Highway 58 Extension and Fox Lake Access Roads Scope of Assessment

The CSR was prepared in accordance with the Terms of Reference issued by Indian and Northern Affairs Canada and Parks Canada (the RAs). The Terms of Reference identified the scope of the environmental assessment to be conducted in relation to the Project. The scope of the environmental assessment includes both the scope of the project (those project components, undertakings and activities that are the subject of the environmental assessment) and the scope of the assessment (the factors to be considered in the environmental assessment and the scope of those factors, including their temporal and geographic extent). The scope has been established in accordance with Sections 15 and 16 of the Canadian Environmental Assessment Act.

Scope of the Project

The scope of the project established for the purposes of this environmental assessment comprises the various components of the project as proposed by the Little Red River Cree Nation (LRRCN). The scope of the project includes the site preparation, construction, operation, maintenance and decommissioning of all components of the all season access roads, including watercourse crossing structures, borrow excavation development, extraction and restoration.

More specifically, the scope includes the following works and activities:

- The upgrade of 57.8 km of existing summer/winter roads to all-season access roads and the operation of the all-season access road;
- The removal of existing watercourse crossing structures and the construction and operation of a number of structures including: one major span bridge, four span bridge structures and 20 culvert structures;
- The construction and operation of 7.0 km of new all-season access road;
- The reclamation of approximately 28.85 ha of existing summer/winter road corridors which were developed as bypasses during wet/poor weather conditions; and
- The decommissioning while not explicitly evaluated has been considered in this comprehensive study.

Scope of the Assessment

The scope of the assessment of the Project includes the consideration of changes to the environment that may result from the project, including but not limited to consideration of:

- The environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the Project and any cumulative environmental effects that are likely to result from the project in combination with the other projects or activities that have been or will be carried out:
- The significance of the effects;
- Comments from the public that are received in accordance with CEAA and its regulations;
- Measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project;
- A consideration of the need for the project and alternatives to the project;
- The purpose of the project;
- Alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternatives;
- The need for, and the requirements of, any follow-up program in respect of the project; and
- The capacity of the renewable resources that is likely to be significantly affected by the project to meet the needs of the present and those of the future.

Environmental effects is defined under CEAA as: any change that the project may cause in the environment, including any change it may cause to a listed wildlife species its critical habitat or the residences of individuals of that species as those terms are defined in subsection 2(1) of the *Species at Risk Act* (SARA) and any change in the environment that would have an effect on health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes by aboriginal persons, or any

structure, site or thing that is of historical, archaeological, paleontological or architectural significance. In addition, consideration is also given to any change to the Project that may be caused by the environment.

Valued Ecosystem Components

Following a review of existing information field analysis and stakeholder consultation, several valued ecosystem components (VECs) were selected including:

- Soils
 - Soil quality
- Vegetation
 - o Forests
 - o Treed bogs, wet shrub/bogs,
 - Wetland/riparian communities,
 - o Old growth forests,
 - o Rare plant species,
 - o White Spruce, Deciduous, Mixedwood, Pine trees
- Aquatic Resources
 - Water quality
- Fisheries
 - o Goldeye
 - o Burbot
 - Arctic Grayling
 - Walleye
 - Northern Pike
- Forage Fish
 - Flathead Club
 - Finescale Dace
- Coarse Fish
 - Longnose Sucker
- Wildlife
 - o Moose
 - o Bison
 - o Marten
 - o Lynx
- Birds
 - o Ovenbird
 - Cape May Warbler
 - o Grouse
 - o Ducks
- Amphibians
 - Wood Frog

- Cultural Resources/Traditional Land Use
 - Historic and Prehistoric sites
 - Traditional Land Use
- Navigability

Temporal and Geographic Scope

For assessment purposes, the temporal boundaries for the proposed project are divided into the construction and operational and maintenance periods. Construction is expected to take place over a three to four year period. The design life of the road is 20 years, the design life of the bridges is 70 years and the design life of the watercourse crossing culverts are 50 years.

Spatial boundaries for the assessment areas are specific to each of the identified valued ecosystem components (VECs), based on the expected or predicted interactions between the Project and those VECs.

Cumulative Environmental Effects

The terms of reference indicate that the cumulative effects assessment for the proposed project should:

- Identify past and existing stressors (i.e. human land and watercourse use, resource consumption, habitat fragmentation, pollutants, climate change, exotic species, roads, fire control, other park specific issues, timber berth revegetation, land excisions, etc.) on key components of Wood Buffalo National Park (WBNP) that impact on the heritage values of WBNP (i.e. ecological integrity (biological diversity, ecosystem function) and presentation and protection of the park).
- Identify past and existing stressors on lands outside of WBNP that impact on heritage values associated with these lands.
- Discuss the impact of the potential construction of the winter road between Peace Point and Garden River.
- Discuss and attempt to quantify the resulting contribution of the road (i.e. direct loss of habitat, habitat fragmentation and its effects such as habitat avoidance, individual and social disruption of wildlife) to these existing stressors and the resulting cumulative impact to heritage values as described above.

- Discuss and quantify the capacity for renewable resources affected by the construction and operation of the project, to continue to meet the needs of other current and potential future land users.
- Discuss the possibility of increased year-round human activity along the road and its effects to heritage values of the project area.
- Discuss environmental effects to areas outside of the project area as a result of increased access, including opportunities for resource extraction (i.e. heavy oil, gas, forestry), tourism, additional roads) and the possible "islandification" of WBNP.
- Discuss the impacts of proposed road on treaty land entitlement negotiations.
- Identify mitigation measures for the cumulative effects.
- Determine whether the residual impacts of the cumulative effects will adversely impact on the heritage values of WBNP (i.e. ecological integrity, presentation and protection of the site) and its carrying capacity.
- Identify uncertainties and feedback to evaluate the accuracy of the assessment of cumulative effects and any proposed mitigation.