



# Keeyask Generation Project

CEC Hearings - Environmental Impact Statement



**Moving Forward as Partners on Environmental Matters**

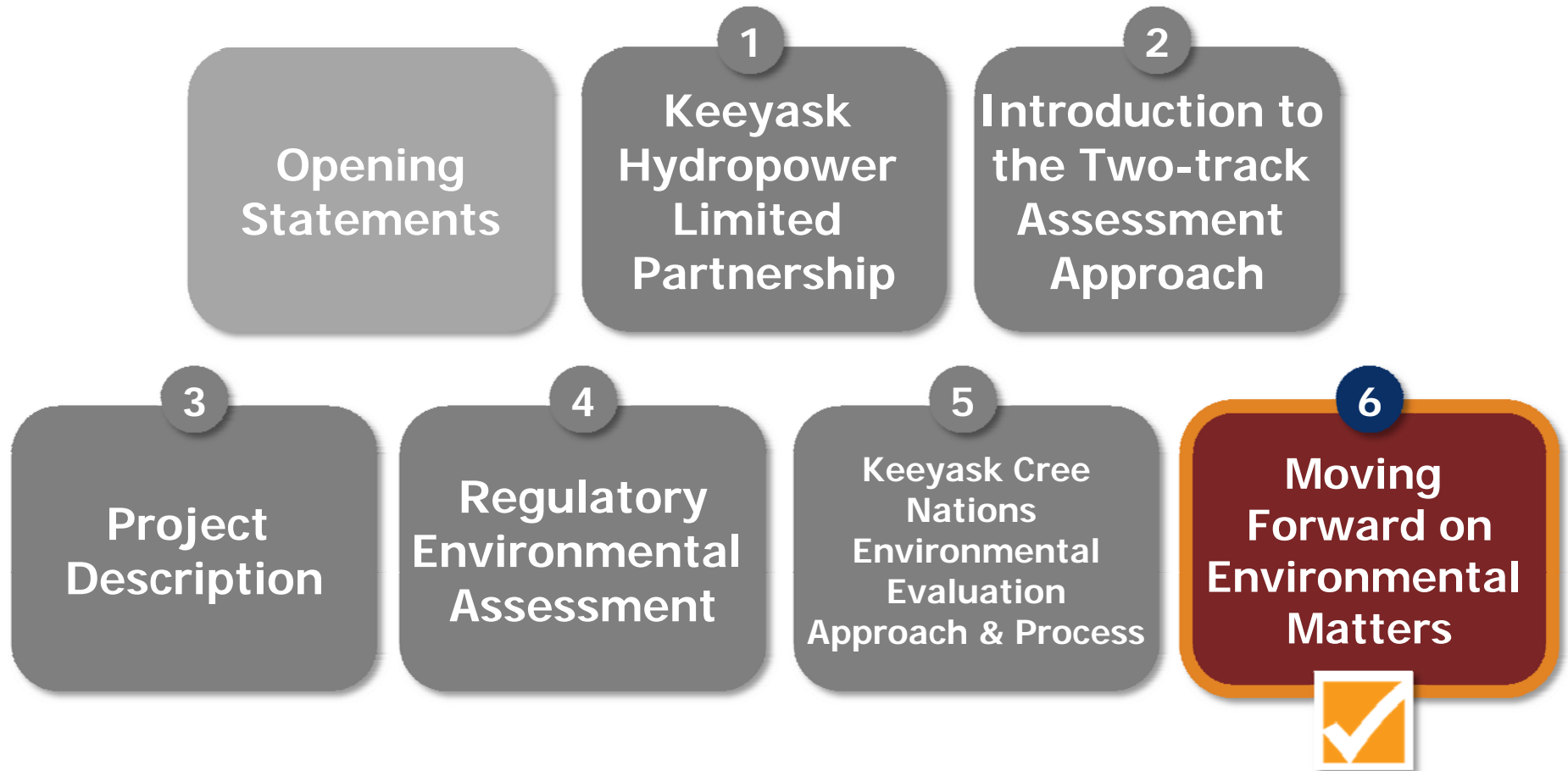
**Carolyn Northover: Sr. Environmental Specialist, Manitoba Hydro**

**Ted Bland: York Factory First Nation**

**George Neepin: Fox Lake Cree Nation**

**Victor Spence: Cree Nation Partners**

# Panel and Presentation Guide



# Introduction and Roles

**Carolyn Northover**

- Sr. Environmental Specialist, Manitoba Hydro

**Victor Spence**

- Cree Nation Partners: Tataskweyak Cree Nation and War Lake First Nation

**Ted Bland**

- York Factory First Nation

**George Neepin**

- Fox Lake Cree Nation

**Karen Anderson**

- Fox Lake Cree Nation

**Vicky Cole**

- Manager, Major Projects Assessment and Licensing, Manitoba Hydro

**Jane Kidd-Hantscher**

- Partnership Implementation Supervisor, Manitoba Hydro

**Shawna Pachal**

- Division Manager, Power Projects Development, Manitoba Hydro





# Ted Bland, York Factory First Nation

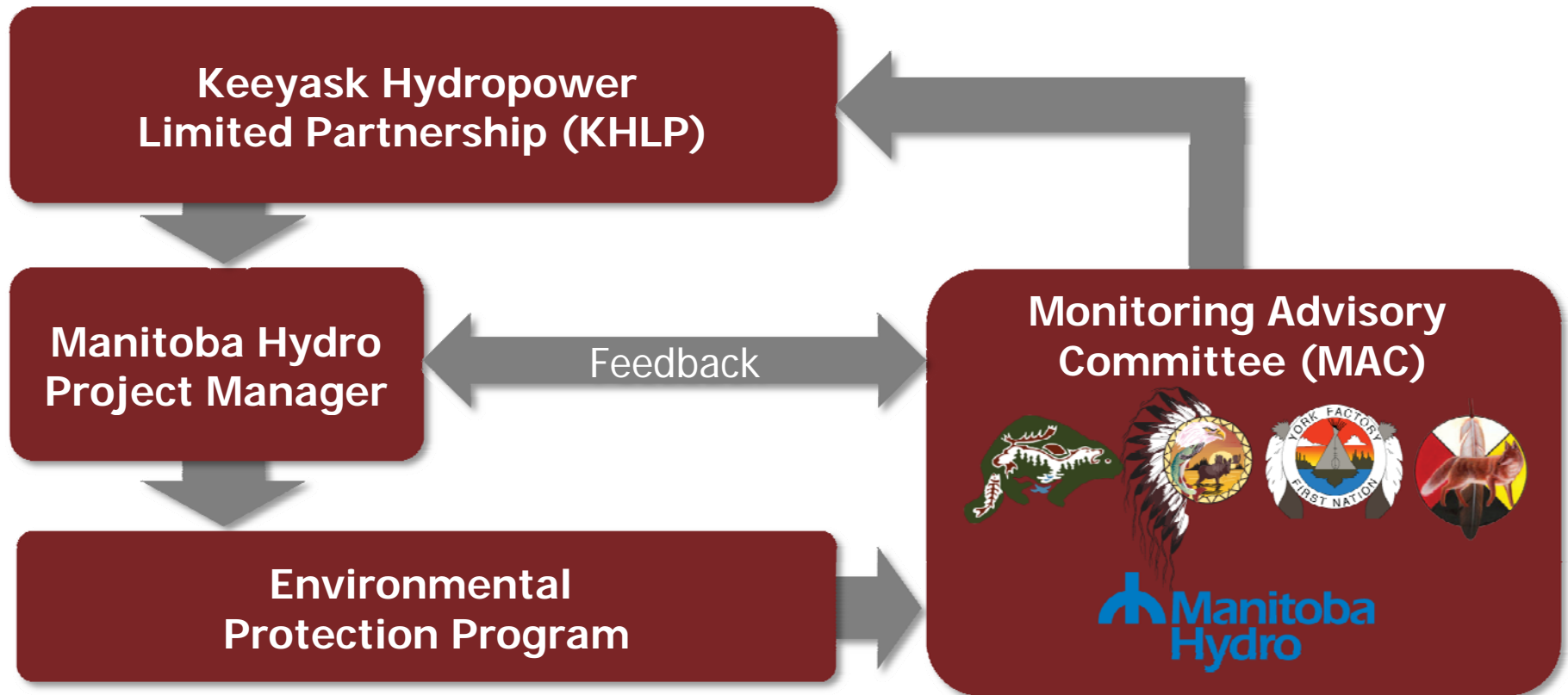
# Introduction

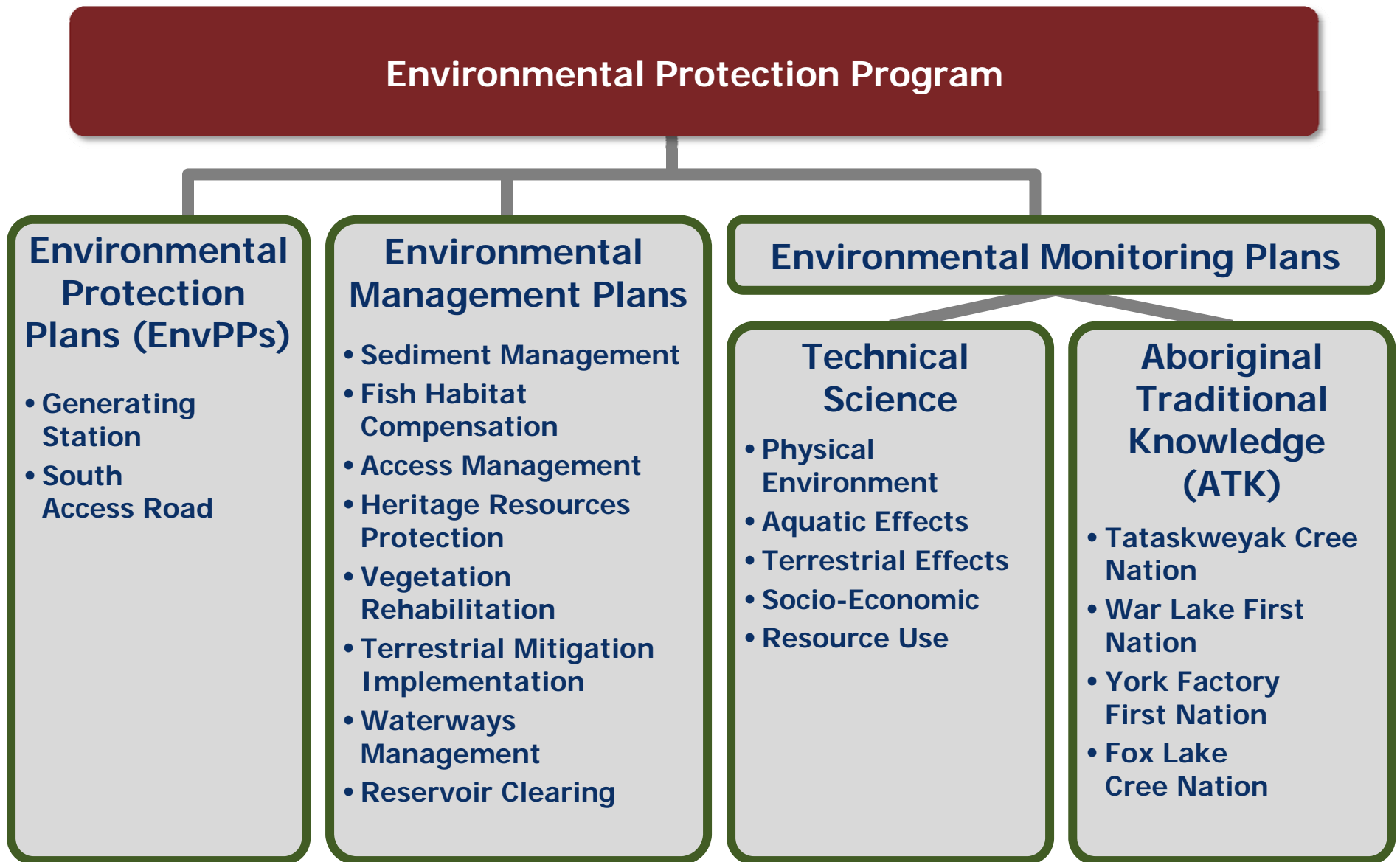
- **Environmental Protection Program**
- **Adaptive Management**
- **Monitoring Advisory Committee**
- **Communication of Outcomes.**

# Moving Forward as Partners

- **Manitoba Hydro and First Nation Partners talks led to agreements and collaboration in planning Keeyask**
- **A collaborative approach resulted in a viable Project, providing maximum regional socio-economic benefits and minimum adverse environmental effects**
- **Long-term monitoring and follow-up collaboration continues to strengthen the Partnership.**

# Environmental Protection Program Implementation Structure

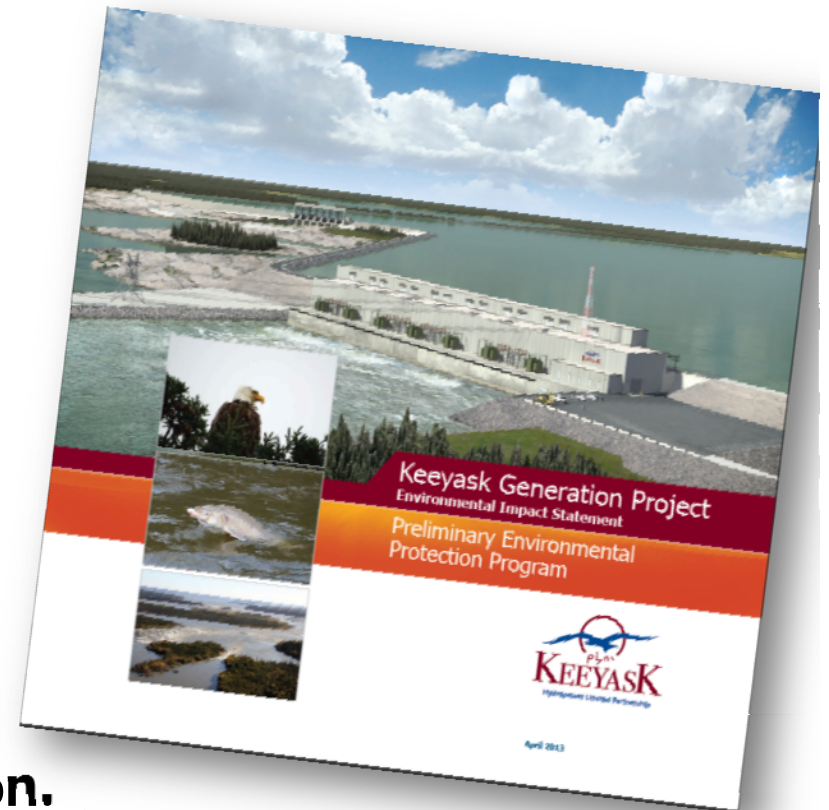


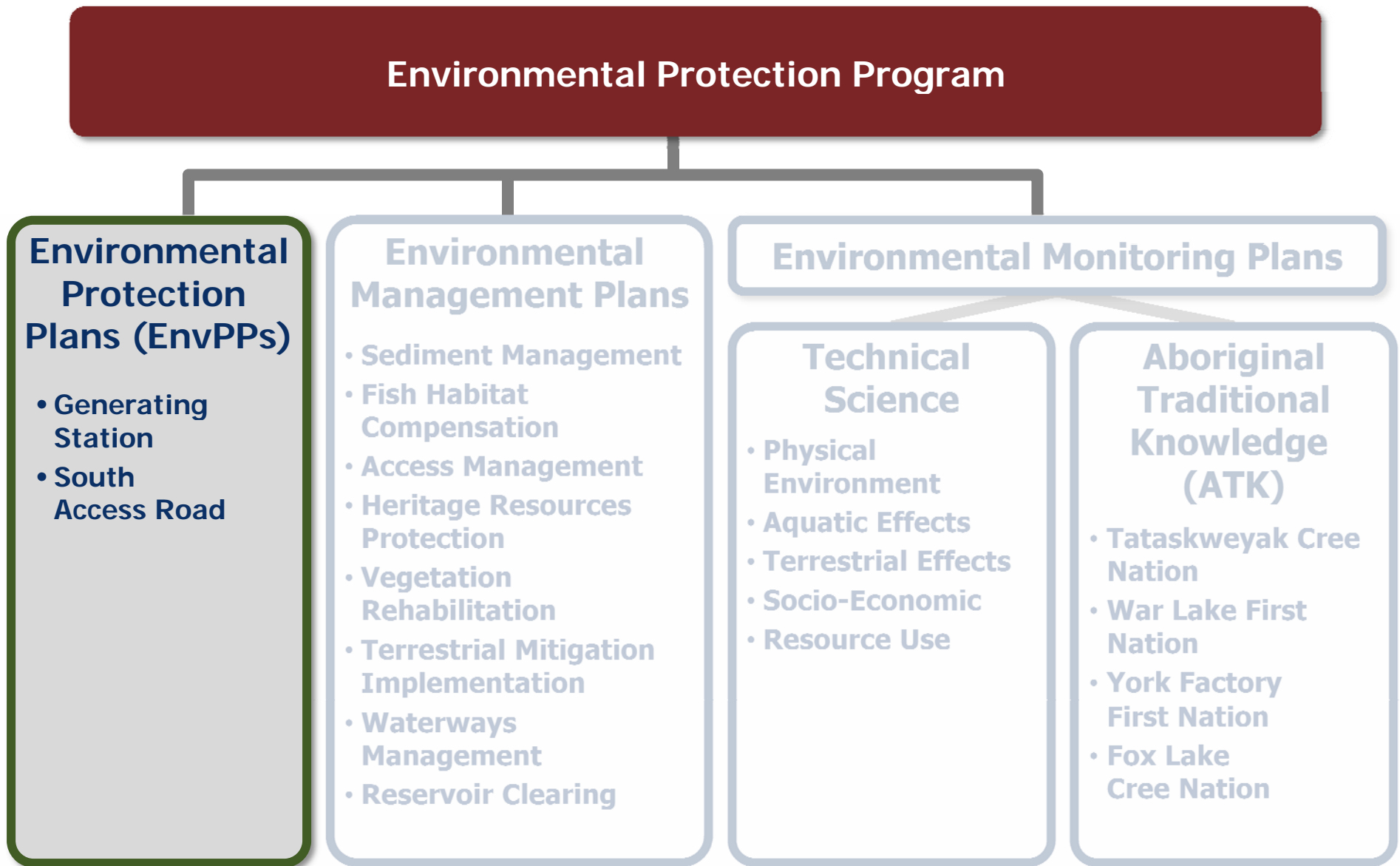




# Environmental Protection Program

- Comprehensive Program under development
- EIS made specific environmental mitigation commitments
- Commitments are the Program's foundation
- Preliminary plans submitted
- Completed after licences issued to incorporate clauses i.e. *Manitoba Environment Act Licence, Fisheries Act Authorization.*

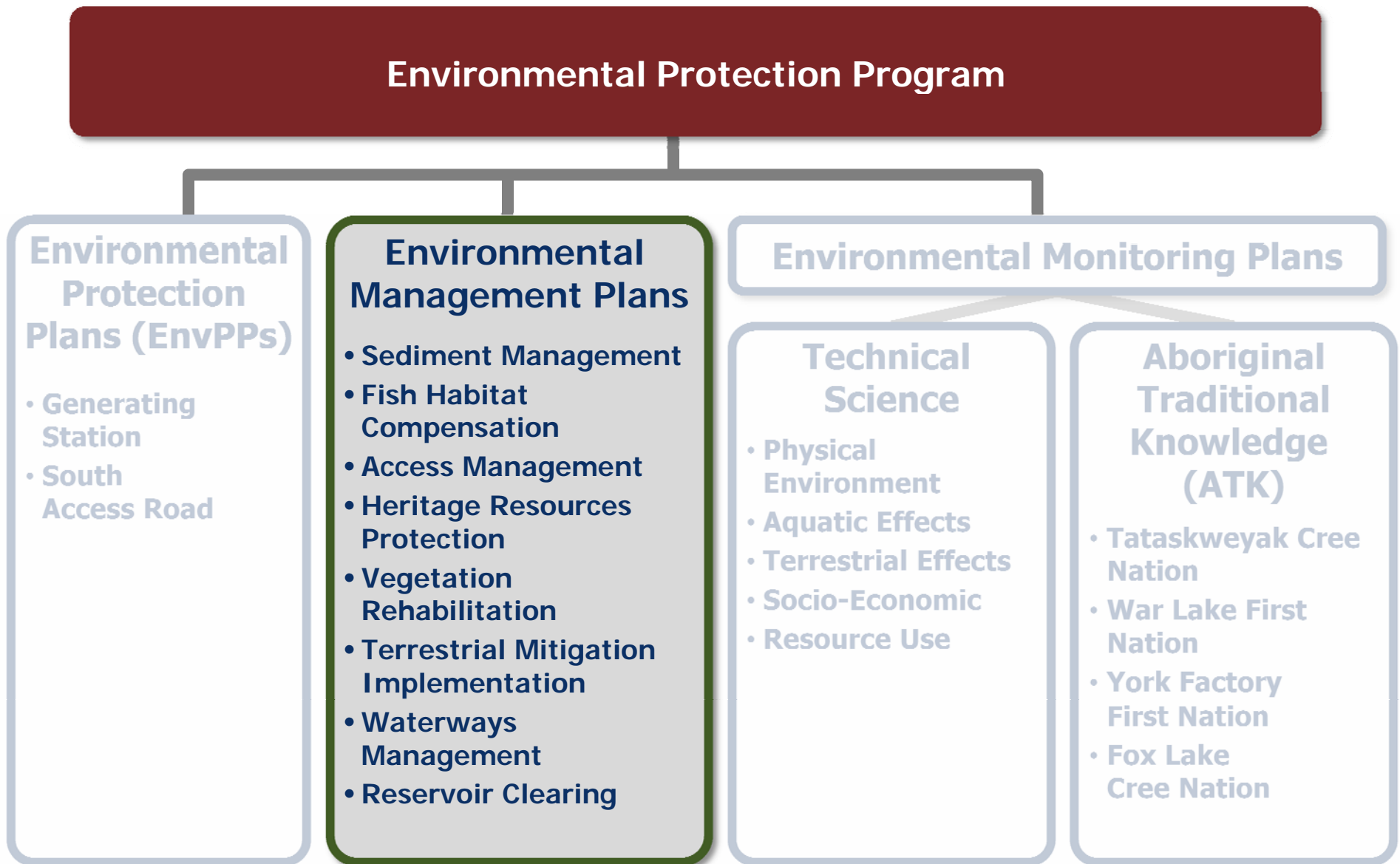




# Environmental Protection Plans

- Measures to be implemented by contractors and staff to minimize construction effects
- Organized by construction activity (e.g., tree clearing, drilling, in-water work) with mitigation measures listed specific to the activity
- Designed as reference documents providing best management practices to meet or exceed regulatory requirements.





## Environmental Management Plans

# Sediment Management Plan

- Prescribes procedures to measure sediment levels in Nelson River in real-time due to in-stream construction and actions to be taken if Project's total suspended solids (TSS) exceed target levels
  - Submitted: April 26, 2013
  - Discussed in: Panel 4b (Physical Environment).



## Environmental Management Plans

# Fish Habitat Compensation Plan

- Identifies works to be installed or other activities to compensate for fish habitat loss
- Particularly focused on spawning habitat and sturgeon stocking
  - Submitted: August 14, 2013
  - Discussed in: Panel 4c (Aquatic).



## Environmental Management Plans

# Construction Access Management Plan

- Prescribes measures to ensure safe, coordinated access for authorized users during construction to protect the area's natural resources
  - Submitted: April 26, 2013
  - Discussed in: Panel 4d (Socio-economic).



## Environmental Management Plans

# Heritage Resources Protection Plan

- Prescribes procedures for addressing heritage resources or human remains discovered during Project construction
  - Submitted: April 26, 2013
  - Discussed in: Panel 4d (Socio-economic).





## Environmental Management Plans

# Vegetation Rehabilitation Plan

- **Project areas not needed for operation will be decommissioned and rehabilitated**
- **Will give preference to rehabilitating the most affected priority habitat types**
  - **Will be developed during construction**
  - **Discussed in: Panel 4c (Terrestrial).**



## Environmental Management Plans

# Terrestrial Mitigation Implementation Plan

- **Outlines implementation of terrestrial mitigation measures described in the EIS, including such things as wetland replacement and bird-nesting structures**
  - **Under development: all concepts included in EIS**
  - **Discussed in: Panel 4c (Terrestrial).**



## Environmental Management Plans

# Waterways Management Program

- **Contribute to the safe use and enjoyment of the waterway from Split Lake to Stephens Lake**
- **A multi-purpose boat patrol to monitor shoreline and waterway activities and manage debris during both pre- and post impoundment**
  - **Submitted: April 26, 2013 and in JKDA**
  - **Discussed in: Panels 3 and 4b (Project Description and Physical Environment).**

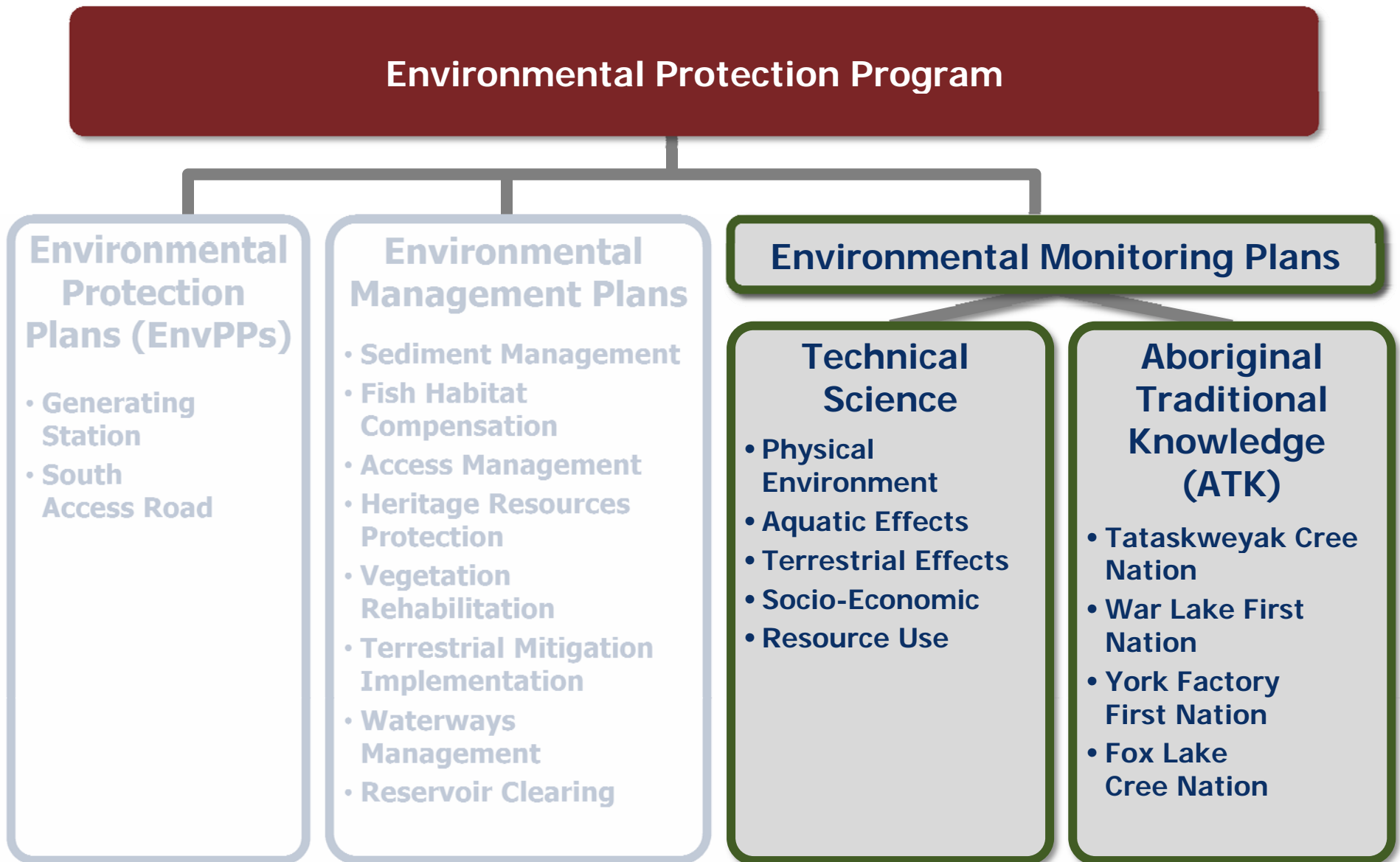


## Environmental Management Plans

# Reservoir Clearing Plan

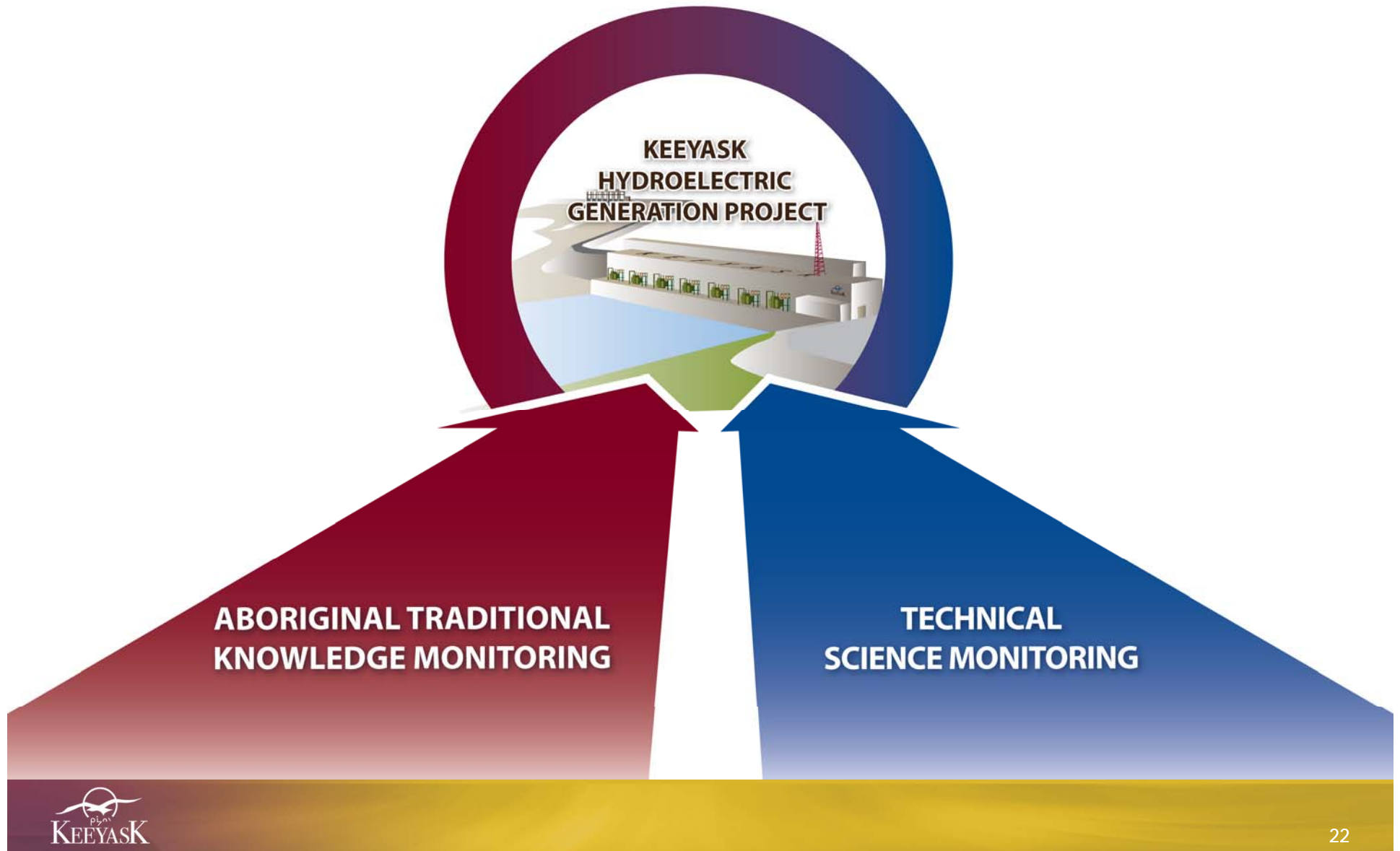
- **Describes the flooded areas in the reservoir that must be cleared of trees prior to impoundment and methods to do so**
  - **Submitted: April 26, 2013 and in JKDA**
  - **Discussed in: Panel 3 and 4b (Project Description and Physical Environment).**





## Environmental Monitoring Plans

# Two-track Monitoring Process



# Environmental Monitoring Plans

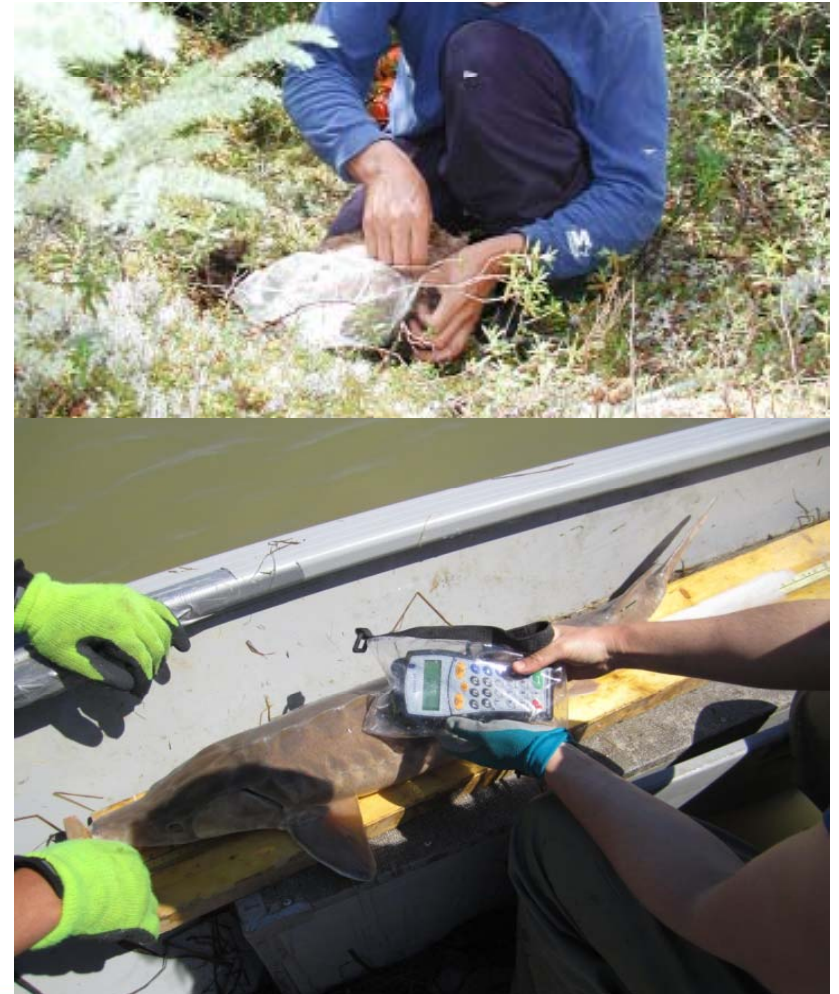
- **Monitoring to test predictions and evaluate effectiveness of mitigation in reducing environmental and social effects**
- **Monitoring addresses areas where uncertainty exists including areas where there are differences between predictions based on technical science and ATK.**



## Environmental Monitoring Plans

# Technical Science Monitoring Plans

- **The 5 technical science plans have been drafted**
- **They follow-up on the VECs and supporting topics described in the EIS**
  - **Discussed in: Panels 4b, c and d**
  - **Physical Environment, Terrestrial Effects, Socio-economic, and Resource Use submitted in June 2013**
  - **Aquatic Effects submitted in August 2013.**





## Environmental Monitoring Plans

# ATK Monitoring Programs

- The Partner First Nations are currently developing community-specific ATK monitoring programs
- These ATK monitoring programs will be based on Cree perspectives and understandings about the potential effects of the Project.



## Environmental Monitoring Plans

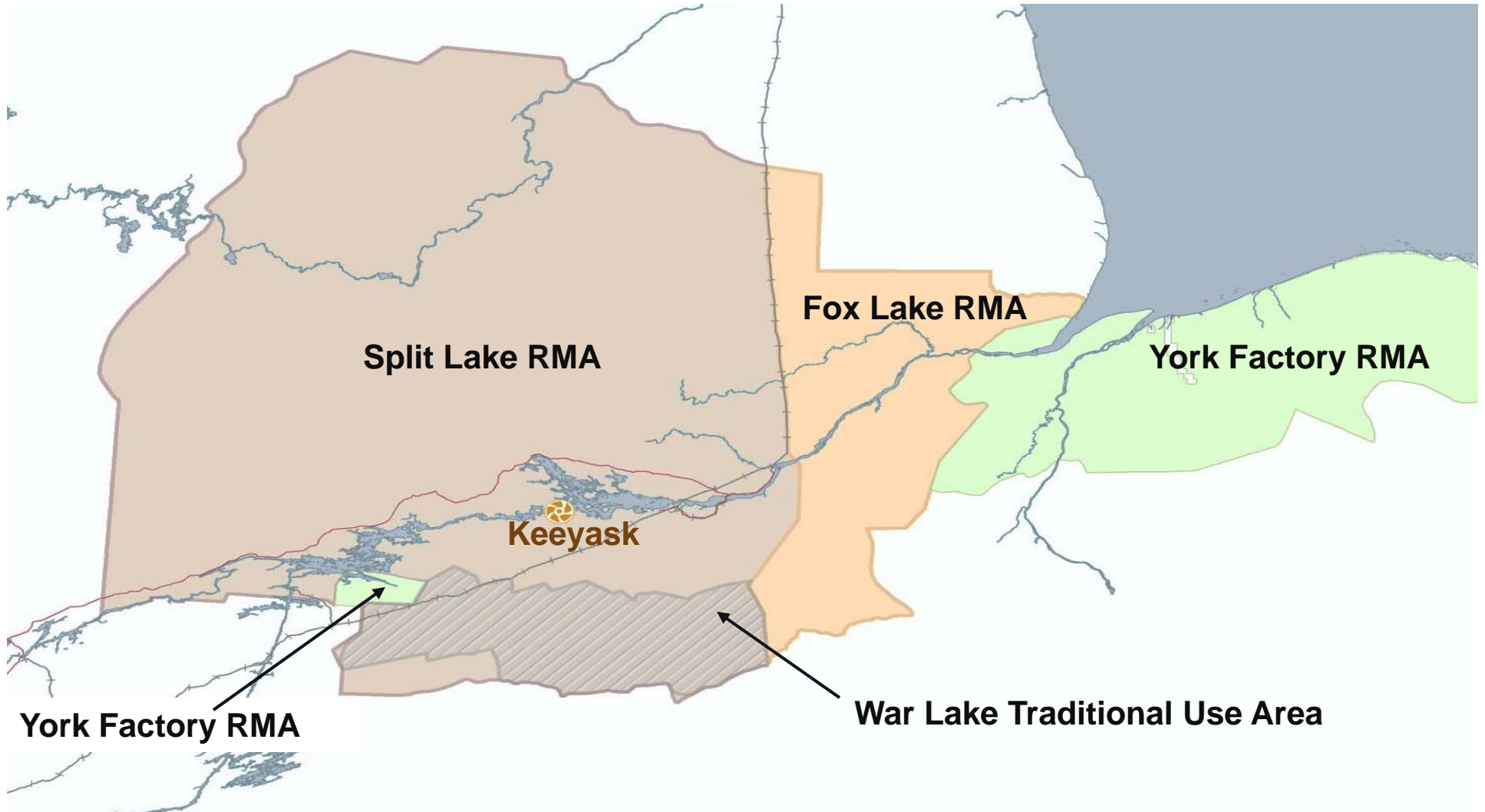
# ATK Monitoring Programs

- **ATK monitoring will involve the development and implementation of annual monitoring programs based on construction and/or operational activities and related community concerns about potential effects**
- **The results of the ATK monitoring will be an integral part of assessing the accuracy of predictions and the effectiveness of mitigation measures.**



## Environmental Monitoring Plans

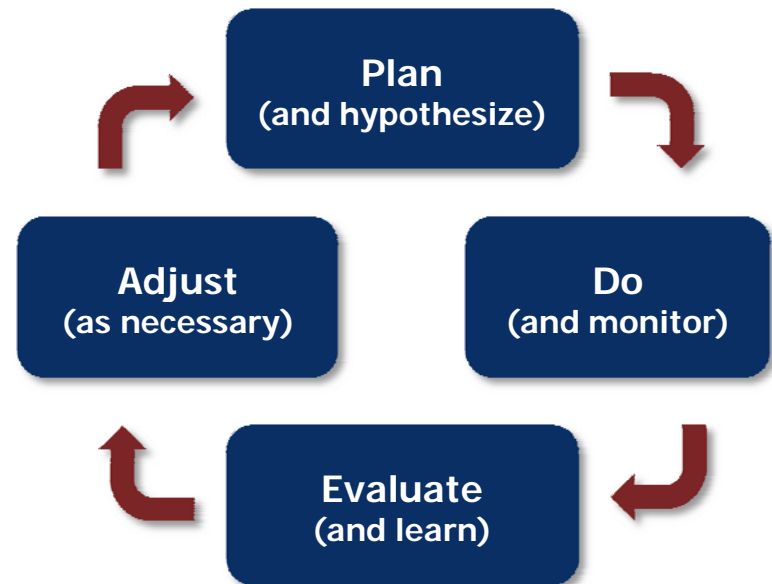
# Aboriginal Traditional Knowledge



# **Adaptive Management, Monitoring Advisory Committee and Communication of Outcomes**

# Adaptive Management

- Mitigation measures have been carefully planned to prevent or reduce adverse effects from the Project
- There can be uncertainties with predicted effects and the effectiveness of planned mitigation measures
- Adaptive management is a planned process responding to uncertainty or to an unanticipated or underestimated effect.



# Adaptive Management

- **Adaptive management will be applied when monitoring demonstrates there is a variation between actual project effects and predicted effects**
- **Decision to be made:**
  1. Application of pre-determined adaptive measures
  2. New measures designed based on monitoring results
  3. A communication plan where no adaptive measures can be applied.

## Monitoring Advisory Committee (MAC)

- **The MAC is an advisory committee to the KHLP Board of Directors**
- **MAC will have representatives from each of the Partner communities and Manitoba Hydro**
- **Will meet every 2 months during construction and will be in place for the life of the project**
- **Purpose is to provide oversight of the Environmental Protection Program.**

# MAC

- **MAC will provide effective oversight of Keeyask construction and operation**
- **The MAC has sufficient resources allocated to it to make it meaningful**
- **It will be flexible and adaptive**
- **Membership from the communities that are most affected by the Project**
- **MAC can raise concerns and recommendations to the KHLP Board.**



# MAC and Adaptive Management

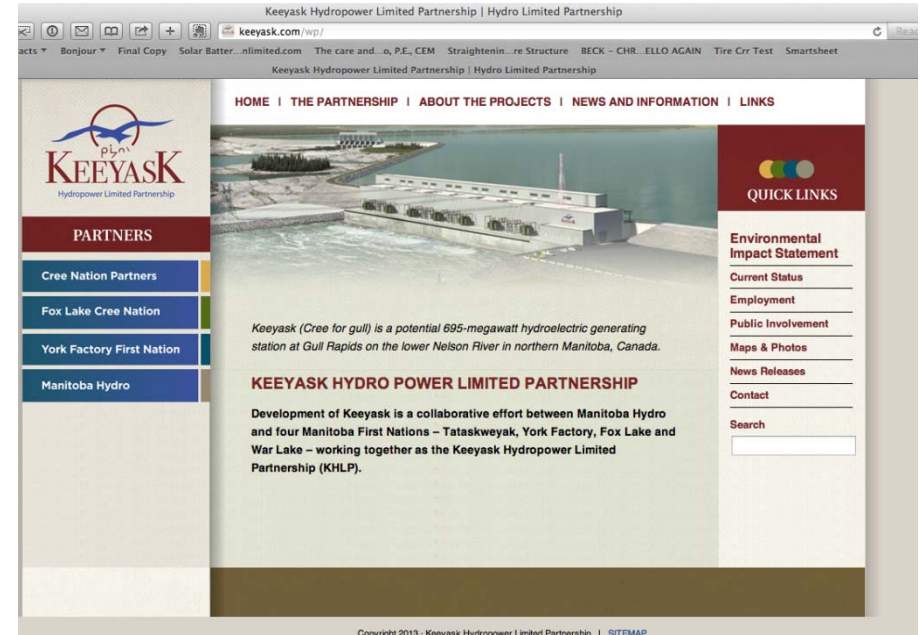
- **MAC will provide the forum to discuss practical modifications to mitigation**
- **Review recommendations from technical experts and possibly regulatory agencies on the most appropriate course of action.**

## Communication of Outcomes

- **MAC is responsible for communicating the outcomes on an annual basis to Members of the Partner communities**
- **Communication to Partner communities through various forums, i.e. open houses**
- **A summary report of all Environmental Protection Program activities and results prepared annually by the KHLP for the Partner communities and the general public**
- **Report translated into Cree.**

# Communication of Outcomes

- **Manitoba Hydro (on behalf of KHLPP) will submit reports to Regulators including:**
  - Compliance monitoring report in connection with the EnvPPs
  - Technical reports of the activities and results of the monitoring including the outcomes of both ATK and western science
- **All reports will be posted on the Keeyask website.**



## Summary

- **The Partners have worked collaboratively for many years to assess the Project and to develop mitigation measures to minimize the adverse effects**
- **Participation and collaboration of all the Partners will continue throughout the life of the Project to implement a comprehensive Environmental Protection Program**
- **Both ATK and technical science will be used to assess and mitigate effects**
- **Through MAC the partners will oversee the Program and work together to protect the environment/Askiy.**



# George Neepin, Fox Lake Cree Nation



# Victor Spence, Cree Nation Partners



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## Thank You