Panel and Presentation Guide

Opening Statements

1 Keeyask Hydropower Limited Partnership

2 Introduction to the Two-track Assessment Approach

3 Project Description

4 Regulatory Environmental Assessment

5 Keeyask Cree Nations Environmental Evaluation Approach & Process

6 Moving Forward as Partners on Environmental Matters

Keeyask Generation Project

CEC Hearings - Environmental Impact Statement

KEEYASK
Hydropower Limited Partnership

Approach, Methods and Processes

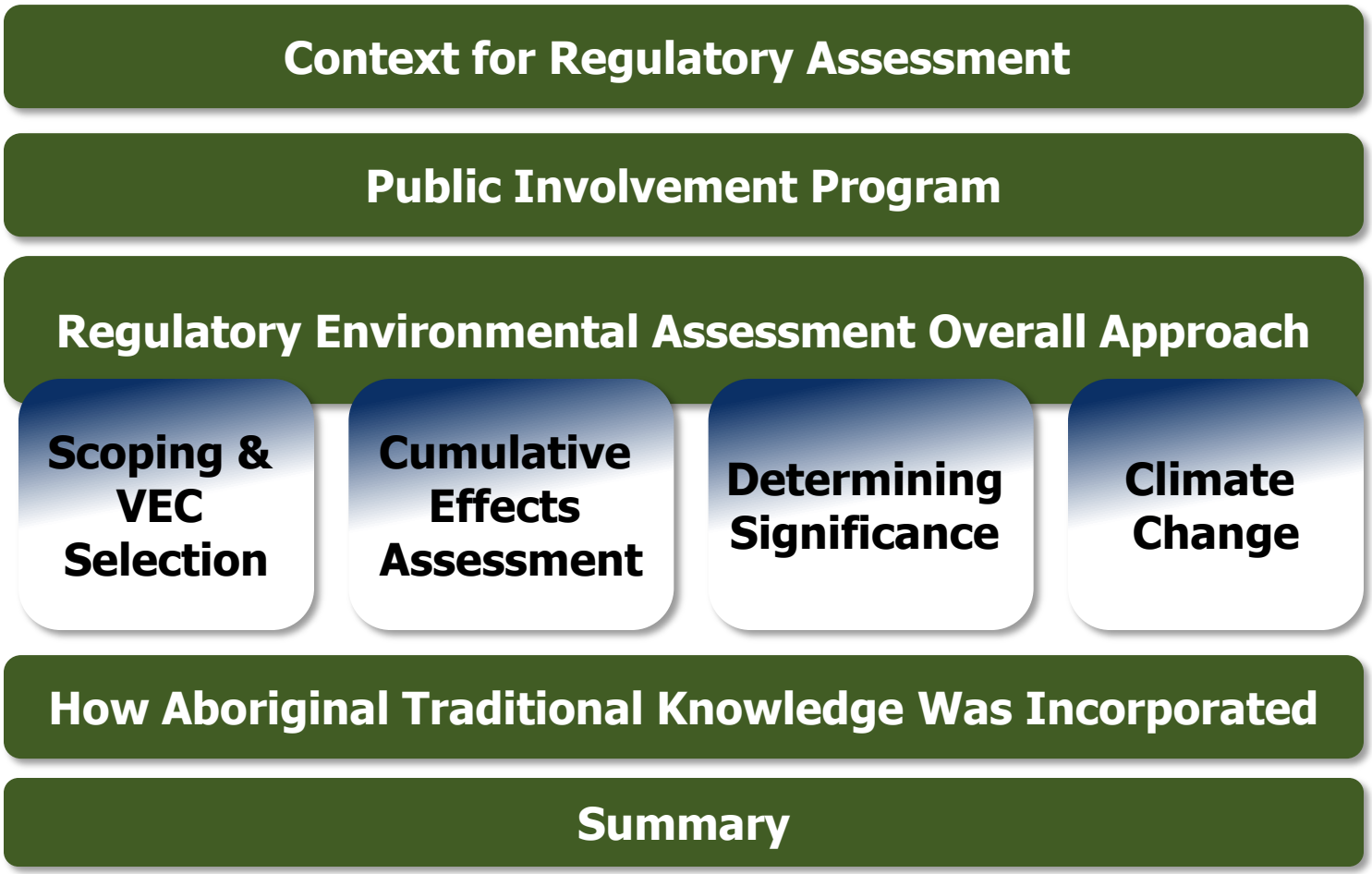
4 Regulatory Environmental Assessment

- Approach, Methods and Processes
- Physical Environment
- Aquatic and Terrestrial Environments
- Socio-economic, Resource Use, Heritage Resources

Panel Members

Vicky Cole	• Major Projects Assessment & Licensing Manager, Manitoba Hydro
Stuart Davies	• President of North/South Consultants Inc.
George Rempel	• Principal at Stantec
Janet Kinley	• Principal at InterGroup Consultants Ltd.
James Ehnes	• Principal at ECOSTEM Ltd.
Mark Manzer	• Socio Economic/Partner & Public Involvement Coordinator, Manitoba Hydro

Regulatory Assessment Panel Overview

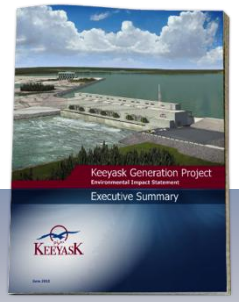


Context

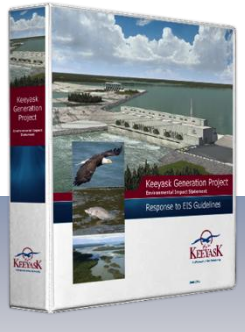
- **Environmental Impact Statement Filed: July 6, 2012**
- **Over 10 years of studies and preparation by a Manitoba-based team**
- **Numerous individuals and experts in a variety of fields**
- **Collaborative effort: Manitoba Hydro, consultants, KCNs, and advisors**
- **Rigorous assessment of the project that reflects two worldviews.**

The Response to the EIS Guidelines

Keeyask: Our Story Video



Executive Summary



Full Response to the EIS Guidelines

The Keeyask Cree Nations Evaluations

Cree Nation Partners,
York Factory First Nation,
Fox Lake Cree Nation,
Keeyask: Our Story (Video)

Purpose of These Documents and Planning and Assessment Process…

- **To provide the Partners and governments with the information needed to make an informed decision about whether or not to proceed with the Project from an environmental perspective**
- **The Partnership has used the process for its most important purpose – to plan and design the best project possible.**

Regulatory Environment

- **Environmental Impact Statement Guidelines for the Keeyask Generation Project (CEAA, 2012)**
- **Federal: *Canadian Environmental Assessment Act* (pre 2012)**
  - Undertaking a Comprehensive Study Report
- **Provincial: *The Environment Act* (Manitoba)**
  - CEC asked to hold hearings by the Minister of Conservation and Water Stewardship as part of this process
- **Canada-Manitoba Agreement on Environmental Assessment Cooperation (2007)**
  - Review by regulatory authorities through a coordinated Technical Advisory Committee

Needs For and Alternatives To (NFAT)

- **Considered in the "Needs For and Alternatives To" (NFAT) process led by the Public Utilities Board**
- **Keeyask is reviewed in that process as part of the preferred development plan**
- **NFAT process designed specifically for review of alternatives and is separate from the Environmental Assessment Process**
- **KHLP was developed for the Keeyask project, as proposed.**

How Partner Cree Nations, Manitoba Hydro and the EA Team Worked Together

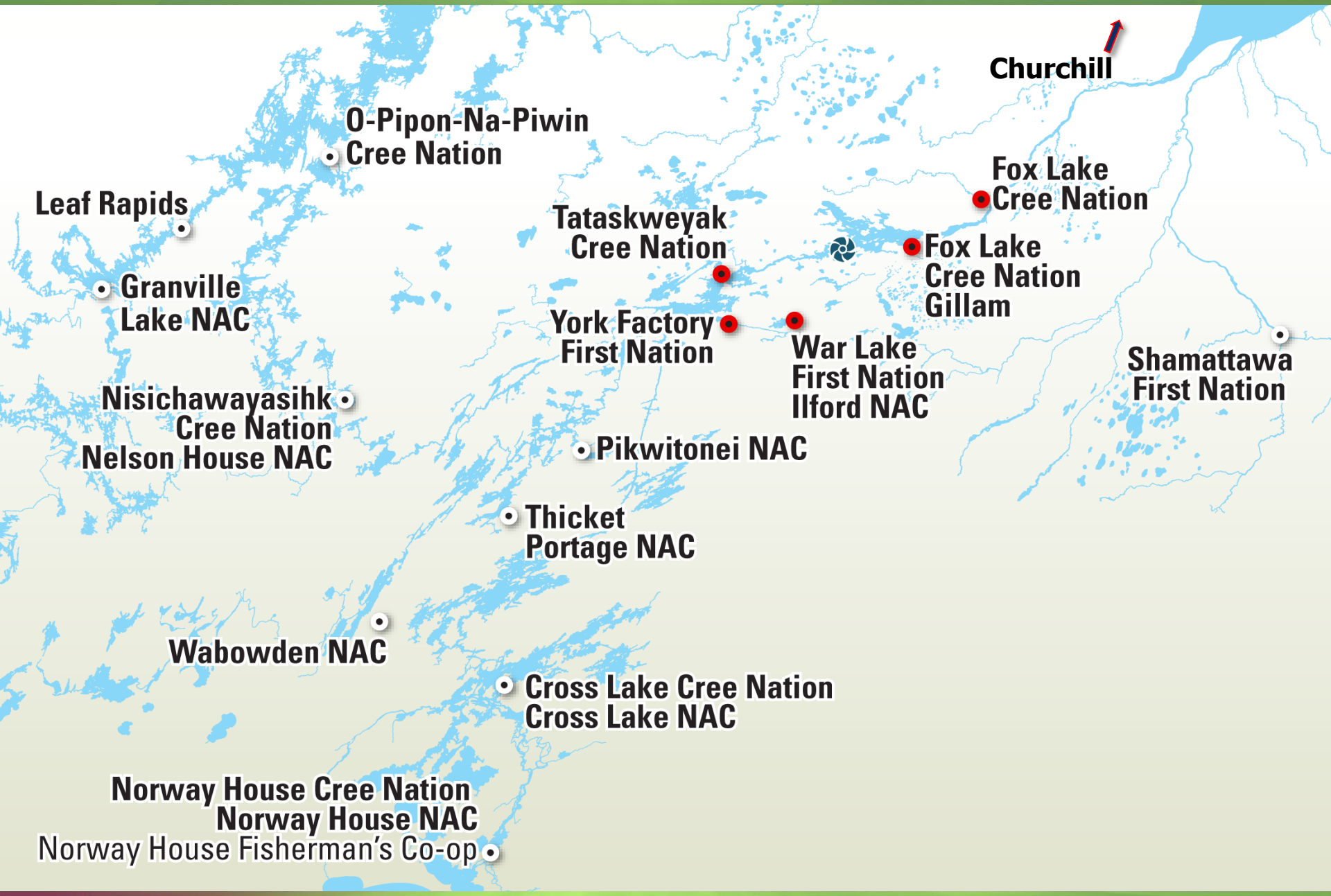
Public Involvement Program

Objectives and Scope

- **To provide meaningful opportunities to share information and perspectives about the Project and the potential effects.**

Audiences for the PIP include:

- **Potentially affected Aboriginal and other northern Manitoba communities and groups**
- **Other interested organizations**
- **The general public.**


Churchill
O-Pipon-Na-Piwin
Cree Nation
Leaf Rapids
Fox Lake
Cree Nation
Tataskweyak
Cree Nation
Fox Lake
Cree Nation
Gillam
Granville
Lake NAC
York Factory
First Nation
War Lake
First Nation
Ilford NAC
Shamattawa
First Nation
Nisichawayasihk
Cree Nation
Nelson House NAC
Pikwitonei NAC
Thicket
Portage NAC
Wabowden NAC
Cross Lake Cree Nation
Cross Lake NAC
Norway House Cree Nation
Norway House NAC
Norway House Fisherman's Co-op


Churchill
Thompson
Keewatin Tribal Council
Manitoba Keewatinowi Okimakanak
LGD of Mystery Lake
Other Targeted Groups
Winnipeg
Manitoba Metis Federation
Northern Affairs Community Council
Southern Chiefs Organization
Other Targeted Groups
CEC Funded Groups
Government Agencies
Brandon

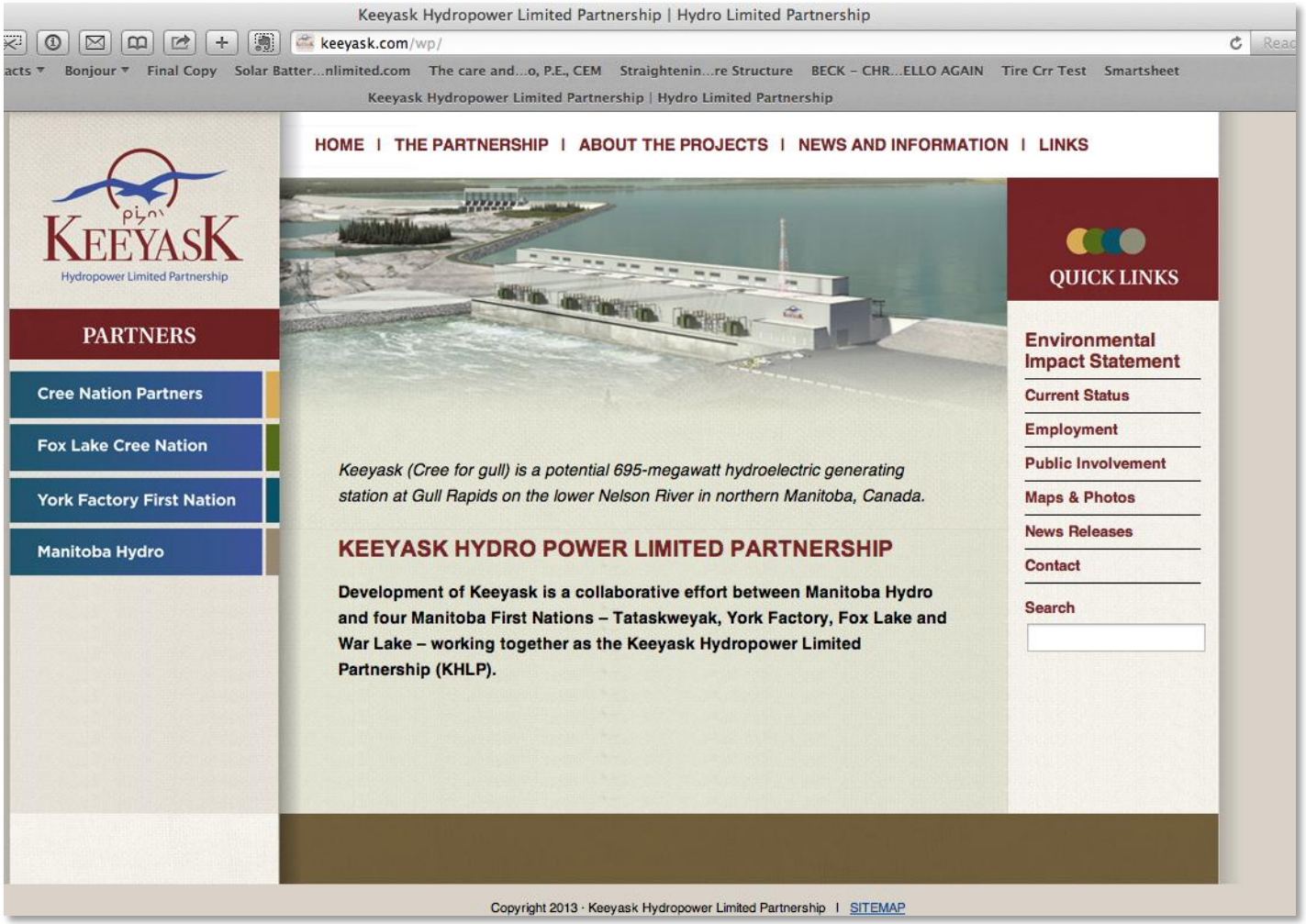
Public Involvement Program

Round One: 2008
Project Description and Issue Identification

Round Two: 2012
Preliminary Environmental Assessment Results

Round Three: 2013
Final Environmental Impact Statement Review

Keeyask Website



Issues Identified in the PIP

- **Planning and partnership issues**
- **Employment, training and business opportunities**
- **Concerns about the physical environment**
  - Including erosion and sedimentation; changes to water levels and flows
- **The need to protect Lake Sturgeon populations**
- **Mercury in fish and the relationship to human health**
- **Concerns about caribou and other terrestrial topics**
- **Concerns about water quality along the entire Nelson River and especially drinking water quality.**

Potable Water

- **Responsibility for potable water in Partner communities and elsewhere does not lie with Manitoba Hydro or this Partnership**
- **Potable water is topic covered in the Northern Flood Agreement through:**
  - Article 6.1 - responsibilities of Canada to provide potable water
  - Article 6.2 – reimbursement obligations of Manitoba Hydro to Canada for this potable water
- **Manitoba Hydro has met and is meeting its obligations under Article 6.2.**

PIP – Additional Engagement Efforts

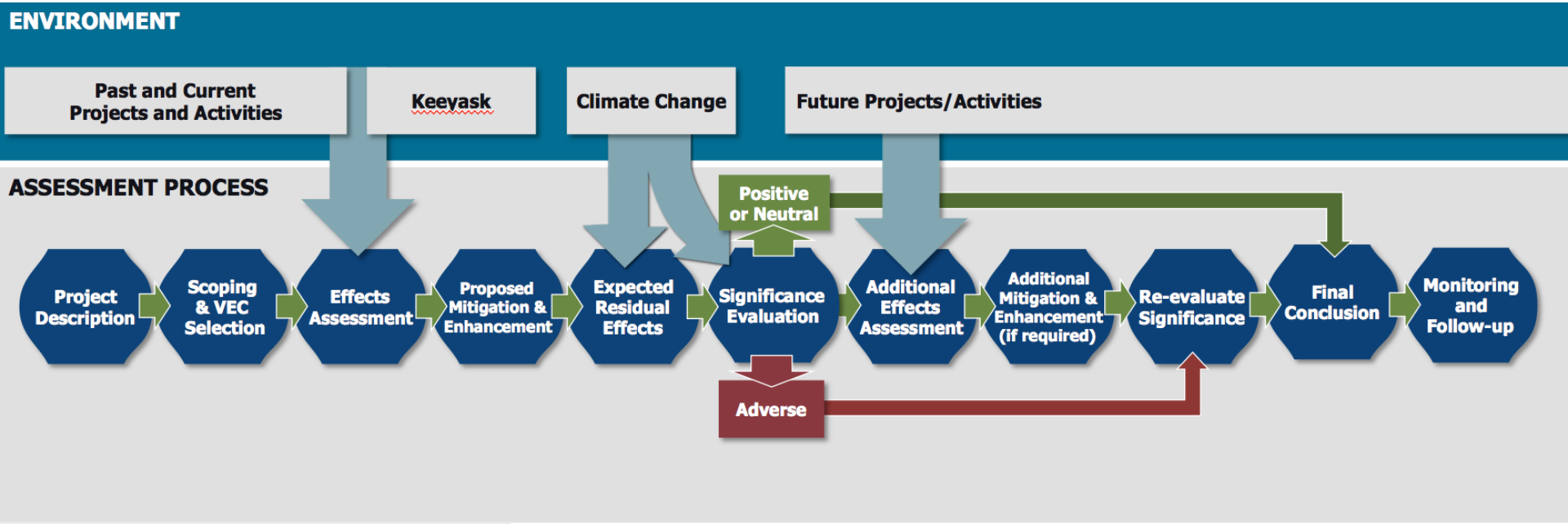
- **Manitoba Metis Federation**
  - Have worked together for several years through the 2009 Protocol Agreement
  - Agreement reached on a Metis-specific studies in June 2013
  - Studies will build on information already collected and documented by Partnership in EIS filings

PIP – Additional Engagement Efforts

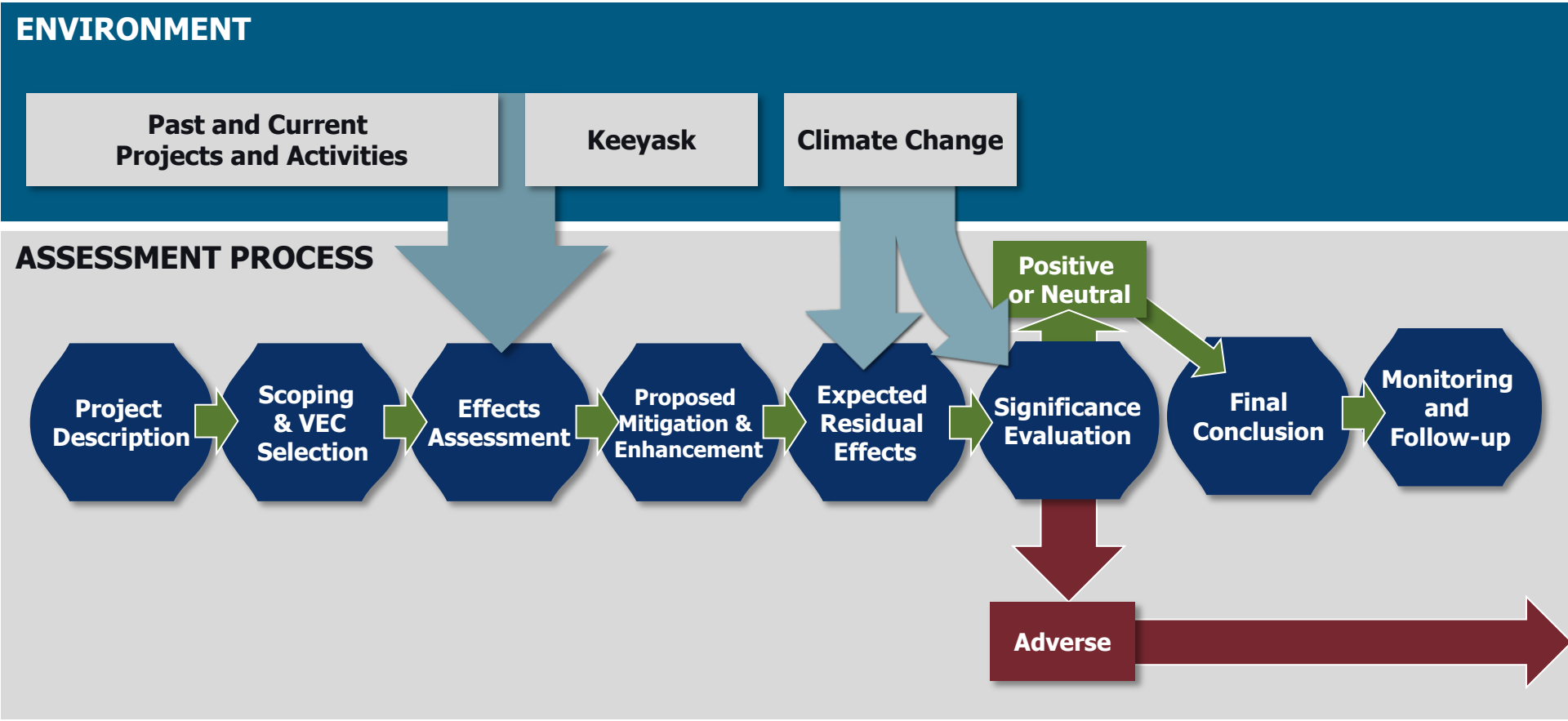
- **Pimicikamak Okimawin/Cross Lake First Nation**
  - Engaged for 12 years on Keeyask through Article 9 of the Northern Flood Agreement
  - Working towards agreement on a Pimicikamak-specific resource use study for Keeyask; proposal received in September 2013
  - If undertaken, study will build on information already collected and documented by the Partnership in EIS Filings.

Environmental Assessment Process

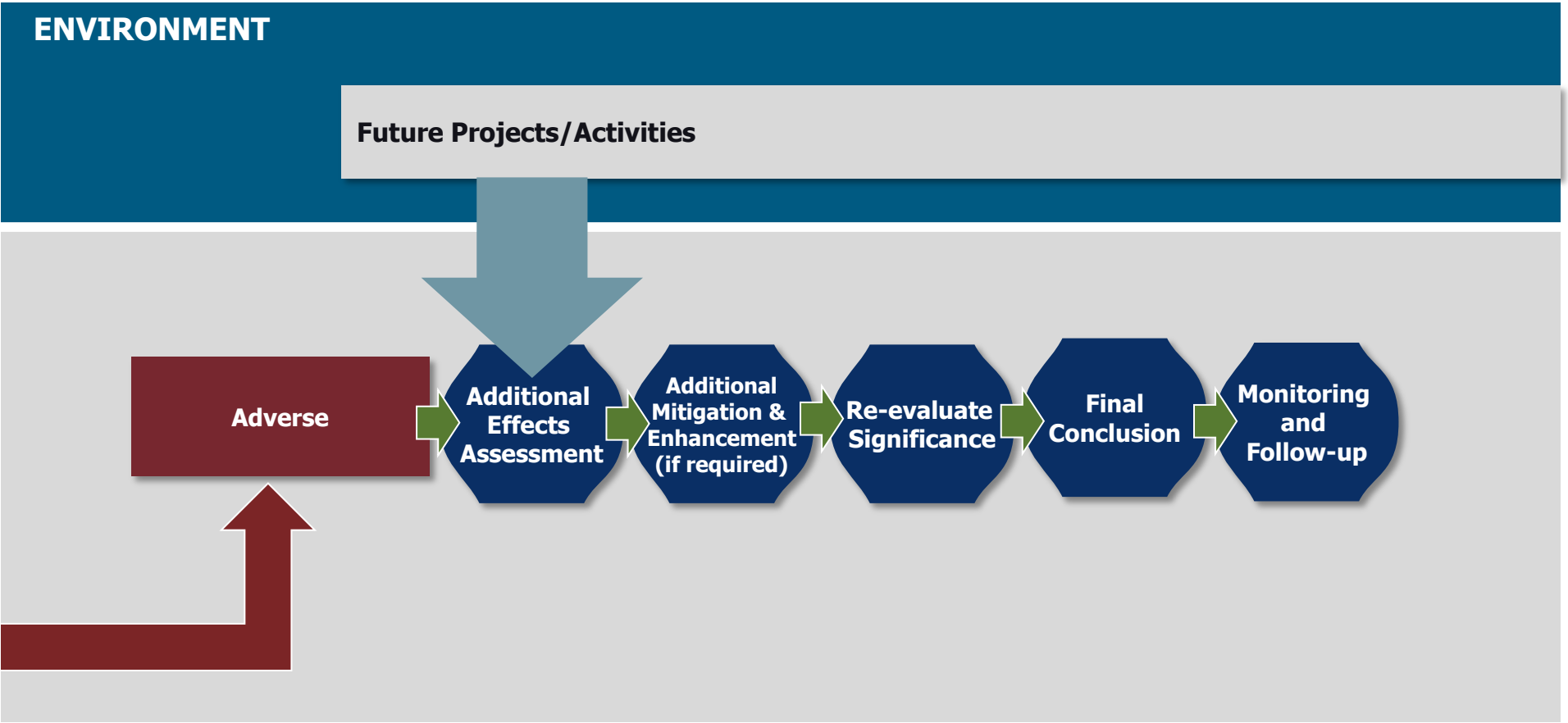
Environmental Effects Assessment



Environmental Effects Assessment



Environmental Effects Assessment



Valued Environmental Component (VEC) Selection Process

Inputs

- Keeyask Cree Nations
- Expert Opinion
- CEAA Guidelines
- Public Involvement Program
- Baseline Studies
- Regulatory Importance
- Project Advisory Team
- Technical Advisory Committee

Potential Valued Environmental Components

Valued Environmental Component (VEC) Selection Process

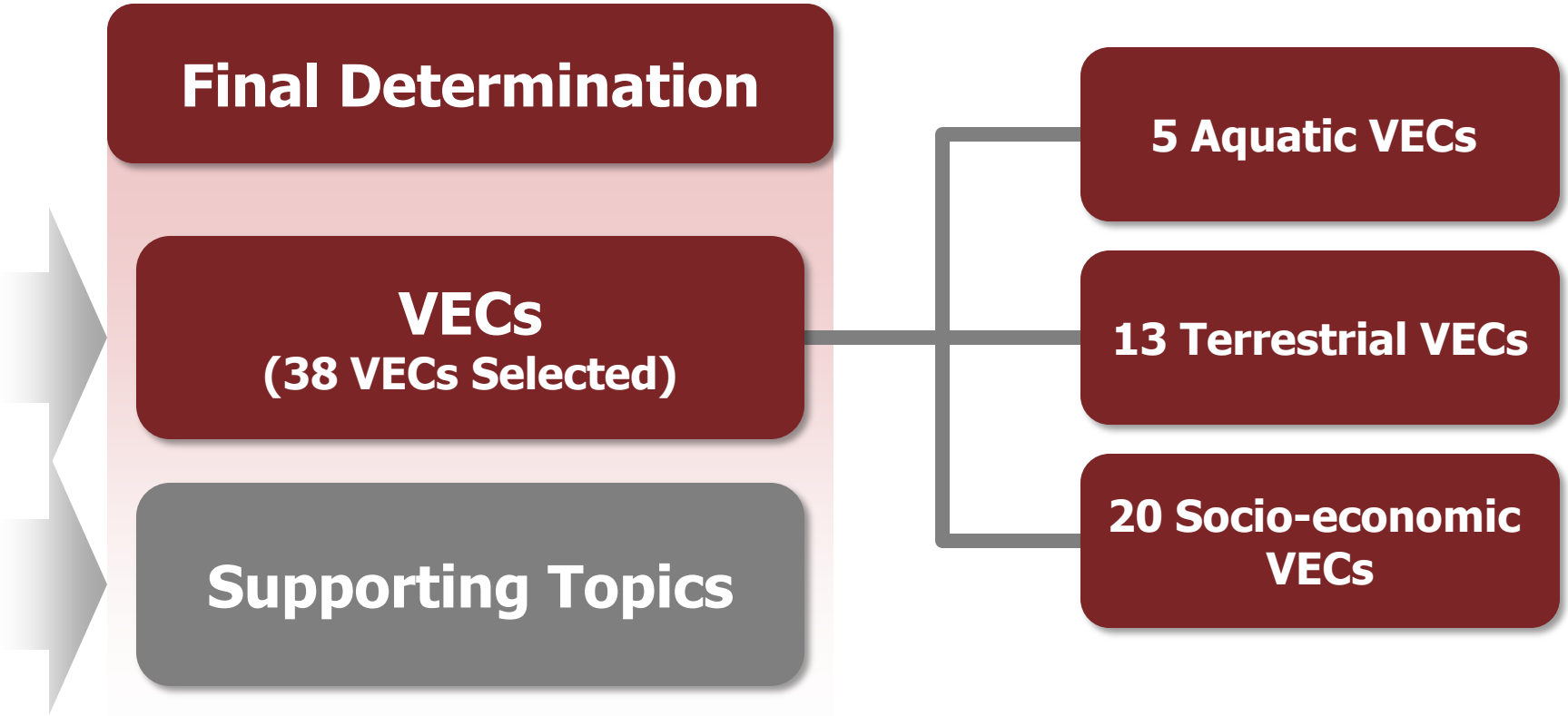
Selection Criteria

- Importance/Value to People
- Key for Ecosystem Function
- Umbrella Indicator
- Amenable to Scientific Study re Analysis of Existing/Post-Construction Conditions
- Potential for Substantial Project Effects
- Regulatory Requirements

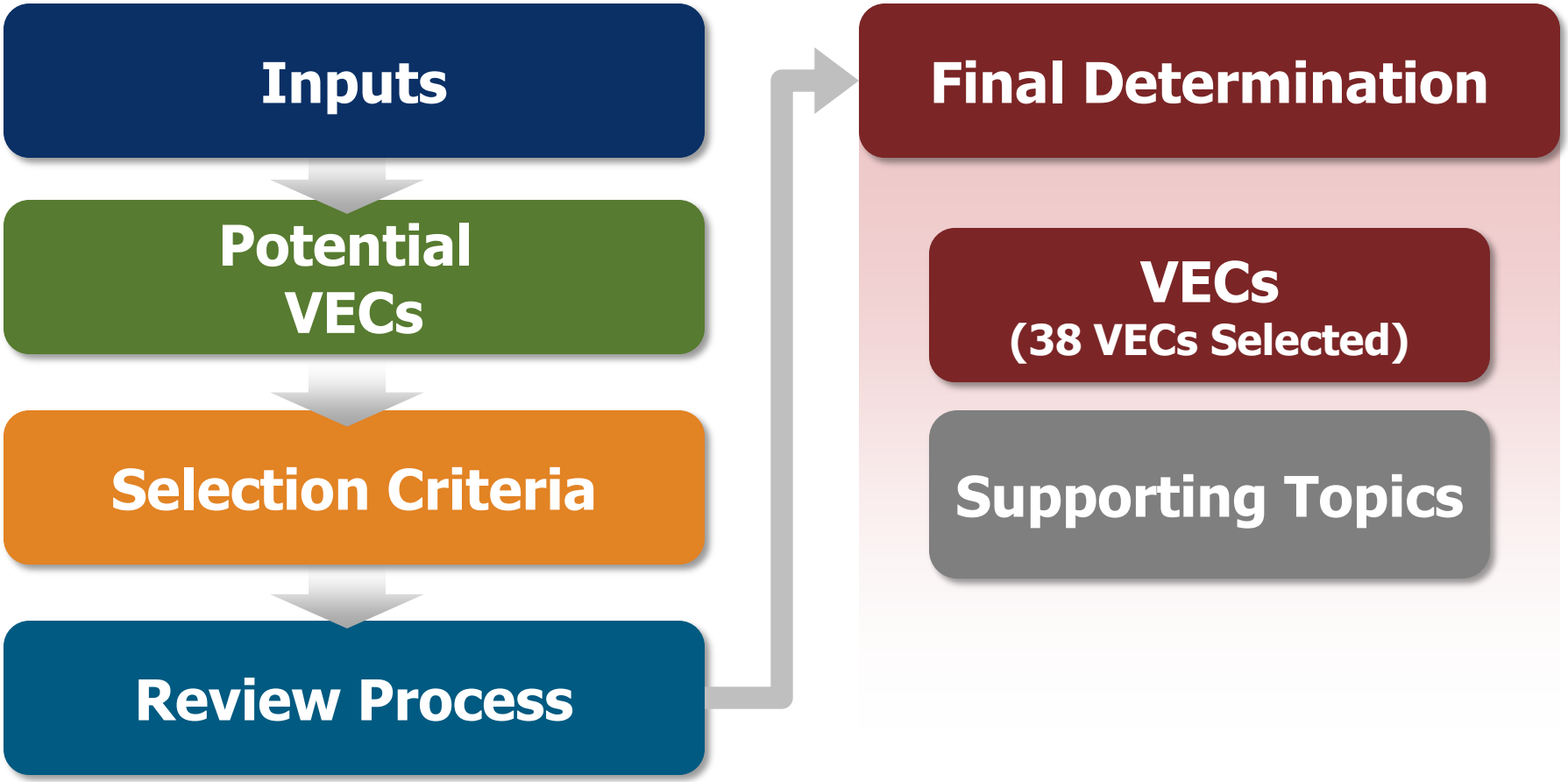
Review Process

- Keeyask Cree Nations
- Public through the Public Involvement Program
- Regulators

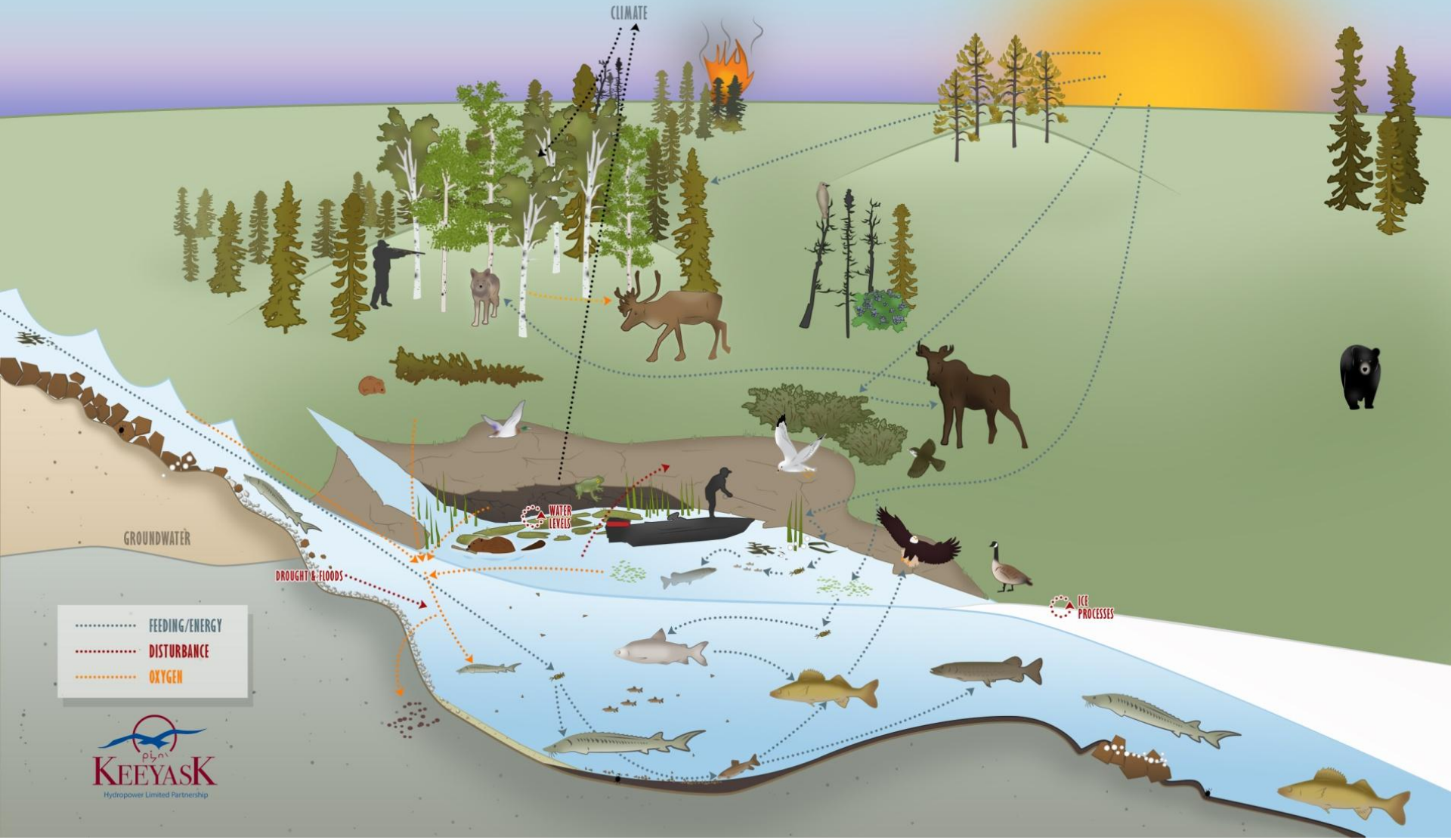
Valued Environmental Component (VEC) Selection Process



Valued Environmental Component (VEC) Selection Process



Project Linkages



Cumulative Effects Assessment

Assessment Best Practices as Outlined
By CEAA and the Clean Environment Commission

CEAA - CEA Practitioners' Guide	CEC - Wuskwatim	CEC - Bipole III

CEA Practitioner's Guides – CEAA

"Cumulative Effects Assessment is environmental assessment as it should always have been: an Environmental Impact Assessment (EIA) done well." *(Page 3)*

Canadian Environmental Assessment Agency, 1999

CEA Practitioner's Guides – CEAA

- **Assess effects over a larger (i.e., "regional") area that may cross jurisdictional boundaries**
- **Assess effects during a longer period of time into the past and future**
- **Consider effects on Valued Ecosystem Components (VECs) due to interactions with other actions, and not just the effects of the single action under review**
- **Include other past, existing and future (e.g., reasonably foreseeable) actions**
- **Evaluate significance in consideration of other than just local, direct effects.**

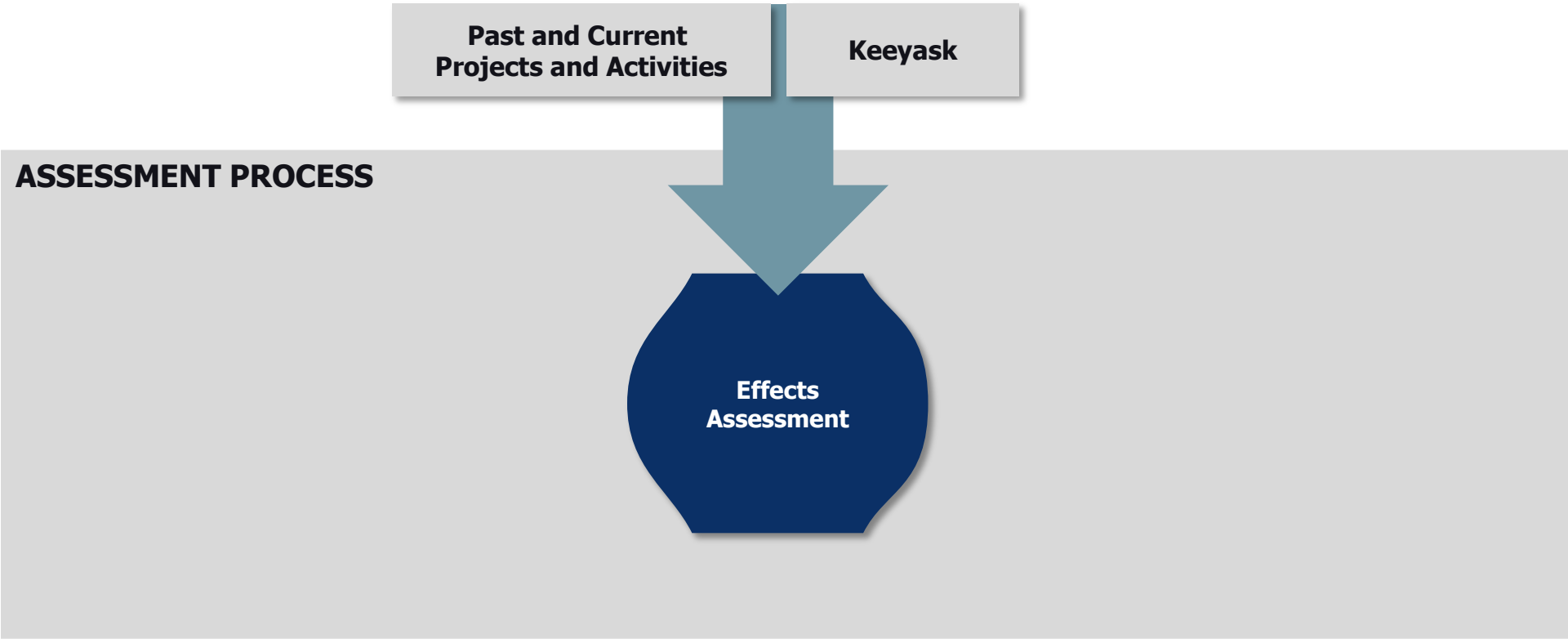
CEC Wuskwatim Comments

- **Assess effects over a larger (that is, regional) area that may cross jurisdictional boundaries**
- **Assess effects during a longer period of time into the past and future**
- **Consider effects on VECs due to interactions with other actions, and not just the effects of the single action under review**
- **Include other past, existing and future (for example, reasonably foreseeable) actions**
- **Evaluate significance in consideration of other than just local, direct effects.**

CEC Bipole III Recommendations

- **Assess effects in close vicinity to the Project as well as in the regional context**
- **Assess effects during a longer period of time into the past and future**
- **Consider effects on VECs due to interactions with other actions, and not just the effects of the single action under review**
- **In evaluating significance, consider other than just local, direct effects**
- **Include all past, current and reasonable foreseeable actions.**

Past and Current Effects



List of Past Projects and Activities

Manitoba Hydro Generation Projects	Linear Developments	Other
Churchill River Diversion	Transmission Lines	Mining (e.g. Vale)
Lake Winnipeg Regulation	Rail Lines	Commercial Forestry
Jenpeg, Kelsey, Kettle, Long Spruce, Limestone, Wuskwatim	Highways (including upgrades to PR 280)	Commercial Fishing (including Sturgeon)
Kelsey Re-runnering		Other agents of change identified in specific VEC assessments (see Chapter 6)
Keeyask Infrastructure Project		

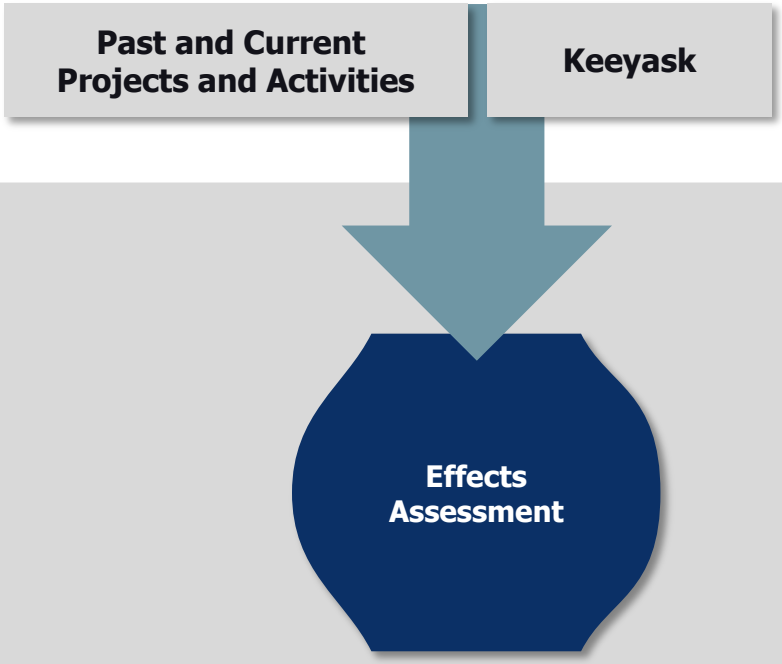
Information Used to Understand Past Effects

- **Changes over time are presented quantitatively (where feasible)**
- **If information is not available, a detailed qualitative description has been provided based on historical records, previous studies and, most importantly, Aboriginal Traditional Knowledge**
- **Information used to understand:**
  - Past response to previous developments (e.g., caribou calving islands in Stephens Lake)
  - Current state of a VEC
  - Success of previous mitigation (e.g. Lake Sturgeon stocking efforts).

Effects Assessment

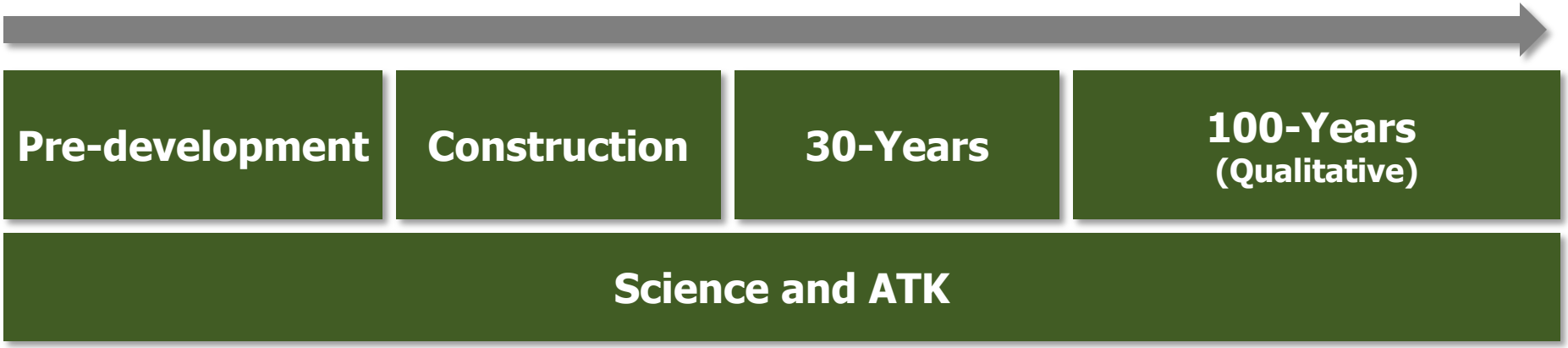
- **The current state of each VEC represents the environment in which the project is being developed**
  - Ultimate role of environmental assessment is to understand the difference between what the local and regional environment would be like with and without the Project in place
- **An understanding of historical and current conditions and any trends that may be occurring is used as the basis for assessing the effects of Keeyask.**

Past and Current Effects



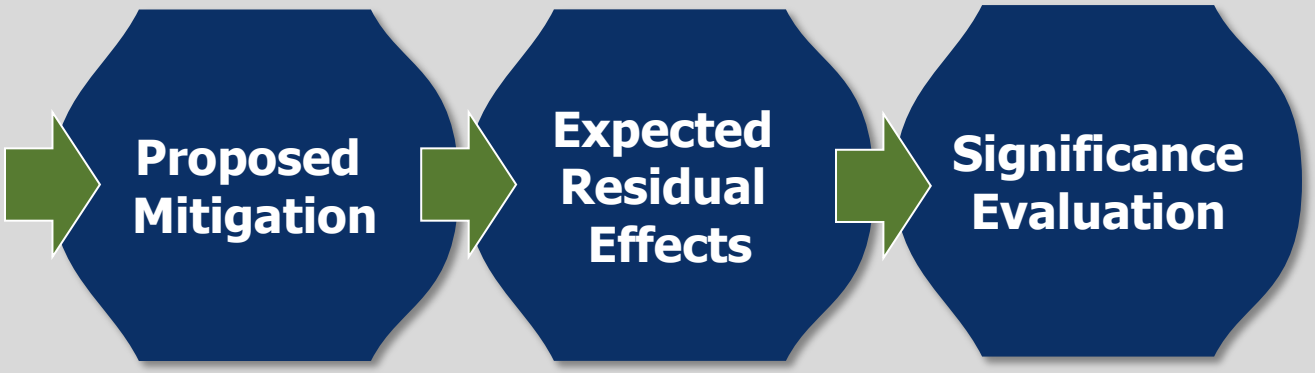
Incremental Effect in Combination with Past and Current Projects and Activities

- **Analysis predevelopment and during operations**



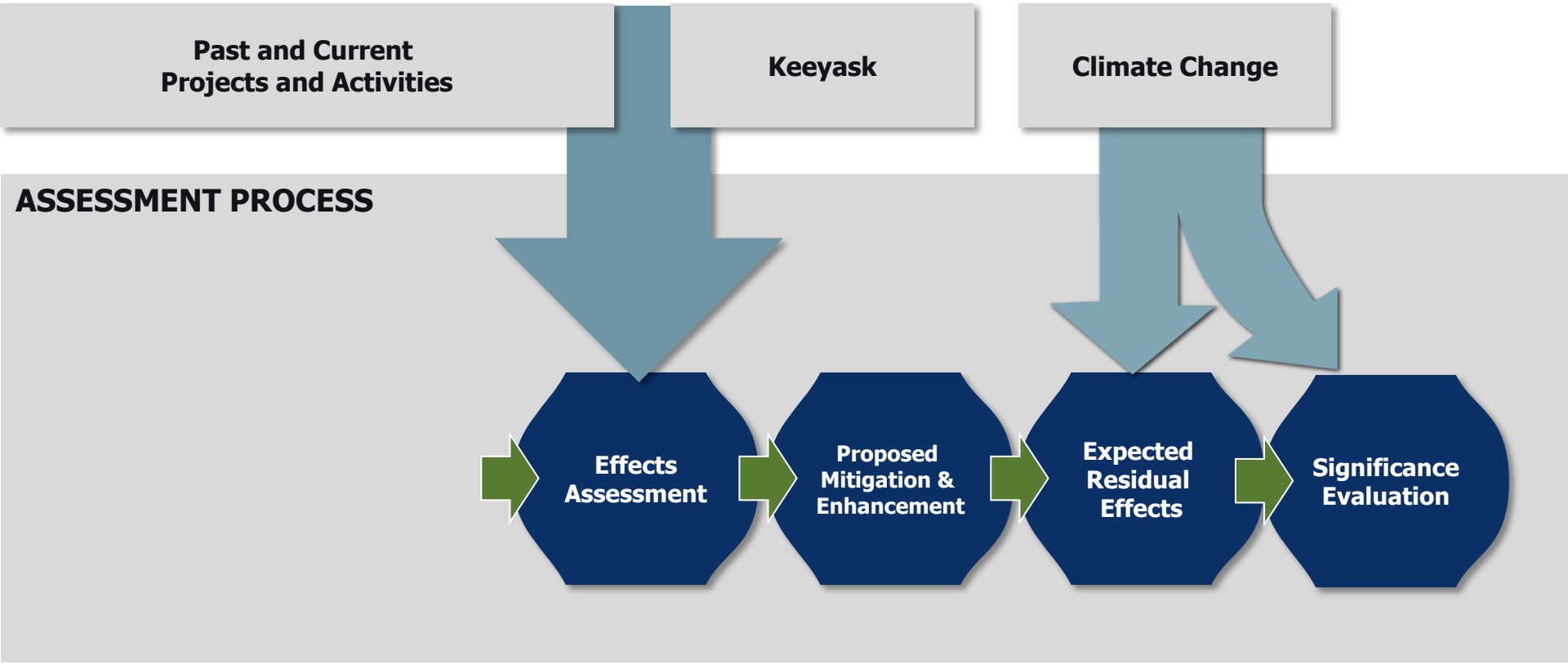
Mitigation, Residual Effects, Significance

ASSESSMENT PROCESS

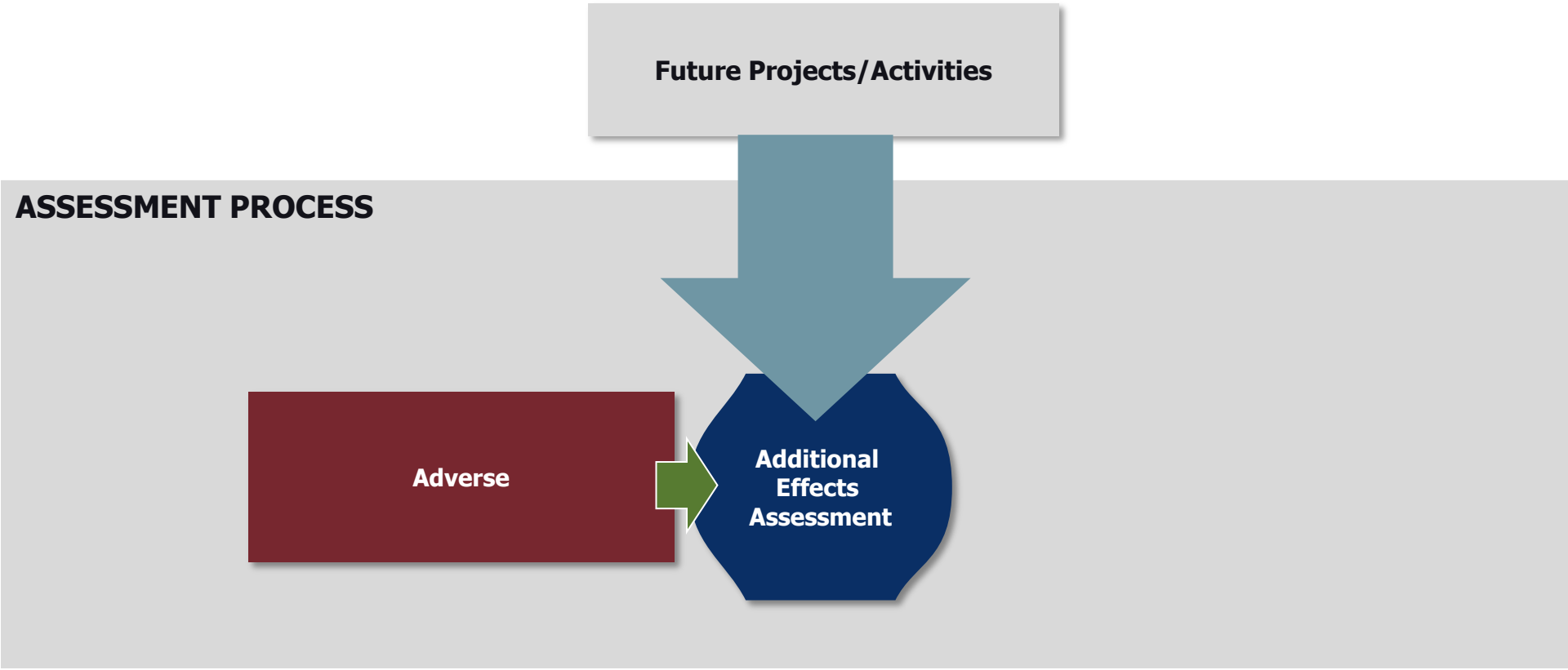


Mitigation

Residual Effects



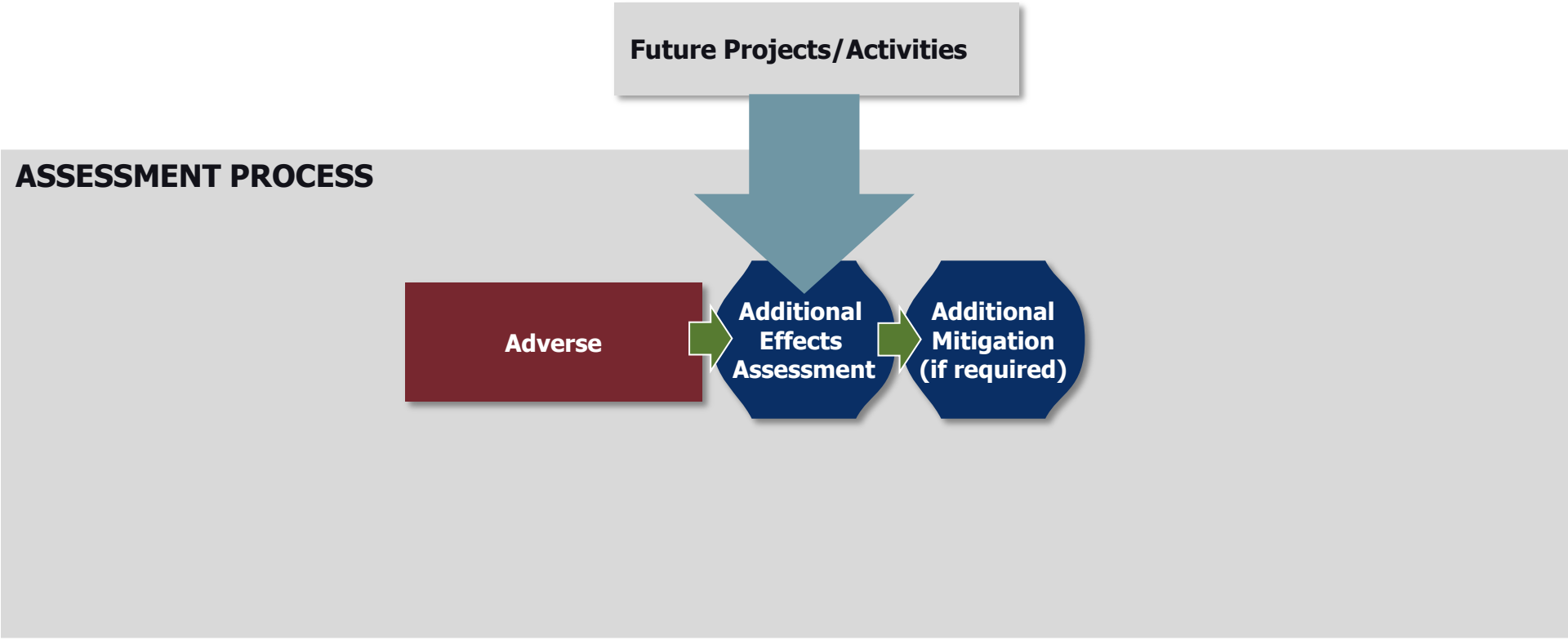
Additional Effects Assessment



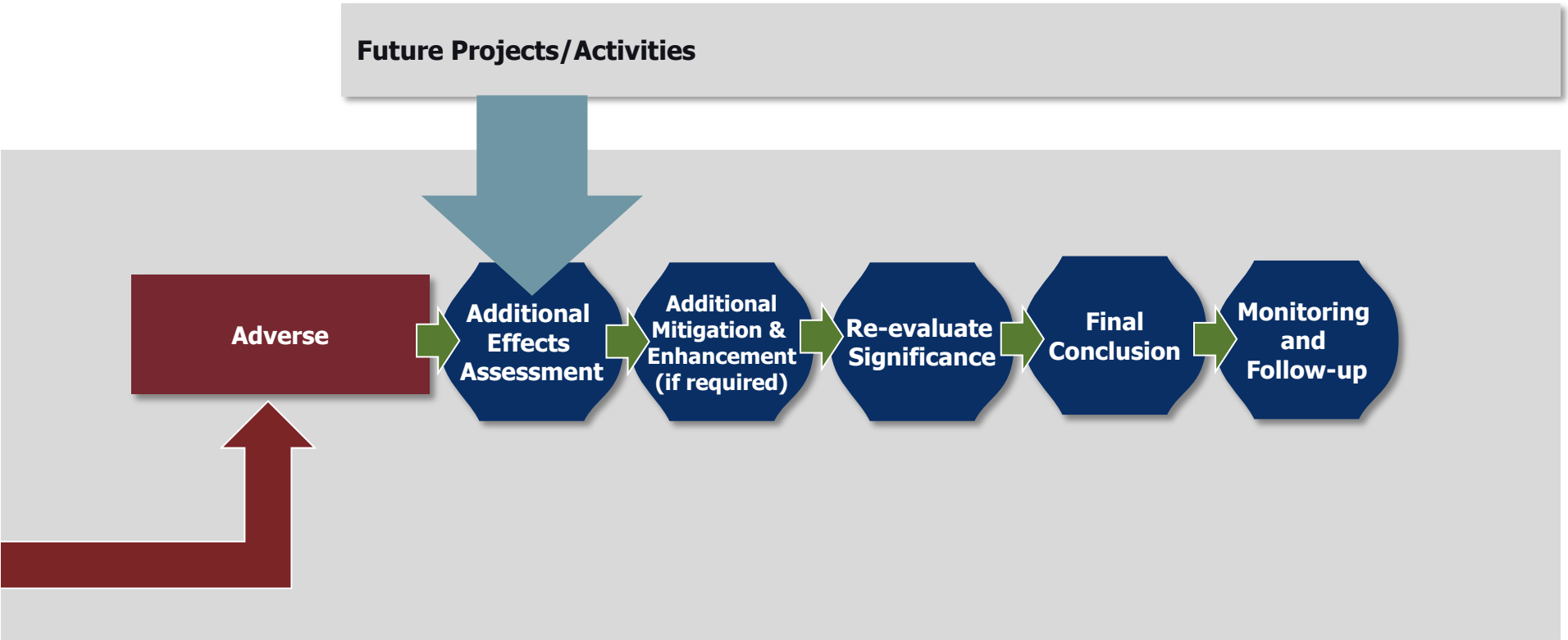
List of Future Projects and Activities

MH Generation Projects	Linear Developments	Other
Conawapa GS (including camp)	Bipole III (including Keewatinoow Converter Station)	Gillam Redevelopment
	Keeyask Transmission Project	

Review of Mitigation



Significance Re-evaluated



Wuskwatim CEC Report Revisited

- **Assess effects over a larger (that is, regional) area that may cross jurisdictional boundaries**
- **Assess effects during a longer period of time into the past and future**
  - Include other past, existing and future (for example, reasonably foreseeable) actions

Keeyask took into account the effects of past, present and, where required, reasonably foreseeable future projects at least 30 years and sometimes 100 years into the future qualitatively to determine incremental, cumulative effects.

Wuskwatim CEC Report Revisited

- **Consider effects on VECs due to interactions with other actions, and not just the effects of the single action under review**

Keeyask – Consideration of all potential factors affecting each VEC at a regional level (not just those of the Project).

Study areas selected for analysis are based on each individual VEC, with consideration given to both local, direct effects of the Project and its potential regional effects (a best practice noted by the Commission).

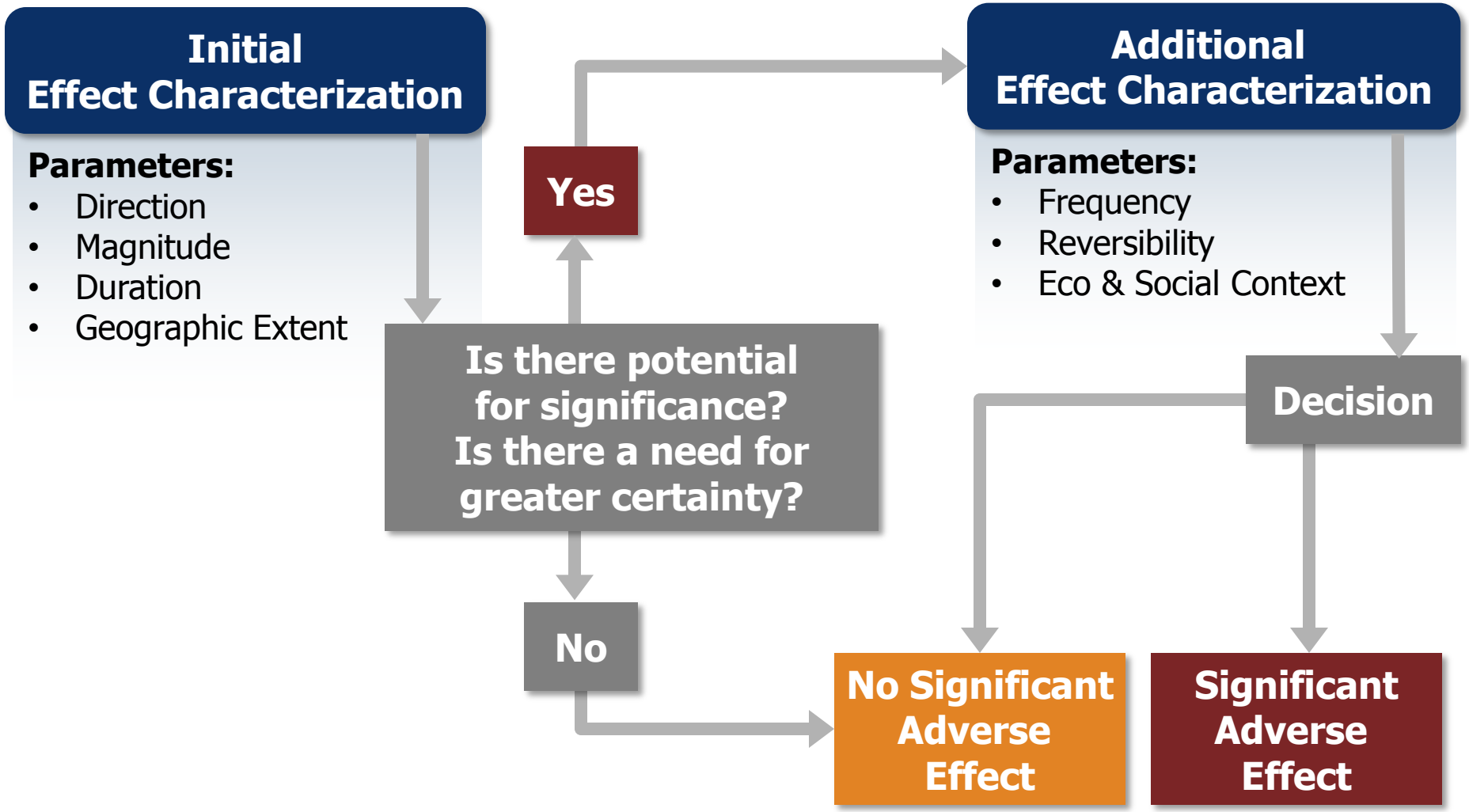
Wuskwatim CEC Report Revisited

- **Evaluate significance in consideration of other than just local, direct effects.**

Keeyask- Significance has been determined for the incremental effect of Keeyask first in combination with past and current projects and activities, and then again based on potential cumulative effects with future projects.

Significance

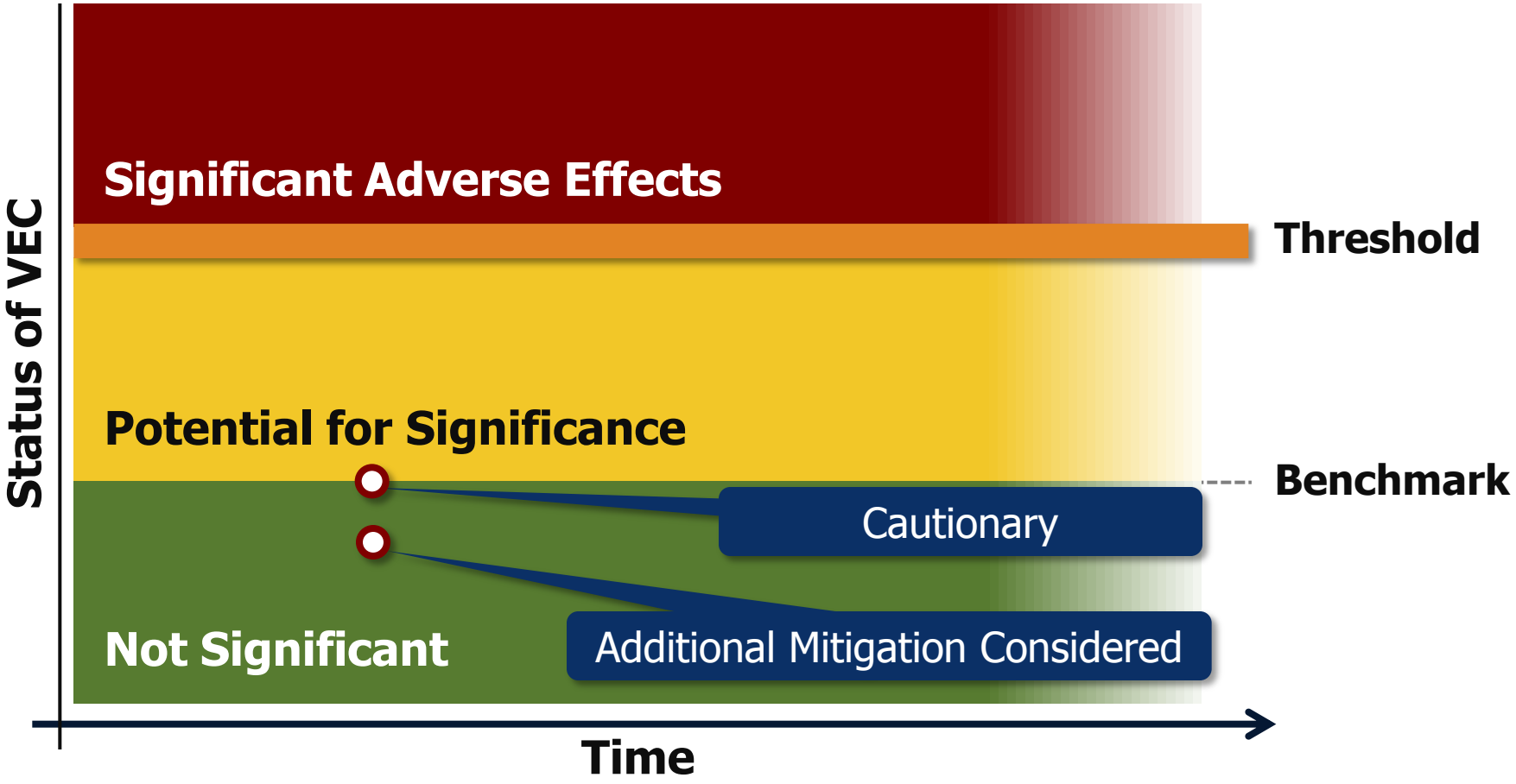
Significance Assessment Process



Use of Thresholds and Benchmarks

- **EIS committed to use established national and provincial thresholds and guidelines to evaluate significance**
- **Thresholds and guidelines are typically levels defined by governments or through scientific consensus**
  - No established thresholds for VECs identified
  - Government guidelines were identified and used where applicable, e.g., Manitoba Surface Water Quality Guidelines
- **Where no available thresholds or guidelines, the Partnership used benchmarks to measure project effects and assess significance.**

Benchmarks and Thresholds

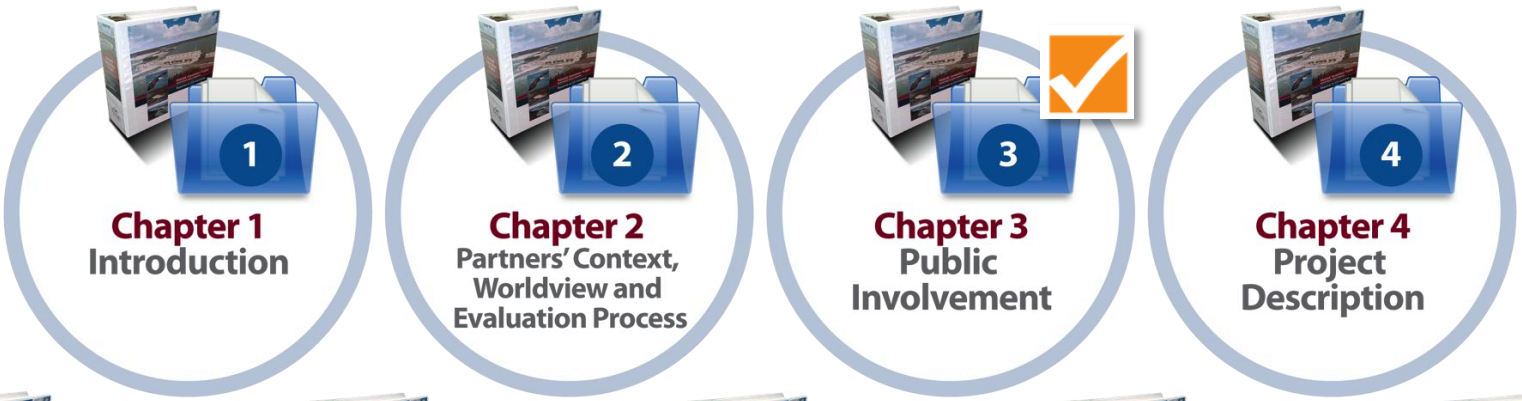


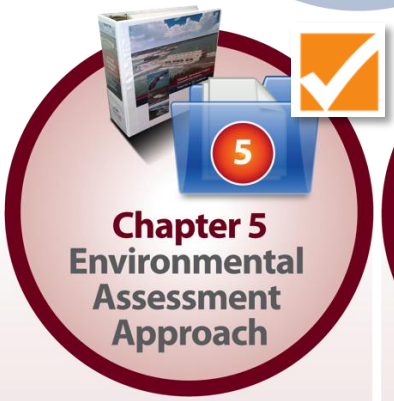
Approach to Consideration of Climate in the Keeyask EIS

EIS Considered Three Aspects of Climate Change

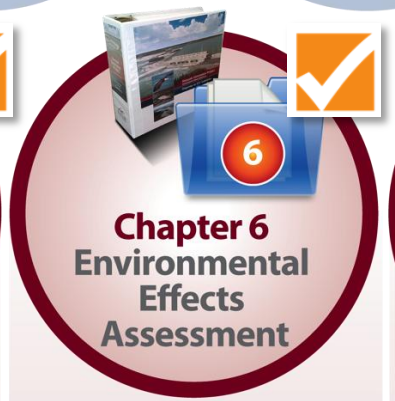
- **Effect of the environment (including climate) on the Project – Guideline Requirement**
- **Effect of the Project on the environment (GHG emissions) – Guideline Requirement**
- **Sensitivity of effects assessment to climate change.**

Structure of Response to EIS Guidelines

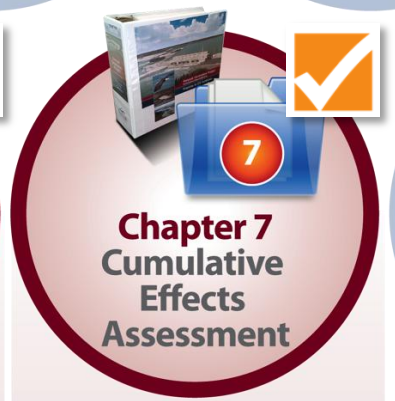




- Assessment Framework
- Approach to Cumulative Effects Assessment
- Approach to Determination of Significance



- Scoping & VEC Selection
- Description of Historical and Current Context
- Assessment of Project Effects
- Proposed Mitigation
- Residual Effects
- Significance Assessment
- Sensitivity of Conclusions to Climate Change



- Interactions with Future Projects/Activities
- Proposed Mitigation
- Significance Assessment

Aboriginal Traditional Knowledge

Two-track Assessment Process

The Big Picture – Developing Respectful Relationships

- **Respectful relationships central to worldview and values to the Cree**
- **Road from difficult history before Keeyask to respectful relationships in planning Keeyask**
- **Partner Cree Nations helped plan a better Keeyask Project**
- **Partner Cree Nations will be involved in stewardship through Partnership, including monitoring.**

ATK Principles – Partner Cree Nations

1. Giving equal weight
2. Ensuring visibility
3. Maintaining authority and confidentiality
4. Leading documentation – rigorous and defensible methods
5. Acknowledging worldviews
6. Building and sustaining respectful relationships
7. Acknowledging the past
8. Reflecting cultural values and spirituality
9. Acknowledging caution and addressing uncertainty.

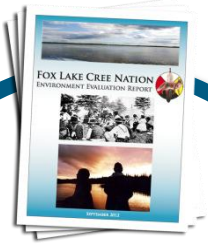
Applying ATK Principles

- **Identifying issues, concerns, VECs**
- **Learning about effects of past developments**
- **Identifying mitigation options**
- **Discussing uncertainty**
- **Identifying importance of monitoring and follow-up**
- **Discussing how to document ATK and technical science in the filing**
- **Reviewing and approving the filing.**

Where ATK is Reflected in the Filing

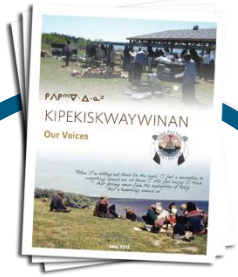
Cree Nation Partners Environmental Assessment Report

Response to Environmental Impact Statement Guidelines (Chapters 1-10)



Fox Lake Cree Nation Environmental Report

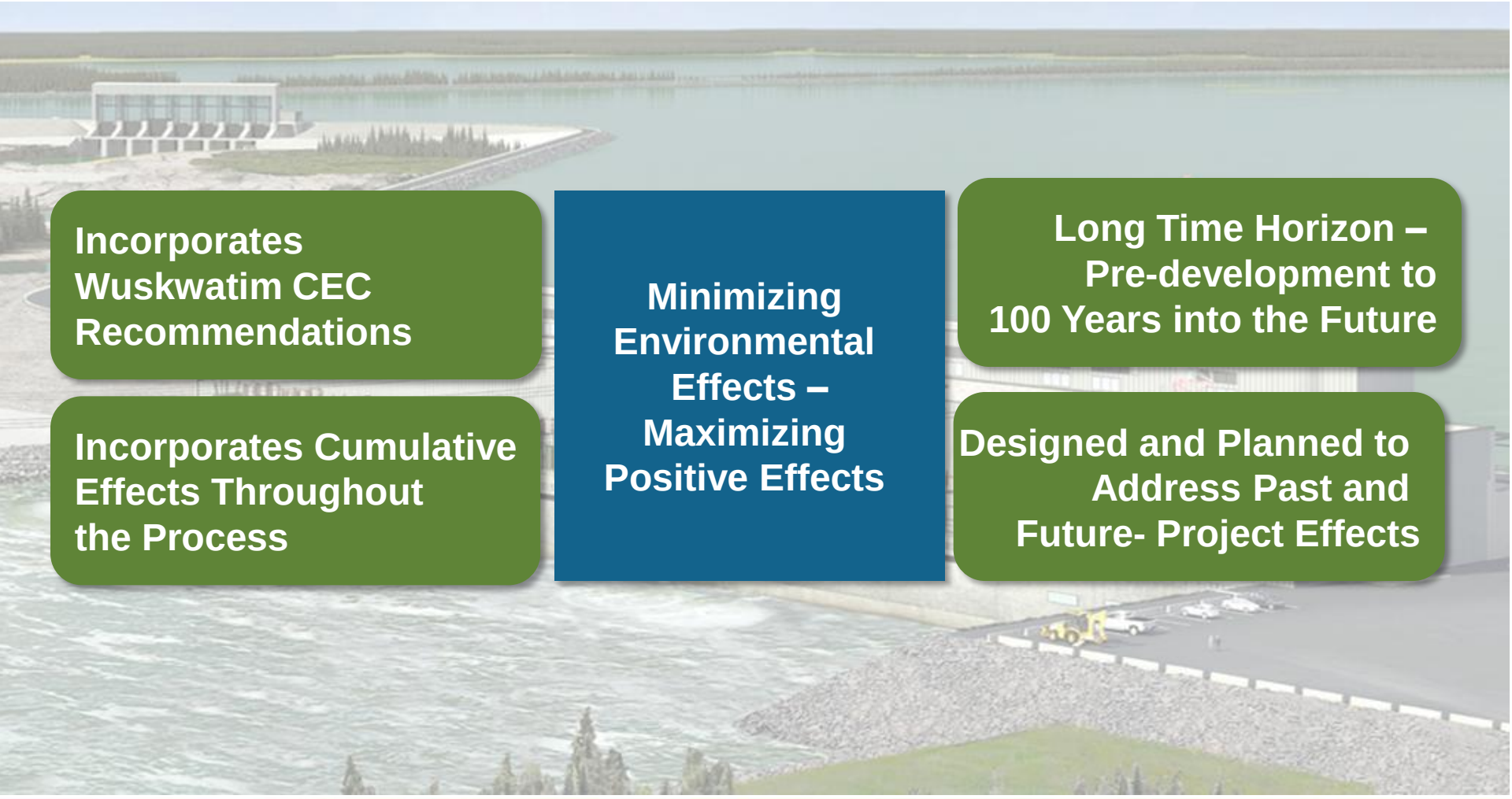
Keeyask: Our Story Video



York Factory First Nation Kipekiskwaywinan (Our Voices)

Summary and Conclusion

Realizing the Full Potential of the Environmental Assessment Process



The Partnership Goal: No significant Residual Adverse Effects

- **The Partnership worked hard to address potential significant effects to accomplish a goal of no significant residual adverse effects**
- **Together as partners, Manitoba Hydro and First Nation Partners have developed an EIS incorporating and respecting Aboriginal Traditional Knowledge in a meaningful, transparent way**
- **Together we have addressed differences of assessment conclusions through on-going monitoring and additional study**
- **Drawn upon and influenced by input from broad public involvement process.**

Minimizes Effects – Enhances Benefits

- Contributes to sustainable development
- Benefits those most affected
- Designed to minimize environmental effects
- Shows respect for and stewardship of the environment
- Will leave a positive legacy for future generations

Working Together Over the Long-Term

- **This is NOT the end point… JKDA and EIS are outcomes of planning to date, but committed to working together as partners to implement Keeyask as promised**
- **Partners incorporated tenets of sustainable development from beginning of discussion on Keeyask:**
  - Inclusive and participatory process
  - Long-term mindset
  - Sought to maximize benefits and minimize risks for future generations
  - Efforts to minimize trade-offs and enhance benefits
  - Mitigation, compensation and offsetting developed in advance of project construction and part of project costs.

Benefits for Manitobans

- **Employment and business opportunities**
- **Labour income and tax revenue**
- **Water rentals**
- **Long-term source of reliable, renewable energy**

Comprehensive Regulatory Process

- **Full provincial regulatory process will include:**
  - Environmental review under the *Environment Act* (Manitoba) and this CEC Hearing process
  - PUB NFAT review of economics and alternatives.

Keeyask Generation Project

CEC Hearings - Environmental Impact Statement

KEEYASK

Hydropower Limited Partnership

Thank You