N

Moswakot River

280

Looking Back Creek

STEPHENS LAKE

Kaiser Island

Lowe Island

William Smith Island

Gull Rapids

GULL LAKE

Legend

Study Areas
- Project Footprint
- Local Study Area

Mapping
- Habitat Mapping Area

Sample Locations
- Soil Profile Only
- Habitat Characterization Plot
- Priority Plant Transect

Land Cover
- Broadleaf Treed on Mineral Soil
- Broadleaf Treed on Peatland
- Conifer Treed on Mineral Soil
- Conifer Treed on Peatland
- Human Features
- Outcrop
- Recent Burn on Mineral
- Recent Burn on Peatland
- Tall Shrub or Low Vegetation on Mineral Soil
- Tall Shrub or Low Vegetation on Peatland
- Water

KEEYASK

0 1 2 4 Kilometres

0 0.5 1 2 Miles

Projection: UTM NAD 83, Zone 15
Data Sources: Sample Locations, Study Areas, Nelson River and Highway 280 - ECOSTEM Ltd.; Impact Areas- MB Hydro.
Created by: ECOSTEM Ltd.
Date Created: July 15, 2009

Sample Locations (2002 - 2008) on Land Cover

Figure B2-1

Appendix B3

Terrestrial Bird Information

BIRDS APPROACH AND METHODS

Breeding-Bird Survey Methods

To provide baseline information on bird abundance and habitat use in the Keeyask Infrastructure Project area, bird surveys were conducted in 2004 and 2005 within the Project area including the vicinity of the main camp (phase one) and adjacent to the proposed road ROW:

- Transect locations were preselected within major habitat types (black spruce and jack pine) using available plant community and habitat data including Forest Resource Inventory (FRI), aerial photography and data collected during previous surveys:
  - Breeding-bird survey transect sites were located in representative habitat areas, with each transect placed within the largest areas of continuous (i.e., homogenous) habitat.
  - Where preselected sampling sites fell within habitat that did not match the interpretation of FRI and aerial photography (e.g., area had since been burned), nearby alternative transect sites were selected in the field and sampled.
- Sampling occurred at stops located at 150-m intervals along predetermined line transects (Figure B3-1):
  - The number of stops per transect ranged from 5 to 29.
  - Adjacent to the proposed ROW, breeding-bird survey transects were located on and parallel to the preferred access road route at 150-, 300- and 450-m intervals (Figure B3-2). Some additional survey points were oriented in a linear fashion extending outward (E-W) from the original survey grids (Figure B3-3).
  - Near the Construction Camp (Phase 1) site, survey transects were laid out in a linear orientation within areas expected to be affected by the Project.
  - Two biologists identified and recorded birds and other wildlife (e.g., amphibians) by sound and/or sight within a 75-m radius at each stop.
  - Bird surveys occurred during peak singing times, between sunrise and 11 a.m.
  - Coordinates for each transect stop were recorded using a GPS unit.
  - Other data such as habitat description information, time, date and weather conditions were also recorded.
  - Photographs of habitat were taken at representative transect stops.
- The data were analyzed in relationship to habitat groupings developed by the study team (Figure 3.4-1).

HELICOPTER RECONNAISSANCE METHODS

Helicopter reconnaissance took place at the lakes and ponds that are located near the access road route (Figure B3-2). These waterbodies were overflown to assess waterbird usage in the vicinity of the access road. One lake in particular ("A" on Figure B3-2) was identified as being an area of consistent waterbird usage in relatively close proximity to the access road route.