

## **Public engagement works to defeat pipeline proposal in Manitoba**

Clean Environment Commission turns down its first proposal since its inception in 1988.

By Glen Koroluk, Water Issues Coordinator, Manitoba Eco-Network

In the late 1980s, during Manitoba's last dry spell, communities in the south central region of the province created a task force to investigate additional water supplies for the region. At the time, a number of communities experienced water shortages. Agriculture Canada identified the area to be drought susceptible and recommended the development of regional pipelines from secure water sources to drought-proof the region.

The Pembina Valley Water Cooperative (PVWC) was created in response to these concerns and over the course of the last decade, established a distribution network of pipes and water treatment plants. The Co-op acquires water from five main sources in the region, which include the Stephenfield Reservoir on the Boyne River, Winkler Aquifer, Lake Minnewasta on the Deadhorse Creek and two withdrawal points on the Red River at Letellier and Morris. The current distribution system supplies water to 45,000 customers and encompasses an area of 3,500 square miles.

Fueled by fears of drought that would impact the flow of the Red River, their main source of water, and citing an ever-increasing growth in population, the Pembina Valley Water Cooperative applied for an environmental license in January 2006 to develop a new source of water. The water was to be imported via a \$12 million 96 kilometer pipeline from a precious groundwater source in the Sandilands Uplands region of southeastern Manitoba. The Sandilands Uplands is an ecological gem consisting of a rich array of wetlands, bogs, marshes, peatlands and forests. The region is the focal point of three sub-basins of the Hudson Bay basin and the headwaters of five watersheds. Area wetlands are considered one of the most biological diverse ecosystems on the planet.

The Sandilands glaciofluvial aquifer complex, which sits under the region, is an important recharge area in the province and supplies the Sandstone and Carbonate Aquifers, which are two major bedrock aquifers in south central Manitoba.

The rationale for requiring additional water in the PVWC distribution area was to "alleviate water shortages during periods of drought" and act as an emergency supply from accidental spills and contamination. The proposal called for the withdrawal of 50 litres per second (or about 1200 acre feet per year) with the notion that at a later time, an "ultimate annual water supply" of 300 litres/second (or 7300 acre feet per year) would be required. The initial test well was viewed as the first of many that would extract water from the Sandilands region. A decade earlier, the City of Winnipeg regarded the northern extent of this aquifer complex to be a highly suitable supply for additional water in times of need.

Upon receipt of the PVWC proposal, the public was given 30 days to review the environmental impact statement and file their concerns. Local governments in the Sandilands region and participants of the Water Caucus were worried about the precedent this project might set. A

public education campaign was initiated to mobilize citizens and organizations in the Sandilands region. Once alerted of the nature of this proposal, citizens expressed their overwhelming concerns and called on the Minister of Conservation to exercise his discretion to hold a Clean Environment Commission (CEC) hearing. To heighten community awareness, the media was notified and the Steinbach Carillon (a regional newspaper) and Winnipeg Free Press covered the story in mid January. As a result, five environmental organizations, four local governments, one First Nation, and twenty-four citizens responded, sending their concerns and a petition with 321 signatures to Minister Stan Struthers and Director of Environmental Approvals within the 30 day public comment period. Respondents identified a number of deficiencies in the proposal and called for the Minister to conduct a CEC hearing to further investigate the potential environmental impacts of the project.

### **Manitoba Clean Environment Commission hearing**

A CEC hearing and participant fund was announced in June of 2006. The Minister indicated that, because of the number and variety of comments received by the public regarding this proposal, he wanted to provide a thorough environmental review process. In response to this announcement, the Manitoba Eco-Network organized a strategy that called for a coordinated approach to participate and apply for funds. The funding program allows registered participants the opportunity to hire experts to provide testimony at the hearing.

Three main arguments were put forth to the panel. Our first contention was to demonstrate that insufficient information exists on the sustainability of the Sandilands glaciofluvial aquifer complex to make an informed decision as to whether water can be withdrawn from that source. The second argument called for the project to be measured against Manitoba's policies regarding watershed planning, water conservation and sub-basin transfer rules to see if the project fits with the existing regulatory framework. Our third claim, and perhaps our strongest, advanced the concept that communities serviced by the Pembina Valley Water Coop should no longer rely on withdrawing water from a new source, but embrace demand management as a cheaper and environmentally safer alternative.

Dr. David Brooks, Policy Director of Friends of the Earth Canada provided expert testimony on the merits of a comprehensive water demand management program. His analysis questioned the whole basis of large and necessary increases in water use in the PVWC distribution area and suggested that with appropriate policies and programs directed to water conservation, current use rates will decline. He called for all municipal end users (local governments who purchase bulk water from the PVWC) to increase the use of meters in their communities and move away from flat and declining block rates that are still common for larger commercial and institutional establishments. By focusing on the household sector, Dr. Brooks indicated that without significant loss in the quality of the service, water use can be easily cut by one-third with the installation of dual-flush toilets. Other imaginative changes such as capturing rain water for laundry use or recycling of gray water can reduce water use even further.

In dryer summers, Dr. Brooks indicated that up to half of all water use occurs outside of the home, for lawns, decorative plants, gardens, swimming and wading pools, car washing and general hose cleaning. In this area, another 30% water gain can be achieved by utilizing drought

resistant ground cover, channeling captured rainwater and using simple drip hose systems as opposed to sprinklers. As an encouragement for change during summer peaks, pricing water at a higher rate during the day may reduce the peak demand.

Given that the PVWC distributes water to on-farm customers for stock watering, washing and cleaning on-farm operations, water gains could be achieved by having the utility deliver two sets of water quality, one, which is treated for drinking purposes, and the other, which is lower in quality and can be used for other purposes, such as washing barns, cleaning and irrigation.

Dr. Brooks also challenged past land use decisions that have occurred in the region (such as intensified drainage systems) and indicated that many of these decisions can be reversed over time to improve use of natural flows. These would include directing run-off water into ponds and areas for recharging aquifers and supplying water for ecological services that would hold more water within the region. He questioned the future of industrial agriculture in the area, such as raising hogs and irrigating potatoes, which are water intensive, citing that they may be privately profitable, but publicly undesirable, and requiring explicit public decision.

Dr. Brooks concluded by saying that the differences between pipeline construction costs and the conservation alternative are so large that it would be less costly for the PVWC to subsidize consumers to retrofit their water using equipment than to build the proposed pipeline. He felt that the project cannot be built and operated in order to yield anything approaching conventionally acceptable rates of return and that in one way or another, the project is likely to require subsidies from the public or from a member municipality. And finally, in response to the PVWC's concern that an extended drought in the region will create devastation, alternative coping strategies such as reverse osmosis water treatment plants and/or compensation programs in time of water shortages were offered as a solution.

The Manitoba Eco-Network concluded its overall presentation in the following manner:

“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 law for watershed planning, water conservation and sub-basin transfer 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 PVWC's conservation plan and feel that it requires a revisit. 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 sustainability 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.

### **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 complete a state of watershed report, assemble a comprehensive water budget and develop a source water 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 plans and schemes must set bench-marks and assign responsibilities for implementation, evaluation and follow-up.
- Manitoba and Canada must negotiate a minimum in-stream flow agreement for the Red River at the international border.

### **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 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 favorable Court of Queens Bench ruling must be made on the standing of the by-law.

### **Protecting a Vital Resource**

- Given the ecological significance and the importance of the Sandilands Glaciofluvial complex, opportunities exist for Manitoba to protect lands above this aquatic ecosystem. This can include action on areas already under consideration as part of the Protected Areas Initiative.
- 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.

### **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.

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

Ninety days later, a recommendations report was issued by the Clean Environment Commission concluding that an Environmental Act license should not be issued to the PVWC.

The Commission found that:

1. The Pembina Valley Water Cooperative has played and continues to play an important role in developing and conserving water resources in Manitoba. The cooperative model has proven to be particularly effective in assuring responsible resource stewardship.
2. The Project cannot be appropriately assessed in the absence of an integrated watershed plan for the Manitoba portion of the Red River basin including associated aquifer plan(s) for the Sandilands aquifers.
3. There is also need for a basin-wide watershed management plan for the Red River. The development and implementation of such a plan will require the cooperation of the Manitoba government, the Government of Canada, and the appropriate state and federal jurisdictions in the United States.
4. Without an appropriate calculation of the sustainability of the aquifer it is not possible to make a reasonable determination of potential impacts of the Project on current and future users of the aquifer in the Sandilands region, the impact of development on the economic growth prospects of the region, and the potential impacts of the Project on regional ecosystems.
5. The Manitoba government should play a greater role in facilitating more in-depth investigation into water-supply alternatives, desalinization and surface and surface water capture in the PVWC region.
6. In the area of water management, the Government of Manitoba has a well-developed legislative and policy regime. There is a need for the Manitoba government to fully implement its existing policies and regulations in relation to water management. There is also need for a further review of its policies and regulations in relation to water extraction and allocation.

And recommended that,

1. In absence of an integrated watershed and aquifer plan for the Manitoba portion of the Red River basin that an Environment Act license not be issued for the Project.
2. Integrated watershed and aquifer plans include aquifer water budgets and sustainable yield estimates.

3. The Manitoba government take the lead and make development of an integrated watershed plan for the Manitoba portion of the Red River basin and the associated aquifers a priority.
4. The Manitoba government and the Government of Canada work with the appropriate jurisdictions in the United States to develop a fully integrated watershed management plan for the Red River basin.
5. Both the federal and provincial governments enhance efforts to ensure the negotiation of a guaranteed-flow agreement for the Red River.
6. The Manitoba government further review its policies and regulations, regarding water extraction and allocation in respect of watershed management and planning.
7. The Manitoba government enhance efforts to implement its existing policies and regulations to water management.
8. The Manitoba government establish and require higher standards of performance in environmental assessment. To that end, the government should provide comprehensive and clear guidance for proponents, consultants and practitioners by:
  - Issuing Guidelines for projects seeking a license under The Environment Act that are more prescriptive as to what constitutes an acceptable environmental assessment; and
  - Establishing protocols for best professional practice.

## **Conclusion**

This is the first proposal to be rejected by the Clean Environment Commission in Manitoba since the implementation of the current *Environment Act* of 1988. A combination of advocacy in the form of expressing public concern, engagement in the environmental assessment process and the hiring of experts, who put together a comprehensive argument against the proposal, enabled the Clean Environment Commission to come to the proper conclusion. The final decision-maker, Minister Struthers, concurred.

Participant funding enabled us to hire the expertise to make our case, however, without the support of the Gordon Foundation, the coordination of this group effort would not have come to fruition.