

**Submission to the Manitoba Clean Environment  
Commission Hearing**

**for the**

**Pembina Valley Water Cooperative (PVWC) Supplemental  
Groundwater Supply Project**  
*Public Registry File # 5156.00*

**By: Manitoba Eco-Network Water Caucus, Inc.**

*Synopsis*

An assessment of project suitability in relation to key provincial, and municipal water policies and legal instruments, with particular attention to water planning & watershed management, water conservation, inter-basin transfer, and water exports

*November 7, 2006*

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## ***Manitoba Eco-Network Water Caucus***

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### **1. Project Rationale / Justification**

#### **a) Conflicting Messages – What is the Justification for the PVWC Supplemental Groundwater Supply Project?**

There are four different rationales for the proposed Pembina Valley Water Cooperative (PVWC) Supplemental Groundwater Supply project contained in the materials filed by PVWC.

- i) drought susceptibility / emergency supply
- ii) supply water to new customers
- iii) population growth
- iv) population growth and growth of the livestock industry

The initial December 2005 information contained in the four reports filed by PVWC indicates that susceptibility to drought is driving the project and the water would be used in instances where access to an emergency supply of water is necessary<sup>1</sup>. However the emergency supply rationale is contradicted by a later statement “there is an opportunity to provide treatment along the pipeline route as there is a potential to sell water to communities and rural municipalities along the way”<sup>2</sup>.

The PVWC’s September 2006 supplementary filing provides a third rationale, stating that the project need is based on population growth in the PVWC region, including immigration from Germany<sup>3</sup>. The September 2006 filing also reintroduces the issue of drought in Section 6.0 Public Consultation. Also in the September 2006 supplemental filing, the PVWC describes a meeting with the RM of De Salaberry where PVWC explained that they “have a policy of sharing supplies where sources permit and that the water would be available at the same wholesale price paid by its other municipal members”<sup>4</sup>, suggesting again that this water would allow the PVWC to expand its customer base.

Most recently, the PVWC filed its 2003 Master Plan, of which a significant portion is

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<sup>1</sup> For example, see Pembina Valley Water Cooperative Inc. Supplemental Groundwater Supply Environment Act Proposal Information for the Well and Associated Area - December, 2005, pg. 3 [http://www.gov.mb.ca/conservation/envapprovals/registries/pembinavalley/eapinfo\\_well\\_associated\\_area/ec2.pdf](http://www.gov.mb.ca/conservation/envapprovals/registries/pembinavalley/eapinfo_well_associated_area/ec2.pdf)

<sup>2</sup> Ibid, pg 5.

<sup>3</sup> Pembina Valley Water Cooperative Inc. Supplemental Groundwater Supply Project Additional Information Submission – September 2006, pg. 3 <http://www.cecmanitoba.ca/File/Sandilands%20-%20Section%201.pdf>

<sup>4</sup> Ibid.

dedicated to providing growth and demand projections for the regions serviced by the PVWC. This document makes the argument that both growth in population and livestock necessitate the need for expanded water sources for PVWC water supply<sup>5</sup> - yet another slightly different rationale.

Currently, all of the PVWC's conflicting statements as to its project's rationale cast doubt as to what the true rationale is for the PVWC's proposed project. Clarity is certainly lacking and PVWC's justification for its project is significantly weakened by the contradictory information it has filed.

### **b) Context for Water Policy Analysis**

Our analysis is based on public concerns about the PVWC's proposed project and issues raised by this project that are regulated by other Manitoba statutes and policies. Both of these matters are part of the scope of this Clean Environment Commission hearing.

Consideration of public concerns was specifically included in the CEC Terms of Reference for the Pembina Valley Water Cooperative Supplemental Groundwater Supply System Proposal (emphasis added)<sup>6</sup>,

*For the potential environmental effects of the Proposal, the Commission shall consider the four reports associated with the Proposal, **and public concerns***

Please refer to the spreadsheet we developed that identifies and categorizes all written comments from the environmental impact statement review that took place in early 2006 (see Appendix: *Pembina Valley Water Cooperative Comments – Proposed Supplemental Groundwater Supply System: Summary of Issues Raised by the Public*). The intent is to assist the proponent in providing specific responses to these public comments.

Our analysis will reflect the Principles and Guidelines of Sustainable Development described under the *Sustainable Development Act*. A 'sustainable development analysis' was required of the proponent as per a June 30 memo<sup>7</sup>, however the response, as part of the September 2006 supplemental filing, can be considered not adequate. The PVWC's two-paragraphs in Section 9<sup>8</sup> do not constitute an analysis. A thorough 'sustainable development analysis' would include a review of current public policy and legislative instruments and analysis of the proposed project's 'fit' with stated public policy in the context of Manitoba's commitment to sustainable development principles. The review and analysis in the pages that follow are based on this premise.

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<sup>5</sup> Cochrane Engineering. 2003. *Background Study – PVWC Regional Water System Master Plan Final Report*.

<sup>6</sup> Terms of Reference – Clean Environment Commission Public Hearing on the Pembina Valley Water Cooperative Supplemental Groundwater Supply System Proposal, May 28, 2006, pg. 1  
<http://www.cecmanitoba.ca/File/PVWC%20CEC%20T%20of%20R%20Final%202%20May%202006.pdf>

<sup>7</sup> CEC's June 30, 2006 memo to Tracy Braun, Director of Environmental Assessment and Licensing

<sup>8</sup> Pembina Valley Water Cooperative Inc. Supplemental Groundwater Supply Project Additional Information Submission – September 2006, Section 9

## **2. Manitoba Public Policy & Legal Instruments – Issues Specific to Sandilands Glaciofluvial Complex**

### **a) Policy & Legislation – Water Protection & Aquifer Sustainability**

In this section we explore policies and legislation related to water protection and aquifer sustainability.

Protection of water sources such as aquifers (sub surface protection) needs to be considered in conjunction with protection of ecological values of the lands above (surface protection). In this instance, the lands above the Sandilands glaciofluvial aquifer complex itself have significance in the context of protection for the natural environment, in addition to its value as a water source. The Sandilands Uplands, including the Bedford Ridge is an ecological gem consisting of a rich array of wetlands, bogs, marshes, peatlands and forests. Wetlands are said to be one of the most biological diverse ecosystems on the planet. The region is the foci of 3 sub-basins of the Hudson Bay Basin and the headwaters of 5 watersheds<sup>9</sup>. The Glaciofluvial Aquifer complex, which sits under the region, also supplies the Sandstone and Carbonate Aquifers, two major bedrock aquifers in south central Manitoba<sup>10</sup>. This region must be afforded special protection - for both surface and subsurface areas – in order to safeguard the critical ecosystem services that this aquifer complex provides.

Delivery of objectives in protected areas establishment and mechanisms to achieve these public policy goals are the responsibility of Manitoba Conservation's *Protected Areas Initiative* (PAI). The primary goal is to establish a network of protected areas that represents Manitoba's lands and waters, across our province's regions. This goal has not been reached in the natural regions affected by the PVWC proposal. A variety of government designed candidate protected areas (Areas of Special Interest, Rank One ASIs supported for protected status by the mining sector) exist in Natural Regions 5b, 5c, and 9.

Another possible mechanism that could enhance protection of the Sandilands regional ecosystem's aquifer complex is establishing a protection area with Water Quality Management Zones under *The Water Protection Act*<sup>11</sup>.

The impetus for protection is drawn from Manitoba's *Water Protection Act*<sup>12</sup>, the purpose of which is "to provide for the protection and stewardship of Manitoba's water resources and aquatic ecosystems". Part 2(c) of the *Water Protection Act* acknowledges the need for protection of drinking water sources; this is also reflected in other Manitoba public policies, such as *The Water Strategy (2003)* – which is characterized as "a holistic

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<sup>9</sup> Brokenhead River, Whitemouth River, Rat River, Seine River, Cooks Creek watersheds

<sup>10</sup> Frank Render November 1, 2006 submission to the CEC; Kennedy, P. L. and Woodbury, A. D. 2005. Sustainability of the Bedrock Aquifer Systems in South-Central Manitoba: Implications for Large-Scale Modelling. *Canadian Water Resources Journal*, Vol. 30(4): 281–296 (2005).

<sup>11</sup> Manitoba Water Stewardship - Nutrient Management Regulation for Water Quality Management Zones <http://www.gov.mb.ca/waterstewardship/wqmz/index.html>

<sup>12</sup> *Water Protection Act* <http://web2.gov.mb.ca/laws/statutes/ccsm/w065e.php>

approach to protecting our water – from watershed to tap”<sup>13</sup>.

Section 9.1(1) of *The Water Rights Act*<sup>14</sup> also provides a rationale for protecting and maintaining ecosystems. It compels the Minister, when considering an application for a licence under the *Act* to,

*consider scientific and other information relating to the groundwater and water body levels, and the in-stream flows, that are necessary to ensure that aquatic ecosystems are protected and maintained.*

There is therefore potential to protect lands and waters (both surface and below ground) to safeguard the glaciofluvial aquifer complex as an important groundwater source and to recognize the importance of the Sandilands regional ecosystem.

Adding to the argument for protection of this aquifer complex are Manitoba’s policy commitments with respect to groundwater/aquifer sustainability, which are supported by legislation. *Applying Manitoba’s Water Policies (1994)* and *The Manitoba Water Strategy (2003)* both make clear statements regarding the need to ensure the sustainability of Manitoba’s groundwater and aquifers.

For instance, the PVWC referenced *Applying Manitoba’s Water Policies (1994)* in Section 9.0, but omitted Policy 3.3, which states: “Groundwater development and utilization shall be managed so that the long term sustainability of aquifers is achieved and existing uses are not negatively impacted.”

The PVWC has acknowledged the grave uncertainties and serious information gaps associated with their current knowledge of groundwater in the Sandilands glaciofluvial aquifer and have not confidently asserted that its project will not compromise aquifer sustainability. In contrast, respected former government scientist Frank Render has offered his opinion that, “the Sandilands Glaciofluvial complex ground water recharge capability is not known . . . the area has not been studied sufficiently to allow a realistic long term average recharge number to be stated”<sup>15</sup>.

PVWC’s argument is that they need to proceed with aquifer development to be able to determine the long term average aquifer replenishment rate. This argument does not seem to be in line with notions of sustainability or the precautionary principle.

Government also has a significant role and responsibility as an active participant in undertaking the research and study to address the uncertainties and information gaps when it comes to the province’s aquifers. Policy 3.3 commits the Manitoba government to<sup>16</sup>,

*evaluate aquifers to define their location and dimensions, water table, flow dynamics, water quality, yield, pollution hazard areas, and interrelationships with other aquifers, wetlands, and stream flow.*

<sup>13</sup> The Manitoba Water Strategy <http://www.gov.mb.ca/waterstewardship/waterstrategy/pdf/index.html>

<sup>14</sup> The *Water Rights Act* <http://web2.gov.mb.ca/laws/statutes/ccsm/w080e.php>

<sup>15</sup> November 1, 2006 Comments submitted to the CEC by Frank Render

<sup>16</sup> *Applying Manitoba’s Water Policies*, pg. 34.

## **b) Water Transfers and Bulk Water Removals**

Public policy discussions regarding water transfers and bulk water removal date back (at least) to *Applying Manitoba's Water Policies (1994)*. Policy 3.3 refers to concerns about water transfers across continental or internal basin boundaries relating to “the impact on the present and future water supplies within the donor basin, and the possible irreversible dependencies that develop in the receiver basin.”<sup>17</sup> The 2000 public consultation document, *Policies – Water Use & Allocation – 1999 Public Consultation: Summary and Conclusions*, also recommends prohibiting water transfers and bulk water removals<sup>18</sup>.

These policies are supported by two pieces of legislation. The *Water Resources Conservation Act*<sup>19</sup> states,

*No person shall*

- (a) drill for, divert, extract, take or store water for removal;*
- (b) sell or otherwise dispose of water to a person for removal;*
- (c) convey or transport water for removal; or*
- (d) remove water<sup>20</sup>;*

*from a water basin or sub-water basin.*

The issue of water transfer between sub basins is an issue that the PVWC has not addressed, as they have not acknowledged the implications of the direct connectivity between the Lower Sand Unit and the Upper Sand Unit, and that the Lower Sand Unit of the glaciofluvial complex likely extends into the Whitemouth River watershed.

The Whitemouth River watershed is in turn part of the Winnipeg River sub-basin, whereas PVWC's well is situated in the Red River sub-basin. The possibility exists that the PVWC project may draw water from one sub-basin for use in another, constituting a sub-basin water transfer (see Appendix: Water Sub Basins and Watersheds).

The second piece of legislation pertaining to the water transfer issues is noted for clarity's sake. Section 25.1 of the *Water Rights Act* specifies that the *Water Resources Conservation Act* takes precedence over the *Water Rights Act*. The precautionary principle must therefore come into play when Water Rights licences are being considered, especially when such a licence would constitute a water removal and a transfer as defined in the *Water Resources Conservation Act*.

Finally, *The Water Resources Conservation Act* also contains provisions (Section 6) to define sub basin boundaries through a public consultation process. The public consultation mechanism has been initiated, but the process is not yet complete; no

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<sup>17</sup> *Applying Manitoba's Water Policies*, pg. 38.

<sup>18</sup> *Water Use & Allocation – 1999 Public Consultation: Summary and Conclusions*. 2000. Manitoba Conservation, pg iv, 2, 5-8

[http://www.gov.mb.ca/waterstewardship/reports/planning\\_development/water\\_use\\_allocation.pdf](http://www.gov.mb.ca/waterstewardship/reports/planning_development/water_use_allocation.pdf)

<sup>19</sup> The Water Resources Conservation Act <http://web2.gov.mb.ca/laws/statutes/ccsm/w072e.php>

<sup>20</sup> “remove from” is defined in the Act “in relation to water in a sub-water basin, includes transferring the water between sub-water basins”

regulation has been issued. We suggest that the formal designation of water sub basin boundaries needs to be a priority for Manitoba, given water's priority for the government and given that Manitoba is facing proposals such as that proposed by the PVWC. The absence of a regulation to define sub basins should not negate the intent of the *Act* to prohibit sub-basin transfers of water.

Since coming into effect no projects for water removal and transfer from one sub basin to another have been licensed under the Manitoba *Environment Act*. If the Pembina Valley Water Cooperative's (PVWC) proposed project is allowed to proceed,

- it risks being in contravention of the *Water Resources Conservation Act*
- it would set a precedent that would signal that Manitoba's water is available for the taking
- it would set the bar for other projects of this nature to seek approval and licences – without a watershed plan in place, without adequate technical information regarding the water source, etc.

#### **c) The Rural Municipality of Piney By-Law**

Adding to the weight of the *Water Resources Conservation Act* is By-Law No. 45/06 enacted by the Rural Municipality (RM) of Piney on May 9, 2006. This By-Law prohibits the removal of ground or surface water originating in the Municipality's source (aquifer) "by means of pipeline, tanker truck or other equivalent bulk method". It also reinforces the provincial-level prohibition of bulk water removal from a sub basin. One question this raises is: Will the Government of Manitoba respect this By-Law that is based on the province's own legislation?

There are legal implications to the RM of Piney By-Law beyond the scope of this analysis that need to be addressed in the review of the PVWC proposal. We are not providing a legal analysis here, but we point to the Supreme Court of Canada decision (*Spraytech v. Town of Hudson*), which ruled that the municipality had the authority to regulate the use of lawn care products through its by-law making process. The decision upheld the Quebec *Cities and Towns Act* ("C.T.A."), which states that a "council may make by-laws to "secure peace, order, good government, health and general welfare in the territory of the municipality"<sup>21</sup>. It could be argued that this same principle should and will be upheld with respect to decisions and by-laws pertaining to natural resources, especially as these affect health and general welfare in the municipality.

#### **d) Climate Change & the Precautionary Principle**

The Manitoba *Water Strategy* advocates determining "possible effects of climate change on water supplies and study[ing] options to deal with and adapt to these potential changes"<sup>22</sup>. The *Water Resources Conservation Act* enshrines the precautionary principle

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<sup>21</sup> The Supreme Court of Canada (*Spraytech v. Town of Hudson*) June 28, 2001  
<http://csc.lexum.umontreal.ca/en/2001/2001scc40/2001scc40.html>

<sup>22</sup> The Manitoba Water Strategy – Water Supply  
<http://www.gov.mb.ca/waterstewardship/waterstrategy/pdf/index.html#Water%20supply>

in law in relation to water management and climate change<sup>23</sup>,

*AND WHEREAS, in light of the fact that future domestic needs and the potential effects of climate change are unknown, such a [water resource management] scheme should be based on the precautionary principle and on sustainable water resource management practices;*

The PVWC raises the issue of climate change as part of their rationale for bringing more water to the region, however they do not discuss it in their proposal in terms of the effects regionally or on groundwater resources that they wish to tap into. There is a body of research regarding possible climate change impacts and water supply that the PVWC could consult with respect to its proposed project. For example, Kennedy and Woodbury (2005) make some statements regarding the possible impacts of changes in the climate that are pertinent to the PVWC proposal<sup>24</sup>. In light of the absence of information in PVWC's and the legislated responsibility to apply the precautionary principle to water management in the face of climate change, this is a relevant issue for discussion as part of the CEC hearings.

#### **e) Summary – Issues Specific to the Sandilands Glaciofluvial Complex**

Our review of Manitoba's water policies and legal instruments as they relate to the Sandilands glaciofluvial complex highlights several areas where the Pembina Valley Water Cooperative's proposed project is out of step with Manitoba's stated principles and objectives concerning groundwater.

- Manitoba is committed to protecting groundwater resources (*The Water Protection Act, Water Strategy (2003), The Water Rights Act*), and Manitoba is committed to the creation of a protected areas network (*Protected Areas Initiative*). This network is incomplete in the natural regions that may be impacted by the PVWC project and there are opportunities for protection that may be acted upon to safeguard the Sandilands glaciofluvial aquifer complex. Proposed regulations under *The Water Protection Act* may also be used to enhance protection.
- Manitoba is committed to ensuring aquifer sustainability (*Applying Manitoba's Water Policies (1994), Manitoba Water Strategy (2003), The Water Protection Act*). Considerable uncertainties exist with regard to whether the PVWC's project would affect aquifer sustainability, and the PVWC's argument that they will determine the aquifer's sustainability through development is contrary to any notions of sustainability. According to Manitoba's policies, the government has a responsibility to undertake research to address information gaps and to better understand our aquifers.
- Sub basin transfers and bulk removals of water are contrary to provincial law (*The Manitoba Resources Conservation Act*) and prohibited by the municipality in which the proponent has situated its well site (RM of Piney By-Law).
- Climate change scenarios must be considered in the region where water is

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<sup>23</sup> The Water Resources Conservation Act <http://web2.gov.mb.ca/laws/statutes/ccsm/w072e.php>

<sup>24</sup> Kennedy, P. L. and Woodbury, A. D. 2005. Sustainability of the Bedrock Aquifer Systems in South-Central Manitoba: Implications for Large-Scale Modelling. *Canadian Water Resources Journal*, Vol. 30(4): 281–296 (2005).

withdrawn (*Water Strategy (2003)*) and there is a legal responsibility to apply the precautionary principle in the face of climate change (*Water Resources Conservation Act*). The PVWC's proposal does not discuss or consider the implications of climate change for its proposed project.

### **3. Manitoba Public Policy & Legal Instruments – Water Planning Issues**

#### **a) Manitoba's Policies – Water Conservation**

Water conservation and strategies to reduce water demand are the focus of the other portion of our presentation. Here we are simply drawing attention to the fact that conservation is a fundamental element of Manitoba's public policy concerning water and providing some general comments with respect to the PVWC's conservation plan.

Water conservation is a cornerstone of Manitoba's *Water Strategy*<sup>25</sup>. The 'Water Supply' section of *Strategy* highlights conservation and recommends "demand management techniques and principles for managing water supplies"<sup>26</sup>. The CEC has also made recommendations with respect to water conservation – in its 2003 report on the hearings for the RM of Brokenhead, for example<sup>27</sup>.

The PVWC acknowledges the importance of conservation and it has a conservation plan in place. PVWC's conservation plan was a requirement stipulated by its original Environment Act licence (No. 1841, dated June 7, 1994) and it was not submitted until 1998<sup>28</sup>. The PVWC has not filed any documentation to indicate that it has undertaken a formal study to follow-up, evaluate, audit, or update its 1998 conservation plan. This should be required of the PVWC, and it should be done by an independent body, especially, in light of the *Water Strategy's* emphasis on conservation. Dr. Brooks will provide more detail on demand side management.

#### **b) Policies & Legislation – Water Planning**

The intent of Policy 3.2 of *Applying Manitoba's Water Policies* is to "ensure that water management priorities are determined on a watershed-wide basis rather than only through site-specific or single purpose planning" and "water use and allocation decisions should ideally be made within the framework of integrated basin, watershed, and aquifer plans"<sup>29</sup>. In 1994, the Assiniboine River Advisory Board, which was formed as a result of the Pembina Valley Water Cooperative's plans to remove water from the Assiniboine River, called for watershed planning. The notion that watershed and aquifer plans should be used in water allocation strategies and licensing decisions was also discussed in 1999 as part of the province's public discussions regarding water issues. The public input from this process called for recognition of watershed planning in law<sup>30</sup>.

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<sup>25</sup> The Manitoba Water Strategy – Conservation

<http://www.gov.mb.ca/waterstewardship/waterstrategy/pdf/index.html#Conservation>

<sup>26</sup> The Manitoba Water Strategy – Water Supply

<http://www.gov.mb.ca/waterstewardship/waterstrategy/pdf/index.html#Water%20supply>

<sup>27</sup> Manitoba Clean Environment Commission. 2003. Report on Public Hearings - Rural Municipality of Brokenhead (Garson, Tyndall, and Henryville) Water/Sewer Infrastructure Project, pg. 69  
[http://www.cccmanitoba.ca/Reports/PDF/Brokenhead\\_Report\\_Final.pdf](http://www.cccmanitoba.ca/Reports/PDF/Brokenhead_Report_Final.pdf)

<sup>28</sup> According to the 1994 licence, the PVWC was required to submit a "comprehensive water conservation plan and implementation strategy" by December 1994.

<sup>29</sup> *Applying Manitoba's Water Policies*, pg. 32.

<sup>30</sup> Water Use & Allocation – 1999 Public Consultation: Summary and Conclusions. 2000. Manitoba Conservation, pg iv, 2, 5-8

Most recently, in its enactment of *The Water Protection Act*, the province has acknowledged the need for specific watershed plans that include source water protection that should precede development planning under the *Planning Act*. The preamble of *The Water Protection Act* sets out Manitoba's commitment to watershed planning, Part 2(b) recognizes the importance of watershed planning, and watershed planning is enabled in Part 3 – Watershed Management Plans.

### **c) Water Planning in the PVWC Distribution Region**

Watershed planning in the watersheds (Morris River and Plum Coulee, see Appendix: Map #6 Southern Manitoba Water Sub Basins and Watersheds) that are serviced by the PVWC's supply network has not begun. In fact, only 2 minor regional planning exercises have been completed – The Stephenfield Lake Watershed Management Plan and the Winkler Aquifer Management Plan. This is also one of the few areas in agro-Manitoba that do not have a conservation district in place.

The Stephenfield Lake Watershed Management Plan is a positive step for the Morris River watershed to improve capacity to manage its water. The plan notes that the Stephenfield Lake's watershed is fully allocated, but suggests that more investigation is required of the groundwater resources in the area. The plan for the Winkler Aquifer evolved as a result of the over exploitation of this groundwater source<sup>31</sup>. Experiences with the Winkler aquifer point to the dangers of developing an aquifer before its capacity is understood. The circumstances that led to the development of the Winkler plan are also an indication that aquifers in southern Manitoba need management plans. The precautionary principle and experiences in Winkler also point to the need to proceed with particular caution when making decisions about groundwater resources.

There is no source protection plan in place for the Morris River and Plum Coulee watersheds. The PVWC's proposal does not discuss the status of watershed planning in the region, nor does it acknowledge the province's priorities in terms of watershed planning prior to importing a new supply. PVWC's proposal needs to be considered in light of the policy and legislative commitments and priorities of the Government of Manitoba that mandate watershed and aquifer planning prior to water allocation decisions.

### **d) PVWC & the Red River Basin Commission**

The absence of watershed planning information in the PVWC's proposal should also be considered in the context of PVWC's other activities. For instance, the PVWC has a seat on the board of the Red River Basin Commission, which released a 2005 report<sup>32</sup> indicating a "commitment to comprehensive integrated watershed stewardship and management". This report's description of goals and objectives also pledges to "Manage

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<sup>31</sup> Winkler Aquifer Management Plan

[http://www.gov.mb.ca/waterstewardship/reports/planning\\_development/winkler\\_aquifer\\_mp.pdf](http://www.gov.mb.ca/waterstewardship/reports/planning_development/winkler_aquifer_mp.pdf)

<sup>32</sup> Red River Basin Commission Natural Resources Framework Plan (NRFP)

[http://www.redriverbasincommission.org/Services/NRFP\\_Document.pdf](http://www.redriverbasincommission.org/Services/NRFP_Document.pdf)

natural resources in the RRB [Red River Basin] by watershed boundaries rather than political boundaries”.

The Commission’s statements and the PVWC’s participation on the Commission’s board make it difficult to reconcile the PVWC’s proposed project, as it appears to ignore watershed boundaries.

#### **e) Planning and Livestock Policies**

*The Planning Act* is mentioned here because of its provision stipulating the adoption of livestock operation policies by municipalities by 2008.

*The Planning Act* states<sup>33</sup>,

*A planning district and a municipality that is not part of a planning district have until January 1, 2008 to*

*(a) adopt a development plan by-law that meets the requirements of Part 4, including a livestock operation policy; or*

*(b) amend its existing development plan by-law to include a livestock operation policy.*

On the one hand, the PVWC’s 2003 Master Plan discusses in detail the potential growth in livestock in municipalities where the PVWC supplies water. In the other hand, the PVWC disputes the 2003 Master Plan<sup>34</sup> information concerning livestock, indicating that “the projected agricultural/livestock demand is not considered realistic” and that they feel that the livestock industry will decline. Livestock operation policies have not yet been adopted in the municipalities that are customers of the PVWC. Community development planning and intensive livestock operation policies required under *The Planning Act* must be integrated into the watershed planning process

#### **f) Summary – Conservation and Water Planning Issues**

Manitoba public policies and legislation support and emphasize the importance of conservation and the importance of planning that respects and is based on natural boundaries such as watersheds.

- The PVWC’s conservation plan has not been evaluated or updated, which may have implications for the project’s justification.
- Watershed planning has been legislated in Manitoba through *The Water Protection Act*, but no watershed plans are in place in the watersheds affected by the PVWC proposal.
- The PVWC participates in an organization that advocates watershed planning, yet its proposal is silent on the issue.
- The PVWC has provided conflicting information regarding growth of the livestock industry and how this has contributed to the rationale for its project, yet livestock operation policies required under *The Planning Act* by 2008 are not in place in the municipalities that are customers of the PVWC.

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<sup>33</sup> *The Planning Act* <http://web2.gov.mb.ca/laws/statutes/ccsm/p080e.php>

<sup>34</sup> October 18, 2006 e-mail to G. Koroluk and the CEC

## **4. International Implications**

This section explores policy statements that have been made in the context of international projects with transboundary implications. The Government of Manitoba has been very active and vocal in its opposition to a suite of projects proposed south of the border that would result in the transfer of water from the Missouri basin into the Hudson Bay basin. Various submissions regarding these projects articulate Manitoba's concerns; some of which are applicable to the PVWC proposal.

We are also raising the possibility of the need to inform/involve the International Joint Commission of the PVWC's proposal, since the Sandlands glaciofluvial aquifer complex extends into the US. As the PVWC made reference in its proposal to the issue of an apportionment agreement with the US regarding the Red River, this is also discussed here.

### **a) Manitoba Water Stewardship & the Red River Valley Water Supply (RRVWS) project**

In its initial comments of December 2005 regarding the Red River Valley Water Supply (RRVWS) project<sup>35</sup>, Manitoba Water Stewardship advocates for,

*sustainable water management principles that respect natural systems, that commit to live within the water availability means of the basin itself, that employ a combination of water management techniques, including water conservation, and that do not rely upon removing water from an adjacent basin and from other neighbours who may also need the same water during the same projected periods of future regional drought. Contemporary water management principles suggest that current and projected water supply needs should be met through the development of a sustainable basin-wide strategy, which favours the use of in-basin resources as a first priority.*

Similar comments are made by the department in its comments on the *Draft Red River Valley Water Needs and Options Report*<sup>36</sup>. However, no such comments were made by departmental staff as part of the Technical Advisory Committee review of the PVWC proposal.

Manitoba Water Stewardship also submitted additional comments on the Red River Valley Water Supply (RRVWS) project in June 2006 that largely reiterate the December 2005 comments and also include a strong endorsement for water conservation practices<sup>37</sup>. Manitoba's continued emphasis on 'modern water management practices' and 'conservation measures' support our previous recommendation that the PVWC file an

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<sup>35</sup> Manitoba Water Stewardship Initial Comments – December 2005, Red River Valley Water Supply (RRVWS) project, pg. 3-4

[http://www.rvwsp.com/scoping\\_letter\\_files/draft\\_eis/19\\_manitoba\\_water\\_stewardship\\_initial.PDF](http://www.rvwsp.com/scoping_letter_files/draft_eis/19_manitoba_water_stewardship_initial.PDF)

<sup>36</sup> Manitoba Water Stewardship Comments on the Draft Red River Valley Water Needs and Options report <http://www.usbr.gov/gp/dkao/redriver/rrvwsp/Appendixes/letters/mws.pdf>

<sup>37</sup> Manitoba Water Stewardship – Review and Comment: Draft Environmental Impact Statement, Red River Valley Water Supply Project (June 30, 2006), pg. 5  
[http://www.rvwsp.com/scoping\\_letter\\_files/draft\\_eis/186\\_manitoba\\_water\\_stewardship.pdf](http://www.rvwsp.com/scoping_letter_files/draft_eis/186_manitoba_water_stewardship.pdf)

independent evaluation of the effectiveness of its 1998 conservation plan, and also update this plan to demonstrate how past and future efforts have and will impact water demand.

**b) The IJC & Transboundary Water Management**

As the PVWC acknowledges, the Sandilands glaciofluvial complex is not well understood and the extent to which it interacts with and connects to other aquifers is not clear. The Sandilands glaciofluvial complex extends into the US; questions remain as to how interconnected the Lower Sand Unit is to the entire glaciofluvial complex. This raises the question of whether the International Joint Commission (IJC) and/or the International Red River Board should be informed and involved in this project.

The IJC has well-established policies related to transboundary water issues. As a result of a 1998 reference from the US and Canada, the IJC has been working for several years to define a framework for the operation of ecosystem-based international watershed boards in transboundary river watersheds. The IJC's 'International Watersheds Initiative' promotes an ecosystem approach to water management and the Red River sub basin has been designated as a high priority watershed by the initiative<sup>38</sup>. This issue should be examined as part of the hearings.

**c) An Apportionment Agreement for the Red River**

The PVWC's September 2006 supplemental filing introduces the issue of PVWC reliance on the Red River as a risk because of the lack of a minimum flow agreement with the US<sup>39</sup>. This issue has been under discussion for some time. The PVWC appears to have cast this issue as a barrier and a reason to seek an alternative water supply because of the assumed pressing need for additional water. However, if the urgency of PVWC's water needs is proven incorrect or the timeline overstated, then discussions regarding an apportionment agreement with the US become an argument for a deeper examination of alternatives to the PVWC's project that could meet water needs in an expanded time horizon. Respected non-government policy organizations such as the Munk Centre have recommended the active pursuit of an apportionment agreement for the Red River to both parties (Canada and the US)<sup>40</sup>.

**d) Summary – International Implications**

Manitoba's comments on transboundary projects underscore the province's commitment to conservation, and emphasize its opposition to transfers of water. These principles are not reflected in review comments on the PVWC proposal made by government department members of the Technical Advisory Committee. Manitoba's endorsement of water conservation practices supports our previous recommendation that the PVWC seek

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<sup>38</sup> International Joint Commission. 2005. A Discussion Paper on the International Watersheds Initiative. <http://www.ijc.org/php/publications/pdf/ID1582.pdf>

<sup>39</sup> Pembina Valley Water Cooperative Inc. Supplemental Groundwater Supply Project Additional Information Submission – September 2006, Section 6.0, pg. 35 <http://www.cecmanitoba.ca/File/Sandilands%20-%20Section%205%20to%2010.pdf>

<sup>40</sup> Munk Centre September 2005 – A Binational Perspective on the Draft Report on Red River Valley Water Needs and Options <http://www.powi.ca/pdfs/waterdiversion/redrivervalley.pdf>

an independent audit and update of its 1998 conservation plan.

The extension of the Sandlands glaciofluvial complex into the US raises the possibility that the involvement of the International Joint Commission (IJC) may be relevant and the CEC hearings are an opportunity to explore this possibility.

The possibility of apportionment agreement with the US for the Red River in the near future adds to the argument that other water supply options exist. The CEC hearings should explore this, particularly because the need for the PVWC's project appears to be in question.

## **5. Summary & Recommendations**

We have raised some significant issues related to the lack of consistency in PVWC's rationale for its proposed project. We have also examined the project thoroughly with respect to water policy in Manitoba, noting Manitoba's commitments through its laws for watershed planning, water conservation, the precautionary principle, and the rejection of sub-basin transfers of water.

We have noted and echoed the concerns of others who are not convinced that this project will not compromise the sustainability of the groundwater source the PVWC wishes to exploit. We have reviewed the PVWC's conservation plan and feel that evaluation and implementation is required. We have pointed to other experiences with groundwater extraction in the PVWC supply region and the need for watershed and aquifer plans prior to further development.

Significant information gaps in the PVWC's proposal, in combination with a strong set of Manitoba government public policies that do not support a project of this nature lead us to question the suitability of the Pembina Valley Water Cooperative's proposed project.

Therefore, we feel that before any decision can be made on the sustainability of this project a number of tasks must be performed over the short to medium term.

### **On planning and water demand**

- A watershed authority and/or Conservation District must be established in the Morris River and Plum River watershed to develop a watershed plan. As part of this plan, the authority must compile a state of the watershed report, assemble a comprehensive water budget and develop a source protection plan.
- Community development planning and intensive livestock operation policies required under the *Planning Act* must be integrated into the watershed planning process.
- Water conservation plans and schemes must be embedded within the various levels of planning exercises (ie, at the community level, watershed level and regional level); these must set bench-marks and assign responsibilities for implementation, evaluation and follow-up.

### **Legal clarifications**

The formal designation of water sub basin boundaries under the *Water Resources Conservation Act* must become a high priority.

An independent determination is required as to whether the transfer of water from the lower sand unit aquifer in the Sandilands Glaciofluvial complex constitutes a sub basin water transfer, as defined under the *Water Resources Conservation Act*.

The Clean Environment Commission must seek an independent / non-

government oriented legal opinion of the RM of Piney's by-law prohibiting the bulk export of water, and, in order for the project to proceed, a favourable Court of Queens Bench ruling must be made on the standing of the by-law.

### **On protecting a vital resource**

Given the ecological significance and the importance of the Sandilands Glaciofluvial complex, opportunities exist for Manitoba to protect and the lands above in the Sandilands Uplands region. This can include action on areas already under consideration for protection by Manitoba Conservation.

Manitoba must reinvest resources to fully study and understand the capacity of this aquifer, its interactions with other ecological services, its recharge and impacts deriving from climate warming.

### **On process and environmental assessment**

We support the CEC's recommendation of June 2005 calling for the practice of environmental assessment to be enhanced by requiring higher standards of performance.

We urge the CEC to take steps to ensure that, as per Terms of Reference for hearings, all legitimate public comments submitted are responded to by the proponent and that adequate time is given to participants who qualify for participant assistance.

### **In the short term**

We urge the CEC to recommend the 'no-project alternative' as the immediate route to be followed; the PVWC has not provided a clear rationale for its proposed project, and systems are not in place to ascertain how much water is actually used in the region as a whole and for what purpose. Water planning and conservation planning must come first if we as a society are to move towards sustainability.

### **In the duration**

As our preferred option, the Pembina Valley Water Cooperative and their member municipalities, must heed the advice of Dr. Brooks and aggressively implement a demand side management program within an overall sustainable water management strategy.