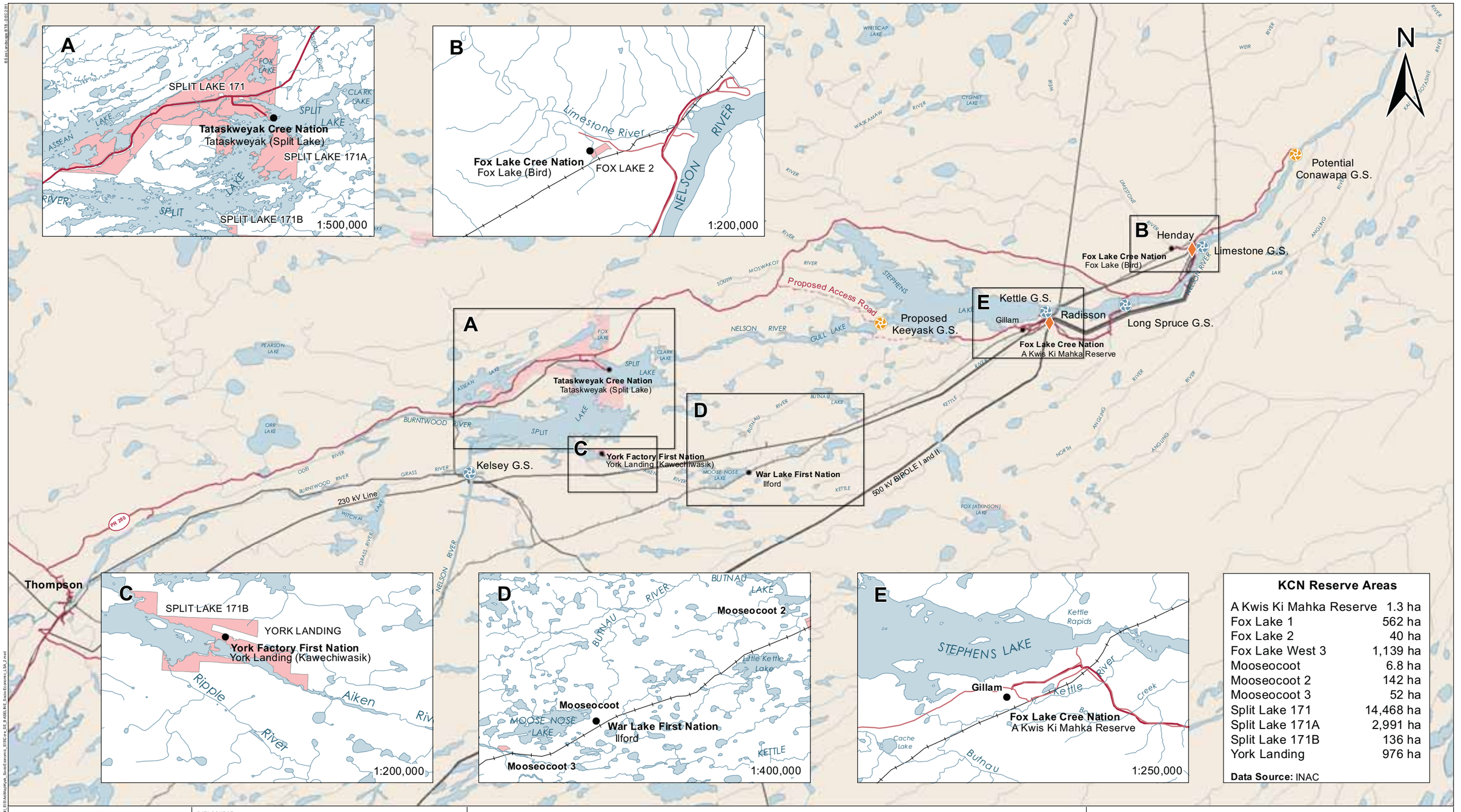


KCN Reserve Areas

A Kwis Ki Mahka Reserve	1.3 ha
Fox Lake 1	562 ha
Fox Lake 2	40 ha
Fox Lake West 3	1,139 ha
Mooseocoot	6.8 ha
Mooseocoot 2	142 ha
Mooseocoot 3	52 ha
Split Lake 171	14,468 ha
Split Lake 171A	2,991 ha
Split Lake 171B	136 ha
York Landing	976 ha

Data Source: INAC

Hydropower Limited Partnership

DATA SOURCE:
Manitoba Hydro, NTS, Stantec Consulting Ltd.

CREATED BY:
Stantec Consulting Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	16-DEC-10	07-JUN-12
0 8.5 17 Kilometres 0 7 14 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

- Generating Station (Planned)
- Generating Station (Existing)
- Converter Station
- First Nation Community
- Town/City
- Highway
- Proposed Access Road
- Rail
- Existing Transmission Line
- First Nation Reserve
- Waterbody

Communities depicted on the map are included in the Socio-Economic Local Study Area

Socio-Economic Local Study Area

Map 6-1

LIMESTONE RIVER
LIMESTONE LAKE
Little Limestone Lake
LIMESTONE RIVER
Twelve Mile Creek
NORTH MOSWAKOT RIVER
SOUTH MOSWAKOT RIVER
Crying Lake
Ferris Bay
STEPHENS LAKE
Sky Pilot Creek
PR 280
Fox Lake Cree Nation
Fox Lake (Bird)
Looking Back Creek
Proposed Keeyask G.S.
Gillam
Fox Lake Cree Nation
A Kwis Ki Mahka Reserve
Assean River
FOX LAKE
NELSON RIVER
GULL LAKE
Birthday Rapids
CLARK LAKE
SPLIT LAKE
Tataskweyak Cree Nation
Tataskweyak (Split Lake)
Open Water
Hydraulic Zone of Influence
Brooks Creek
RIVER
BUTNAU RIVER
BUTNAU LAKE
KETTLE RIVER
North Angling Lakes
ANGLING RIVER
Little Kettle Lake
Kettle Lake
NORTH ANGLING
SPLIT LAKE
York Factory First Nation
York Landing (Kawechiwasik)
AIKEN RIVER
MOOSE NOSE LAKE
War Lake First Nation
Ilford
KETTLE RIVER
Cyril Lake
FOX (ATKINSON) LAKE

N

KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Province of Manitoba, Manitoba Hydro, Stantec Consulting Ltd., NTS, NR CAN

CREATED BY:
Stantec Consulting Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	18-FEB-11	18-MAY-12
0 4 8 Kilometres / 0 3.5 7 Miles	VERSION NO: 1.0	QA/QC: APPROVED

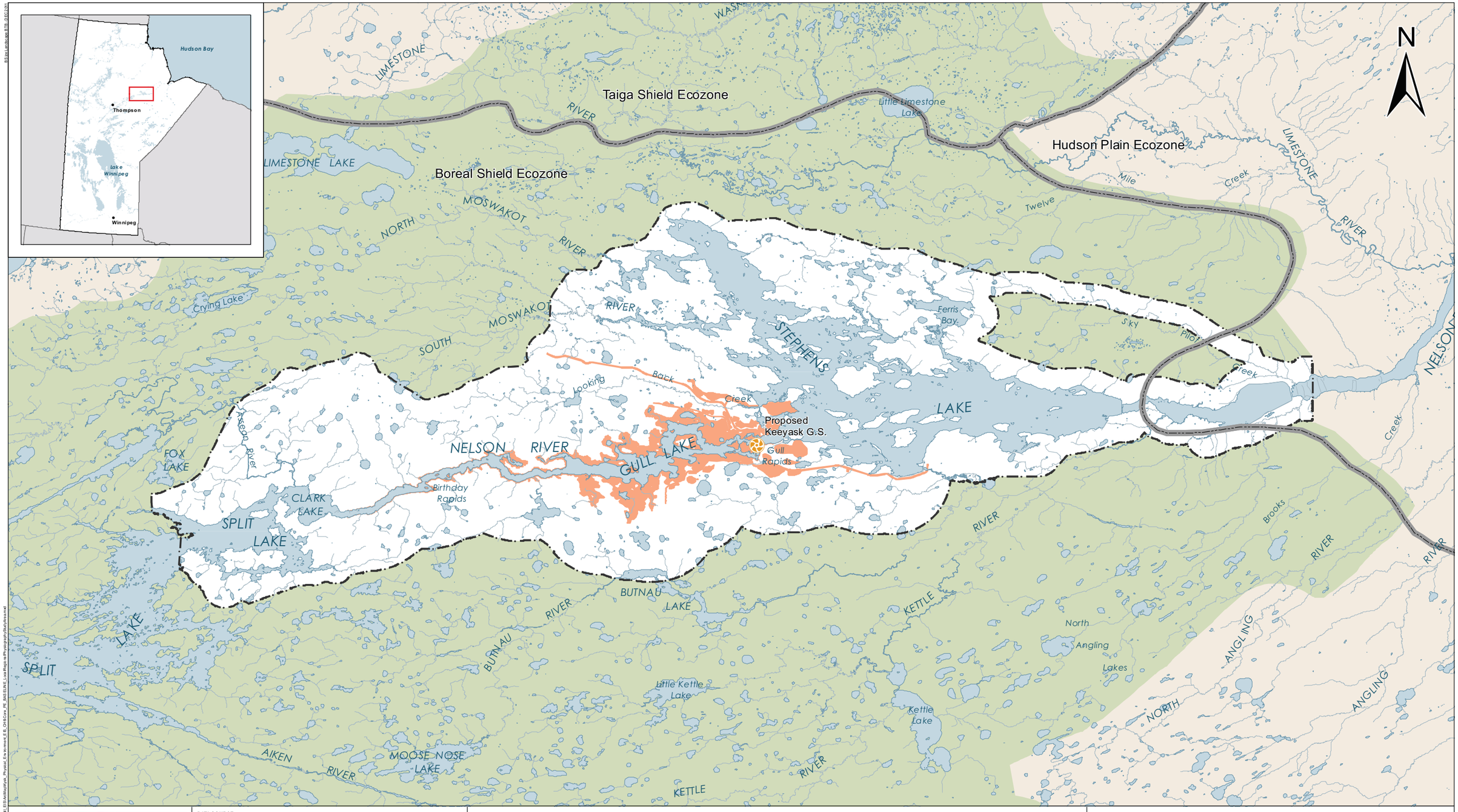
Legend

- Generating Station (Planned)
- Physical Environment Local Study Area
- Highway
- Rail
- First Nation Reserve
- Waterbody

Physical Environment Local Study Area

Map 6-2

File Location: G:\...\GIS_Project_Roster\00_Hydro\1194-20-X-Kpk_GS_Overall_EIS\Mxd\Keeyask_Physical_Environment_EIS\Corp_PE_BASELINE_PhysicalEnvironmentStudyArea.mxd



DATA SOURCE:
Province of Manitoba, Manitoba Hydro, Stantec Consulting Ltd., NTS, Natural Resources Canada.

CREATED BY:
Stantec Consulting Ltd.

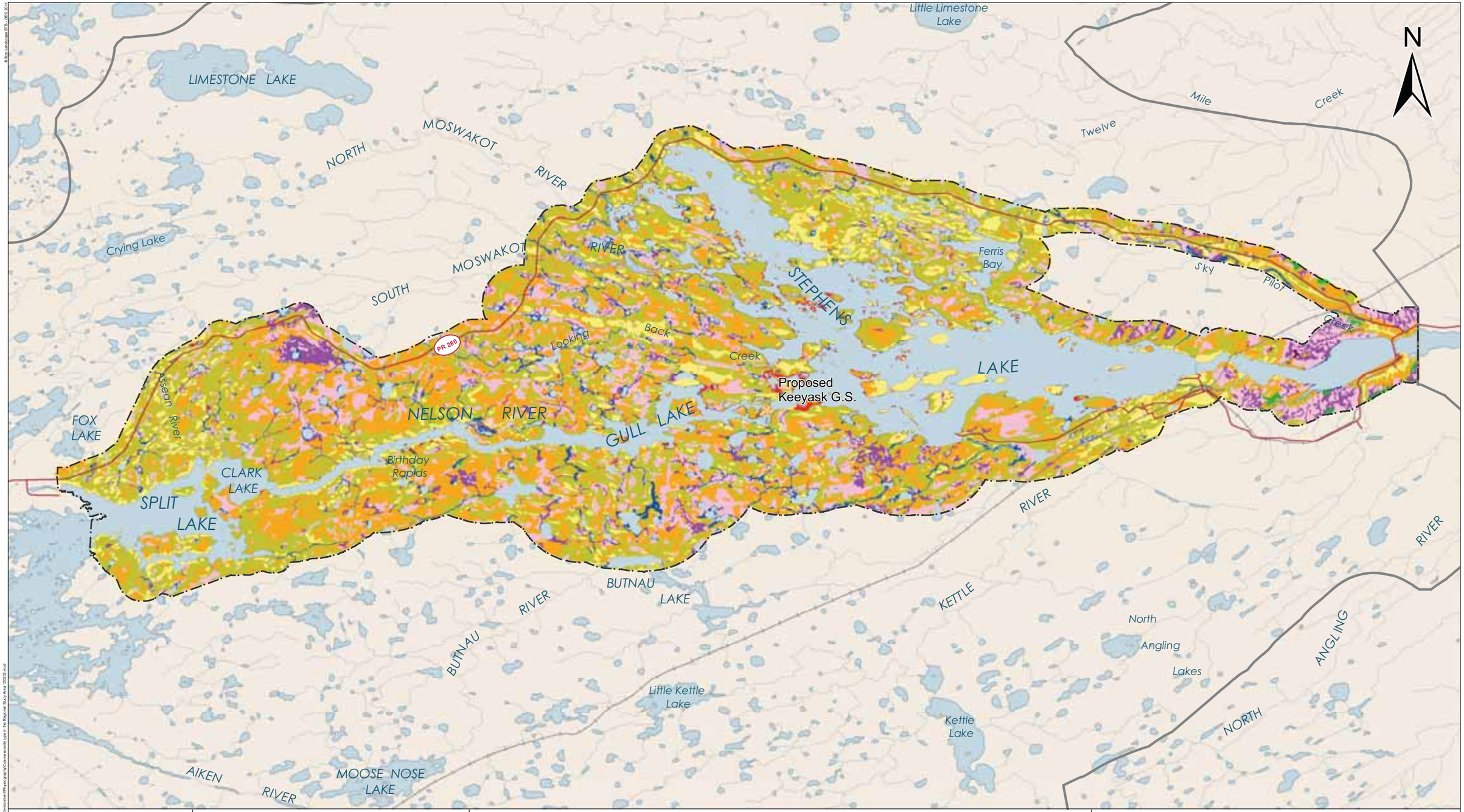
COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	13-JAN-11	10-FEB-12
0 4 8 Kilometres / 0 3 6 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

- Generating Station (Planned)
- Project Footprint and Surrounding Areas (intensely studied)
- Local Study Area
- Regional Study Area
- Ecozone
- Waterbody

Local and Regional Physiography Study Areas

Map 6-3



DATA SOURCE:
Study areas, ecosite data and Nelson River shoreline - ECOSTEM Ltd.; Water - NTS; Infrastructure - Manitoba Hydro; Roads and rail - Manitoba Conservation.

CREATED BY:
ECOSTEM Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	03-FEB-12	27-APR-12
0 2 4 Kilometres / 0 2.5 5 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Coarse Ecosite
- Mineral
- Thin Peatland
- Shallow Peatland
- Ground Ice Peatland
- Permafrost Peatland - Other
- Deep Peatland
- Wet Deep Peatland
- Riparian Peatland
- Ice Scour - Mineral
- Shoreline Wetland
- Waterbody

- Physiography Local Study Area
- Physiography Regional Study Area

Coarse Ecosite
in the Physiography Local Study Area

Map 6-4

File Location: File Location: Z:\Workspace\Keeyask GIS\EIS\Figures\Physical Environment\Physiography\Coarse ecosite type in the Regional Study Area 120202.mxd
© Keeyask Hydropower Limited Partnership 2011

DATA SOURCE:
Study areas, permafrost data and Nelson River shoreline - ECOSTEM Ltd.; Water - NTS; Infrastructure - Manitoba Hydro; Roads and rail - Manitoba Conservation.

CREATED BY:
ECOSTEM Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	06-FEB-12	27-APR-12
0 2 4 Kilometres / 0 3 6 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Permafrost Continuity

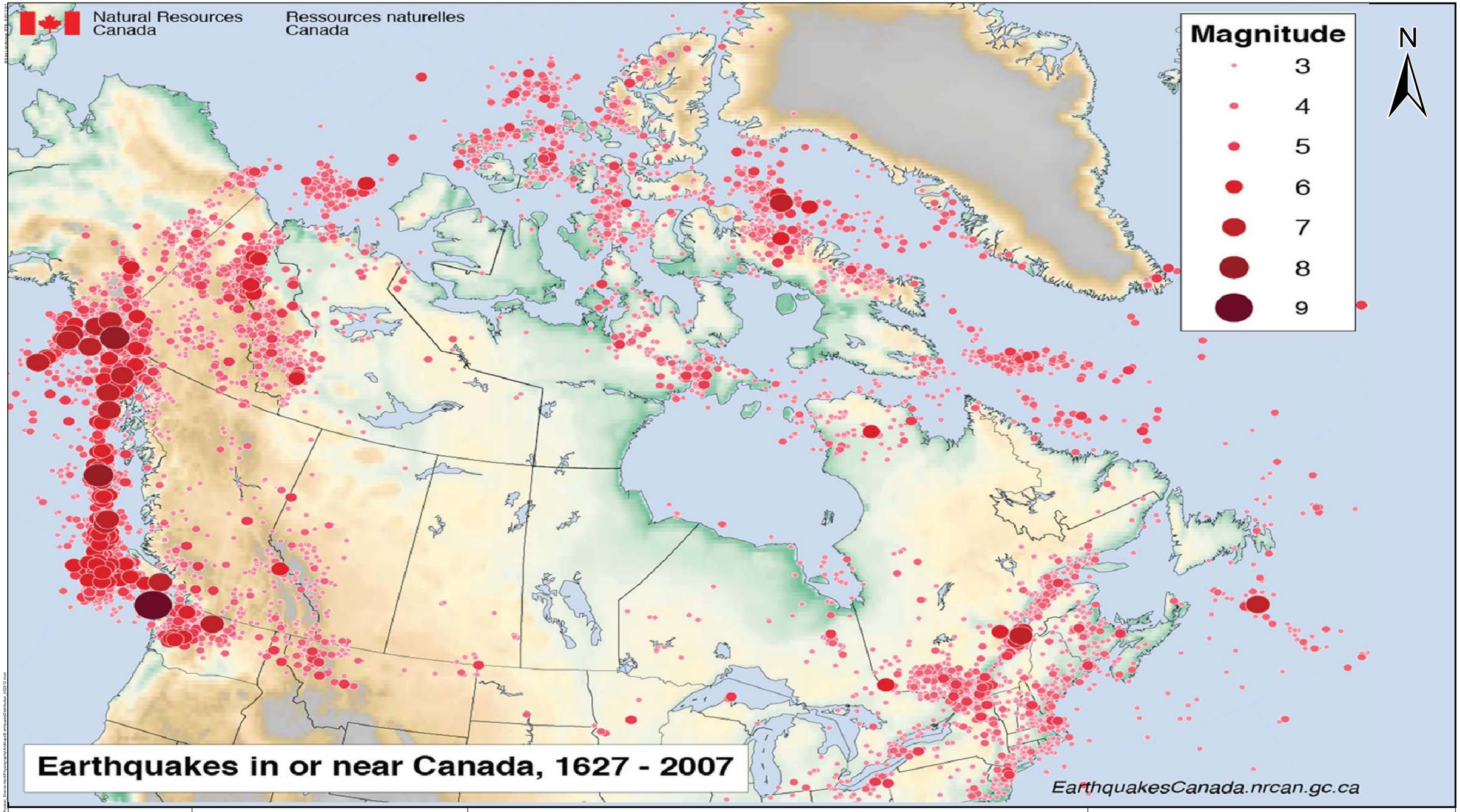
- Continuous
- Extensive Discontinuous
- Sporadic Discontinuous
- Isolated Patches
- None

- Physiography Local Study Area
- Physiography Regional Study Area

Surface Permafrost
in the Physiography Local Study Area

Map 6-5

File Location: P:\a Location 2: Workspaces\Keeyask GIS\EIS\Figures\Physical Environment\Physiography\Coarse ecosite type in the Regional Study Area 120202.mxd

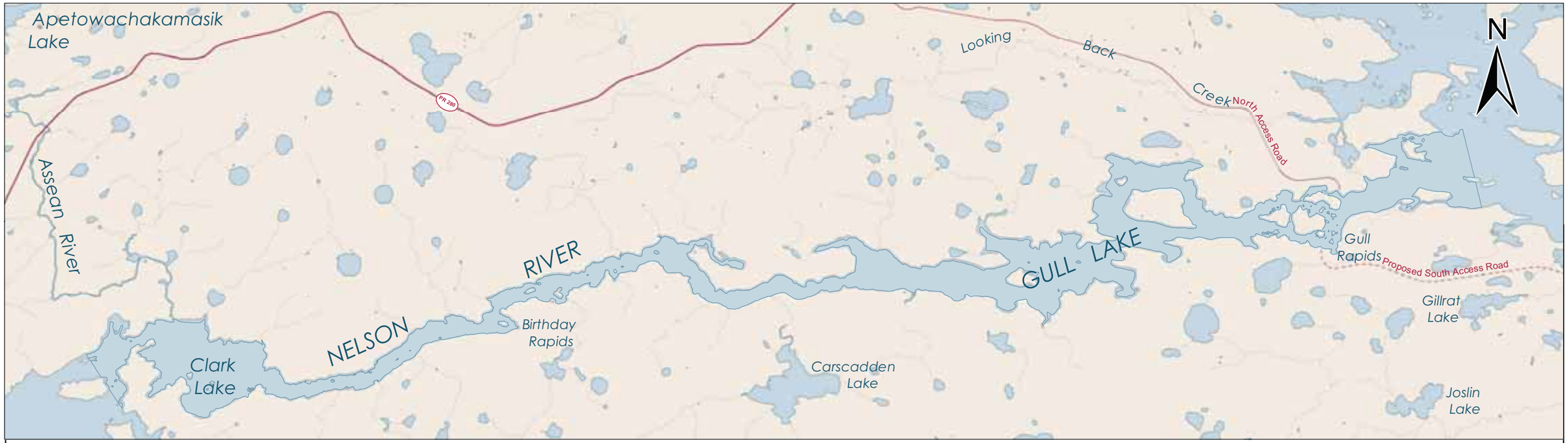


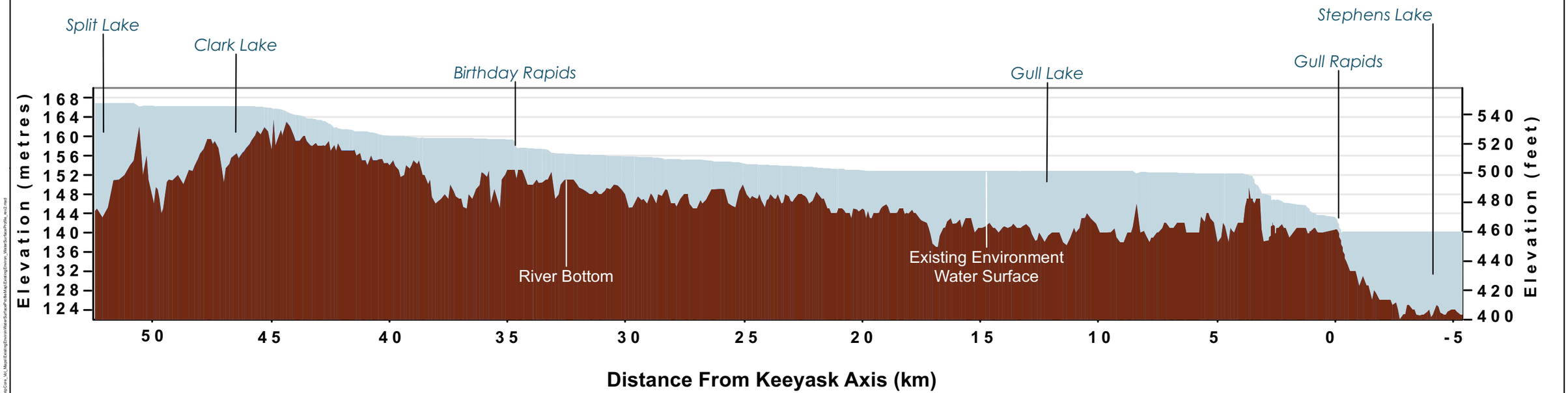
KEEYASK
Hydropower Limited Partnership

DATA SOURCE: Natural Resources Canada EarthquakesCanada.nrcan.gc.ca		
CREATED BY: Stantec		
COORDINATE SYSTEM: UTM NAD 1983 Z15N	DATE CREATED: 10-FEB-10	REVISION DATE: 23-MAY-12
	VERSION NO: 1.0	QA/QC: APPROVED

Earthquakes in or Near Canada, 1627-2007

Map 6-6





KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Government of Canada; Government of Manitoba; Manitoba Hydro: gull-ee-50perc-3032cms-rev3

CREATED BY:
Manitoba Hydro - Water Resource Engineering

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	26-Jan-10	18-MAY-12
0 1.5 3 Kilometres / 0 1.5 3 Miles	VERSION NO: 1.0	QA/QC: APPROVED

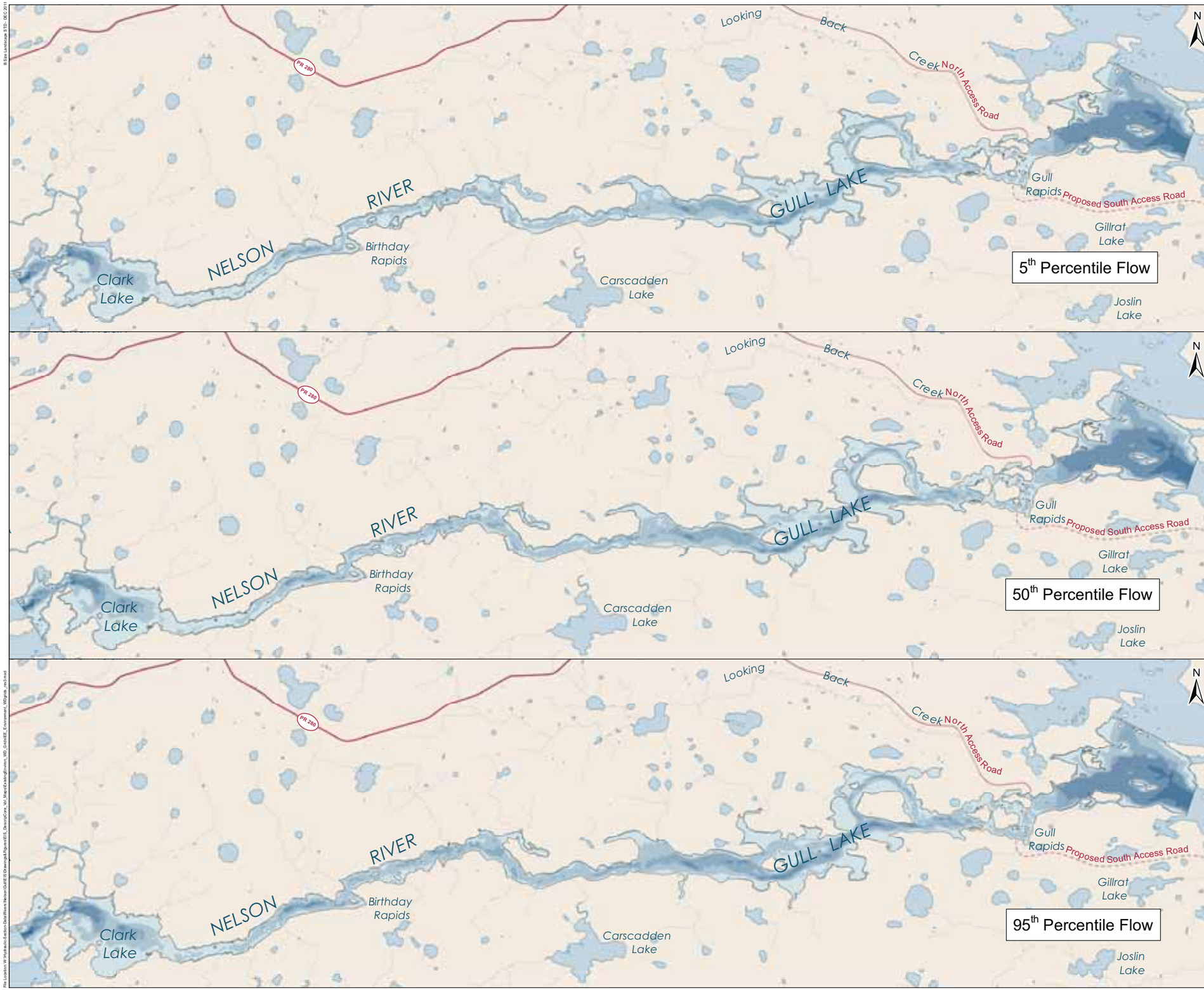
Legend

Existing Environment

Open Water Surface Profile
Typical Existing Environment

Map 6-7

File Location: W:\Hydraulic-Section-Data\Rivers\Nelson\GuIE\BDrawings&Figures\EIS_DetailedCore_Wq_Maps\ExistingEnviron\WaterSurfaceProfileMap\ExistingEnviron_WaterSurfaceProfile_rev2.mxd

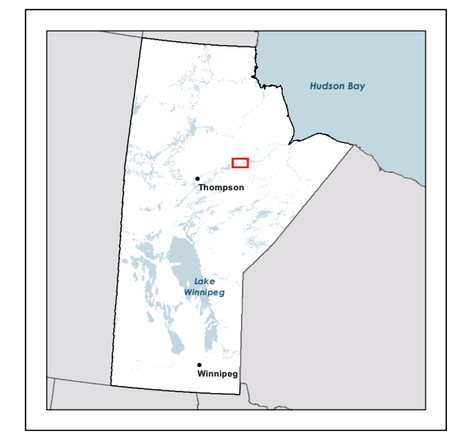


KEEYASK
Hydropower Limited Partnership

Legend

Depth (m)

- 0 - 4
- 4 - 8
- 8 - 12
- 12 - 18
- 18 - 23
- 23 - 31



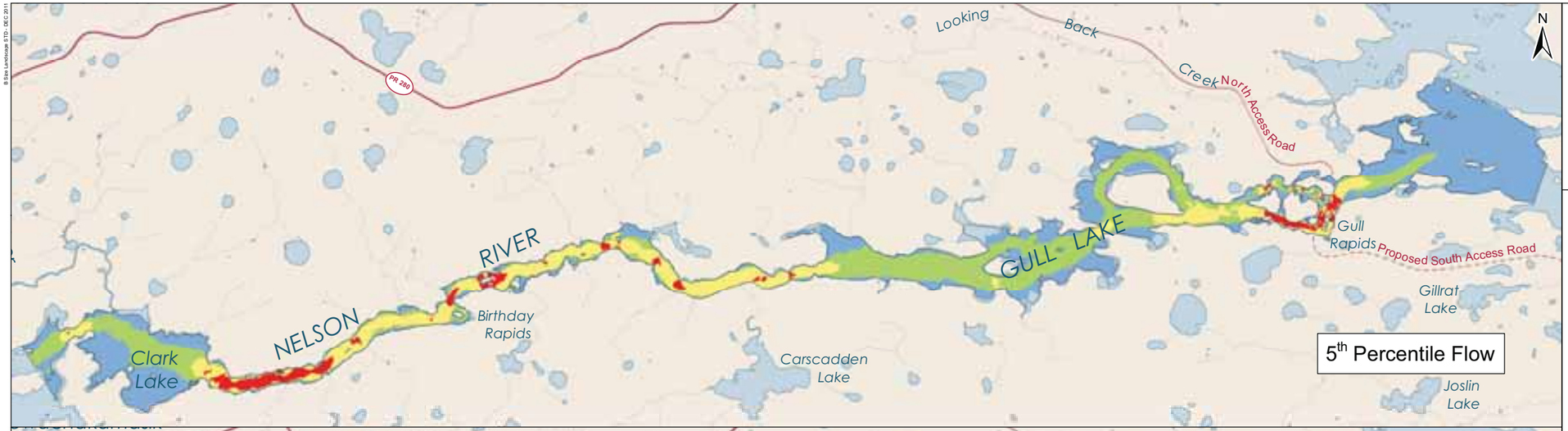
DATA SOURCE:
Manitoba Hydro; Government of Manitoba; Government of Canada

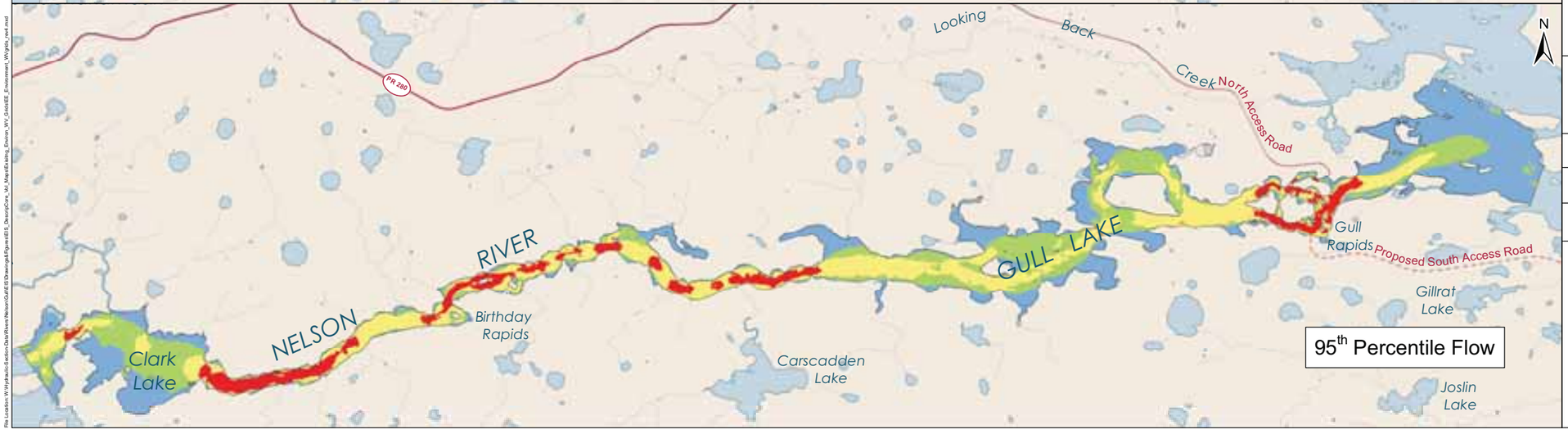
CREATED BY:
Manitoba Hydro - Water Resources Engineering Department

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	08-JAN-10	17-MAY-12
0 2 4 Kilometres / 0 1.5 3 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Water Depth Grids
Existing Environment

Map 6-8





KEEYASK
Hydropower Limited Partnership

Legend

Velocity (m/s)

- Standing (0 - 0.2)
- Low (0.2 - 0.5)
- Moderate (0.5 - 1.5)
- High (>1.5)

DATA SOURCE:
Manitoba Hydro; Government of Manitoba; Government of Canada

CREATED BY:
Manitoba Hydro - Water Resources Engineering Department

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	08-JAN-10	23-MAY-12
0 2 4 Kilometres / 0 1 2 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Water Velocity Grids
Existing Environment

Map 6-9

B Stn Landscape STD - DEC 2011

File Location: W:\Hydraulics\Section Data\Rivers\Nelson\GIS\EIS\Drawings\Figures\EIS_DescriptCore_Vel_Maps\Existing_Environ_WV_Grids\EIE_Environment_WVgrids_rev4.mxd

Lake Ice
A solid cover forms on Split Lake each year

Predominantly Open Water With Bands of Border Ice
The upper reach of the river including Clark Lake usually remains open with strips of border ice forming along each bank.

Mechanically Thickened Ice Cover
In some areas, the developed ice cover can be up to 10m thick, and is very rough.

Bridging Locations
An ice bridge typically forms at one of three locations within the vicinity of Gull Lake. Once formed, the ice cover is then able to progress upstream as inflowing ice collects against the leading edge. In years where this does not occur the river can remain open.

Lake Ice
A solid ice cover forms on Stephens Lake each year.

Hanging Ice Dam
If the ice cover is unable to progress upstream of Birthday Rapids, a hanging ice dam is formed just downstream of the rapids.

Hanging Ice Dam
Each year, the ice front cannot progress upstream of Gull Rapids. The ice collects against the strong lake ice on Stephens Lake and creates a large hanging ice dam.

DATA SOURCE:
Photos from Manitoba Hydro
Ice condition data from KGS Acres Ltd., 2010

CREATED BY:
KGS Acres Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	16-MAY-12	16-MAY-12
0 1.5 3 Kilometres / 0 1 2 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

- Hanging Ice Dams
- Border Ice
- Waterbody
- Bridging Locations
- Anchor Ice Location
- Keeyask Principal Structures
- Highway
- Access Road
- Proposed Access Road
- Rail
- Rivers

Overview of Existing Environment Ice Processes

Between Split Lake and Stephens Lake

Map 6-10

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File Location: P:\P-00008\19\planet\data\mxd\EIS\Ice_GIS_Figures\Keeyask\Projects\MXDs\Core_6_PE_BASELINE_Overview_of_Existing_Environmental_Ice_Processes_Between_Split_Lake_and_Stephens_Lake.mxd

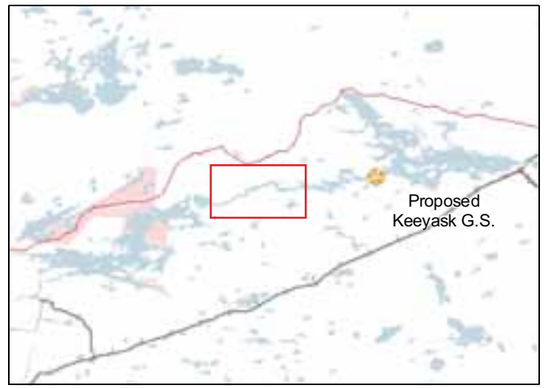


Photo 1 - Bedrock shoreline between near the upstream end of the hydraulic zone of influence

Photo 2 - Eroding mineral soil bank on north shore upstream of Birthday Rapids

Photo 3 - Local erosion of low mineral soil bank and adjacent ice-scoured banks; downstream of Birthday Rapids

Photo 4 - Complex peat shoreline when water elevation is below the 1st percentile in 2003

Photo 5 - Steep ice-scoured bank and exposed mineral soil on North shore of river reach between Birthday Rapids and Gull Lake

Photo 6 - Local slope failure in mineral soil bank between Clark Lake and Birthday Rapids

Photo 7 - Birthday Rapids looking downstream

Photo 8 - Mineral bank on bedrock beach at Birthday Rapids

Photo 9 - Steep ice-scoured bank and exposed mineral soil on south shore of river reach between Birthday Rapids and Gull Lake

Photo 10 - Moderately sloping ice-scoured mineral soil bank near the inlet to Gull Lake

KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Shore material and Nelson River shoreline - ECOSTEM Ltd.; Water - NTS; First Nation Reserves - Natural Resources Canada; Roads and rail - Manitoba Conservation; Photos - J D Mollard and Associates Ltd. and ECOSTEM Ltd.

CREATED BY:
ECOSTEM Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	18-JAN-12	09-FEB-12
0 0.9 1.8 Kilometres 0 0.4 0.8 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Shore Material

- Bedrock
- Coarse Mineral
- Fine Mineral
- Mineral Overlain By Peat
- Peat

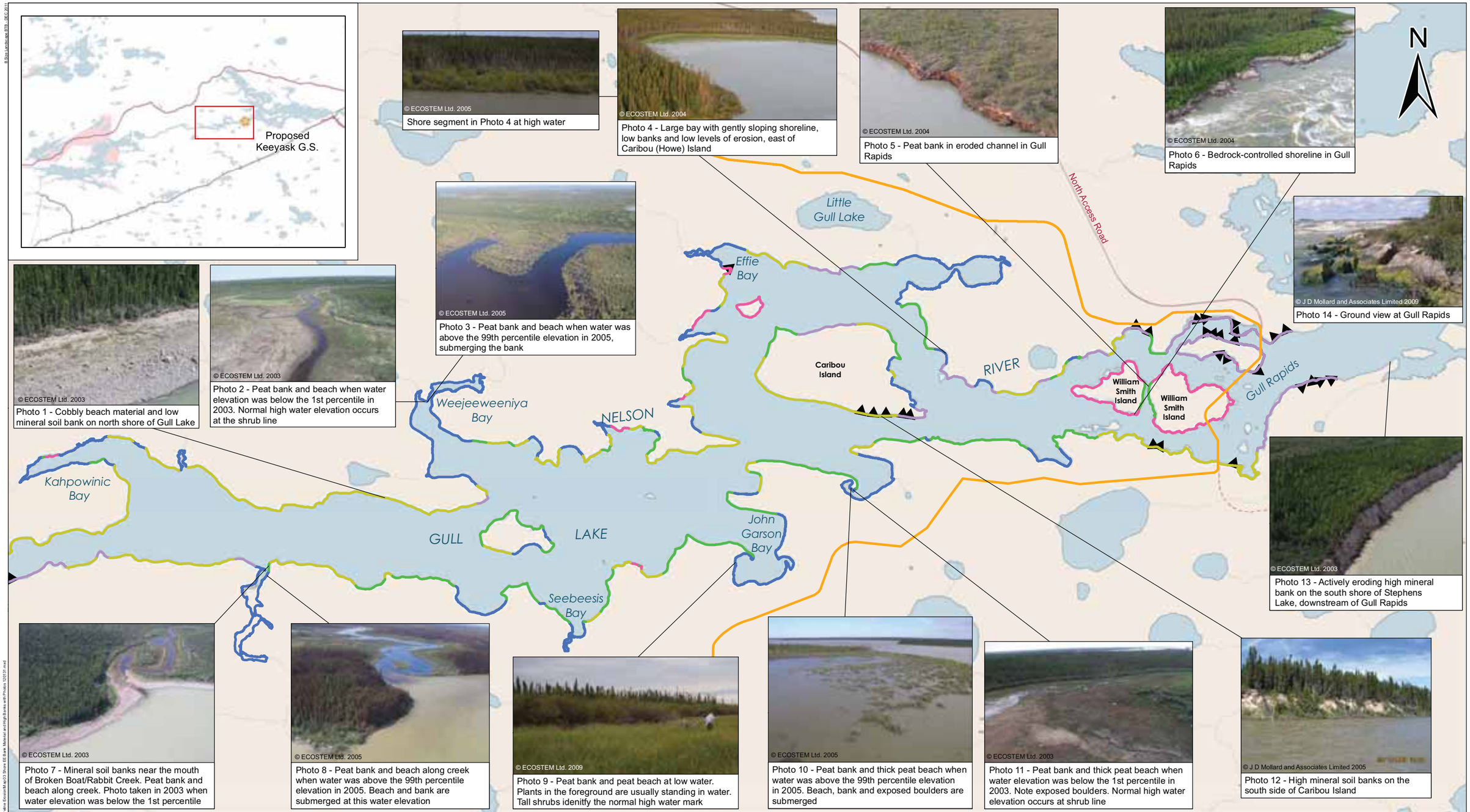
Shore At Least 3m High

Nelson River Bank Material Type and Segments With High Banks

in Western Upstream Reaches

Map 6-11

File Location: Z:\Workspace\Keeyask GIS\EIS\Figures\Physical Environment\Shoreline Erosion\Map 06 Shore ES Bank Material and High Banks with Photos West 120131.mxd



© ECOSTEM Ltd. 2005
Shore segment in Photo 4 at high water

© ECOSTEM Ltd. 2004
Photo 4 - Large bay with gently sloping shoreline, low banks and low levels of erosion, east of Caribou (Howe) Island

© ECOSTEM Ltd. 2004
Photo 5 - Peat bank in eroded channel in Gull Rapids

© ECOSTEM Ltd. 2004
Photo 6 - Bedrock-controlled shoreline in Gull Rapids

© J D Mollard and Associates Limited 2009
Photo 14 - Ground view at Gull Rapids

© ECOSTEM Ltd. 2003
Photo 1 - Cobbly beach material and low mineral soil bank on north shore of Gull Lake

© ECOSTEM Ltd. 2003
Photo 2 - Peat bank and beach when water elevation was below the 1st percentile in 2003. Normal high water elevation occurs at the shrub line

© ECOSTEM Ltd. 2005
Photo 3 - Peat bank and beach when water was above the 99th percentile elevation in 2005, submerging the bank

© ECOSTEM Ltd. 2003
Photo 13 - Actively eroding high mineral bank on the south shore of Stephens Lake, downstream of Gull Rapids

© ECOSTEM Ltd. 2003
Photo 7 - Mineral soil banks near the mouth of Broken Boat/Rabbit Creek. Peat bank and beach along creek. Photo taken in 2003 when water elevation was below the 1st percentile

© ECOSTEM Ltd. 2005
Photo 8 - Peat bank and beach along creek when water was above the 99th percentile elevation in 2005. Beach and bank are submerged at this water elevation

© ECOSTEM Ltd. 2009
Photo 9 - Peat bank and peat beach at low water. Plants in the foreground are usually standing in water. Tall shrubs idenitfy the normal high water mark

© ECOSTEM Ltd. 2005
Photo 10 - Peat bank and thick peat beach when water was above the 99th percentile elevation in 2005. Beach, bank and exposed boulders are submerged

© ECOSTEM Ltd. 2003
Photo 11 - Peat bank and thick peat beach when water elevation was below the 1st percentile in 2003. Note exposed boulders. Normal high water elevation occurs at shrub line

© J D Mollard and Associates Limited 2005
Photo 12 - High mineral soil banks on the south side of Caribou Island

KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Shore material and Nelson River shoreline - ECOSTEM Ltd.; Infrastructure and access roads - Manitoba Hydro; Water - NTS; First Nation Reserves - Natural Resources Canada; Roads and rail - Manitoba Conservation; Photos - J D Mollard and Associates Ltd. and ECOSTEM Ltd.

CREATED BY:
ECOSTEM Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	18-JAN-12	09-FEB-12
0 0.9 1.8 Kilometres / 0 0.4 0.8 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

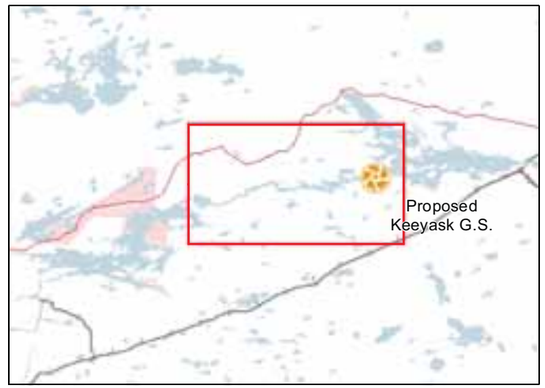
Shore Material

- Bedrock
- Coarse Mineral
- Fine Mineral
- Mineral Overlain By Peat
- Peat
- Bank At Least 3m High
- Keeyask Principal Structures

Nelson River Bank Material Type and Segments With High Banks

in Eastern Upstream Reaches

Map 6-12



Moswakot River

South

North Access Road

STEPHENS LAKE

N

Reach 4
North Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 15 mg/l
Offshore:
Min: 5 mg/l
Mean: 9 mg/l
Max: 16 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 19 mg/l

Reach 5
North Nearshore:
Min: 5 mg/l
Mean: 12 mg/l
Max: 30 mg/l
Offshore:
Min: 5 mg/l
Mean: 10 mg/l
Max: 30 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 13 mg/l
Max: 30 mg/l

Reach 8
North Nearshore:
Min: 5 mg/l
Mean: 6 mg/l
Max: 24 mg/l
Offshore:
Min: 5 mg/l
Mean: 9 mg/l
Max: 16 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 21 mg/l

Back Creek

RIVER

NELSON

GULL LAKE

Clark Lake

Reach 9
North Nearshore:
Min: 5 mg/l
Mean: 6 mg/l
Max: 15 mg/l
Offshore:
Min: 5 mg/l
Mean: 11 mg/l
Max: 16 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 9 mg/l
Max: 16 mg/l

Reach 3
North Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 25 mg/l
Offshore:
Min: 5 mg/l
Mean: 12 mg/l
Max: 25 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 25 mg/l

Reach 6
North Nearshore:
Min: 5 mg/l
Mean: 6 mg/l
Max: 30 mg/l
Offshore:
Min: 5 mg/l
Mean: 11 mg/l
Max: 30 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 6 mg/l
Max: 30 mg/l

Reach 7
North Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 20 mg/l
Offshore:
Min: 5 mg/l
Mean: 10 mg/l
Max: 21 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 7 mg/l
Max: 24 mg/l

Reach 2
North Nearshore:
Min: 5 mg/l
Mean: 16 mg/l
Max: 25 mg/l
Offshore:
Min: 5 mg/l
Mean: 16 mg/l
Max: 25 mg/l
South Nearshore:
Min: 5 mg/l
Mean: 16 mg/l
Max: 25 mg/l

SPLIT LAKE

Butnau Lake

Butnau River

NOTE:
Estimated eroded shore mineral volume under PEAKING scenario has been considered

Plan KEEYASK Hydropower Limited Partnership

DATA SOURCE:
TSS data from KGS Acres LTD., 2010
Modelling reach boundary data from North/South Consultants
Manitoba Hydro
Backround data provided by Geogratis

CREATED BY:
KGS Acres Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	02-MAY-12	03-MAY-12
0 1.5 3 Kilometres / 0 1 2 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Total Suspended Solids (TSS mg/L)
High : 50
Low : 0

Reach Boundaries
Nearshore Boundaries

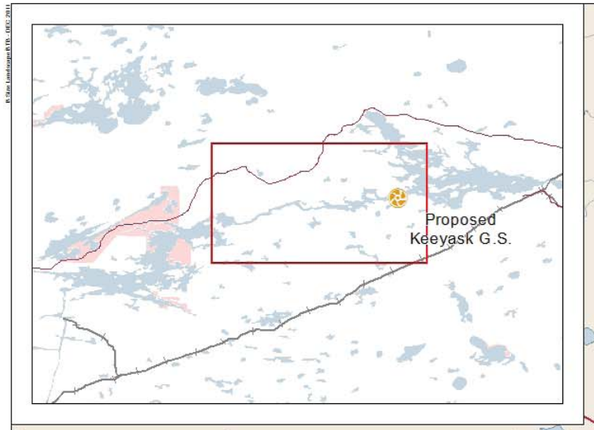
Keeyask Principal Structures
Access Road
Proposed Access Road
Highway
Rail
Rivers
Waterbody

Spatial Distribution of Depth Averaged Sediment Concentration

Existing Environment

Map 6-13

File Location: P:\Pr\135\018\arc\d\dpd\shp\Sediment\con\EIS_Figures\EIA\2-2\MXD\Conc_S_P_E_BASELINE_Spatial_Distribution_of_Depth_Averaged_Sediment_Concentration_E.wmxg_Environment.mxd



DATA SOURCE:
Manitoba Hydro, North/South Consultants, Government of Canada
gull-ee-95perc-4327cms-rev3

CREATED BY:
North/South Consultants

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	26-MAR-10	03-JUL-12
0 1.5 3 Kilometres / 0 1 2 Miles	VERSION NO: 3.0	QA/QC: APPROVED

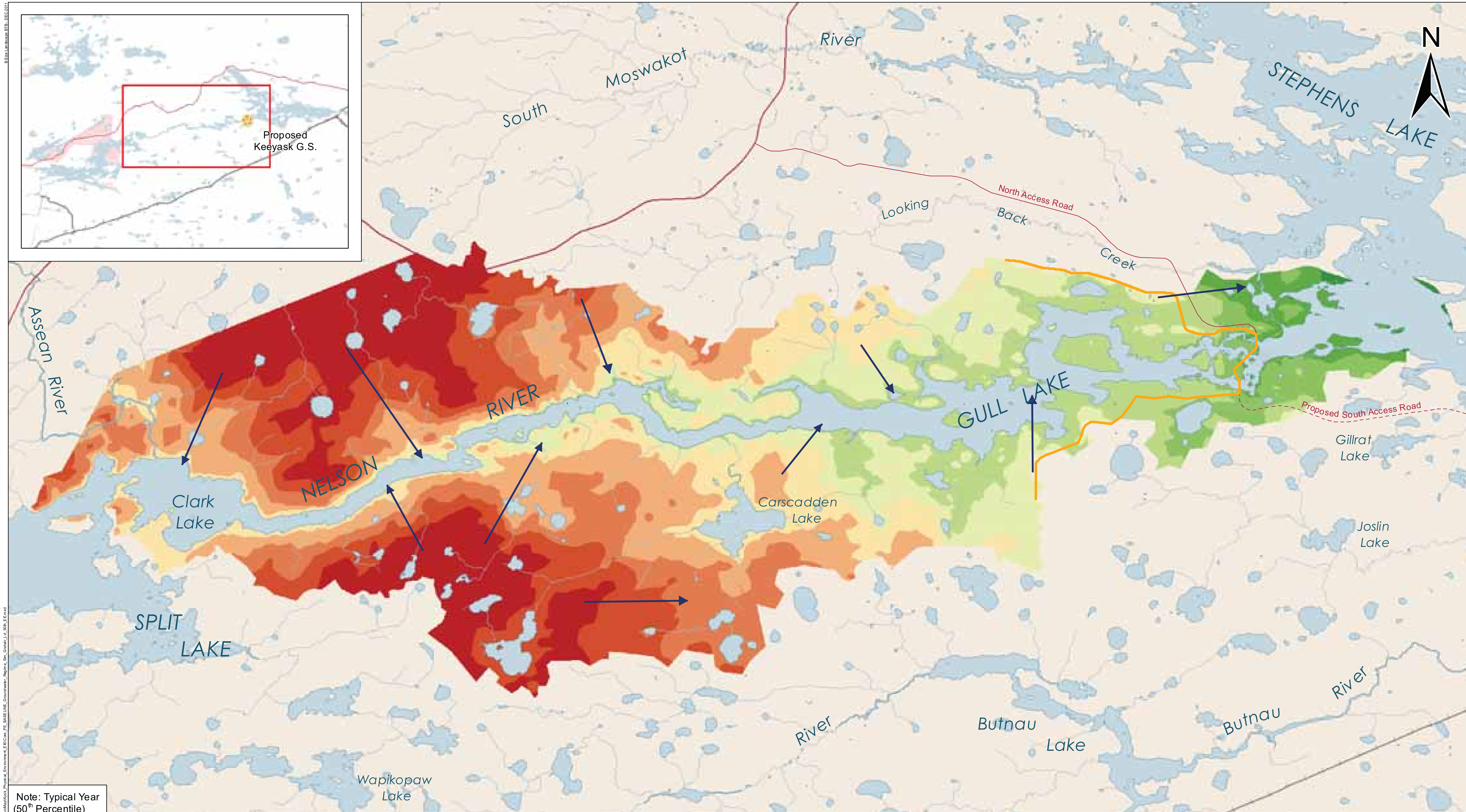
Legend

Substrate

- Bedrock
- Boulder
- Cobble/Boulder/Bedrock
- Cobble/Boulder
- Cobble
- Cobble/Gravel
- Gravel/Cobble/Boulder
- Gravel
- Gravel/Sand
- Sand
- Silt
- Silt/Clay
- Clay
- Organic
- No Data

Substrate
Existing Environment
95th Percentile Inflow Keeyask Area

Map 6-14



DATA SOURCE:
Manitoba Hydro, NTS, Stantec Consulting Ltd.

CREATED BY:
Stantec Consulting Ltd.

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	18-JUL-11	15-MAY-12
0 1.5 3 Kilometres / 0 1 2 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Groundwater Elevation (m)

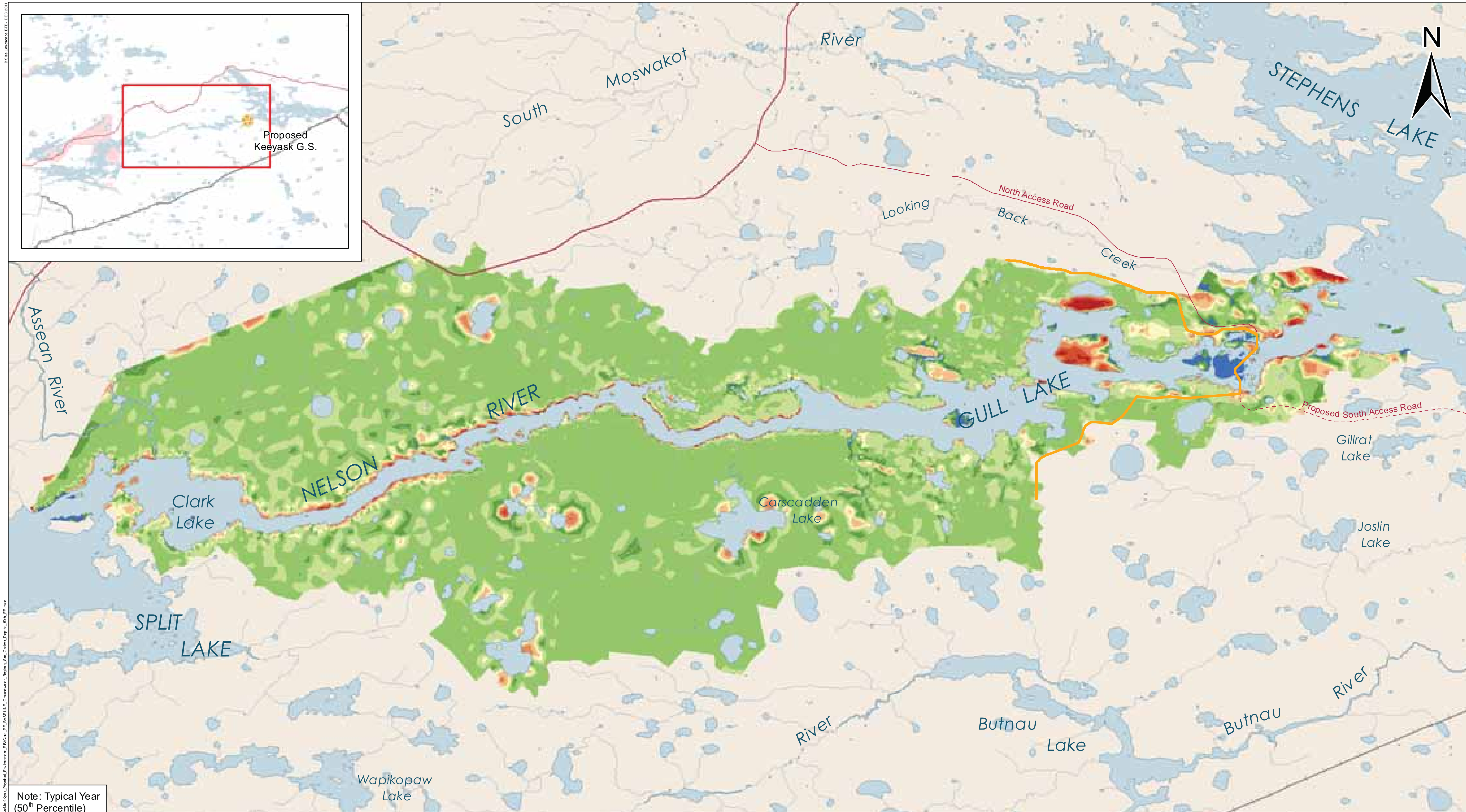
- < 140
- 140 - 146
- 146 - 152
- 152 - 158
- 158 - 164
- 164 - 170
- 170 - 176
- 176 - 182
- 182 - 188
- > 188

- Groundwater Flow Direction
- Keeyask Principal Structures
- Proposed Access Road
- Access Road
- Waterbody

Keeyask Groundwater Regime

Simulated Groundwater Level
(Existing Environment)

Map 6-15



Note: Typical Year
(50th Percentile)

DATA SOURCE:
Manitoba Hydro, NTS, Stantec Consulting Ltd.

CREATED BY:
Stantec Consulting Ltd.

COORDINATE SYSTEM:
UTM NAD 1983 Z15N

DATE CREATED:
18-JUL-11

REVISION DATE:
15-MAY-12

0 1.5 3 Kilometres
0 1 2 Miles

VERSION NO:
1.0

QA/QC:
APPROVED

Legend

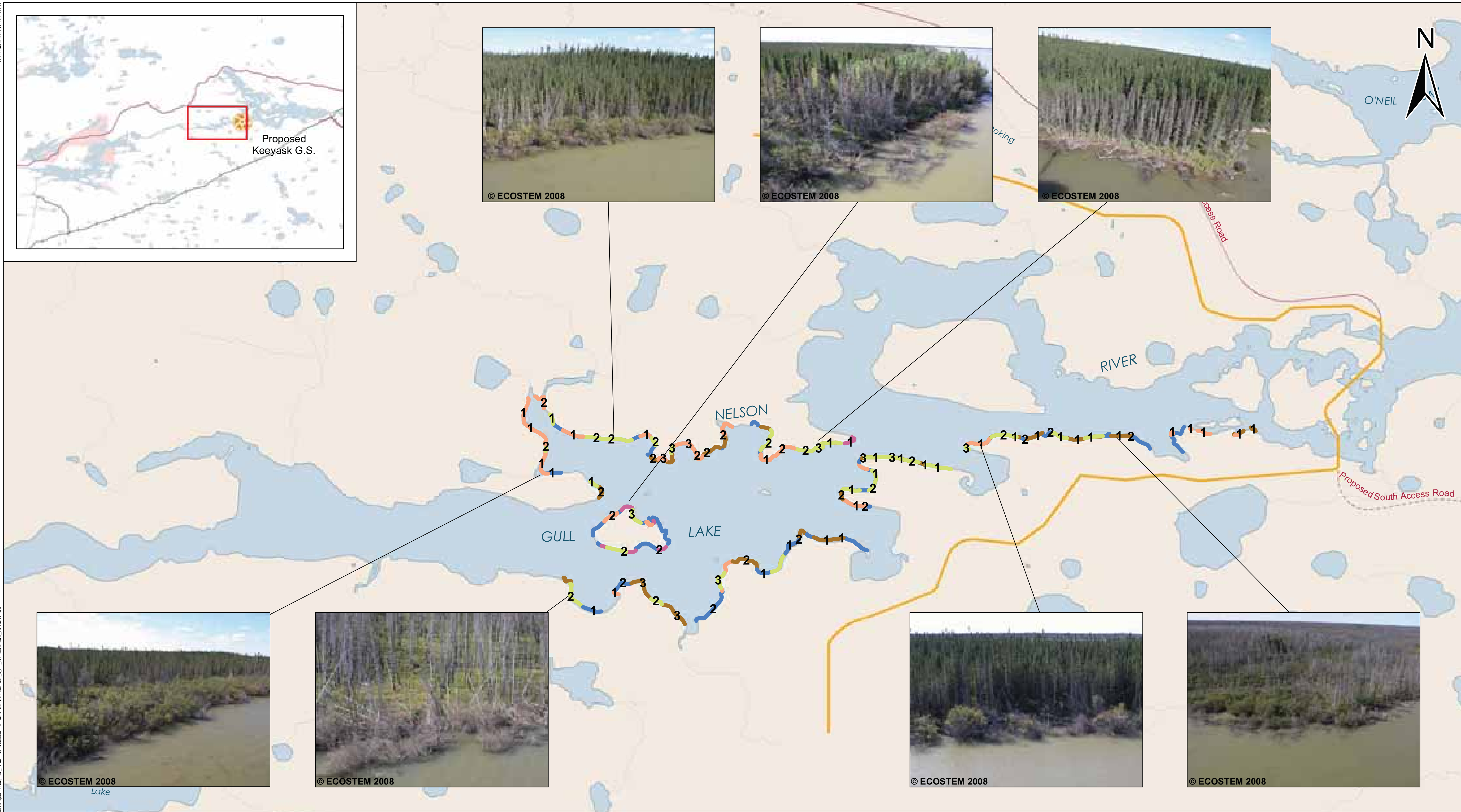
Depth to Groundwater (m)

- Groundwater at Surface
- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 3.0
- 3.0 - 5.0
- 5.0 - 7.5
- > 7.5
- Keeyask Principal Structures
- Proposed Access Road
- Access Road
- Waterbody

Groundwater Regime

Simulated Groundwater Depths (Existing Environment)

Map 6-16



DATA SOURCE:
Manitoba Hydro; Government of Manitoba; Government of Canada;
ECOSTEM 2008-09-01 Shoreline Photos

CREATED BY:
Manitoba Hydro - Hydro Power Planning - GIS & Special Studies

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	11-AUG-09	11-MAY-12
0 0.7 1.4 Kilometres / 0 0.6 1.2 Miles	VERSION NO: 1.0	QA/QC: APPROVED

Legend

Debris Density

1 Low
2 Medium
3 Dense

Debris Type

- Beached Debris
- Floating Debris
- Leaning Trees
- Standing Dead Trees
- Submerged Debris
- None
- Access Road
- Proposed Access Road
- Keeyask Principal Structures

Shoreline Debris

N

STEPHENS LAKE AREA

CLARK LAKE TO STEPHENS LAKE AREA

SPLIT LAKE AREA

Little Limestone Lake

LIMESTONE RIVER

LIMESTONE LAKE

WASKAIOWAKA LAKE

NORTH MOSWAKOT RIVER

SOUTH MOSWAKOT RIVER

Crying Lake

STEPHENS LAKE

Ferris Bay

Looking Back Creek

PR 280

Kettle G.S.

Proposed Keeyask G.S.

Gillam

Fox Lake Cree Nation
A Kwis Ki Mahka Reserve

NELSON RIVER

GULL LAKE

Gull Rapids

Long Rapids

Birthday Rapids

FOX LAKE

Assean River

CLARK LAKE

SPLIT LAKE

Tataskweyak Cree Nation
Tataskweyak (Split Lake)

ASSEAN LAKE

BURNTWOOD RIVER

LAKE

SPLIT

York Factory First Nation
York Landing (Kawechiwasik)

First Rapids

GRASS RIVER

Kelsey G.S.

Witchai Lake Falls

WITCHAI LAKE

Goose Hunting Lake

AIKEN RIVER

MOOSE NOSE LAKE

War Lake First Nation
Ilford

BUTNAU RIVER

BUTNAU LAKE

KETTLE RIVER

Little Kettle Lake

Kettle Lake

North Angling Lakes

KETTLE

Cyril Lake

FOX (ATKINSON) LAKE

KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Government of Canada, North/South Consultants

CREATED BY:
North/South Consultants

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	26-FEB-10	25-MAY-12
0 4 8 Kilometres / 0 3.5 7 Miles	VERSION NO: 2.0	QA/QC: APPROVED

Legend

- Area Boundary
- Generating Station (Planned)
- Generating Station (Existing)
- First Nation Community
- Highway
- Access Road
- Proposed Access Road
- Rail
- First Nation Reserve
- Waterbody

Aquatic Environment Study Area

Map 6-18

File Location: G:\EIS\Keeyask\Publish_MXDs\CORE_VOLUME III - Updated_Templates\Core & AE BASELINE Aquatic Environment Study Area_20120126.mxd

N

Weir Lake
Leochko Lake
WHITECAP LAKE
Myre Lake
WEIR RIVER
CYGNET LAKE
LIMESTONE RIVER
Little Limestone Lake
LIMESTONE LAKE
WASKAIOWAKA LAKE
Twelve Mile Creek
Crying Lake
Ferris Bay
STEPHENS LAKE
PR 280
Broten Lake
WEIR RIVER
WR-1
NR-7
NELSON RIVER
North Seal C reek
Nelson River Estuary
Seal Creek
NR-8
NR-6
AR-1
NR-5
15C-1
GC-1
TC-1
SCK-1
Potential Conawapa G.S.
Lower Limestone Rapids
ANGLING RIVER
Merrick Lake
PENNYCUTAWAY RIVER
HAYES RIVER
LR-1
BC-1
NR-4
Limestone G.S.
ANGLING LAKE
STL-3
STL-2
Kettle G.S.
NR-3
Long Spruce G.S.
GT-1
STL-1
GL-2
Proposed Keeyask G.S.
Camp-1
GL-1
GULL LAKE
Gull Rapids
NR-2
Camp-2
NR-1
TRIB-1
Birthday Rapids
TRIB-2
TRIB-3
AL-2
FOX LAKE
SPL-8
CLARK LAKE
CL-1
SPLIT LAKE
Assean River
ASSEAN LAKE
AL-1
SPL-7
SPL-3
SPL-4
SPL-6
BURNTWOOD RIVER
SPL-1
SPL-2
Kelsey G.S.
GRASS RIVER
SPL-9
YL-1
SPL-5
AIKEN RIVER
AK-1
MOOSE NOSE LAKE
BUTNAU LAKE
KETTLE RIVER
Little Kettle Lake
Kettle Lake
ANGLING RIVER
Cyril Lake
FOX (ATKINSON) LAKE
NELSON RIVER

KEEYASK Hydropower Limited Partnership

DATA SOURCE:
Government of Canada, Province of Manitoba, North/South Consultants

CREATED BY:
North/South Consultants

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	05-MAY-10	18-MAY-12
0 7 14 Kilometres / 0 6 12 Miles	VERSION NO: 2.0	QA/QC: APPROVED

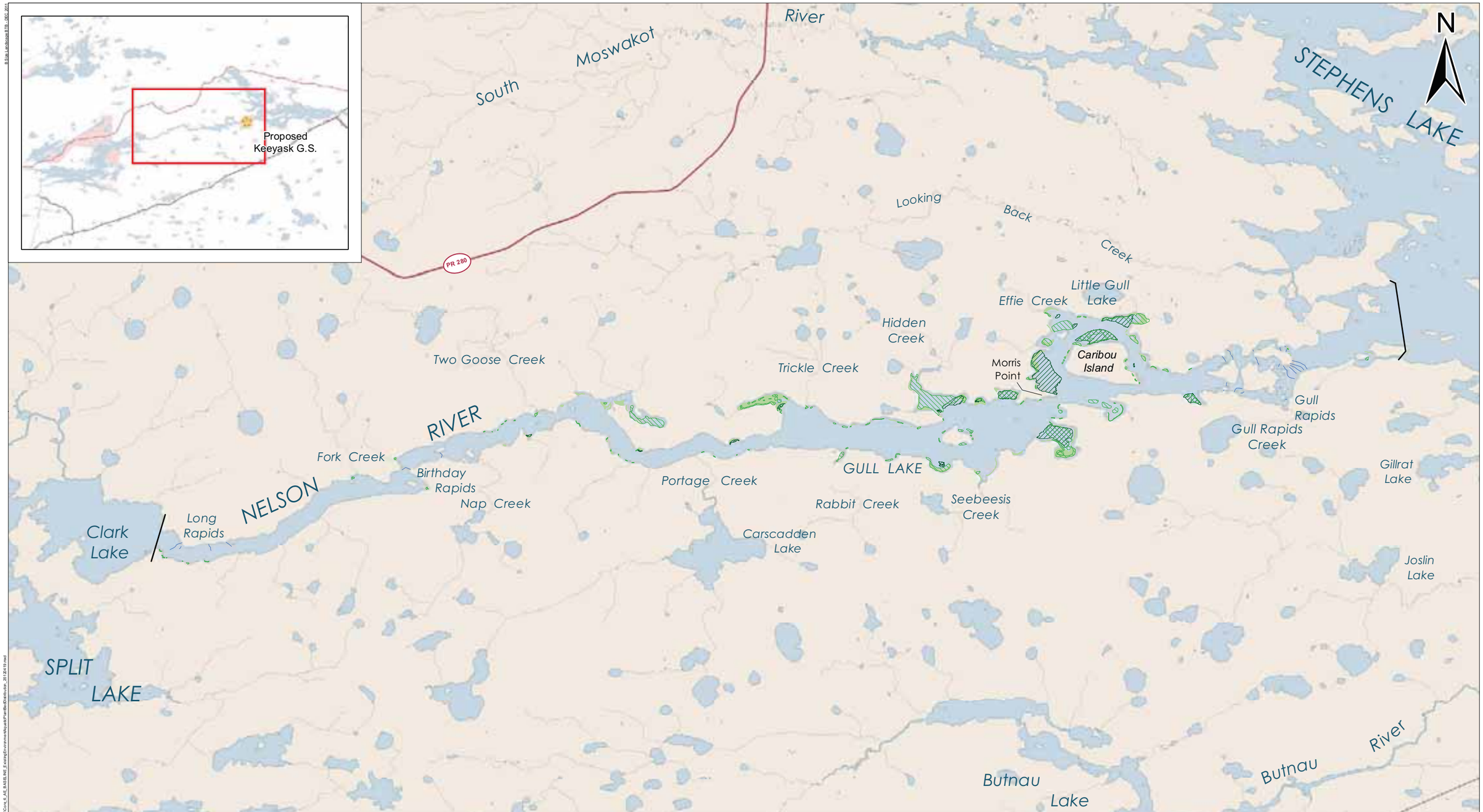
Legend

- Water Quality Sampling Sites
- Generating Station (Planned)
- Generating Station (Existing)
- Highway
- Rail
- First Nation Reserve
- Waterbody

Water Quality Sampling Sites

Map 6-19

File Location: G:\EIS\Keeyask\Publish_MXD\CORE_VOLUME\Fn_Update_Template\Core_6_AE_BASE_NE_WaterQualitySamplingSites_20120202.mxd



KEEYASK
Hydropower Limited Partnership

DATA SOURCE:
North/South Consultants, Government of Canada
Topo_50k_CanVec_Hydrography_Permanent_Seamless

CREATED BY:
North/South Consultants

COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	26-MAR-10	28-MAY-12
0 1.5 3 Kilometres / 0 1 2 Miles	VERSION NO: 4.0	QA/QC: APPROVED

Legend

- 2001 Aquatic Plant Bed
- 2003 Aquatic Plant Bed
- 2006 Aquatic Plant Bed
- Clark Lake to Stephens Lake Area Boundary

Aquatic Plant Bed Distribution
Existing Environment

Map 6-20