

Manitoba Eco-Network Presentation

**Pembina Valley Water Cooperative
(PVWC) Supplemental Groundwater
Supply Project**

Public Registry File #5156.00

**Manitoba Clean Environment
Commission Hearing**

November 7th & 9th, 2006

Project Rationale / Justification

Four different rationales in materials filed by
PVWC:

- drought susceptibility / emergency supply
- supply water to new customers outside of traditional area
- population growth
- population growth and growth of the livestock industry

True rationale for the PVWC's project?

Context for Water Policy Analysis

- Consideration of public concerns - in CEC ToR for PVWC hearing
- Issues raised by this project that are regulated by other Manitoba statutes – in CEC ToR
- Analysis attempted to determine project's 'fit' with stated public policy and legislative instruments

Aquifer Sustainability

- **Unique area – water source for 5 watersheds**
- **Believed to supply the Sandstone and Carbonate Aquifer (two major bedrock aquifers in Manitoba)**
- **Area is rich in biodiversity and provides water to wetlands and bogs**

Water Protection

- *Applying Manitoba's Water Policies (1994)*
- *Manitoba Water Strategy (2003)*
- *Water Protection Act (2006)*
- **Water Rights Act (amendment 2006)**

Water Transfer & Bulk Water Removal

- ***Water Resources Conservation Act***

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;

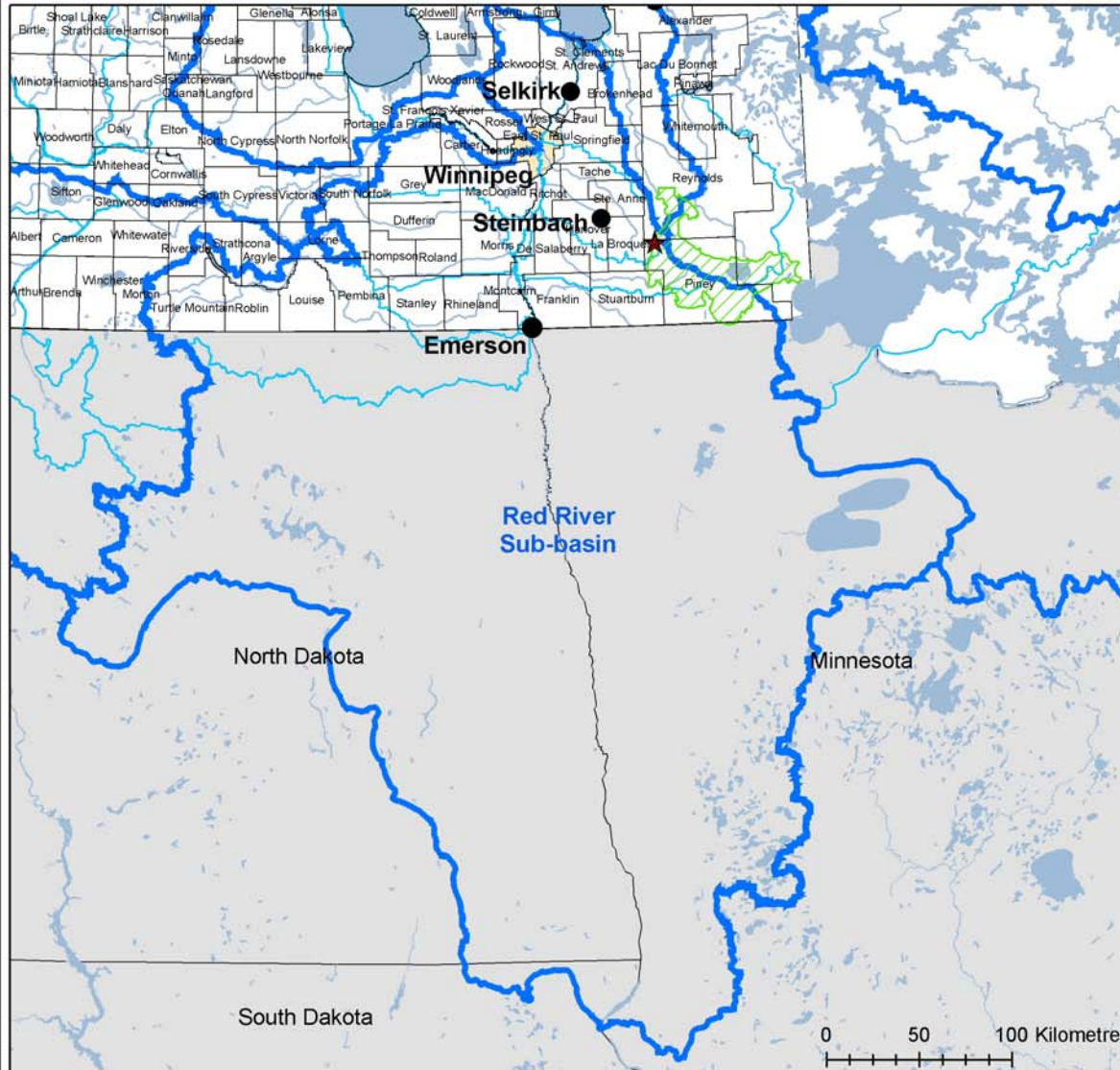
from a water basin or sub-water basin.

Water Transfer & Bulk Water Removal

- Lower Sand Unit likely extends into Whitemouth River watershed which is part of the Winnipeg River sub basin

PVWC project may draw water from one sub basin for use in another – sub basin water transfer

PEMBINA VALLEY WATER COOPERATIVE SUPPLEMENTAL GROUNDWATER SUPPLY SYSTEM



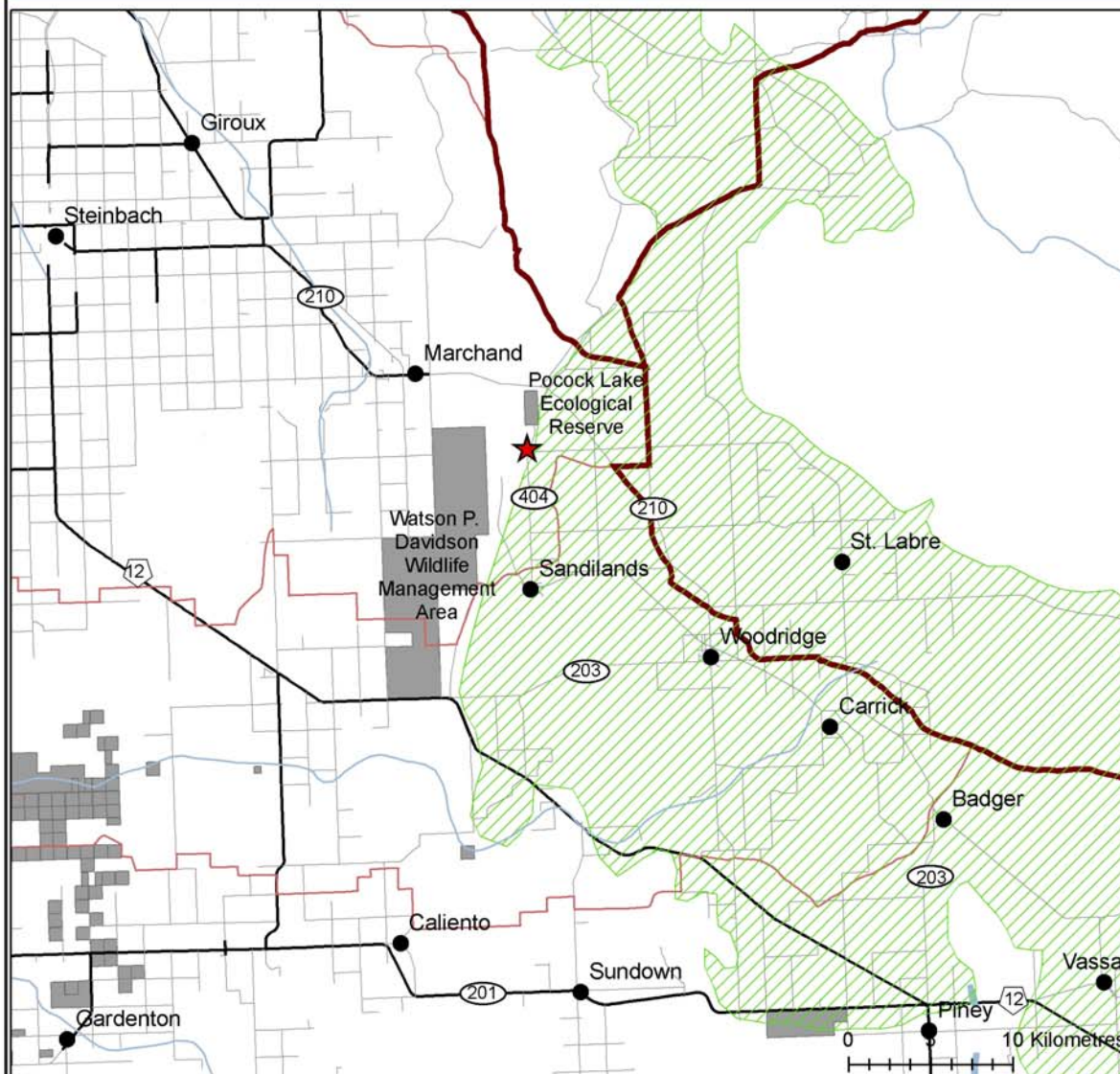
- ★ Proposed Well Location
- ⊕ Rural Municipality
- Sub-Basins
- Watersheds
- Sandilands Glaciofluvial Complex

Data Sources
 Manitoba Land Initiative
 Pembina Valley Water Co-operative
 ESRI

November 2006

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PEMBINA VALLEY WATER COOPERATIVE SUPPLEMENTAL GROUNDWATER SUPPLY SYSTEM



- ★ Proposed Well Location
- Protected Areas
- Red outline Sub Basins
- Thin red outline Watersheds
- Community
- Black line Road
- Grey line Gravel Road
- Green hatched area Sandilands Glaciofluvial Complex

*Manitoba Conservation
**Mining Sector Approved for protection

Data Sources
Manitoba Land Initiative,
Red River Basin Commission
Pembina Valley Water Co-operative
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RM of Piney By-Law

- Rural Municipality of Piney By-Law No. 45/06 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".
 - Supreme Court ruling in favour of municipality's right to make by-laws
- Need for independent legal advice re: PVWC's project

Climate Change & the Precautionary Principle

- *Manitoba Water Strategy*
- *Water Resources Conservation Act*

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;

- PVWC proposal does not address impacts of climate warming within the Sandilands region

Summary – Issues Specific to Sandilands Glaciofluvial Complex

Manitoba is committed to:

- ensuring aquifer sustainability
- protecting groundwater resources; PVWC's proposal fails to fully demonstrate that its project will not compromise ecosystem functions of aquifer
- protected areas network; incomplete in the natural regions impacted by PVWC project

Summary – Issues Specific to Sandilands Glaciofluvial Complex (con't)

Manitoba is committed to:

- rejecting sub basin transfers and bulk removals of water
- Precautionary principle re: impacts of climate change; PVWC's proposal does not consider implications of climate change
- **PVWC's proposed project is out of step with Manitoba's stated principles and objectives concerning groundwater**

Water Planning Issues

Manitoba position:

- *Applying Manitoba's Water Policies*

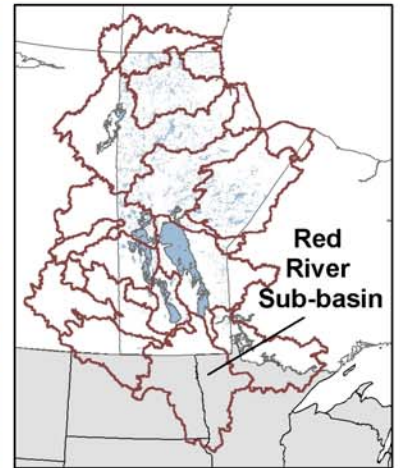
“water use and allocation decisions should ideally be made within the framework of integrated basin, watershed, and aquifer plans”

- *Water Protection Act* – enables watershed planning and is a high priority in Manitoba

Watershed Planning

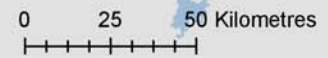
- Watershed planning has not begun in the watersheds that the PVWC supplies water to
- Only 2 major planning exercises –
 - The Stephenfield Lake Watershed Management Plan
 - Winkler Aquifer Management Plan
- Indication of need for watershed, source water planning

PEMBINA VALLEY WATER COOPERATIVE SUPPLEMENTAL GROUNDWATER SUPPLY SYSTEM



- ★ Proposed Well Location
- ⊕ Rural Municipality
- ⬮ Sub-Basins
- ⬮ Watersheds
- ▨ Sandilands Glaciofluvial Complex

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Watershed Planning

- PVWC – seat on the board of the Red River Basin Commission
- 2005 *Natural Resources Framework Plan*: commitment to watershed planning and to “Manage natural resources in the RRB [Red River Basin] by watershed boundaries rather than political boundaries”.

Water Conservation

- Water conservation is a high priority and can be enabled by the Water Protection Act.
- PVWC has a conservation plan (written in 1998)
 - No evaluation, progress report, update

International Implications

- Manitoba Water Stewardship comments – Red River Valley Water Supply Project
- continued emphasis of ‘modern water management practices’ that respect natural systems and ‘conservation measures’
- underscores provincial commitment to conservation, emphasize its opposition to transfers of water

International Implications

- Sandilands glaciofluvial complex extends into the US
- extent of interconnectivity of Lower Sand Unit to the entire complex undetermined
- IJC's International Watersheds Initiative designated Red River sub basin as a high priority watershed Question: should the IJC / International Red River Board be notified about this project?

International Implications

- **Apportionment Agreement for the Red River** – issue introduced in PVWC's September 2006 supplemental filing as another rationale for the need for water
- if PVWC's water needs are not in fact urgent or the need/timeline overstated, then apportionment agreement between US and Canada must be negotiated

Summary – International Implications

- the involvement of the International Joint Commission (IJC) may be relevant and the CEC may want to clarify their role
- possibility of apportionment agreement with the US for the Red River in near future supports idea that PVWC needs exist on the Red

- Presentation prepared by K. Bingeman, G. Koroluk & G. Whelan Enns
- November 7, 2006 Presentation to the CEC made by G. Koroluk

. . . On behalf of the Manitoba Eco-
Network