

BRITISH COLUMBIA - ALBERTA MEMORANDUM OF UNDERSTANDING
BILATERAL WATER MANAGEMENT AGREEMENT NEGOTIATIONS

THIS MEMORANDUM OF UNDERSTANDING executed this 18th day of March, 2005.

BETWEEN:

BRITISH COLUMBIA MINISTRY OF WATER, LAND AND AIR PROTECTION
as represented by the Minister of Water, Land and Air Protection
(hereinafter called "British Columbia")

and

ALBERTA ENVIRONMENT
as represented by the Minister of Alberta Environment
(hereinafter called "Alberta")

1. PURPOSE:

The purpose of this memorandum of understanding is to outline the process, schedule, principles and information required to negotiate the Bilateral Water Management Agreement between British Columbia and Alberta.

2. VISION AND CONTEXT:

The vision is for a signed Bilateral Water Management Agreement that is successful, enduring, and effective at providing the basis for sound management of the transboundary waters that flow between British Columbia and Alberta. The Agreement will meet the needs of the two jurisdictions while ensuring that the aquatic ecosystem health of the transboundary waters is protected for future generations. The Agreement will be drafted, approved and implemented in a timely manner.

Both parties recognize that a healthy and sustainable water supply is vital to the long-term prosperity of British Columbia and Alberta. They also depend on the water resource to support growing communities and sustainable economic development. The parties also recognize existing developments and interests critical to the economic well being of both provinces.

It is the intent of the parties in negotiating the Bilateral Water Management Agreement to take an adaptive management approach, respect the jurisdiction of each Government, within its own boundaries, and cooperatively manage transboundary water resources for the benefit of the environment, economy and people in both jurisdictions in the future.

3. RATIONALE AND INTENT:

British Columbia and Alberta recognize that they must work together to manage transboundary waters properly and not be in isolation of one another. Both parties want to ensure these waters are managed soundly. Thus, shared watershed management is required for the protection and sustainable use of this resource.

Additionally, the Mackenzie River Basin Transboundary Waters Master Agreement (signed by Canada, British Columbia, Alberta, Saskatchewan, Northwest Territories and Yukon), which became effective on July 24, 1997, includes the provision for Bilateral Water Management Agreements between neighbouring jurisdictions. The British Columbia/Alberta Bilateral Water Management Agreement will promote the principles of cooperation as set out in the Master Agreement and will set the ground rules for how transboundary waters will be managed in the future by British Columbia and Alberta. The May 26, 2004 signing of the Alberta-British Columbia Memorandum of Understanding on Environmental Cooperation and Harmonization re-confirmed this commitment to a Bilateral Water Management Agreement.

4. CONTENT OF AGREEMENT:

The British Columbia / Alberta Bilateral Water Management Agreement will identify shared goals, the roles of each party, a process for future management and a dispute resolution mechanism. It will include at least three sections that will provide:

- 1) A number of broad statements outlining shared values and guiding principles for future cooperation and effective management of transboundary waters,
- 2) More specific technical guidelines and objectives for the protection of the water resources at transboundary waters crossing points (such as, but not limited to, water quality parameters, timing and volume of flow, and other indicators of aquatic health) and,
- 3) A mechanism for a fair, flexible and adaptive management process for future management of issues that arise concerning transboundary waters.

Although focused on the Peace River watershed, this bilateral agreement will include at a minimum, broad management principles of all ground water and surface water crossings (rivers and lakes) between British Columbia and Alberta within the Mackenzie River Basin. More specific technical details for water quality and water quantity will be provided for the management of the Peace River. Details for other rivers, ground water and lakes may be included in the initial agreement or as addendums at a later date.

6. SHARED PRINCIPLES OF NEGOTIATIONS:

All individuals participating in the bilateral negotiation process, including the project champions, negotiation teams and technical working groups and other support, recognize and acknowledge the following shared principles for negotiations:

- Negotiators will respect each other's values and priorities. Negotiations will be based on collaboration (each member open to listening and learning) and working towards an agreement that is beneficial to both parties and that supports

the principles of the Mackenzie River Basin Transboundary Waters Master Agreement.

- A sound and efficient negotiation process is dependent on effective information sharing between the two jurisdictions and their agencies. Signatories and participants to this MOU will support the negotiating process by sharing relevant, timely and accurate information for consideration in the development of the Bilateral Water Management Agreement.
- All participants to the negotiating process agree to operate in a fair and transparent manner and will use respect in addressing all members of the negotiating team and its supporting work teams.

7. COMMUNICATION / CONSULTATION:

A communications protocol will be developed. All participants to the negotiating process will adhere to this protocol such that both parties are made aware of, in a time sensitive manner, any communications relevant to negotiations, made to stakeholders or the public by either party.

Consultation with stakeholders is an important element in the development of the Bilateral Water Management Agreement. Both parties recognize the obligation to consult with affected stakeholders. Each party is responsible for consultation within its province, but will keep each other notified of these consultations as they take place.

8. PROCESS / TIMELINE (SCHEDULE):

Development of the bilateral agreement will involve four phases with the goal of completing a final agreement within three years, subject to direction from Ministers.

Phase 1 Information gathering and sharing: Create a common knowledge base by gathering and sharing information relevant to the management of transboundary waters.

Phase 2 Negotiation and writing: Negotiate and write a draft agreement document.

Phase 3 Consultation: Consult with stakeholders on the draft agreement.

Phase 4 Approval: Approve and sign the formal agreement.

9. ROLES AND RESPONSIBILITIES OF BILATERAL NEGOTIATING AND SUPPORT TEAMS:

The overall relationships and broad roles and responsibilities of the negotiation and support teams can be seen in Negotiating Structure attached (Appendix 1). Further detail on roles and responsibilities can be appended to this document as each team develops terms of reference.

10. INFORMATION REQUIRED:

Initial discussions between British Columbia and Alberta indicate that information sharing is critical to the success of this effort. To initiate the first phase of information sharing, initial information needs must be identified. To date, 11 information areas have been listed (Appendix 2). In addition, a joint workshop will be held to discuss information sharing and understanding on the Peace-Athabasca Delta. Each jurisdiction will assign the appropriate staff to facilitate information compilation and exchange.

11. COSTS/FUNDING:

Each Government will be responsible for its own employees' travel expenses, the expenses of their aboriginal advisor(s), all communication and consultation costs within its province, and costs associated with hosting face-to-face negotiation sessions.

All internal costs in support of the negotiations will be absorbed by base budgets (e.g. photocopying, administration, research, mail-outs, etc.).

12. DEPENDENCIES (Assumptions/risk/strategy):

Assumption 1: The Parties have the knowledge to make sound decisions in setting parameters and objectives for transboundary waters.

* **Risk:** There is a lack of information, or lack of adequate resources to collect the information, on critical issues.

Strategy: Work teams will be struck as required to investigate issues and provide recommendations to the negotiating teams. Resourcing will be addressed through each jurisdiction's regular business planning and budgeting processes.

Assumption 2: All critical stakeholders that are directly affected by a bilateral agreement are engaged and consulted in this process and abide by the principles of the Negotiations MOU so that they are aware and able to make informed decisions as the process unfolds.

* **Risk:** A directly affected stakeholder does not participate in the process, or enters the process at a late date, such that it negatively impacts work on the agreement.

Strategy: It is each jurisdiction's responsibility to identify key stakeholders at the beginning of this process and to engage those stakeholders in a manner that is meaningful and that prevents future delays of the project.

* The risks identified above relate to factors external to the negotiation process and beyond the reasonable control of either jurisdiction.

13. AMENDMENT / TERMINATION

This Memorandum of Understanding comes into effect on the date of the last signature.

This Memorandum of Understanding may be amended by the written agreement of both parties.

This Memorandum of Understanding may be terminated by either party upon written notice to the other party.

14. MEMORANDUM OF UNDERSTANDING SIGNATORIES:

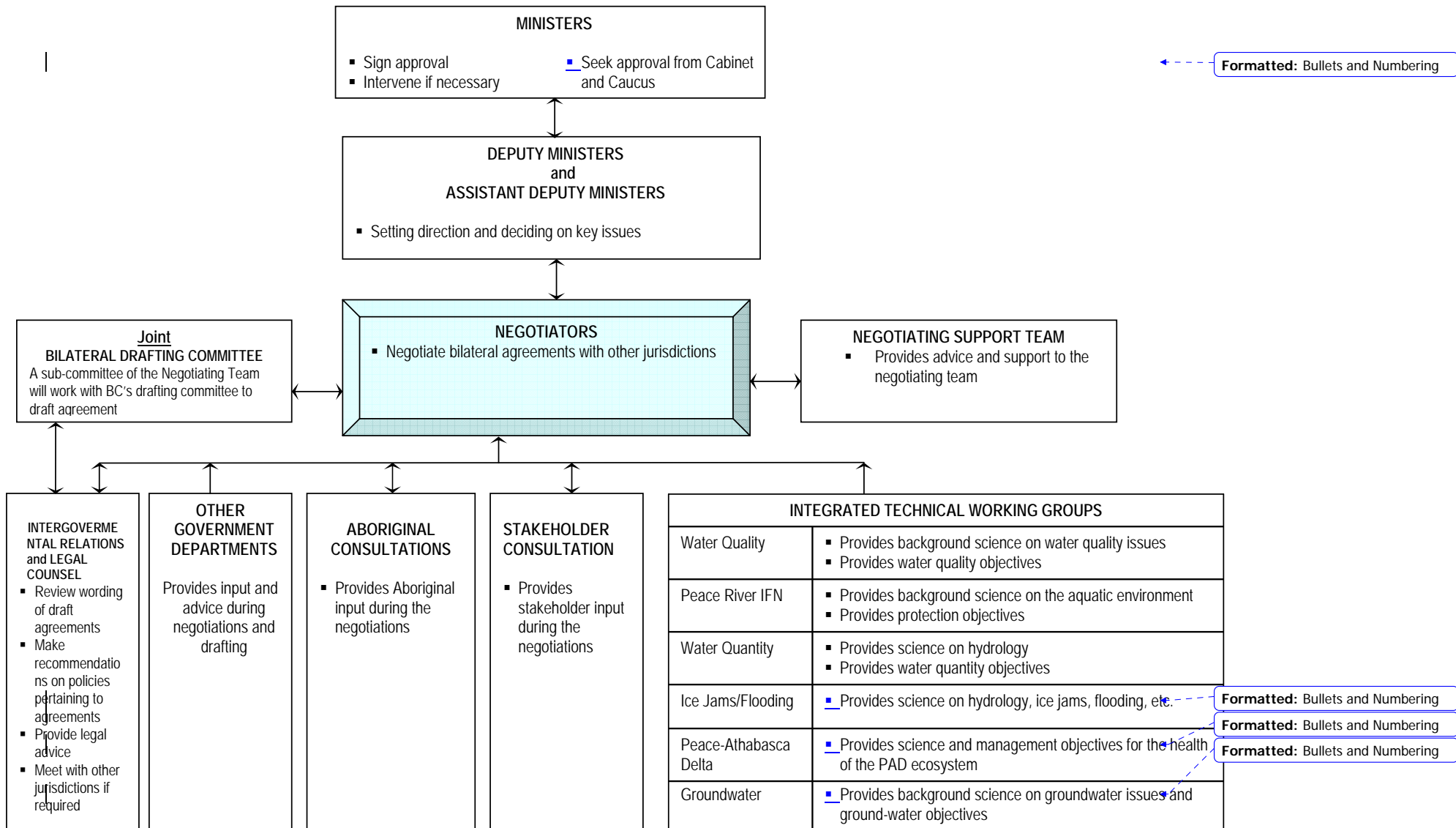
The Honourable Bill Barisoff
Minister of Water, Land and
Air Protection
Government of British Columbia

The Honourable Guy Boutilier
Minister, Alberta Environment
Government of Alberta

Attachments:

- Appendix 1 – Negotiating Structure
- Appendix 2 – Information Needs

Appendix 1 - Negotiating Structure



APPENDIX 2 – BRITISH COLUMBIA / ALBERTA BILATERAL WATER MANAGEMENT AGREEMENT - INFORMATION NEEDS

(Note: Working Groups within the negotiating structure, once convened, are expected through their expertise in these fields, to add to or modify the information needs listed below.)

1. Cross-Boundary Streams and Lakes – What streams & Lakes are in the agreement?

What is required?

- A list of cross-boundary streams and lakes shared by Alberta and British Columbia.
- A map showing the cross-boundary streams and lakes shared by Alberta and British Columbia.

Why is this needed for the bilateral negotiations?

- a) Needed to show locations and juxtaposition of specific cross-boundary streams and lakes (i.e. those the agreement will target specifically) and other cross-boundary streams and lakes, which the agreement will categorize in more general terms.
- b) Will assist in illustrating scope of the bilateral agreement.

2. Water Quality Conditions – What are the current water quality conditions?

What is required?

- a) A list of chemical, physical and biological parameters that have been monitored on cross-boundary streams and lakes.
- b) An assessment of existing water quality conditions at (specific) boundary crossings.
- c) An assessment of existing water quality conditions at (general category) boundary crossings.
- d) An assessment of existing water quality conditions at those streams on either side of the boundary that may influence boundary streams.
- e) A review of the water quality requirements for the boundary crossings.

Why is this needed for the bilateral negotiations?

- a) Baseline water quality information needed to determine the water quality parameters and to assist in negotiating targeted water quality concentrations (see #3 below) within the completed agreement.

3. Water Quality Parameters – What water quality parameters should be in the agreement?

What is required?

- a) A list of cross-boundary streams and lakes to be targeted with specific water quality parameters.
- b) A list of cross-boundary streams and lakes to be targeted with general water quality parameters.
- c) A list of chemical, physical and biological water quality parameters for each of the (specific and general) boundary crossings.

- d) Optional targeted concentrations for each parameter, for each (specific and general) boundary crossings to be used to in negotiating the agreement.

Why is this needed for the bilateral negotiations?

- a) Needed as the water quality commitments within the agreement.
- b) Needed to negotiate water quality monitoring of each parameter.

4. Flow Conditions – What have been the historic actual flows and what would have the flows been without changes caused by man?

What is required?

- a) The historic flows (actual recorded) of the cross-boundary streams over their entire length (BC through NWT), including data sets.
- b) The natural flows (influence of man removed) of the cross boundary streams over their entire length (BC through NWT), including data sets.
- c) Interpretation of the historic and natural flows (including climate change impacts).

Why is this needed for the bilateral negotiations?

- a) Needed to help determine in-stream flow requirements (specifically) for the Peace River.
- b) Needed to develop “what if” scenarios in modelling river flows.
- c) Needed to explain the degree of influence between natural and regulated flows in the wider basin context and/or at various points in the Mackenzie Basin and/or at different times of the year.
- d) Needed to show how changes between historic and natural flows have affected the aquatic ecosystem.
- e) May be used to identify the need to monitor other cross-boundary (general category) streams.

5. Downstream Indicator Areas – What are the important areas in BC, Alberta and NWT that may be used as indicators of the health of the aquatic ecosystem?

What is required?

- a) A list of 4 - 10 important areas within BC, Alberta and/or NWT that will be used as indicators of the needs of a healthy ecosystem.
- b) The identification of the flow (timing and quantity) and water quality requirements of the indicator areas in BC, Alberta and/or NWT, including justification of these requirements.
- c) The identification of natural conditions (precipitation, snow pack, temperature, etc), which combined, with flow conditions contribute to flow (timing and quantity) and water quality requirements.
- d) Information on how these areas are impacted by changes to flow and water quality.

Why is this needed for the bilateral negotiations?

- a) Needed to identify indicator areas that would benefit from opportunistic timing of flows, (given the occurrence of a natural set of complimentary conditions), to benefit the environment.
- b) Needed to identify flow/quality requirements for these indicator areas.

6. Bennett Dam Flow Simulations (if required) and/or Flow Condition Options – A tool to be able to assess various operating scenarios.

What is required?

- a) A set of “what if” flow simulations to meet downstream needs, based on the operations of WAC Bennett Dam, including general operations, reservoir refill, flooding in the Peace-Athabasca Delta, ice formation and ice break-up conditions.
- b) A determination of the relationship of these flow conditions to the requirements of downstream indicator areas.
- c) A review of the flow condition options to help determine the flow requirements for the boundary crossings to be used in the agreement.

Why is this needed for the bilateral negotiations?

- a) May be needed to consider adaptive management options when circumstances warrant.
- b) Needed to develop the water quantity commitments within the agreement.

7. Current Water Usage – How much water is being used (diverted, consumed, returned) on the cross-boundary streams and lakes?

What is required?

- a) A list of current water withdrawals (diverted, consumed, returned)(in excess of 100 acre feet per year) in both jurisdictions.

Why is this needed for the bilateral negotiations?

- a) Needed to develop an understanding of the number of large water diversions from cross boundary streams and lakes.
- b) Needed to assist in developing natural flow data sets.

8. Industrial and Municipal Developments – What are the development pressures in the watersheds?

What is required?

- a) A list of all (existing and potential) industrial and municipal projects (locations, size and scope to be determined).
- b) Identification of potential impacts (type of impact, not degree) of these developments.

Why is this needed for the bilateral negotiations?

- a) Needed to generate an understanding of the existing level of development, the patterns and trends of future growth in both jurisdictions.
- b) Needed to identify sources and types of potential pollutants and flow changes to ensure the agreement addresses these items specifically or in general.

9. Monitoring Sites – Where is monitoring taking place and where is monitoring needed in the future?

What is required?

- a) A list of all existing monitoring stations and sites at the boundary crossings.
- b) An assessment of the suitability of the existing stations in monitoring the agreement.

- c) A determination of the need for, and locations of additional stations.

Why is this needed for the bilateral negotiations?

- a) Needed to determine the best means of monitoring the agreement.
- b) Needed to determine cost implications of implementing the agreement.

10. Aquatic Ecosystem Information – What is known about the aquatic ecosystem and what is the condition of the aquatic ecosystem?

What is required?

- a) The compilation of base information on the aquatic ecosystem (i.e. fish, habitat, other) and adequate (quality and quantity) objectives for the aquatic ecosystem.

Why is this needed for the bilateral negotiations?

- a) Needed to identify ecosystem indicators for monitoring in order to recognize changes in ecosystem health or to trigger management/agreement responses.
- b) Needed to craft management/agreement responses to ecosystem changes.

11. Ground Water – What is known about ground water and what issues exist with ground water?

What is required?

- a) The identification of potential ground water issues in the border region.
- b) The documentation of the criteria for including ground water in the bilateral agreement (or not).
- c) A list of known transboundary aquifer(s), wells, etc.

Why is this needed for the bilateral negotiations?

- a) Needed to build a general foundation that will permit the future addressing of ground water issues within the framework of the bilateral without the need for re-negotiation.