

West Souris River Watershed – Public Input Summary

Introduction

In February 2008 the West Souris River Conservation District (WSRCD) was designated as the Watershed Planning Authority for the West Souris River Watershed by the Province of Manitoba. One of the first steps in the development of the watershed plan was to hold public forums to explore the water concerns of local residents and other stakeholders within the planning area. The issues identified at these public forums and summarized in this document will provide direction to WSRCD on the content and objectives of the Integrated Watershed Management Plan.

Three public meetings were held in March and April 2009 at: Pipestone (March 25), Pierson (March 26) and Cromer (April 6). At each of the public meetings the attendees were asked individually and as a small group to provide their top two concerns related to water within the watershed. Attendees were also asked to contribute ideas on how their issue could be resolved and how best to measure success. Public comments were also gathered at kitchen table meetings and at the WSRCD Annual General Meeting. Every response, a total of 207, was collected and compiled in a digital format, word for word, by members of the PMT.

The PMT members then reviewed and tagged the public comments according to key themes that emerged from the comments, a concerted effort was made to capture the essence of the issues as presented. One individual's comment could be tagged multiple times, for example, the issue statement "Keeping good quality & quantity of water in our creeks & lakes" would be tagged under both "water supply" and "water quality". This approach was utilized as it reveals the nature, complexity, and interconnectedness of public concerns better than placing each issue in a single category.

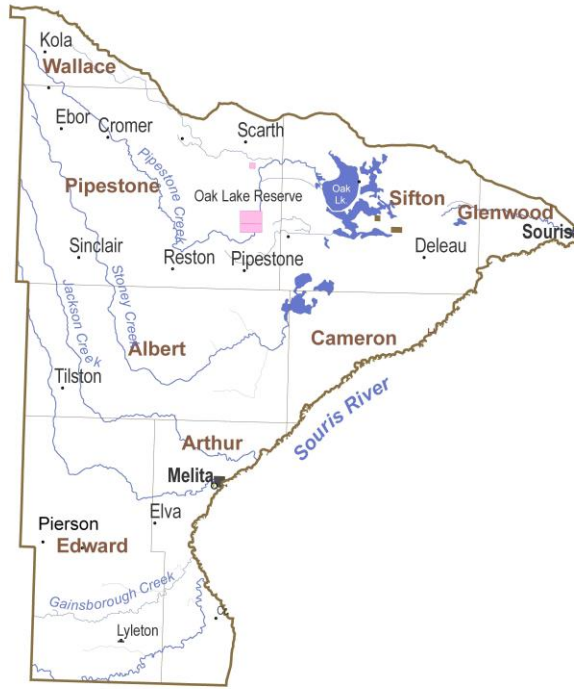


Figure 1: West Souris River Watershed

1. Water Supply (44 comments)

Water supply concerns are focused on the quantity of surface and ground water available for human use including stock watering, irrigation, and recreation. Many of the water supply statements called for small dams to be used to capture and store runoff and thus increase the water supply in the local area.

Target Areas

- Oak Lake
- Pipestone Creek
- Souris River
- South Antler Creek
- Gainsborough Creek
- Oak Lake Aquifer
- Stony Creek
- Hunter Lake
- Maple Lakes
- South-east corner of District

Causes

- Climate/precipitation
- Upstream dams in Saskatchewan & U.S.A.
- Reverse osmosis water treatment uses too much water to clean the system

Solutions

- Small water retention dams (retain water during wet times for later use)
- Dam on Pipestone Creek @ Cromer (with no cottage development on the reservoir)
- Extension of rural water pipelines across the watershed
- More control of upstream dams in Saskatchewan & U.S.A.
- Increased drainage into creeks and streams
- Metering of all commercial & industrial water withdrawals
- Exploration of new groundwater sources (e.g. Pierson Valley)
- Water co-op in rural areas & community wells
- Tighter restrictions on licensed and unlicensed water withdrawals from Oak Lake Aquifer

Example Statements

- “Unable to retain and control spring runoff of the creeks in the CD too often the spring surplus become a shortage of pond water during summer”
- “While we have some reliable sources throughout the district there are many that suffer from shortages! The Oak Lake Aquifer is large supply, the recharge is reliant on snow. We need programs, small dam storage, new sources of reliable water.”
- “Water level in Oak Lake is very important. The dam needs to be replaced. Raise the dam.”

2. Water Quality (43 comments)

Water quality refers to the physical, chemical and biological characteristics of water that determine its suitability for human uses and its ability to support healthy ecosystem function. The statements tagged as water quality were generally precautionary in nature, recognizing the vulnerability of water quality and focusing on preserving the present quality of water.

Target Areas

- Oak Lake
- Pipestone Creek
- South Antler Creek
- Gainsborough Creek
- Souris River
- Stony Creek

- Jackson Creek
- Plum Creeks

Causes

- Dead trees & debris in creeks
- Livestock wastes
- Drainage

Solutions

- Small dams
- Livestock exclusion fencing & offsite watering
- Increasing flows/ raise water levels of Oak Lake (dilution)
- Grassed waterways/riparian buffers
- Feedlot runoff retention ponds
- Feedlot relocation away from surface waters
- Private septic systems on Oak Lake
- Controlled grazing of riparian areas
- Regulate & monitor industrial pollution more closely

Example Statements

- “Take some action to keep the good quality water that we have now for our grand kids for their future.”
- “Healthier streams, rivers and lakes. Less pollution from feedlots, sewers, farm chemicals and fertilizers.”
- “Maintain the quality of water we have right now. Move some of the feedlots off the river banks.”

3. Flooding (38 comments)

Overbank flooding of creeks and drains in the watershed, typically during spring melt or severe summer storm events, can cause significant damage to cropland and infrastructure. Small dams were overwhelmingly tagged as the most desirable solution to alleviate flooding issues.

Target Areas

- Pipestone Creek
- Graham Creek
- South Antler Creek
- Plum Creek/Plum Marsh
- Souris River
- Stony Creek
- Hunter Lake
- Maple Lakes
- Oak Lake

Causes

- Deadfall & debris in streams & creeks
- Excessive drainage – water leaving the land faster
- Clearing and filling of potholes, wetlands, bluffs, etc (loss of natural storage)
- Upstream drainage in Saskatchewan
- Beaver dams

Solutions

- Small water retention dams to control and reduce runoff
- Large dam at Cromer to control runoff on Pipestone Creek/Oak Lake
- Retain wetlands and natural areas
- Installing gates & controls on culverts – slowing runoff & increasing in-stream storage

- Better drainage and flood protection for agricultural lands – strict delineation of agricultural lands and natural areas

Example Statements

- “A flood control dam at or near Cromer has been talked about for decades. I think available infrastructure money from the Federal Govt, Province & Local governments as well as the CD should be used to do this project”
- “We farm land on Stony Creek east of 83 highway. I would like to see the flow of water in Stony Creek controlled to prevent flooding from extensive field drainage into the creek upstream. In recent years we have had flood damage to crop land during the summer months”
- “Our property, approximately 2000 acres is naturally and adversely affected by dozens of very shallow depressions on a flood plain. It is my intention to remedy this with heavy equipment in the near future.”

4. Natural Areas (Ecosystem Services & Recreation) (28 comments)

Natural areas include wetlands, native grasslands, forests, sloughs, bluffs and any other areas that have remained relatively undisturbed by human development. The values behind protecting and promoting these areas are varied and include wildlife habitat, aesthetics, recreation, and other ecological goods & services. Recreation was frequently cited and some specific activities include: canoeing, swimming, bird watching, and fishing.

Target Areas

- Oak Lake
- Pipestone Creek (damaged culvert @ Butler Hill)
- Souris River/Sourisford Park
- Gainsborough Creek
- Sourisford Park/Souris River

Causes

- Draining and filling of wetlands
- Clearing of bush and grasslands
- Oil development
- Damaged infrastructure (i.e. culvert in Pipestone Creek at Butler Hill)

Solutions

- Compensate landowners to preserve and/or restore natural areas
- RMs (who are members of a CD) should not do custom clearing of sloughs
- Educate landowners on the benefits of natural areas
- Environmental checklist for oil companies when drilling
- Build and replace small dams
- Remove dead trees from the beds and banks of streams (to allow for recreation)

Example Statements

- “Loss of native grasslands due to oil development should be curbed. As much as 10% of native cover on a 1/4 section is lost if 4 wells are drilled”
- “Removal of many bluffs, plus the drainage of the many sloughs. This speeds up spring runoff when more water on the landscape would be a benefit to all”
- “Loss of trees and grasslands and the farming of marginal lands”

- “There are pieces of the culvert still in the Pipestone Creek from the 1970s (Butler Hill - Road 54N). This makes it dangerous for swimming (which I do) and things like canoeing (which other people do). They have removed some pieces but the water was higher at that time and they didn't get it all.”
- “Dead tree removal and creek cleanup along the Gainsborough Creek and on the River. Many dead elm trees or even when water is high it is impossible to navigate the creek with a canoe anymore”

5. Groundwater Recharge & Groundwater Protection (30 Comments)

Groundwater protection concerns are centered on protecting the quality of groundwater by minimizing or eliminating the threats posed by chemical or bacterial pollution. Since groundwater is the source of all public, semi-public, and all known private drinking water sources this concern also includes public comments on preserving and protecting drinking water at its source. Also included are concerns that human activities and landscape changes may reduce the quantity of water that percolates through the ground to the water table and thus reduced volume of water available for withdrawal from an aquifer or local water table.

Target Areas

- Oak Lake Aquifer

Causes

- Extensive and intensive livestock operations
- Don't currently have a ground water quality problem – want to ensure that it stays safe
- Use of fertilizers, pesticides, chemicals, and oil products
- Draining, clearing, and filling of bluffs, potholes, sloughs, wetlands, etc
- Faster runoff due to improved drainage system

Solutions

- Better use/location of pasture and hay land
- Education for polluters and potential polluters
- Ongoing monitoring of drinking water (private and semi-public wells)
- Measures to improve surface water quality
- Building small dams on streams and ravines to increase recharge
- Educate landowners on the benefits of wetlands and natural areas
- Offer financial incentives for landowners to retain natural areas
- Better manage snow to increase infiltration/recharge

Example Statements

- “The west side of Pipestone has very high nitrate counts and from 4th St (Main st) east the count is fine. Is there any way of rectifying this?”
- “Large intensive livestock operation on top of aquifer. In some places the aquifer is not very deep to the water table.”
- “Water quality our aquifer is very vulnerable to pollution”
- “excess drainage making for a fast runoff and lowering aquifer water levels in the surrounding area”
- “I would like to see some small dams on the Graham & South Antler Creeks. This would hold water back to help recharge the water table and also relieve the flood threat in the river flats in the Melita Area.”
- “Stop draining wetlands and potholes to increase the groundwater”

6. Aquatic Ecosystem Health (13 Comments)

Concerns about aquatic ecosystem health focused on maintaining the quality and quantity of water and habitat connectivity to support healthy ecosystems. In many cases dams were cited as a means of improving aquatic ecosystem health by providing a more regular flow regime throughout the year, although it is also recognized that dams pose a problem by restricting the movement of aquatic organisms.

Target Areas

- Oak Lake
- Pipestone Creek
- Stony Creek
- Jackson Creek

Causes

- Poor water quality
- Low water levels/large variations in stream flow
- Habitat barriers (i.e. dams and other obstructions in streams)

Solutions

- Construct fish ladders at obstructions on streams (where appropriate)
- Regulate water levels on streams through the construction of dams
- Aeration projects
- Maintain riparian health and water quality

Example Statements

- “My concern is the dam on Oak Lake, the poor condition it is in, the water we're losing from leakage under the bottom. This has to be repaired. Also a proper fish ladder installed.”
- “Be able to make livestock crossings with rock rip rap. These help aerate water for fish, (resulting in...) more fish in creek and oxygen in water downstream (e.g. Oak Lake)”
- “Control water on Souris River (Ross' Dam back towards US Border) - maintain and repair where necessary to raise water to a fixed height. This would help keep cattle & people with better water quality & give better quality of water for wildlife and fish. This would help benefit local irrigation systems”

7. Cross-Border Issues (11 comments)

There were two cross border issues identified by the public, namely the operation of dams upstream in Saskatchewan and the USA which affect the quantity and timing of stream flow; and excess drainage in Saskatchewan increasing the rate and volume of runoff.

Target Areas

- Souris River
- Pipestone Creek system

Causes

- No local input in the operation of upstream dams outside of Manitoba

Solutions

- Build a dam under local control in Manitoba (i.e. Cromer Dam on Pipestone Creek)

- Greater cooperation/agreements with Saskatchewan & USA on dam operation and control

Example Statements

- “No Manitoba control of water entering the Pipestone-Plum system. Less water flows most of the time, some spring flooding caused by the "woosh" effect of cropland drainage. Having to beg Saskatchewan to flow water out of Moosomin Dam”
- “Drainage from Saskatchewan”
- “Maintaining a fixed level in Souris River between Ross's Dam and the US Border”

	Water Quality	Water Supply	Flooding	Natural Areas	Groundwater	Aquatic Ecosystem Health	Cross-Border Issues
Oak Lake	12	8	3	3	1	5	2
Oak Lake Aquifer		5			8		
Pipestone Creek	12	6	8	5	2	6	2
Stony Creek	1	2	5		1	1	
Souris River	3	3	4	3	1	1	2
Gainsborough Creek	1	3		3			
Plum Creeks/Marsh	1	1	6				
Maple/Hunter Lakes		1	1				
South Antler Creek	1	1	3		1		
Jackson Creek	1					1	
Graham Creek			1		1		

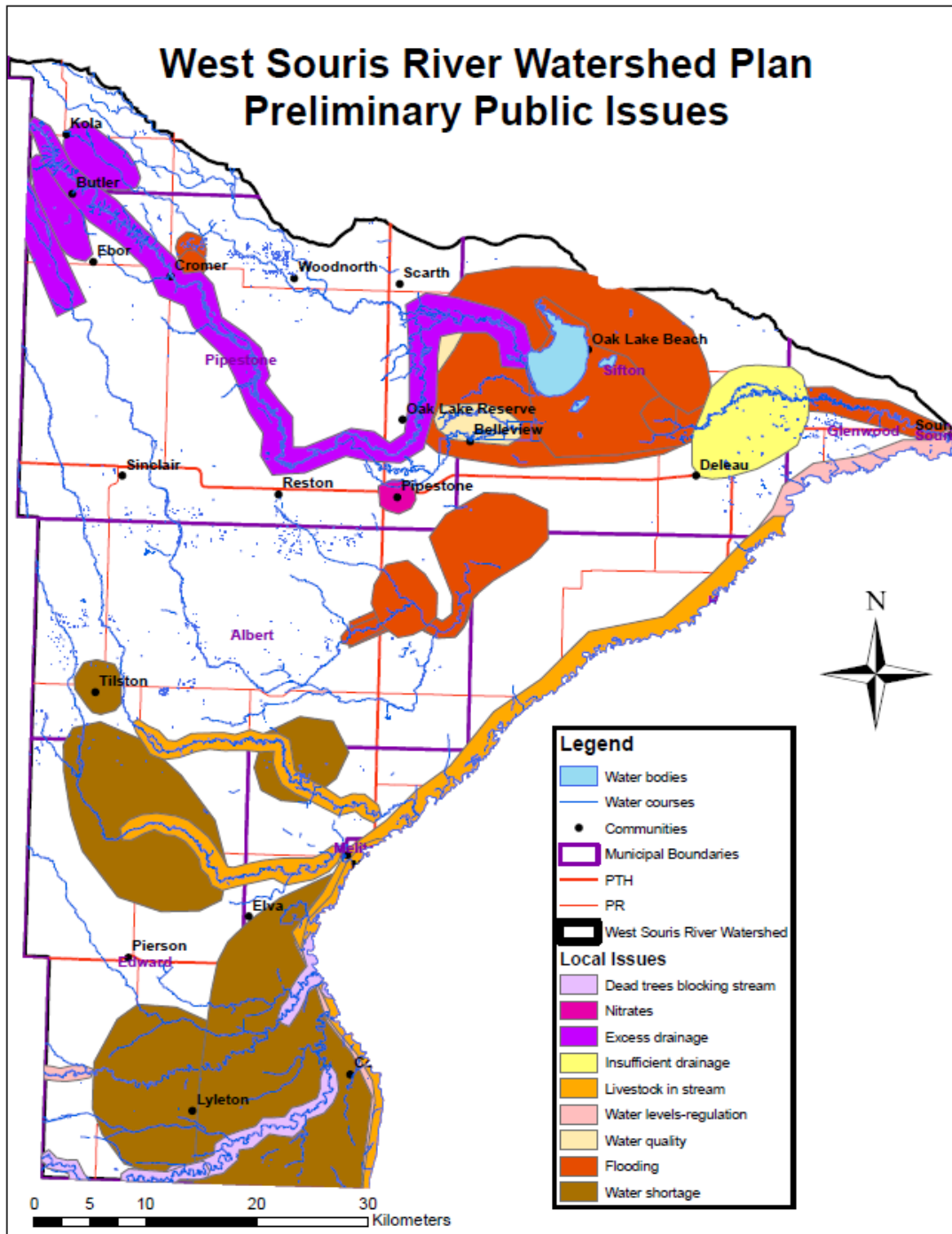


Figure 2: Issues identified on maps during public consultations (note: the map does not include the target areas identified in public statements)

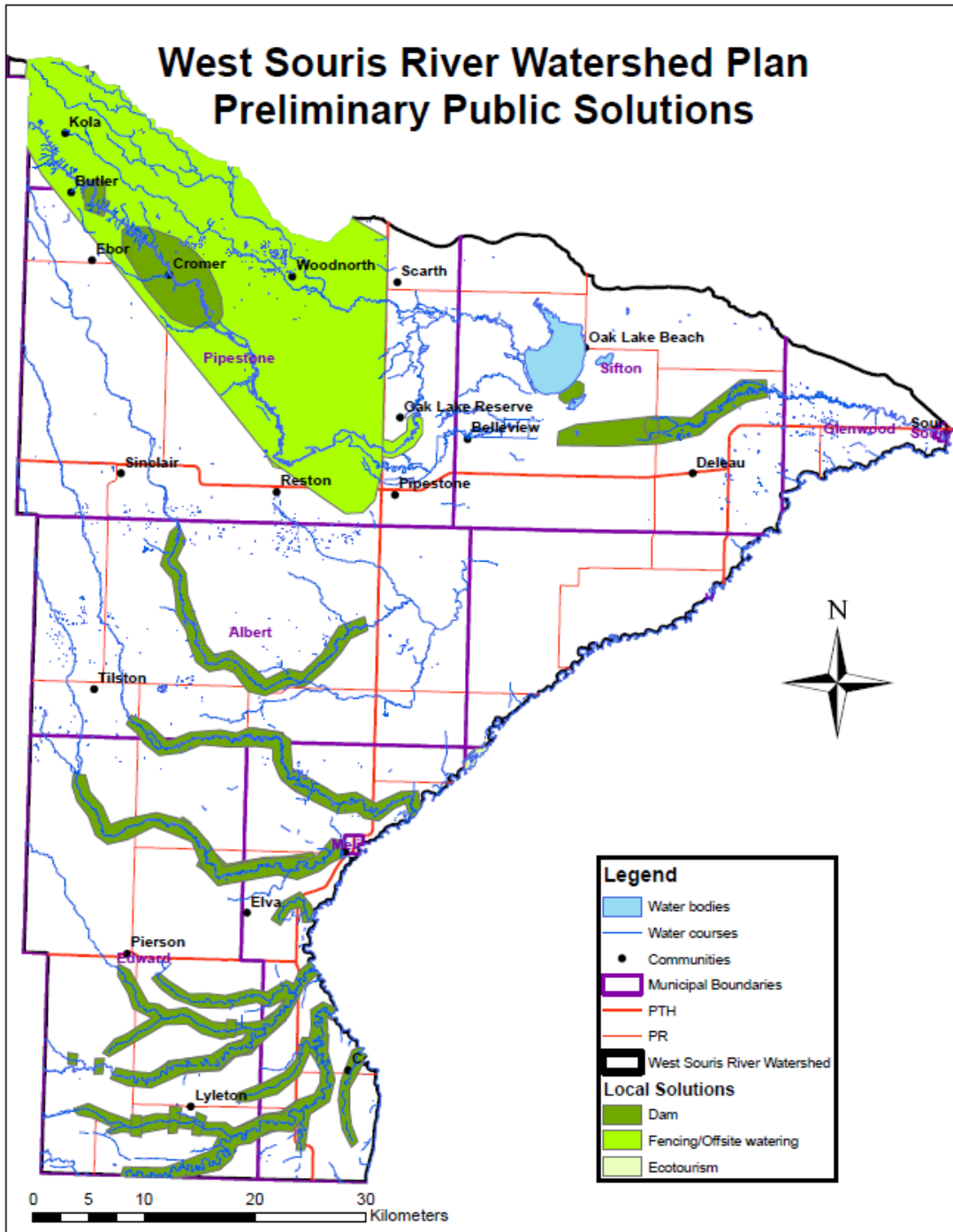


Figure 3: Issues identified on maps during public consultations (note: the map does not include the target areas identified in public statements)