ESS Group: Water Crossing

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW-50E</td>
<td>N4-004</td>
<td>Kinnear Lake</td>
<td>501186U</td>
<td>5908205</td>
<td>14N</td>
<td>N/A</td>
<td>N/A</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

Potential Effects:
Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

Specific Mitigation:
- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrubs and herbaceous understory veg will be maintained along with trees that do not violate NV veg Clearance Requirements.
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- No instream works or fording from April 1 - July 15

ESS Group: Mammals and Habitat

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-50E</td>
<td>N4-Wild-202</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 27 to 28</td>
<td>E-364225</td>
<td>E-364031</td>
<td>14N</td>
<td>1885m</td>
</tr>
<tr>
<td>N4-50E</td>
<td>N4-Wild-207</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 17 to 34</td>
<td>E-364031</td>
<td>E-361066</td>
<td>14N</td>
<td>5118m</td>
</tr>
</tbody>
</table>

Potential Effects:
Disruption of Caribou Crossing areas

Specific Mitigation:
- For mitigation for this area refer to the "Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans" document.
**ESS Group: Water Crossing**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-505</td>
<td>unnamed</td>
<td>358933</td>
<td>5895707</td>
<td>14N</td>
<td>13m</td>
<td>13m</td>
<td>Low</td>
<td>Important</td>
</tr>
</tbody>
</table>

**Potential Effects:**

- Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams;
- Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of navigation.

**Specific Mitigation:**

- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate MH Veg Clearance Requirements.
- No machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- No instream works or fording from April 1 - July 15

---

**ESS Group: Intersection**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>Location</th>
<th>ESS Name</th>
<th>Crossing Coordinates</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-505</td>
<td>C1</td>
<td>Snowmobile Trail</td>
<td>E-363632</td>
<td>14N</td>
</tr>
<tr>
<td>N4-Section-100</td>
<td>N4-Section-100</td>
<td>C1</td>
<td>Snowmobile Trail</td>
<td>N-5891634</td>
<td>14N</td>
</tr>
</tbody>
</table>

**Potential Effects:**

- Potential interference with snowmobilers; safety issues

**Specific Mitigation:**

- Identify and flag prior to start of work
- Avoid surface damage to and obstruction of access route
- Post warning markers and signs at snowmobile trail crossing
- Notify snowmobile club/users and local authorities regarding construction activities and schedule, and address concerns prior to construction

---

**ESS Group: Mammals and Habitat**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-505</td>
<td>N4-Wild-202</td>
<td>MCWS Caribou Sensitive Area</td>
<td>E-364031</td>
<td>E-364031</td>
<td>14N</td>
<td>5118m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

- Disruption of Caribou Crossing areas

**Specific Mitigation:**

- For mitigation for this area refer to the "Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans" document.
ESS Group: Archaeological

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-S05</td>
<td>N4-Hert-100</td>
<td>Overflowing River 3-10</td>
<td>396864</td>
<td>5892715</td>
<td>14N</td>
</tr>
</tbody>
</table>

Potential Effects:

Potential disturbance to Heritage Resources

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Food/Medicinal

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>Location</th>
<th>ESS Name</th>
<th>Crossing Coordinates</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-S05</td>
<td>N4-RUse-201</td>
<td>C2</td>
<td>Plant Gathering</td>
<td>E-356878</td>
<td>14N</td>
</tr>
</tbody>
</table>

Potential Effects:

Use of vegetation as a result of clearing, construction, maintenance and decommissioning activities

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Minimize surface disturbance around the site to the extent possible
- Remove trees by low-disturbance methods
- No herbicide to be applied during construction
- Confining vehicle traffic to established trails to the extent possible

ESS Group: Water Crossing

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
<th>Channel Width</th>
<th>Wet Width</th>
<th>Fish Habitat Class</th>
<th>Habitat Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-S05</td>
<td>N4-Aqua-110</td>
<td>Overflowing River</td>
<td>356837</td>
<td>582672</td>
<td>14N</td>
<td>30m</td>
<td>32m</td>
<td>Low</td>
<td>Important</td>
</tr>
<tr>
<td>N4-S05</td>
<td>N4-Aqua-111</td>
<td>Unnamed tributary of</td>
<td>356775</td>
<td>582584</td>
<td>14N</td>
<td>N/A</td>
<td>N/A</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams;
Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impacted fish movement; Rutting of floodplain

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or out lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate MH Veg Clearing Requirements
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- No in-stream works or fording from April 1 - July 15

MAP NUMBER: 175
**ESS Group: Groundwater**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 35 to 36</td>
<td>E-355743 N-5799173</td>
<td>E-354352 N-5889174</td>
<td>14N</td>
<td>2402m</td>
</tr>
<tr>
<td>N4-506</td>
<td>N4-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 39 to 42</td>
<td>E-354352 N-5889174</td>
<td>E-357885 N-5877929</td>
<td>14N</td>
<td>11787m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface. Also, wetting the surficial environment (ground saturation); effect on local vegetation.

**Specific Mitigation:**

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

**ESS Group: Mammals and Habitat**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-Wild-203</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 37 to 38</td>
<td>E-35584 N-5890909</td>
<td>E-354352 N-5889174</td>
<td>14N</td>
<td>2128 m</td>
</tr>
<tr>
<td>N4-506</td>
<td>N4-Wild-203</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 40 to 41</td>
<td>E-354352 N-5889174</td>
<td>E-356289 N-5883006</td>
<td>14N</td>
<td>6484 m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Disruption of Caribou Crossing areas

**Specific Mitigation:**

- For mitigation for this area refer to the "Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans" document.
**ESS Group: Groundwater**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 35 to 36</td>
<td>E-355743</td>
<td>E-354352</td>
<td>14N</td>
<td>2402m</td>
</tr>
<tr>
<td>N4-506</td>
<td>N4-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 39 to 42</td>
<td>E-354352</td>
<td>E-357885</td>
<td>14N</td>
<td>11787m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface. Also, wetting the surficial environment (ground saturation); effect on local vegetation.

**Specific Mitigation:**

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

**ESS Group: Mammals and Habitat**

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-505</td>
<td>N4-Wild-203</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 37 to 38</td>
<td>E-355564</td>
<td>E-354352</td>
<td>14N</td>
<td>2128 m</td>
</tr>
<tr>
<td>N4-506</td>
<td>N4-Wild-203</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 40 to 41</td>
<td>E-354352</td>
<td>E-356289</td>
<td>14N</td>
<td>6464 m</td>
</tr>
</tbody>
</table>

**Potential Effects:**

Disruption of Caribou Crossing areas

**Specific Mitigation:**

- For mitigation for this area refer to the "Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans" document
### ESS Group: Mammals and Habitat

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-Wild-203</td>
<td>MCWS Caribou Sensitive Area</td>
<td>Site: 40 to 41</td>
<td>E-354352</td>
<td>14N</td>
<td>6464 m</td>
<td></td>
</tr>
</tbody>
</table>

**Potential Effects:**

Disruption of Caribou Crossing areas

**Specific Mitigation:**

- For mitigation for this area refer to the "Moose and Woodland Caribou Sensitive Range Delineation and Mitigation Plans" document.

### ESS Group: Groundwater

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-Aqua-201</td>
<td>Saline artesian areas</td>
<td>Site: 39 to 42</td>
<td>E-354352</td>
<td>14N</td>
<td>11787 m</td>
<td></td>
</tr>
</tbody>
</table>

**Potential Effects:**

Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface. Also, wetting the surficial environment (ground saturation); effect on local vegetation

**Specific Mitigation:**

- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

### ESS Group: Food/Medicinal

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-RUse-202</td>
<td>Plant Harvest</td>
<td>Site: 43 to 44</td>
<td>E-356181</td>
<td>14N</td>
<td>2381 m</td>
<td></td>
</tr>
</tbody>
</table>

**Potential Effects:**

Loss of vegetation as a result of clearing, construction, maintenance and decommissioning activities.

**Specific Mitigation:**

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Minimize surface disturbance around the site to the extent possible
- Remove trees by low-disturbance methods
- No herbicide to be applied during construction
- Confine vehicular traffic to established trails to the extent possible
ESS Group: Archaeological

Potential Effects:
Potential disturbance to Heritage Resources

Specific Mitigation:
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

ESS Group: Water Crossing

Potential Effects:
Habitat loss and degradation from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

Specific Mitigation:
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate NL Veg Clearance Requirements.
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- No instream works or fording from April 1 - July 15

ESS Group: Food/Medicinal

Potential Effects:
Loss of vegetation as a result of clearing, construction, maintenance and decommissioning activities.

Specific Mitigation:
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Minimize surface disturbance around the site to the extent possible
- Remove trees by low-impact methods
- No Herbicide to be applied during construction
- Confinement of vehicle traffic to established trails to the extent possible

ESS Group: Groundwater

Potential Effects:
Increase in salinity of soils and surface water in case of possible groundwater discharge to the surface. Also, wetting the surficial environment (ground saturation); effect on local vegetation

Specific Mitigation:
- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.

MAP NUMBER: 179
No specific mitigation measures for this map, page intentionally left blank.
### ESS Group: Archaeological

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Easting</th>
<th>Northing</th>
<th>UTM Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-Her-102</td>
<td>Heritage Site</td>
<td>359357</td>
<td>5873238</td>
<td>14N</td>
</tr>
</tbody>
</table>

**Potential Effects:**
- Potential disturbance to Heritage Resources

**Specific Mitigation:**
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Identify and flag prior to start of work
- Conduct site investigation with Archaeologist post clearing and prior to construction
- Minimize surface disturbance around the site to the extent possible
- Inspect excavated materials or surface disturbance for heritage resources and report any finds to Environmental Inspector
- Implement additional mitigation from site investigation

### ESS Group: Food/Medicinal

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-RUs-203</td>
<td>Berry Harvest</td>
<td>Site: 45 to 46</td>
<td>E-360175 N-5870640</td>
<td>E-361117 N-5867642</td>
<td>14N</td>
<td>3143m</td>
</tr>
</tbody>
</table>

**Potential Effects:**
- Loss of vegetation as a result of clearing, construction, maintenance and decommissioning activities.

**Specific Mitigation:**
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Minimize surface disturbance around the site to the extent possible
- Remove trees by low-disturbance methods
- No Herbicide to be applied during construction
- Confines vehicle traffic to established trails to the extent possible
ESS Group: Food/Medicinal

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-Ruse-203</td>
<td>Berry Harvest</td>
<td>Site: 45 to 46</td>
<td>E-360175</td>
<td>E-36117</td>
<td>14N</td>
<td>3143m</td>
</tr>
</tbody>
</table>

Potential Effects:
Loss of vegetation as a result of clearing, construction, maintenance and decommissioning activities.

Specific Mitigation:
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Minimize surface disturbance around the site to the extent possible
- Remove trees by low-disturbance methods
- No Herbicide to be applied during construction
- Confinement of vehicle traffic to established trails to the extent possible

ESS Group: Groundwater

<table>
<thead>
<tr>
<th>Sec-Seg ID</th>
<th>ESS ID</th>
<th>ESS Name</th>
<th>Location</th>
<th>Start</th>
<th>Stop</th>
<th>UTM Zone</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N4-506</td>
<td>N4-Aqua-202</td>
<td>Saline artesian area</td>
<td>Site: 47 to 48</td>
<td>E-360436</td>
<td>E-363288</td>
<td>14N</td>
<td>9511 m</td>
</tr>
</tbody>
</table>

Potential Effects:
Increase in salinity of soils and surface water in case of potential groundwater discharge to the surface. Also, wetting the surficial environment (ground saturation); effect on local vegetation.

Specific Mitigation:
- Qualified driller with appropriate experience will be contracted to work in areas affected by artesian conditions.
- Emergency response plans for sealing/grouting and pumping will be implemented as required.
- Follow up inspections of installed foundations will be undertaken to monitor for excess moisture.