  __ recontouring
__ slash and burn
__ soil testing
__ topsoil, overburden or soil
  __ fill
  __ disposal
  __ removal
  __ storage
__ stream crossing/bridging
__ tunnelling/underground
__ other, explain:_____

___ accidents or malfunctions (Check if there is a possibility for malfunctions and accidents with this project. Describe:
- potential for sewage spills from trucks
_____
_____

___ effects of environment on project (e.g. beaver dams). Describe:
- effects of cold weather on lagoon-wetland (freezing)
_____
_____

Project Effects
(✓ check all the items appropriate to this project)

Biophysical Environment
1. _deposit into surface water
2.__ deposit into ground water
3.__ change in surface water flow
4.__ change in ground water flow
5.__ change in water temperature
6.__ change in drainage pattern

7.__ change in air quality
8.__ change in air flow
9.__ micro-climate change
10.__ ice fog

11.__ change in ambient noise level
12.__ change in slope stability
13.__ change in soil structure
14.__ alteration of permafrost regime
15.__ destabilization/erosion
16.__ soil compaction

17.__ loss of access to non-renewable resource
18.__ depletion of non-renewable resource

19.__ removal of rare/endangered plant species
20.__ introduction of species
21.__ toxin/heavy metal accumulation

22.__ removal of rare/endangered wildlife species
23.__ change in wildlife health
24._ impact to large mammals
25._ impact to small mammals
26._ impact to fish
27.__ impact to birds
28.__ impact to other wildlife
29.__ impact in a calving, nesting or spawning area
30.__ removal of wildlife buffer zone
31.__ change in wildlife habitat/ecosystem
32._other, explain: marine water quality

Directly-related Socio-economic and Cultural Environment
33.__ impact to trappers
34.__ impact to hunting
35.__ impact to outfitters
36.__ recreational or back country use
37.__ impact to fishing
38.__ impact to First Nation traditional use
39.__ impact to community
40.__ impact to industry
41._ impact to community health
42.__ change in manpower or community economics
43.__ change in housing or infrastructure
44.__ change in regional transportation
45.__ other, explain:

46.__ impact to traditional use area
47.__ impact to historical site or cultural landmark
48.__ impact to local aesthetics
49.__ impact to archaeological or historical site
50.__ other, explain:
_____

7. Identification of Project Components and Environmental Effects (Cont.)

Describe biophysical and socio-economic and cultural environmental effects identified from checklist.

Environmental Effect	**Describe**
surface water (fresh and saltwater)	inadequately treated sewage may have impacts on water quality by contributing suspended solids and nutrients
fisheries	sewage effluent may effect fish habitat, specifically through sedimentation
community health	the impact on fish could possible affect community health if they

8. Identification of Other Resource Uses and Their Environmental Effects

Based on relevant past, current and future (pending applications) physical works and activities and their potential adverse environmental effects.

Matching Number(s)

Description of cumulative environmental effects

No cumulative effects were identified

Other Resource Uses
(✓ check all the items appropriate to this project)

- __ agriculture
- __ forestry
  - __ commercial
  - __ domestic
- __ fishing
- __ hunting/subsistence
- __ urbanization
  - __ commercial / residential
  - __ Built structures
  - __ Infrastructure
- __ mining
  - __ exploration
  - __ open pits
  - __ underground
- __ quarries
- __ transportation/communications
  - __ roads/trails
  - __ channels/canal
  - __ telephone lines, satellite dishes, cables
  - __ beacons
- __ solid waste disposal
- __ energy project
  - __ hydro
  - __ pipeline
  - __ transmission line
- __ other water licences, permits, leases
- __ land claims
  - __ selected
  - __ withdrawn
  - __ special management
  - __ heritage sites
  - __ cultural sites
- __ other private lands held under tenure
- __ recreational
- __ trapping
- __ mineral processing
- __ airport
- __ recreation
- __ other heritage site
- __ other, explain:_____

Effects from other Resource Uses
(✓ check all the items appropriate to the scope of this project)

Biophysical Environment

1. __ deposit into surface water
2. __ deposit into ground water
3. __ change in surface water flow
4. __ change in ground water flow
5. __ change in water temperature
6. __ change in drainage pattern
7. __ change in air quality
8. __ change in air flow
9. __ micro-climate change
10. __ ice fog
11. __ change in ambient noise level
12. __ change in slope stability
13. __ change in soil structure
14. __ alteration of permafrost regime
15. __ destabilization/erosion
16. __ soil compaction
17. __ loss of access to non-renewable resource
18. __ depletion of non-renewable resource
19. __ removal of rare/endangered plant species
20. __ introduction of species
21. __ toxin/heavy metal accumulation
22. __ removal of rare/endangered wildlife species
23. __ change in wildlife health
24. __ impact to large mammals
25. __ impact to small mammals
26. __ impact to fish
27. __ impact to birds
28. __ impact to other wildlife
29. __ impact in a calving, nesting or spawning area
30. __ removal of wildlife buffer zone
31. __ change in wildlife habitat/ecosystem
32. __ other, explain:_____

Directly-related Socio-economic and Cultural Environment

33. __ impact to trappers
34. __ impact to hunting
35. __ impact to outfitters
36. __ recreational or back country use
37. __ impact to fishing
38. __ impact to First Nation traditional use
39. __ impact to community
40. __ impact to industry
41. __ impact to community health
42. __ change in manpower or community economics
43. __ change in housing or infrastructure
44. __ change in regional transportation
45. __ other, explain:
46. __ impact to traditional use area
47. __ impact to historical site or cultural landmark
48. __ impact to local aesthetics
49. __ impact to archaeological or historical site
50. __ other, explain:

10. Mitigation Measures

For each environmental effect identified in #7 and #8, describe the required mitigation measure(s)

Number(s)	Description of Mitigation Measure(s)
1	- install and maintain fencing to prevent scattering of solid waste
	- locate all waste, sewage contaminants, and fuel caches a minimum of 30 meters from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that deleterious substances do not enter any water body
	- locate all waste disposal areas at least 450 metres from any building used for human habitation or for the storage of food, as per the *General Sanitation Regulations, Public Health Act*.
7	- consider mechanical compaction as an alternative to open burning to reduce the volume of solid wastes, open burning can result in the release of contaminants as products of incomplete combustion
26	- ensure compliance with the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO, 1995), available upon request from DFO.
1,26,32	-prepare and submit an Operation and Maintenance Plan that includes a procedure to implement and maintain sediment and erosion control measures prior to, and during work to prevent sediment entry into the water during a spring thaw; upon completion of work, all disturbed Areas should be stabilized and re-vegetated as required, and restored to a pre-disturbed state
1,24-26,32,41	-assess contaminants in the abandoned solid waste site, submit an abandonment and restoration plan that summarizes these results and outlines the steps required to restore this site in a manner that will mitigate environmental impacts
	- develop and implement an Operation and Maintenance Plan that outlines procedures for the safe handling, storage and disposal of waste oil and other hazardous wastes, storage and disposal/removal of bulky items and scrap metal, trench filling, compacting and covering
	- assess contaminants in the area of the current storage site and implement appropriate remedial measures
	- prepare and submit an abandonment and reclamation plan for the waste disposal site, specifically the bagged sewage pit that can be closed if the Hamlet deems this practicable (based on the need and number of houses requiring retrofitting with storage tanks), assess the content of drums in the bagged sewage pit and determine whether they should be removed
	- sample lagoon effluent monthly, during periods of flow, as per the *Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories* (1992), the effluent must meet the following criteria: Total Suspended Solids - 120 mg/L, BOD - 100 mg/L, Oil and Grease - no visible sheen, pH - 6-9, Total Coliforms - 10,000/100 mL, Ammonia - monitor only
	- control all activities, including maintenance procedures and refueling, to prevent the entry of petroleum products or other deleterious substances into the water

11. Significance

After taking into account the above mitigation measures, are any of the adverse environmental effects significant?

___ Yes ___ No If yes, identify which one(s) and proceed to #12; if no, proceed to #13.

Number(s) _____ _____

_____ _____

12. Likelihood of Occurrence

Of the identified adverse significant environmental effects in #11 which are likely to occur?

___ Yes ___ No

Number(s) _____ _____

_____ _____

13. CEAA Determination Recommendation

___ Section 20 (1)(a) - Project may proceed as it is not likely to cause significant adverse environmental effects. **Refer to attached cover letter for recommendations.**

_____ Section 20 (1)(b) - Project may not proceed as it is likely to cause significant adverse environmental effects that cannot be justified.

_____ Section 20 (1)(c)(i) - Project must be referred to the Minister of Environment as it is uncertain whether the project is likely to cause significant adverse environmental effects

_____ Section 20 (1)(c)(ii) - Project must be referred to the Minister of Environment as it is likely to cause significant adverse environmental effects.

_____ Section 20 (1)(c)(iii) - Project must be referred to the Minister of Environment as public concerns warrant the reference.

14. Screening Report and/or Decision Report

Public Notice of availability of Screening Report	___ Yes	__ No
Public Notice of availability of Decision Report	___ Yes	__ No
	___ No Decision Report	
Decision Report sent out Yes No	To whom (attach list)	
Public Comments Received on Screening Report	___ Yes	__ No
Public Comments Received on Decision Report	___ Yes	__ No
Record of Comments attached to screening form	__ Yes	___ No

15. Authorization

Prepared By: _____ Date: July 23, 2002

Screener

Approved By: _____ Date: July 23, 2002

Decision Maker (e.g., Regional Manager, engineer, etc.)

Appendix A: Subject Descriptors

Choose from this list and insert as a "Subject Descriptor"

- agriculture
- buildings
- communications
- defence
- energy
- forestry
- industry
- inland waters
- mining
- oceans
- oil and gas
- parks
- transportation

Appendix B: Ecozone

Choose from this list and insert as "Ecozone" (Note that this list only includes Ecozone found within Nunavut).

08	Taiga Shield	South-eastern mainland near the Hamlet of Arviat, as well the Belcher Islands and Sanikiluaq.
10	Hudson Plains	The islands within James Bay, such as Bear Island.
13	Southern Arctic	Nunavut mainland, including Rankin Inlet, Baker Lake, Kugluktuk and the Jericho/Lupin Mines area. Also includes Southampton Island and the community of Coral Harbour. Does not include the Melville Peninsula area.
14	Northern Arctic	The Melville Peninsula (Igloolik and Hall Beach) as well as all of the arctic islands, including Baffin, Ellesmere and Victoria (with the exception of Southampton Island). Note that it does not include the Cordillera regions on the eastern coasts of Baffin and Ellesmere Islands.
15	Arctic Cordillera	The area within the mountainous Cordillera, which include the east coasts of Baffin Island, Devon Island and Ellesmere Island.

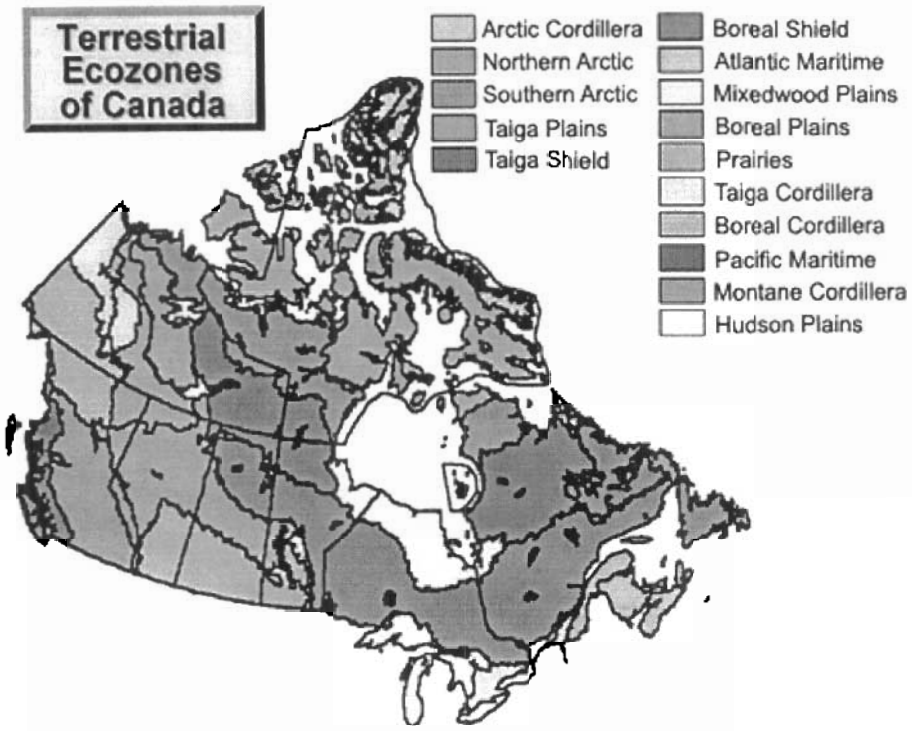

Image taken from Environment Canada at: http://www2.ec.gc.ca/soer-ree/English/vignettes/Terrestrial/terr.cfm