



Keeyask Generation Project

Environmental Impact Statement

Supporting Volume
Socio-Economic Environment,
Resource Use and Heritage Resources



June 2012

This page is intentionally left blank.

KEYYASK GENERATION PROJECT
SOCIO-ECONOMIC ENVIRONMENT, RESOURCE USE
AND HERITAGE RESOURCES

SOCIO-ECONOMY

Prepared by

Keeyask Hydropower Limited Partnership
Winnipeg, Manitoba

June 2012

Canadian Environmental Assessment
Registry Reference Number: 11-03-64144

Manitoba Conservation and Water Stewardship
Client File Number: 5550.00



This page is intentionally left blank.

LIST OF KEY PERSONNEL

The following is a list of key personnel from the consulting firms who worked on the Socio-Economic, Resource Use and Heritage Resources components of the Socio-Economic Supporting Volume.

InterGroup Consultants Ltd.

Cam Osler, M.A., Study Lead

Janet Kinley, M.A., MCIP, Socio-Economic and EIS Document Lead

John Osler, MBA, Public Involvement Lead

Nancy LeBlond, M.A., Socio-Economic Lead

North South Consultants

Don MacDonell, M.N.R.M.; Resource Use Lead

Gaylen Eaton, M.N.R.M.; Resource Use Author

Northern Lights Heritage Services

Virginia Petch, Ph.D., Study Lead, Heritage Resources and Culture and Spirituality

Lisa Bobbie, M.A. (Candidate), Heritage Resources Lead

Hani Khalidi, M.A., Culture and Spirituality Lead

This page is intentionally left blank.

ACKNOWLEDGEMENTS

InterGroup Consultants wish to acknowledge, with gratitude, the co-operation and assistance received from many sources in the course of conducting the socio-economic environmental assessment and preparing the environmental impact statement. In addition to the Key Personnel listed separately, InterGroup would like to acknowledge the following people:

InterGroup Consultants Ltd.

Denis De Pape, Andrew McLaren, Anneke Gillis, Kristin Drewes, Darcy McGregor, Gene Senior, Hamid Najmidinov, Erin Jonasson, Jennifer Olson, Harv Sawatzky, Jeff Valdivia, Heather Senyk, Jolene Mollard, Joy MacLean, Matt Abra, Celeste Linton, Cynthia Carr, Ross Wilson, and Dr. Laurie Chan. In addition, InterGroup Consultants would like to thank the YFFN and FLCN community researchers and coordinators that assisted us with community-based research.

Lewis Communications

Jim Lewis, Chris Hunter

KGS Acres

Ross Dewar

North South Consultants

Don MacDonell, Gaylen Eaton

Northern Lights Heritage Services

Virginia Petch, Lisa Bobbie, Hani Khalidi, Amber Flett, Emily Linneman

This page is intentionally left blank.

ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	
AADT	Average Annual Daily Traffic
AC	Alternating Current
AE SV	Aquatic Environment Supporting Volume
AEA	Adverse effects agreement
AGE	Advisory Group on Employment
AIP	Agreement in Principle
AMEC	An engineering, project management and consulting firm
AMP	Access management plan
ANOVA	Analysis of variance
AOL	Aski'Otutoskeo Ltd.
ASI	Area of special interest
asl	above sea level
ATE	Adventure travel and eco-tourism
ATK	Aboriginal traditional knowledge
ATV	all terrain vehicles
BC	British Columbia
BCHCR	Burntwood Community Health Resource Centre
BFI	Brighter Futures Initiative
BHC	Building Healthy Communities
BNA	Burntwood Nelson Agreement
BOD	Biochemical oxygen demand
BP	Before Present
BRHA	Burntwood Regional Health Authority
CAC	Construction Advisory Committee
CBN	Churchill-Burntwood-Nelson
CCFM	Canadian Council of Forest Ministers
CCME	Canadian Council of Ministers of the Environment
CCREM	Canadian Council of Resource and Environment Ministers
CEA	Cumulative effects assessment
CEAA	Canadian Environmental Assessment Agency
CEO	Chief Executive Officer
CETP	Community Employment and Training Program
CFIA	Canadian Food Inspection Agency
CHA	Canadian Hydropower Association
CIA	Comprehensive Implementation Agreement
CINE	Centre for Indigenous Peoples' Nutrition and Environment
CI	Confidence limit
CLFN	Cross Lake First Nation

Acronym / Abbreviation	
CMHC	Canadian Mortgage and Housing Corporation
CNG	Core Negotiating Group
CNP	Cree Nation Partners
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CPUE	Catch per unit effort
CRCM	Canadian Regional Climate Model
CRD	Churchill River Diversion
CRDAP	Churchill River Diversion Archaeological Project
CWS	Canadian Wildlife Services
d.w.	Dry weight
dBA	Decibels adjusted (noise power)
DBH	Diameter at breast height
DBs	Depth below surface (note: Heritage Resources)
DC	Direct current
DELT	Deformities, erosion, lesions, and tumours
DFO	Department of Fisheries and Oceans
DIN	Dissolved inorganic nitrogen
DL	Detection limit
DMA-80	Direct mercury analysis (version 80)
DNC	Direct negotiated contract
<i>e.g.</i>	example
EA	Environmental assessment
EAPF	Environment Act Proposal Form
EC	Environment Canada
EIA	Environmental impact assessment
EIS	Environmental impact statement
EMPA	Excavated Material Placement Areas
EMS	Environmental Management System
ENGO	Environmental non-governmental organizations
EnvPP	Environmental protection plan
EPA	Environmental Protection Agency
EPP	Environmental protection program
ER	Ecological Reserve
ESWG	Environmental Studies Working Group
et al.	and others
ETL	Enviro-Test Laboratories
EUP	Exclusive use permit
FEMP	Federal Ecological Monitoring Program
FFMC	Freshwater Fish Marketing Corporation
FL	Fork length
FLAEA	Fox Lake Adverse Effects Agreement
FLCN	Fox Lake Cree Nation

Acronym / Abbreviation	
FLRMA	Fox Lake Resource Management Area
FMU	Forest Management Unit
FNIHB	First Nations and Inuit Health Branch
FSDA	Federal Sustainable Development Act
FSDS	Federal Sustainable Development Strategy
FSL	Full supply level
GHA	Game Hunting Area
GHG	Greenhouse gases
GIS	Geographic information system
GOT	Generation Outlet Transmission
GPS	Global positioning system
GS	Generating Station
GW	Gigawatt
HBC	Hudson's Bay Company
HGD	Harmonized Gillam Development
HHRA	Human health risk assessment
HNTEI	Hydro North Training and Employment Initiative
HRB	Historic Resources Branch
HRIA	Heritage resources impact assessment
HRPP	Heritage resources protection plan
HTFC	Hilderman Thomas Frank Cram
HVDC	High Voltage Direct Current
HZI	Hydraulic Zone of Influence
<i>i.e.</i>	That is
IHA	International Hydropower Association
IMAC	Interim maximum acceptable concentration
INAC	Indian and Northern Affairs Canada
IPCC	Intergovernmental Panel on Climate Change
ISD	In-service date
ISO	International Organization for Standardization
JKDA	Joint Keeyask Development Agreement
KCNs	Keeyask Cree Nations communities including Tataskweyak Cree Nation (TCN), War Lake First Nation (WLFN), York Factory First Nation (YFFN) and Fox Lake Cree Nation (FLCN),.
KERC	Keeyask External Relations Committee Reference Group
KETA	Keeyask Employment and Training Agency Reference Group
KHLP	Keeyask Hydropower Limited Partnership
KIP	Keeyask Infrastructure Project
KIP EA	Keeyask Infrastructure Project Environmental Assessment
KIRC	Keeyask Internal Relations Committee Reference Group
KPI	Key person interview
KTC	Keewatin Tribal Council

Acronym / Abbreviation	
LC50	Concentration at which 50% mortality of a test organism occurs
LCA	Life-Cycle Assessment
LEL	Lowest effect level
LGD	Local Government District
LK	Local knowledge
LNR	Lower Nelson River
LUC	Land use categories
LWCNRSB	Lake Winnipeg, Churchill and Nelson Rivers Study Board
LWR	Lake Winnipeg Regulation
MAC	Maximum acceptable concentration
MB	Manitoba
MBCDC	Manitoba Conservation Data Centre
MBESA	Manitoba Endangered Species Act
MCWS	Manitoba Conservation and Water Stewardship
MDMNR	Manitoba Department of Mines and Natural Resources
MEMP	Manitoba Ecological Monitoring Program
MESA	Manitoba Endangered Species Act
MH	Manitoba Hydro
MIT	Manitoba Infrastructure and Transportation
MKO	Manitoba Keewatinowi Okimakanak
MMF	Manitoba Metis Federation
MMMR	Canada-Manitoba Agreement on the Study and Monitoring of Mercury in the Churchill River Diversion
MNS	Manitoba Naturalists Society
MOL	Minimum operating level
MOU	Memorandum of Understanding
MPMO	Major Projects Management Office
MTS	Manitoba Telecom Services
MW	Megawatt
MWG	Mammals Working Group
MWQSOG	Manitoba Water Quality Standards, Objectives, and Guidelines
MWS	Manitoba Water Stewardship
n.d.	No date
N/A	Not available/applicable
NCIS	National Contaminants Information System
NCN	Nisichawayasihk Cree Nation
NCS	Northern Collector System
NFA	Northern Flood Agreement
NFFA	Northern Fishermen's Freight Assistance
NLHS	Northern Lights Heritage Foundation
NNADAP	National Native Alcohol and Drug Abuse Program
NRSB	Nelson River Sturgeon Co-Management Board

Acronym / Abbreviation	
NSC	North/South Consultants Inc.
NWPA	Navigable Waters Protection Act
NWT	Northwest Territories
OC	Organic carbon
ON	Organic nitrogen
OWL	Overview of Water and Land
PAL	Protection of Aquatic Life
PD	Project Description
PD SV	Project Description Supporting Volume
PE SV	Physical Environment Supporting Volume
PEL	Probable effect level
PEMP	Physical Environment Monitoring Program
PF	Percent flooded
PIP	Public Involvement Program
PI SV	Public Involvement Supporting Volume
PM	Particulate matter
PPER	Post-Project Environmental Review
ppm	parts per million
PPT	Pre-Project Training
PR	Provincial Road
PRLC	Partners Regulatory and Licensing Committee
PTH	Provincial Truck Highway
PY	Person years
PYLL	Potential years of life lost
RCM	Regional Climate Model
RCMP	Royal Canadian Mounted Police
RMA	Resource Management Area
RNFB	Revised Northern Food Basket
ROW	Right-of-way
RRCS	Renewable Resources Consulting Services Ltd.
RTL	Registered Trapline
SARA	Species at Risk Act
SD	Standard deviation
SE	Standard error
SE SV	Socio-Economic Environment, Resource Use and Heritage Resources Supporting Volume
SEIA	Socio-Economic Impact Assessment
SEMP	Socio-Economic Monitoring Program
SIL	Southern Indian Lake
SLCPPER	Split Lake Cree Post Project Environmental Review
SLRMA	Spilt Lake Resource Management Area
SLRMB	Split Lake Resource Management Board

Acronym / Abbreviation	
sp(p).	species
SV	Supporting volume
TBD	To be determined
TC	Tendered contract
TCN	Tataskweyak Cree Nation
TDS	Total dissolved solids
TE SV	Terrestrial Environment Supporting Volume
TEMA	Tataskweyak Environmental Monitoring Agency
TGH	Thompson General Hospital
TK	Traditional knowledge
TLE	Treaty Lands Entitlement
TSS	Total suspended solids
UCN	University College of the North
UMA	Underwood McLellan and Associates Ltd.
UNESCO	United Nations Educational, Scientific and Cultural Organization
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
UVA/UVB	Ultraviolet light (type A and B)
VEC	Valued Environmental Component
WHO	World Health Organization
WKTC	Wuskwatim Keeyask Training Consortium
WLFN	War Lake First Nation
WMA	Wildlife Management Area
WMP	Waterways Management Plan
WQG	Water quality guidelines
WRCS	Wildlife Resource Consulting Services
WUA	Weighted usable area
Ya	Years ago
YFFN	York Factory First Nation
YFRMA	York Factory Resource Management Area
YOY	Young-of-the-year

UNITS

Abbreviation	Unit
Btu	British thermal unit
cm	centimetre
CFU/mL	coliform forming units per millilitre
cm ³	cubic centimetre
km ³	cubic kilometre
m ³	cubic metre
m ³ /s	cubic metre per second
d	day
d/wk	days per week
d/y	days per year
°C	degrees Celsius
fish/h	fish per hour
fish/m/h	fish per metre per hour
fish/s	fish per second
fc	footcandle
GHz	gigahertz
GJ	gigajoule
GW	gigawatt
GWh	gigawatt-hours
g	gram
g/L	grams per litre
g/m ²	grams per square metre
g/t	grams per tonne
> (use only in tables)	greater than
≥	greater than or equal to
ha	hectare (10,000 m ²)
Hz	hertz
h (not hr)	hour
h/d	hours per day
h/wk	hours per week
h/y	hours per year
" symbol not "	inch
individuals/m ³	individuals per cubic metre
individuals/L	individuals per litre
individuals/m ²	individuals per square metre
J	joule
kg	kilogram
kg/m ³	kilograms per cubic metre
kg/h	kilograms per hour
kg/m ²	kilograms per square metre
kJ	kilojoule
km	kilometre
km/h	kilometres per hour
kPa	kilopascal
kV	kilovolt
kW	kilowatt

kWh	Kilowatt-hour
< (use only in tables)	less than
≤	less than or equal to
L	litre
L/m	litres per minute
MW	megawatt
MWh	megawatt-hour
m	metre
m/min	metres per minute
m/s	metres per second
t	metric ton (tonne)
µg/g	micrograms per gram
µg/L	micrograms per litre
µm	micrometre
µS/cm	microSiemens per centimetre
mg	milligram
mg/m ³	milligrams per cubic metre
mg/L	milligrams per litre
mL	millilitre
mm	millimetre
M	million
mo	month
ng/L	nanograms per litre
oocyte/L	oocyte per litre
ppb	parts per billion
ppm	parts per million
%	percent
plants/m ²	plants per square metre
s	second (time)
cm ²	square centimetre
km ²	square kilometre
m ²	square metre
TWh	terawatt hours
wk	week
yr	Year

MASTER TABLE OF CONTENTS

PART 1: SOCIO-ECONOMIC ENVIRONMENT

- 1.0 INTRODUCTION
 - 1.1 PURPOSE AND CONTENT OF THE SOCIO-ECONOMIC IMPACT ASSESSMENT
 - 1.2 OVERVIEW OF ASSESSMENT APPROACH
 - 1.2.1 PRE-PROJECT PLANNING, JOINT KEEYASK DEVELOPMENT AGREEMENT AND ADVERSE EFFECTS AGREEMENTS
 - 1.2.2 ROLE OF THE KEEYASK CREE NATIONS IN THE ENVIRONMENTAL ASSESSMENT
 - 1.2.3 ABORIGINAL TRADITIONAL KNOWLEDGE IN THE ENVIRONMENTAL ASSESSMENT
 - 1.2.4 SOCIO-ECONOMIC FRAMEWORK
 - 1.2.5 VALUED ENVIRONMENTAL COMPONENTS
 - 1.2.6 SCOPE OF ASSESSMENT
 - 1.2.7 ASSESSMENT METHODOLOGY
 - 1.3 STUDY AREA
 - 1.3.1 SOCIO-ECONOMIC LOCAL STUDY AREA
 - 1.3.2 SOCIO-ECONOMIC REGIONAL STUDY AREA
 - 1.4 SOURCES OF INFORMATION
 - 1.5 SUMMARY OF PROJECT COMPONENTS RELEVANT TO THE SOCIO-ECONOMIC ENVIRONMENT
 - 1.5.1 PROJECT COMPONENTS RELEVANT TO CONSTRUCTION-PHASE EFFECTS
 - 1.5.2 PROJECT COMPONENTS RELEVANT TO OPERATIONS-PHASE EFFECTS
- 2.0 HISTORICAL CONTEXT
 - 2.1 REGIONAL STUDY AREA OVERVIEW
 - 2.1.1 HISTORICAL INFLUENCES ON SETTLEMENT
 - 2.1.2 COMMUNITY DEVELOPMENT IN THE REGIONAL STUDY AREA
 - 2.2 LOCAL STUDY AREA
 - 2.2.1 HISTORICAL OVERVIEW OF THE LOCAL STUDY AREA
 - 2.2.2 OVERVIEW OF HYDRO DEVELOPMENT FIRST ORDER EFFECTS
 - 2.2.3 KEEYASK CREE NATIONS
 - 2.2.4 GILLAM
 - 2.2.5 THOMPSON
 - 3.0 ECONOMY
 - 3.1 INTRODUCTION

- 3.2 APPROACH AND METHODOLOGY**
 - 3.2.1 EMPLOYMENT OPPORTUNITIES**
 - 3.2.2 BUSINESS OPPORTUNITIES**
 - 3.2.3 INCOME**
 - 3.2.4 COST OF LIVING**
 - 3.2.5 RESOURCE ECONOMY**

- 3.3 ENVIRONMENTAL SETTING**
 - 3.3.1 EMPLOYMENT AND TRAINING OPPORTUNITIES – LOCAL STUDY AREA**
 - 3.3.2 BUSINESS OPPORTUNITIES – LOCAL STUDY AREA**
 - 3.3.3 INCOME – LOCAL STUDY AREA**
 - 3.3.4 COST OF LIVING – LOCAL STUDY AREA**
 - 3.3.5 REGIONAL STUDY AREA – EMPLOYMENT AND TRAINING OPPORTUNITIES**
 - 3.3.6 REGIONAL STUDY AREA – BUSINESS OPPORTUNITIES**
 - 3.3.7 REGIONAL STUDY AREA – INCOME**
- 3.4 ENVIRONMENTAL EFFECTS ASSESSMENT**

- APPENDIX 3A: SUPPLEMENTARY DATA TABLES**
- APPENDIX 3B: COST OF LIVING IN KEEYASK COMMUNITIES TECHNICAL REPORT**
- APPENDIX 3C: ECONOMIC IMPACT ASSESSMENT**

- 4.0 POPULATION INFRASTRUCTURE AND SERVICES**
 - 4.1 INTRODUCTION**
 - 4.2 APPROACH AND METHODOLOGY**
 - 4.2.1 POPULATION**
 - 4.2.2 HOUSING, INFRASTRUCTURE AND SERVICES**
 - 4.3 ENVIRONMENTAL SETTING**
 - 4.3.1 POPULATION/MIGRATION – LOCAL STUDY AREA**
 - 4.3.2 HOUSING – LOCAL STUDY AREA**
 - 4.3.3 INFRASTRUCTURE AND SERVICES – LOCAL STUDY AREA**
 - 4.3.4 LAND – LOCAL STUDY AREA**
 - 4.3.5 TRANSPORTATION INFRASTRUCTURE – LOCAL STUDY AREA**
 - 4.3.6 REGIONAL STUDY AREA – POPULATION**
 - 4.3.7 REGIONAL STUDY AREA – TRANSPORTATION INFRASTRUCTURE**
 - 4.4 ENVIRONMENTAL EFFECTS ASSESSMENT**
 - 4.4.1 CONSTRUCTION EFFECTS AND MITIGATION**



4.4.2 OPERATION EFFECTS AND MITIGATION

4.4.3 SUMMARY OF RESIDUAL PROJECT EFFECTS

APPENDIX 4A: POPULATION PROJECTIONS

APPENDIX 4B: POPULATION DATA

APPENDIX 4C: THOMPSON SCENARIOS

5.0 PERSONAL, FAMILY AND COMMUNITY LIFE

5.1 INTRODUCTION

5.2 APPROACH AND METHODOLOGY

5.2.1 COMMUNITY GOVERNANCE, GOALS AND PLANS

5.2.2 COMMUNITY HEALTH

5.2.3 MERCURY AND HUMAN HEALTH

5.2.4 PUBLIC SAFETY AND WORKER INTERACTION

5.2.5 TRAVEL, ACCESS AND SAFETY

5.2.6 CULTURE AND SPIRITUALITY

5.2.7 THE WAY THE LANDSCAPE LOOKS - AESTHETICS

5.3 ENVIRONMENTAL SETTING

5.3.1 GOVERNANCE, GOALS AND PLANS

5.3.2 COMMUNITY HEALTH

5.3.3 MERCURY AND HUMAN HEALTH

5.3.4 PUBLIC SAFETY AND WORKER INTERACTION

5.3.5 TRAVEL, ACCESS AND SAFETY

5.3.6 CULTURE AND SPIRITUALITY

5.3.7 THE WAY THE LANDSCAPE LOOKS (AESTHETICS)

5.4 ENVIRONMENTAL EFFECTS ASSESSMENT

5.4.1 CONSTRUCTION EFFECTS AND MITIGATION

5.4.2 OPERATION PHASE EFFECTS AND MITIGATION

5.5 SUMMARY OF RESIDUAL PROJECT EFFECTS

5.5.1 CONSTRUCTION PHASE

5.5.2 OPERATION PHASE

**5.5.3 SUMMARY OF RESIDUAL EFFECTS FOR THE
CONSTRUCTION AND OPERATION PHASES**

APPENDIX 5A: HEALTH INDICATOR DATA INFORMATION

APPENDIX 5B: MERCURY AND HUMAN HEALTH TWG

APPENDIX 5C: HUMAN HEALTH RISK ASSESSMENT

APPENDIX 5D: CULTURE AND SPIRITUALITY DATA SOURCES

APPENDIX 5E: POLICING STATISTICS IN THE LOCAL STUDY AREA

PART 2: RESOURCE USE

- 1.0 RESOURCE USE**
 - 1.1 INTRODUCTION**
 - 1.1.1 PURPOSE AND CONTENT OF RESOURCE USE IMPACT ASSESSMENT**
 - 1.1.2 OVERVIEW OF ASSESSMENT APPROACH**
 - 1.1.3 STUDY AREA**
 - 1.1.4 SOURCES OF INFORMATION**
 - 1.2 DOMESTIC RESOURCE USE**
 - 1.2.1 INTRODUCTION**
 - 1.2.2 APPROACH AND METHODOLOGY**
 - 1.2.3 EXISTING ENVIRONMENT**
 - 1.2.4 PROJECT EFFECTS, MITIGATION AND MONITORING**
 - 1.3 COMMERCIAL FISHING**
 - 1.3.1 INTRODUCTION**
 - 1.3.2 APPROACH AND METHODOLOGY**
 - 1.3.3 EXISTING ENVIRONMENT**
 - 1.3.4 PROJECT EFFECTS, MITIGATION AND MONITORING**
 - 1.4 COMMERCIAL TRAPPING**
 - 1.4.1 INTRODUCTION**
 - 1.4.2 APPROACH AND METHODOLOGY**
 - 1.4.3 EXISTING ENVIRONMENT**
 - 1.4.4 PROJECT EFFECTS, MITIGATION AND MONITORING**
 - 1.5 COMMERCIAL FORESTRY**
 - 1.5.1 INTRODUCTION**
 - 1.5.2 APPROACH AND METHODOLOGY**
 - 1.5.3 EXISTING ENVIRONMENT**
 - 1.5.4 PROJECT EFFECTS, MITIGATION AND MONITORING**
 - 1.6 MINING**
 - 1.6.1 EXISTING ENVIRONMENT**
 - 1.6.2 PROJECT EFFECTS AND MITIGATION**
 - 1.7 RECREATIONAL FISHING, HUNTING AND CABIN SITES**
 - 1.7.1 INTRODUCTION**
 - 1.7.2 APPROACH AND METHODOLOGY**
 - 1.7.3 EXISTING ENVIRONMENT**

	1.7.4	PROJECT EFFECTS, MITIGATION AND MONITORING
1.8		LODGES, OUTFITTERS AND OTHER TOURISM
	1.8.1	INTRODUCTION
	1.8.2	APPROACH AND METHODOLOGY
	1.8.3	EXISTING ENVIRONMENT
	1.8.4	PROJECT EFFECTS, MITIGATION AND MONITORING
1.9		PROTECTED AREAS AND SCIENTIFIC SITES
	1.9.1	INTRODUCTION
	1.9.2	APPROACH AND METHODOLOGY
	1.9.3	EXISTING ENVIRONMENT
	1.9.4	PROJECT EFFECTS, MITIGATION AND MONITORING
1.10		SENSITIVITY OF EFFECTS TO CLIMATE CHANGE
1.11		REFERENCES
	1.11.1	LITERATURE CITED
	1.11.2	PERSONAL COMMUNICATIONS
1.12		GLOSSARY
APPENDIX 1A		PRODUCTION (MARKETED WEIGHTS) AND VALUE OF THE COMMERCIAL FISHERIES LOCATED IN THE SPLIT LAKE AND FOX LAKE RESOURCE MANAGEMENT AREAS (1960 TO 2008)
APPENDIX 1B		COMPARISON OF FISHING FREQUENCY BY LAKE IN PRE-AND POST- 1997 PERIODS
APPENDIX 1C		COMPOSITE TIMBER DUES TABLES
APPENDIX 1D		FOREST DAMAGE APPRAISAL & VALUATION DETERMINATION
APPENDIX 1E		POTENTIAL SALVAGEABLE STANDS WITHIN THE PROJECT FOOTPRINT

PART 3: HERITAGE RESOURCES

1.0		HERITAGE RESOURCES
	1.1	INTRODUCTION
	1.1.1	PURPOSE AND CONTENT OF THE HERITAGE RESOURCES ASSESSMENT
	1.2	OVERVIEW OF ASSESSMENT APPROACH
	1.2.1	PRE-PROJECT PLANNING, JOINT KEEYASK DEVELOPMENT AGREEMENT AND ADVERSE EFFECTS AGREEMENTS
	1.2.2	ABORIGINAL KNOWLEDGE IN THE HERITAGE RESOURCES ASSESSMENT
	1.2.3	HERITAGE RESOURCES FRAMEWORK

- 1.2.4 SCOPE OF HERITAGE RESOURCES
- 1.2.5 ASSESSMENT METHODOLOGY
- 1.2.6 HERITAGE RESOURCES METHODS
- 1.2.7 SCOPE OF METHODS USED
- 1.2.8 UNCERTAINTY
- 1.3 STUDY AREA
- 1.4 ENVIRONMENTAL SETTING
 - 1.4.1 HISTORY OF PAST HYDROELECTRIC DEVELOPMENT
 - 1.4.2 HERITAGE RESOURCES & CULTURAL LANDSCAPE CHARACTERIZATION
 - 1.4.3 COMMUNITY PARTICIPATION
 - 1.4.4 PREDICTIVE MODELING
- 1.5 FIELD INVESTIGATIONS
 - 1.5.1 FIELD METHODS
 - 1.5.2 RESULTS OF ARCHAEOLOGICAL INVESTIGATIONS
- 1.6 SUMMARY OF KEY PROJECT RELATED EFFECTS
 - 1.6.1 CONSTRUCTION PHASE EFFECTS
 - 1.6.2 CONSTRUCTION PHASE MITIGATION MEASURES
 - 1.6.3 RESERVOIR IMPOUNDMENT AND OPERATION PHASE EFFECTS
 - 1.6.4 RESERVOIR IMPOUNDMENT AND OPERATION PHASE PROPOSED MITIGATION
- 1.7 SUMMARY OF RESIDUAL EFFECTS
 - 1.7.1 CONSTRUCTION PHASE
 - 1.7.2 RESERVOIR IMPOUNDMENT AND OPERATION PHASE
- 1.8 MONITORING AND FOLLOW-UP
 - 1.8.1 CONSTRUCTION PHASE
 - 1.8.2 RESERVOIR IMPOUNDMENT AND OPERATION PHASE
- 1.9 REFERENCES CITED
- 1.10 GLOSSARY
- APPENDIX A LIST OF FIELD REPORTS
- APPENDIX B METHODOLOGY AND METHODS, PREDICTIVE MODELING, SITE RANKING & REPORTING

PART 1

SOCIO-ECONOMIC

ENVIRONMENT

This page is intentionally left blank.