

PARTIAL RESPONSE BY THE WATER CAUCUS OF MANITOBA ECO-NETWORK

to

MANITOBA CLEAN ENVIRONMENT COMMISSION

with respect to hearing on

COMMENTS AND QUESTIONS POSED BY PEMBINA VALLEY WATER
COOPERATIVE (PVWC) TO OUR TESTIMONY PRESENTED ON 07 NOV 2006:

Prepared by

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for presentation on 09 November 2006

Introduction and Summary

The Manitoba Eco-Network is grateful for time to respond to the comments made by Mr. Sam Schellenberg after the presentations by Mr. Glen Koroluk and Dr. David Brooks on behalf of the Network. This portion of our response will only deal with the comments and questions pertaining to the testimony offered by Brooks. It will cover three related issues. The order is not random; each issue builds into and supports the next:

- First, we will identify points where our information is at variance with that offered by PVWC, particularly with reference to pricing, metering and dual systems. In each case, we believe that measures for water conservation are less strongly supported within the PVWC distribution area, and that opportunities to implement water demand management are therefore greater, than does PVWC.
- Second, we will challenge Mr. Schellenberg's reference to the no-project alternative as implying "devastation" for the region. Though in literal terms, this response could be taken as a threat – either this project or devastation – we do not believe that it was meant this way. Rather, we believe it reflects a misunderstanding of the concept of a no-project alternative, and we will explain what it might mean instead.
- Third and finally, we will respond to the problem of periodic low flow rates on the Red River and their effect on the capacity of the Morris treatment plant of PVWC. We admit that we did not fully understand this issue prior to the presentations on 07 November, and we now understand why the proposed pipeline is put forward as both emergency supply and supplemental supply. However, we will go on to indicate why we feel that there are better alternatives, any or all of which could form part of the no-project alternative.

Clarifications

Two points: First, we accept, and we should have made clear, that we know that PVWC has meters at every point at which it sells water to its municipal members, and that it does not sell at rates that decline with volume. This is a good start. However, our investigations indicate that some municipal members do not meter all water and that some sell at rates with discounts for volume. We therefore urge PVWC to take more seriously its obligation under the Manitoba Public Utilities Board “to ensure that water is used prudently,” something that we interpret as including end-users, not just wholesalers, of water. For example, perhaps PVWC might monitor unaccounted for water, and exert its influence to ensure that all members reach the almost leak-free levels that some have reached. Perhaps it might institute not just flat rates but increasing rates with volume taken, or alternatively urge its members to do so.

Second, we were surprised by the dismissal of the suggestion that water could be delivered in two qualities. This approach is common in some areas including Florida. Typically, the lower quality water is distributed in pipes of special colour, and, when used in public parks, it carries a warning that the water is not potable. Given that good quality ground water is found to the east and lower quality ground water to the west, it is logical to make best use of regional resources by extracting the latter for those (mainly agricultural) uses that do not require potable water. (*Nb*: The lower quality ground water to which we are referring in this paragraph is not water polluted by sewage but water that contains high naturally occurring levels of salts and other contaminants.) Something like a third of the water delivered by PVWC from the Red River could in principle be replaced by wells closer to points of use but delivering low-grade water.

No-Project Alternative

As the term “no project-alternative” is used in benefit-cost and environmental impact assessment analyses, it does *not* mean what might happen if the proposal in question is rejected and nothing whatsoever is done. It means instead what alternative policies or programs might be put in place to provide the same services, the same level of security, or whatever else that the proposed project will provide. It is only natural that the proponent believes that its proposal is the best alternative, but it is also natural for the proponent to see issues mainly through its own eyes. Other eyes may assign different values to, say, a wetland, or regard greater access as negative rather than positive.

In the case of the pipeline proposal from the PVWC, the no-project alternative is not merely sitting back and hoping that a drought will never occur but rather thinking of ways of responding to a drought by means other than a pipeline. The conservation options that we have suggested represent such a no-project alternative, and we believe that they will be adequate to avoid devastation. Admittedly, our conclusion is arguable – indeed, it is a conclusion on which argument is invited – but it is also a conclusion that deserves careful analysis, which is what we have been suggesting from the start.

Low Flows on the Red River

It is safe to predict that sooner or later southern Manitoba will experience a severe drought, one lasting several years, and that during this period the Red River will drop so

low that one can walk across it. It is unarguable that this situation will create serious problems for the region as the PVWC system depends mainly on withdrawals from the Red. (We have no knowledge of whether intakes could be adjusted at the Morris plant to respond more effectively to such low flows, but they are not central to our point.) PVWC proposes to prepare for these periodic drought conditions by building a pipeline to the Sandilands area. We commend PVWC for planning ahead for drought years, but we question its choice of coping strategies.

Judging strictly from the materials (mainly photos) put into evidence in the opening testimony from PVWC on 07 November, seriously low flows on the Red occur about once every 20 years. In other words, PVWC is planning for coping with what is called the 20-year drought. (Long-term weather data will indicate whether our choice of 20 years is the correct number; it is used here just for illustration.) The general economic prescription in planning is to invest capital to cope with chronic problems but to use operating funds to cope with periodic ones. Put another way, if a problem occurs only once every ten or 20 or 30 years, it is cheaper to spend a lot of money at the time it occurs than to invest capital that is at least partially idle for the intervening years. (This generalization is sensitive to the cost of coping mechanisms. Killer tsunamis are rare, but the cost of a warning system is low, so it still makes sense to invest in them. It would not make sense to insist that every coastal community move inland or build seawalls high enough to block a big tsunami.)

Because droughts are certain but periodic, we question whether a pipeline, which is of course invested capital, is the right approach. Why not consider alternatives that will admittedly be expensive when put into operation but that will require much less investment. The following are the sorts of things that might be considered. (*Nb: We are not advocating either of the following alternatives. They may or may not be good choices. They are merely illustrations of alternative coping strategies, one involving technology and the other involving compensation.*)

- A number of stand-by reverse osmosis plants (available off the shelf) could be purchased and located at the head of wells that produce sub-standard water. Apart from periodic testing, they would be brought into full operation only when the Morris and/or Letellier plants cannot supply enough potable water.
- At certain pre-defined trigger points, water supplies to all consumers would be reduced by specified amounts, and some large consumers would be cut off completely. In return, a compensation fund would be established to pay owners and workers at those plants during the period when no water is supplied.

The problem posed by low flows on the Red River is real. However, there are better ways of coping with that problem than a pipeline to take water from a forest reserve and carry it to users in another sub-basin, and particularly when conservation options are not fully exploited. This is not sustainable use of Manitoba's water.