

# APPENDIX B: MVLWB Environmental & Resource Impacts and Mitigation

## Physical - Chemical Effects

### **Impact**

#### **1) Ground Water**

- water table alteration
- water quality changes
- infiltration changes
- other:
- N/A

### **Mitigation**

### **Impact**

#### **2) Surface Water**

- flow or level changes
- water quality changes
- water quantity changes
- drainage pattern changes
- temperature
- wetland changes/loss
- other:

### **Mitigation**

Jean Marie River is > 60 m from any boundaries (per "Commercial Timber Harvest Planning & Operations SOP's Manual (ENR)". See Imagery map, and Section 7 detailed description.

- N/A

### **Impact**

#### **3) Noise**

- noise in/near water
- noise increase
- other:
- N/A

### **Mitigation**

There will be short term disturbance during logging.

### **Impact**

#### **4) Land**

- geologic structure changes
- soil contamination
- buffer zone loss
- soil compaction and settling
- destabilization/erosion

### **Mitigation**

There is no on-site fuel storage. SCPlan, Fueling only from roads or landings.

Reclamation of roads//landings, per the Annual Operating Plan. Most operations during winter.

X ditching will be installed as required.

permafrost regime alteration

explosives/scarring

other:

N/A

**Impact**

**5) Non-renewable natural resources**

**Mitigation**

resource depletion

other:

N/A

**Impact**

**6) Air/climate/atmosphere**

**Mitigation**

other:

N/A

**BIOLOGICAL ENVIRONMENT**

**Impact**

**1) Vegetation**

**Mitigation**

species composition

Interim change of trees and vegetation from a mature forest to a seral stage. Native trees and vegetation will regenerate naturally.

species introduction

toxin/heavy accumulation

other: Linear Migration routes, habitat fragmentation

N/A

**Impact**

**2) Wildlife and Fish**

**Mitigation**

effects on rare, threatened or endangered species

Boreal caribou. "Threatened". The forest will mature over time, similarly to after a fire.

fish population changes

No water bodies on site.

waterfowl population changes

breeding disturbance

population reduction

species diversity change

health changes

behavioural changes

habitat changes / effects

After logging, changes from a seral state back to a mature forest over time.

game species effects

Seral habitat species will benefit initially, as the area returns to mature forest

toxins/ heavy metals

forestry changes

After harvesting, natural reforestation will occur

agricultural changes

other:

N/A

### Interacting Environment

#### **Impact**

##### **1) Habitat and Communities**

#### **Mitigation**

predator-prey

wildlife habitat/ecosystem composition changes

See above habitat and vegetation comments

reduction/removal of keystone or endangered species

removal of wildlife corridor or buffer zone

other:

N/A

#### **Impact**

##### **2) Social and Economic**

#### **Mitigation**

planning/zoning changes or conflicts

increase in urban facilities or services use

rental house

airport operations/capacity changes

human health hazard

impair the recreational use of water or aesthetic quality

affect water use for other purposes

affect other land use operations

The JMR Road has an LUP. Discussions with Infrastructure officials. See Engagement Plan

quality of life changes

public concern

other:

N/A

**Impact**

**3) Cultural and Heritage**

- effects to historic property
- increased economic pressure on historic properties
- change to or loss of historic resources
- change to or loss of archaeological resources
- increased pressure on archaeological sites
- change to or loss of aesthetically important sites
- effects to aboriginal lifestyle
- other:
- N/A

**Mitigation**

JMRFN have been logging & milling since 1930, to provide economic benefits.