



# Downstream: Alberta-Northwest Territories Bilateral Water Management Agreement

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# NWT Quick Facts

- Capital city: Yellowknife
- Territorial Population: 42,810
- Total Area: 1,170,000 km<sup>2</sup>
- Number of Communities: 33
- Official Languages: 11 official languages, 9 of which are Indigenous





Mackenzie  
River Basin =  
20% of Canada





Ecologically  
Economically Spiritually  
Culturally Socially

# WATER LIFE



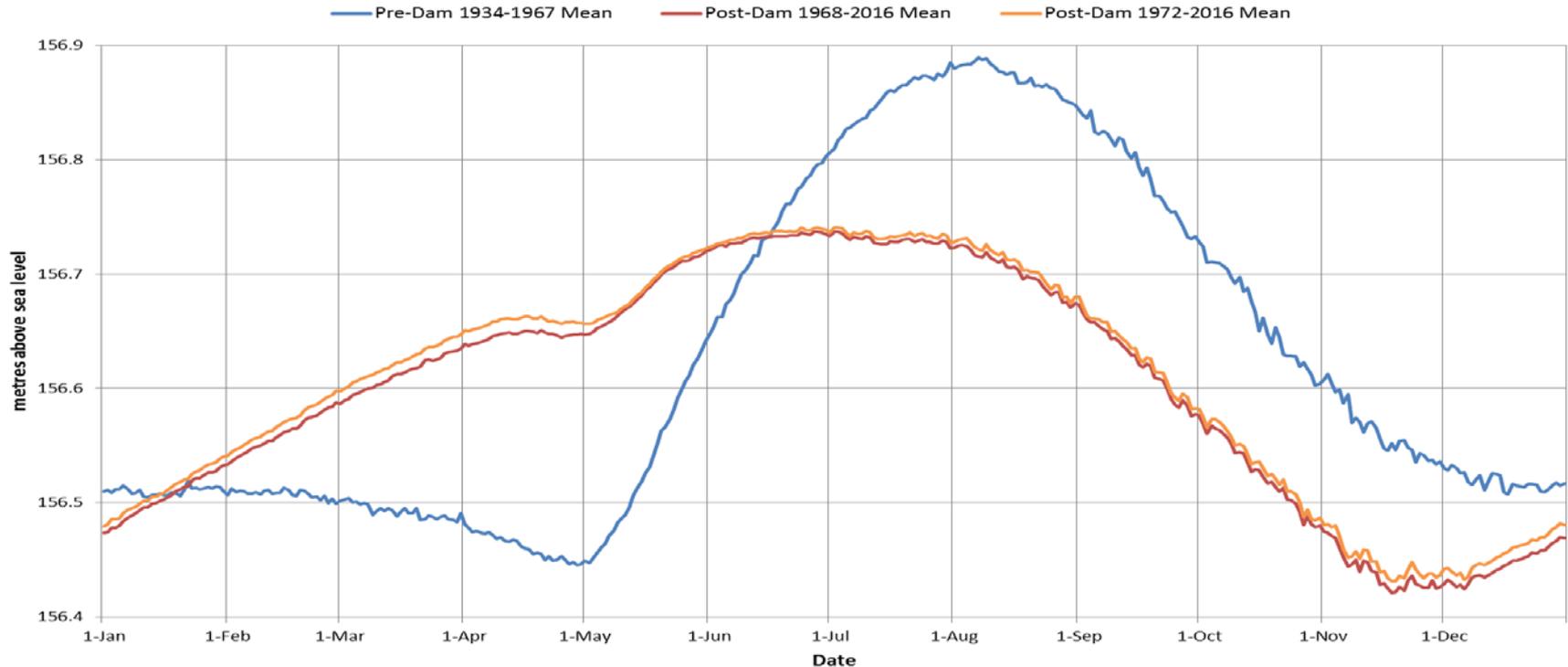


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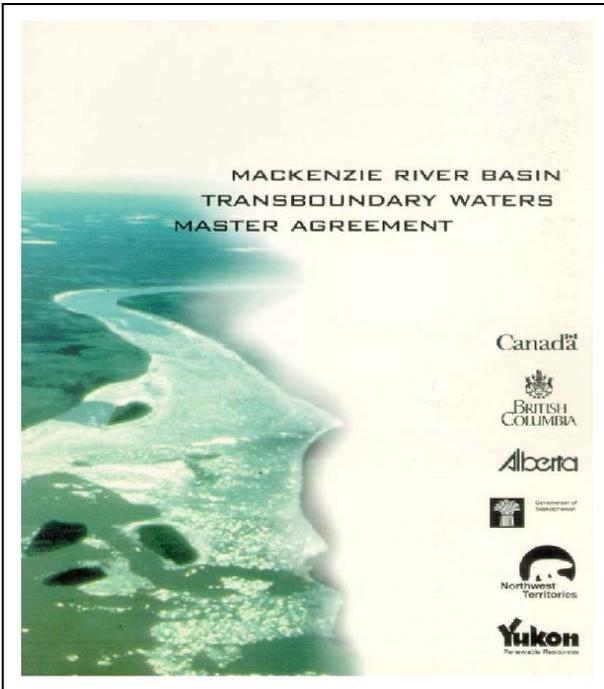
# Understand Regulation & Ice Effects

Mean Annual Hydrographs of Great Slave Lake Levels at Yellowknife Bay



# Mackenzie River Basin (MRB)

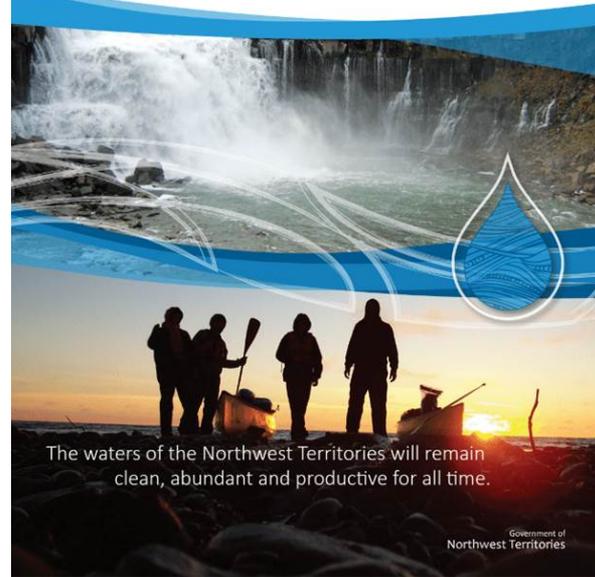
## Transboundary Waters Master Agreement



In 1997, the MRB Transboundary Waters Master Agreement was signed by Canada, British Columbia, Alberta, Saskatchewan, NWT and Yukon.

### Main purposes:

- To establish common principles for the cooperative management of the water resources in the Mackenzie River Basin in a manner consistent with the maintenance of the ecological integrity of the aquatic ecosystem.
- To make provisions to create Bilateral Water Management Agreements.



# Need for a Water Strategy

- Common vision for water stewardship
- Concerns about water quality and quantity
- Increased pressure for development
- Concerns about climate change
- Need for effective collaboration to sustain water



# Vision

## The waters of the Northwest Territories will remain clean, abundant, and productive for all time.

### Water Stewardship Goals

The goals of the Northwest Territories Water Stewardship Strategy are to assure:

- 1 Waters flowing into, within or through the NWT are **substantially unaltered** in quality, quantity and rates of flow.



- 2 Residents have access to **safe, clean** and **plentiful** drinking water at all times.



- 3 Aquatic ecosystems are **healthy** and **diverse**.



- 4 Residents can rely on their water to **sustain** their communities and economies.

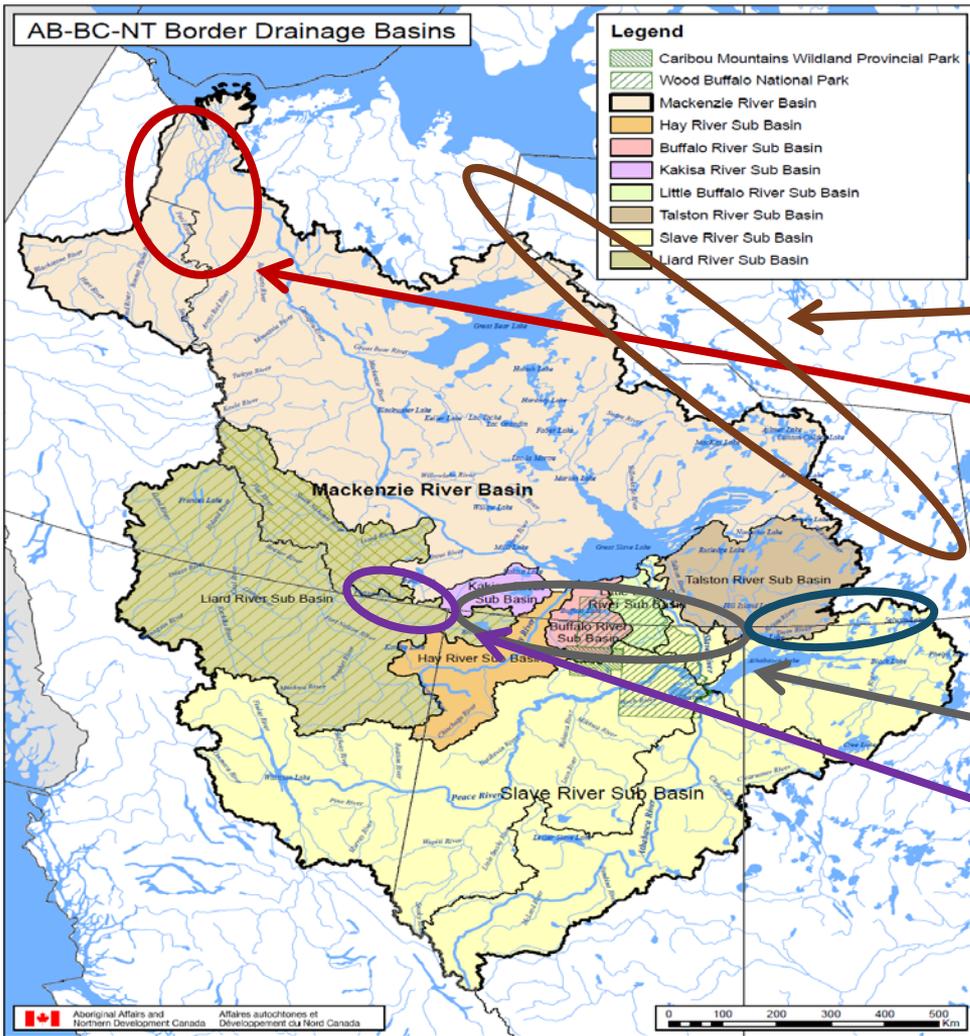


- 5 Residents are involved in and **knowledgeable** about water stewardship.



- 6 All those making water stewardship decisions **work together** to communicate well and share information.





# NWT Transboundary Waters

NWT-Nunavut Border Watersheds

NWT-Yukon Border Watersheds (2002)

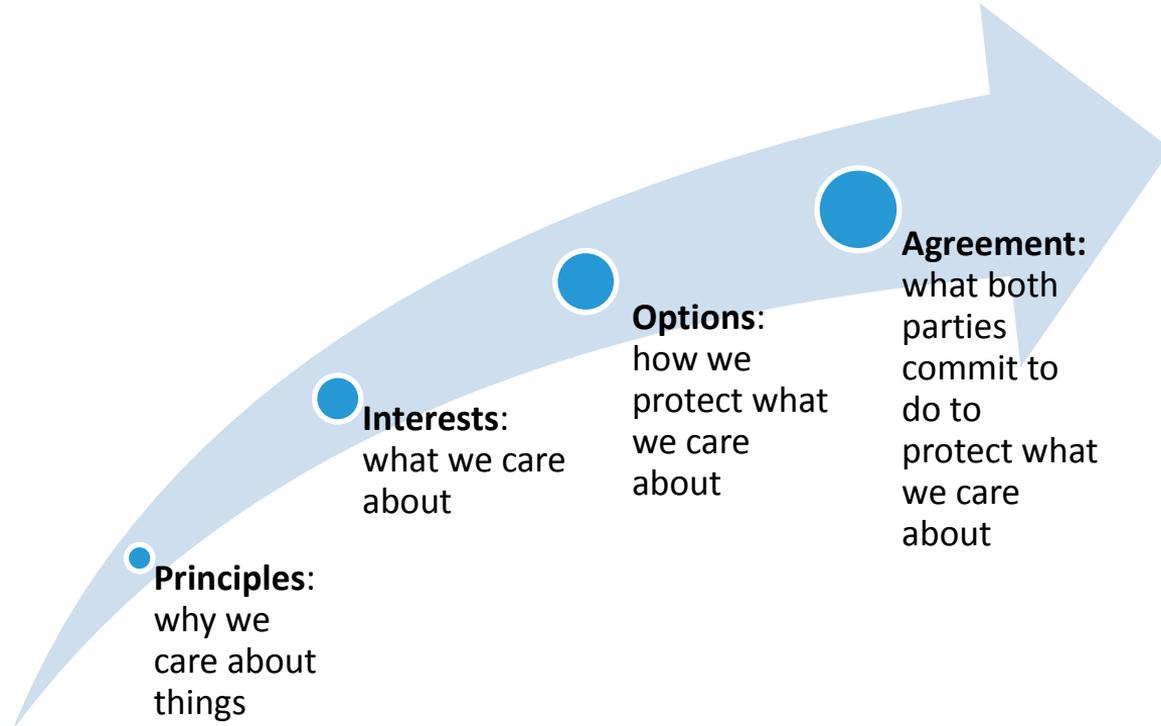
NWT-Saskatchewan Border Watersheds

NWT-Alberta Border Watersheds (March 2015)

NWT-British Columbia Border Watersheds (October 2015)

# Interest-Based Negotiations

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# Aboriginal Consultation and Public Engagement Approach

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Aboriginal  
Engagement on  
**NWT Interests**  
(March 2012)

Aboriginal  
Consultation on  
**Positions for AB  
Agreement**  
(Aug 2012)

Aboriginal  
Consultation on  
**Positions** for BC,  
SK, and YT  
Agreements  
(March 2014)

Aboriginal Consultation  
on **Intentions  
Documents** for AB, BC,  
SK, and YT Agreements  
(Aug 2014-2015+)

Public engagement  
on **NWT interests**  
(May 2012)

Public  
engagement on  
**Positions for AB  
Agreement**  
(Nov 2012)

Public engagement  
on **Positions for  
BC, SK, & YT  
Agreements**  
(July 2014)

Public engagement  
on **Intentions  
Documents** for AB,  
BC, SK, & YT  
Agreements  
(Dec 2014-2015+)

Water Strategy  
Engagement  
(2008-2011)

Water Strategy Aboriginal Steering Committee Engagement

Building on the Engagement Approach



# Indigenous Government Involvement in Implementation

- Input from Aboriginal consultation informed final agreements
- Intergovernmental Agreement on Bilateral Water Management Agreement Implementation sent to regional Indigenous governments in February 2015
- NWT Water Strategy Aboriginal Steering Committee recommended representatives for the AB-NWT and BC-NWT Bilateral Management Committees (BMC):
  - Mr. Tim Heron (Fort Smith) as the Indigenous member for the AB-NWT BMC
  - Ms. Dahti Tsetso (Fort Simpson) as the Indigenous member for the BC-NWT BMC
- Regular Aboriginal Steering Committee meetings



# Signed Bilateral

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# Water Management Agreements

*Alberta - Northwest  
Territories Agreement*  
was signed March 18,  
2015



*British Columbia -  
Northwest Territories*  
was signed October 15,  
2015



# Key Attributes of Agreement

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- Respects Aboriginal and Treaty Rights
- Creates a commitment for jurisdictional cooperation
- Affirms principles of the Master Agreement to protect the ecological integrity of the aquatic ecosystem
- Supports clean and abundant water for people and aquatic life
- Ensures a balance between development and protection of northern waters
- Sets out clear prior notification, consultation and information sharing mechanisms
- Provides steps for adaptive management to new information and changing conditions, including climate change
- Includes management actions and dispute resolution process



Implementation = Opportunity



# Aboriginal Rights

**The Agreement was developed to respect Aboriginal rights and uphold terms in the land claim agreements and treaties, for example:**

“...waters which are on or flow through or are adjacent to [Gwich’in, Sahtu, Tlicho] lands remain substantially unaltered as to quality, quantity and rate of flow”

“...the spirit and intent of the treaty relationship will last as long as the sun shines, the rivers flow and the grass grows” Treaty 8



# Aboriginal Rights in the Agreement

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## Clause 15.5 (Aboriginal and Treaty Rights)

*“Nothing in this Agreement shall be interpreted in a manner inconsistent with the exercise of any existing Aboriginal and Treaty rights as recognized and affirmed in Sections. 35 of the Constitution Act, 1982, which include rights now existing by way of land claims agreements or which may be acquired under land claims agreements, or otherwise.”*

## Appendix E (Surface Water Quality):

*“The Parties will recognize that NWT has obligations to the terms of land claims agreements, which the Parties have reviewed and understood”*

## Traditional Use:

- Transboundary Objectives are intended to protect all uses, including **traditional uses**.
- Traditional use of a water body influences the nature and intensity of management actions required for that water body.



# Traditional Knowledge in the Agreement

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- Consider available information (scientific and **traditional knowledge**) relevant to the setting and assessment of Transboundary Objectives
- Identify, through scientific and **traditional knowledge** assessment and Learning Plans, priority long-term monitoring stations and data to monitor this Agreement and regional and/or basin-level monitoring network.
- In Dispute Resolution, conduct studies and investigations using scientific and/or **traditional knowledge** information.
- Appendix C – Use of Traditional and Local Knowledge



# Jurisdictional Water Management

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Each jurisdiction is responsible for decision making\* in its own jurisdiction and will undertake its role in water management in a manner that fulfills the purpose and principles of the Master Agreement including:

*“The right of each to use or manage the use of Water Resources within its jurisdiction provided such use does not unreasonably harm the Ecological Integrity of the Aquatic Ecosystem in any other jurisdiction”*

\*subject to specific limitations in the agreement



# Bilateral Water Management

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For each agreement, a Bilateral Management Committee (BMC) is established to:

- Administer the Agreement and report on its achievement
- Multi-year work plans will be developed and approved to continually improve the Bilateral Management of Transboundary Waters.
- Monitor and review data
- Classify Transboundary Waters, establish Learning Plans and Transboundary Objectives
- Provide a mechanism for information sharing, notification and consultation
- Resolve disputes
- Initiate research and strike an independent panel if needed
- Report to Ministers
- Work in collaboration with the Mackenzie River Basin Board



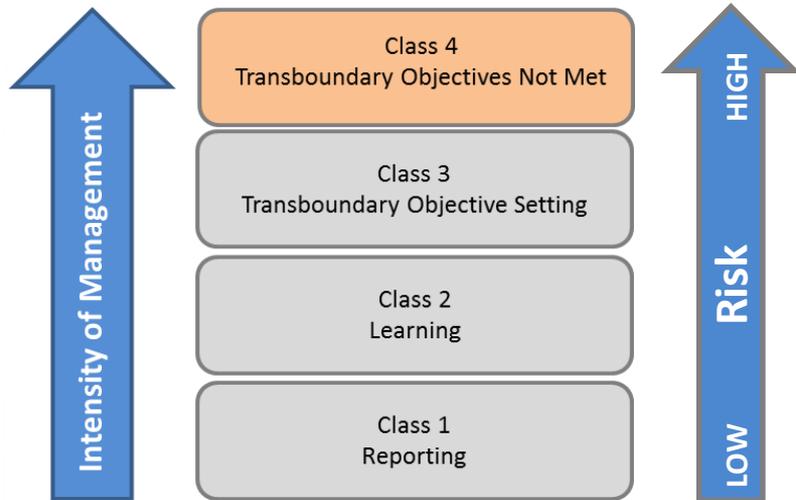
# Risk Informed Management (RIM)

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An approach for managing transboundary waters where risk is assessed and management actions are commensurate with identified risk.

Transboundary water bodies are categorized based on risk.

Management actions increase in intensity with increased risk.



Class 1 – No action required

Class 2 – Learn, monitor and study

Class 3 – Continue to monitor and study, set objectives.

Class 4 – Actions required to return to meeting objectives ASAP so aquatic ecosystem health is maintained

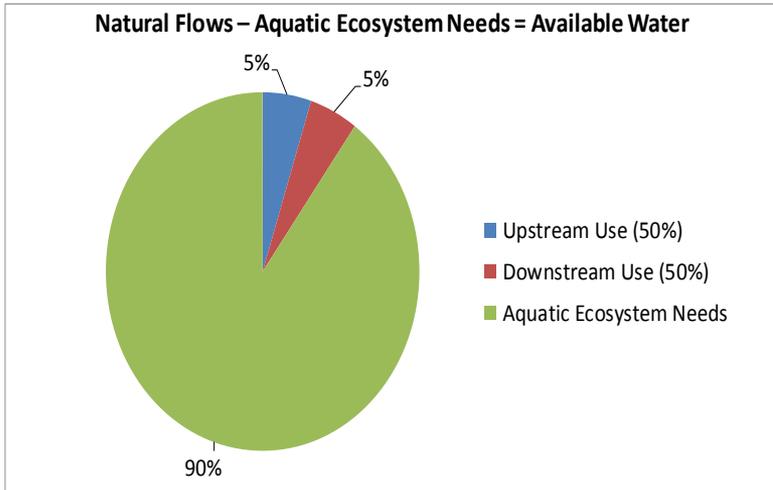


# Surface Water Quantity

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## What was heard?

NWT residents are concerned about changes in water levels, timing of flows, upstream jurisdictional use of water, effects of past and proposed development, and interbasin transfers.



## How was it addressed?

- Ecosystem Needs are paramount. Water is shared equally after Ecosystem Needs have been met.
- Transboundary Waters are monitored and triggers (early warning of change), thresholds and limits will be set in accordance with the RIM Approach to protect the ecological integrity and traditional use.
- Interbasin transfers are not permitted into or out of the Mackenzie River Basin, unless approved by a special Act of Legislature.



# Surface Water Quality

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## What was heard?

NWT residents are concerned about potential effects of past, present and proposed upstream development on transboundary water quality.



## How was this addressed?

- Transboundary Waters are monitored and triggers (early warning of change) and objectives will be set in accordance with the RIM Approach to protect the ecological integrity and traditional use.
- Water quality is different between rivers and seasons, so water quality objectives will be developed accordingly.
- Site-Specific Water Quality Objectives will be developed for Class 3 Rivers to protect all uses:
  - Traditional use
  - Freshwater aquatic life
  - Drinking water
  - Recreation
- Objective of virtual elimination of human-made substances that are toxic, bio-accumulative and persistent.



# Groundwater

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## What was heard?

People are concerned about the lack of information on groundwater and potential effects of oil and gas activities, particularly hydraulic fracturing, on groundwater.



## How was this addressed?

- The Parties will use and share groundwater reasonably and equitably according to principles from international laws.
- Groundwater will be classified and monitored; triggers (early warning of change) and objectives will be set for Class 3 groundwater aquifers (areas).
- Learning plans will be developed for Class 2 groundwater aquifers (areas); baseline information on groundwater quality, quantity and physical structure of aquifers (groundwater units) will be gathered.



# Biological Component

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## What was heard?

People are concerned about changes in fish and wildlife populations, fish and wildlife health, and whether they are safe to eat.

## How this was addressed?

The agreement is intended to protect aquatic ecosystem health including fish, wildlife and humans.

Biological indicators will be used to:

- be an early warning system that a change may be occurring
- detect synergistic and cumulative effects
- signal the movement of invasive species into, out of and within the Basin
- implement management actions to protect indicators if unacceptable changes are detected



# Monitoring

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## What was heard?

Important to have several monitoring stations along the main rivers to act as an early warning system and to maintain the monitoring over the long term, and to consider both western science and traditional knowledge.



## How was this addressed?

- Monitoring will be established to learn and support the BWMA and to assess the health of the Mackenzie River watershed.
- Monitoring will continue at priority monitoring stations. Additional stations will be established as necessary based on scientific and traditional knowledge assessments.
- Information obtained through the biological, surface and groundwater monitoring is tracked and assessed for changes and trends.



# Research

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## **How will Research inform BWMA implementation?**

- Basin-level research needs to support BWMA will be identified (e.g., climate change)
- Results from research will be considered in bilateral decision making

## **Mackenzie River Basin Board (MRBB) Technical Committee**

- The MRBB Technical Committee will assist in determining regional and basin-level monitoring and research priorities and assess information that is under discussion
- Facilitate cooperation, cost effectiveness and consistency



# Climate Change

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## What was heard?

Northerners are concerned about the effects of climate change including: thawing permafrost, water level changes, changes in fish populations and reproduction, and the magnitude and frequency of extreme climatic events.



## How was this addressed?

- Low amounts of water can be taken
- Safe water quality objectives (numbers) that reflect the site-specific conditions of the river
- Monitoring throughout the basin to help differentiate between changes caused by human activity and natural conditions
- Groundwater learning in place
- Decision making will adapt to change so that decisions are based on the most up-to-date knowledge



# Information Sharing, Notification and Consultation

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## What was heard?

NWT residents need to be informed and consulted on future development occurring upstream and monitoring results should be shared.

## How was this addressed?

- Prior notification of projected developments and activities that may cause any adverse transboundary effects must be provided.
- Concerns related to the ecological integrity of either jurisdiction will be discussed and reasonably addressed.
- Information will be exchanged on a regular basis to inform and support decisions related to the bilateral management of Transboundary Waters.



# Emergency Response

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## What was heard?

NWT residents are concerned about incidents (e.g., oil spill) occurring upstream and the length of time between notification and emergency event.

## How was this addressed?

- Emergency protocols are in place to address, mitigate and where possible prevent adverse effects of emergencies.
- Notification occurs without delay.



# Resolving Disputes

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## What was heard?

People are concerned about what will happen if the Parties don't agree.



## How was this addressed?

- Resolve dispute by consensus
- Conduct studies and investigations, using scientific and traditional knowledge
- Discuss dispute with MRBB and committees
- Establish panel of experts
- Refer disputes to responsible Ministers
- None of these preclude legal action if appropriate





# Questions or Comments?

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# Components of the Agreement

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- Purpose
- Definitions
- Jurisdictional Water Management
- Risk Informed Management
- Surface Water Quantity
- Surface Water Quality
- Groundwater
- Biological Component
- Monitoring
- Research
- Information Sharing, Notification, Consultation
- Emergency Response
- Administration
- Dispute Resolution
- Process Provisions



# List of Appendices

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Appendix A:	Risk Informed Management
Appendix B:	List of Transboundary Waters
Appendix C:	Use of Traditional and Local Knowledge
Appendix D:	Surface Water Quantity
Appendix E:	Surface Water Quality
Appendix F:	Groundwater
Appendix G:	Biological
Appendix H:	Learning Plan (Surface & Groundwater)
Appendix I:	Monitoring
Appendix J:	Costs to Administer & Implement Agreement

