SCHEDULE 11-2

KEEYASK HYDROPOWER LIMITED PARTNERSHIP

WATERWAYS MANAGEMENT PROGRAM

DATED .

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1. INTRODUCTION

The **Keeyask Project** will alter the water regime and associated aquatic and terrestrial ecosystems on the Nelson River upstream of Gull Rapids to Clarke Lake and downstream of Gull Rapids to Stephens Lake. Upstream of the **Keeyask Project**, the water levels on some water bodies will increase significantly and will inundate initially forty-five (45) square kilometres (17.4 square miles) of land.

It is expected significant amounts of floating debris will be generated by the initial impoundment of the reservoir. Floating islands and bogs are expected to exist for some time after initial impoundment. Thereafter, other floating debris is expected to be generated as shorelines erode around the reservoir's perimeter. The impoundment and resulting debris will create navigation hazards.

This **Waterways Management Program** describes the agreed programs and plans discussed in section 7 of the **Project Description** that will be implemented by the **Limited Partnership** to reduce potential impacts and accommodate users of the waterway, as well as manage associated safety liabilities for the **Keeyask Project**. This **Waterways Management Program** will be reviewed from time to time by the **Limited Partnership** to ensure that it continues to meet its objectives.

Hydro will implement this **Waterways Management Program**, using existing **Hydro** management and field supervisory staff, as a service to the **Limited Partnership**, and the costs of the program will be included in annual operation and maintenance budgets and reports provided to the **Limited Partnership**.

2. OBJECTIVE

The objective of the **Waterways Management Program** is to contribute to the safe use and enjoyment of the waterway from Split Lake to Stephens Lake throughout the pre-flooding and operational stages of the **Keeyask Project**, in a manner consistent with sections 7.2.1 through to 7.2.7 of the **Project Description**.

3. PROGRAM

3.1 Phase One (1) – Pre-Flooding

The first phase of the **Waterways Management Program** will consist of implementing the measures outlined in section 7.2 of the **Project Description** in the pre-flooding period, including support for clearing activity before impoundment of the reservoir.

An important activity before impoundment will be to work with **Members** of the **Keeyask Cree Nations** to identify and contribute to impact management measures at high priority spiritual and heritage sites that will be flooded.

3.2 Phase Two (2) – Post Flooding

The second phase of the **Waterways Management Program** will consist of implementing waterways management activities after flooding. The **Waterways Management Program** will deliver the services outlined in sections 7.2.2 to 7.2.7 of the **Project Description** and also will provide support services, as required, for reclamation of disturbed sites along shorelines.

4. PROGRAM ACTIVITIES

4.1 Program Activities: Phase 1

In each year of the four (4) year period after construction start and before impoundment, two (2) boat patrols, four (4) persons in total employed as **Hydro** seasonal employees, supplemented as required with local labour, including two (2) persons required for a winter ice trail crew, hired on a short-term basis through a local **KCN Business**, will:

(a) operate a multi-purpose boat patrol, monitor waterway activities and liaise with individuals and groups using the Nelson River;

(b) stabilize shoreline at sensitive streams using low impact techniques;

(c) plan and implement protection and preservation measures using low impact techniques at high priority, spiritually and culturally significant, historical or heritage sites from Gull Rapids to Split Lake;

(d) assist with the relocation of graves to sites not affected by Keeyask, in cooperation with involved **Members**;

(e) construct and maintain a safety cabin;

(f) cut and maintain trails and portages; and

(g) install and monitor regularly the condition of safe ice trails and the nature and extent of their use.

Initial equipment required will consist of two (2) boats, motors and a trailer, two (2) snow machines, sleighs and trailers and safety clothing and equipment, chainsaws, a GPS, ice auger and related equipment.

Low impact techniques include hand placement of field stone and planting of willows to protect a site.

4.2 Program Activities: Phase 2

The activities to be undertaken, in different time periods after impoundment, include the following:

(a) collecting floating debris;

(b) monitoring waterway activities and liaising with individuals and groups;

(c) preparing forebay depth charts and travel routes;

(d) marking safe travel routes, by installing and maintaining navigation and hazard markers;

(e) installing and maintaining water level staff gauges;

(f) constructing and maintaining safe landing sites and required docks and shelters;

(g) installing and monitoring regularly the condition of safe ice trails and the nature and extent of their use;

(h) planning and implementing the remaining protection and preservation measures at spiritually and culturally significant, historical or heritage sites using low impact techniques;

(i) monitoring and maintaining shoreline stabilization measures previously installed at sensitive streams;

(j) maintaining trails and portages.

4.3 Years One (1) to Five (5) Following Impoundment

In each year from years one (1) to five (5) following impoundment, a crew of up to twenty-five (25) workers, configured as two (2) primary boat patrols and three (3) supplementary work crews, will operate five (5) multi-purpose boats for one hundred (100) days in each open water season for the first three (3) and potentially five (5) years. A two (2) person ice trail crew would also operate in this period.

The four (4) persons making up the two (2), two (2) person primary boat patrol crews will be employed as **Hydro** seasonal employees. The workers making up the supplementary work crews and the ice trail crew will be hired on a short term basis through a local contractor.

Below the powerhouse of the **Keeyask Project**, it is expected that concerns will arise with respect to the unknown effects of powerhouse flows. To help manage downstream issues one of the boat patrol crews will operate as a temporary boat patrol for the first three (3) years. The primary function of this boat patrol will be to implement safety measures, deliver information to downstream resource users, and help people become accustomed to the powerhouse's operating mode. The future requirement for this measure would be evaluated thereafter.

4.4 Years Six (6) to Ten (10) Following Impoundment

In each year from years six (6) to ten (10) following impoundment, it is expected that during the open water season, one (1) or more maintenance crews of up to twelve (12) local workers in total, hired on a short term basis through a local contractor, may be required. The maintenance crews would work in conjunction with two (2) person making up a boat patrol crew who will be employed as Hydro seasonal employees. During the ice covered season, when it is safe to travel, a two (2) person ice trail crew will be hired on a short term basis through a local contractor.

4.5 Following Year Ten

In each year after year ten (10), it is expected two (2) persons, making up a boat patrol crew, will be employed as **Hydro** seasonal employees during the open water season and two persons making up a two (2) person ice trail crew will be hired on a short term basis through a local contractor during the ice covered season.

5. SELECTION OF PROGRAM PERSONNEL

5.1 Factors to be Considered on Hiring

The following factors will be considered by **Hydro** in its selection of **Waterways Management Program** personnel:

(a) direct experience and familiarity with open water and winter travel conditions on the Nelson River and Gull Lake;

(b) satisfactory safety record in operating watercraft;

(c) demonstrated safety skills and competencies for working in challenging environmental conditions;

(d) previous work experience in performing required Waterways Management Program tasks;

(e) proven wilderness survival skills; and

(f) personal relationship to Gull Lake.