



Little Saskatchewan River Watershed (05MF) – Public Concerns

In January 2006, the Little Saskatchewan River Conservation District (LSRCD) was designated as the Watershed Planning Authority (WPA) for watershed 05MF (Figure 1) by the Province of Manitoba. This watershed plan was initiated as part of a larger planning initiative for the Assiniboine River which also included the Shell River (05MD), Assiniboine-Birdtail (05ME), and Arrow-Oak (05MG). Following the collection of data and the compilation of a State of the Watershed (SOW) Report, a Project Management Team (PMT) was created specifically for each of the four watersheds in order to provide local input and guidance on planning for each of the individual watersheds.

The next step in the development of the IWMP was to hold public forums to explore the watershed concerns of local residents and other stakeholders within the watershed. The issues identified at these public forums will provide direction to the Little Saskatchewan

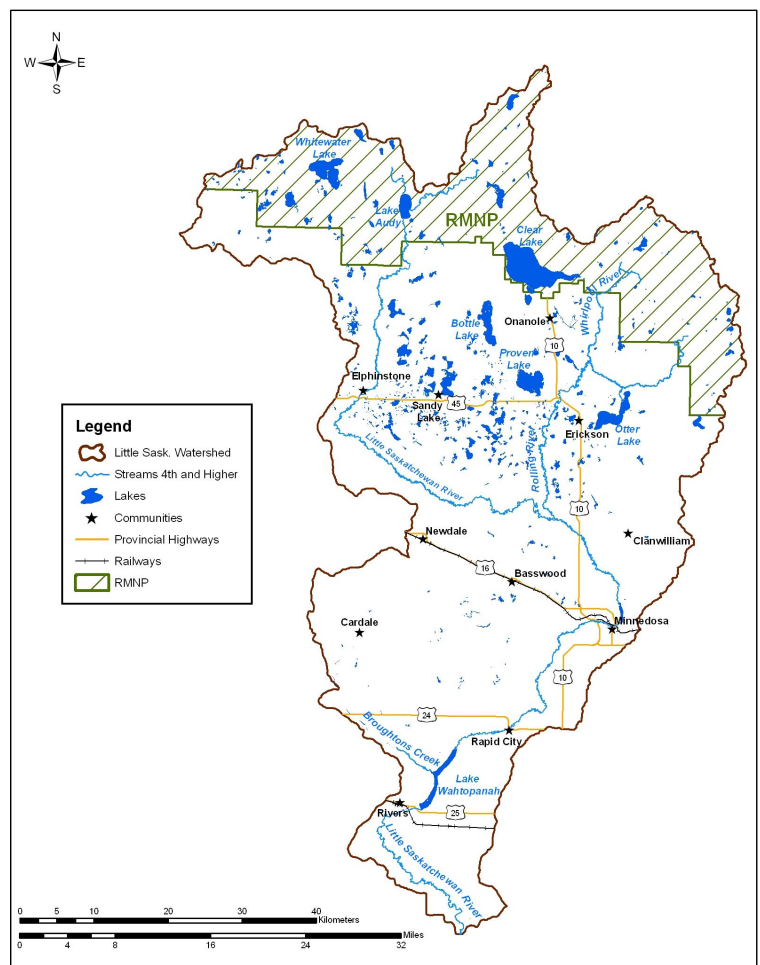


Figure 1: Little Saskatchewan River Watershed

River PMT on the direction and focus of the Integrated Watershed Management

Plan. Three meetings were held across the watershed with the goal of engaging residents and soliciting a range of public issues. The meetings were held in August 2008 at: Sandy Lake (August 4); Rivers (August 5); and Minnedosa (August 7).

At each of the public meetings the attendees were asked to provide their top three concerns related to water within the Little Saskatchewan River watershed. Attendees were also asked to contribute ideas on how these issues could be resolved and, if the issue was successfully resolved what that success would look like in 25 years. Participants at each of these public open houses were also asked to form groups, discuss the issues in the watershed and form a collective list of issues and solutions for the watershed. This was done to allow for discussions on issues and to obtain more general concerns within the watershed as opposed to site specific issues garnered through individual responses. All of the individual and group responses were collected and compiled in a digital format, word for word, by members of the PMT. The complete list of public and group concerns is available on the Assiniboine IWMP website at www.uarcd.ca/IWMP.



In order to analyze the individual and group responses, the public responses were categorized into a primary issue category (e.g. surface water quality), a sub-category if enough information was provided (e.g. nutrient application), and a target location if provided (e.g. Sandy Lake). This methodology required some subjectivity in the categorization process but concerted efforts were made to capture the essence of the issues. In the event that several concerns were addressed in one issue statement, the first issue mentioned was taken as the category, or the issue for which solutions were provided was taken as the dominant concern.

The following is a summary of what 33 watershed residents told us.

Main Categorization of Issues

Individual Input

<i>Category</i>	1st Priority		2nd Priority		3rd Priority	
	#	%	#	%	#	%
Surface Water Quality	16	49	10	38	6	30
Natural Areas	5	15	4	15	6	30
Groundwater	3	9	3	12	3	15
Drinking Water	4	12	4	15	1	5
Surface Water Management	4	12	2	8	1	5
Soil			1	4	1	5
Education & Partnerships			2	8	0	-
Other	1	3	0	-	2	10
Total	33	100	26	100	20	100



Group Input

Category	1st Priority		2nd Priority		3rd Priority	
	#	%	#	%	#	%
Surface Water Quality	3	43	4	57	1	17
Natural Areas	0	-	0	-	3	50
Groundwater	1	14	0	-	0	-
Drinking Water	1	14	0	-	0	-
Surface Water Management	2	29	3	43	1	17
Soil	0	-	0	-	0	-
Education & Partnerships	0	-	0	-	0	-
Other	0	-	0	-	1	16
Total	7	100	7	100	6	100

In order to better incorporate all of the public input and priorities, a weighting system was used which provides more relative importance (weight) to priority issues (i.e. 1st priority = 3 points, 2nd priority = 2 points, 3rd priority = 1 points). Figure 2 shows the results from the individual input based on this weighting system and Figure 3 shows the results from the group input based on the same weighting system.

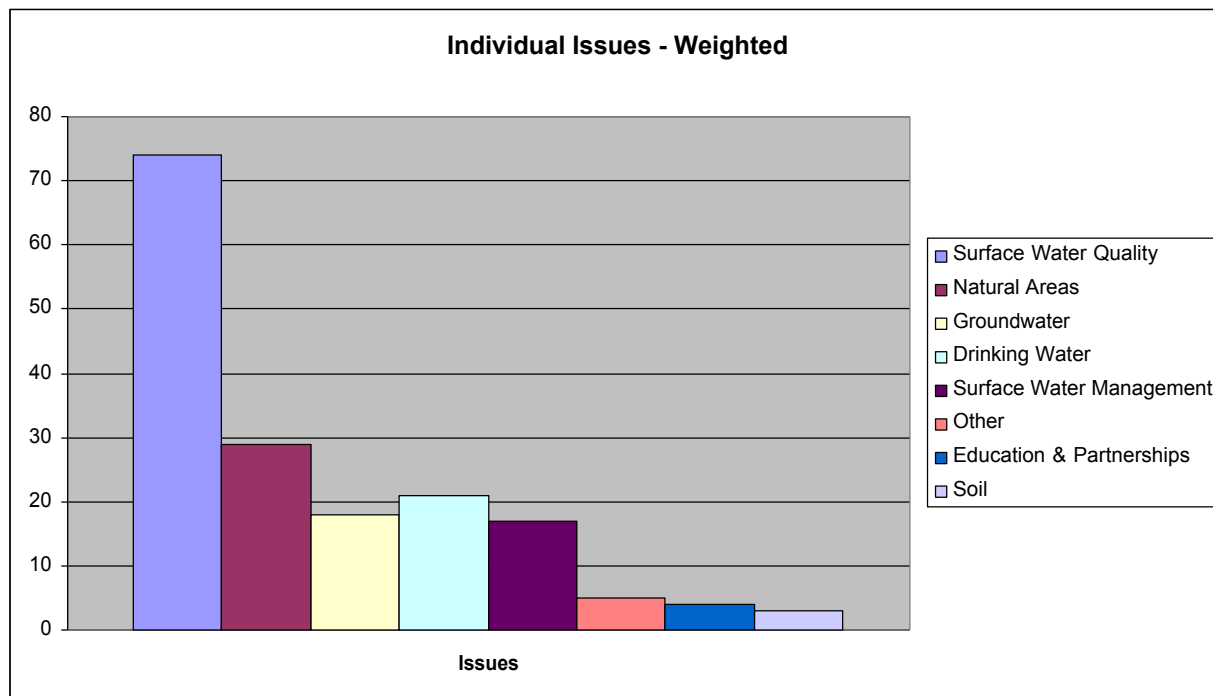


Figure 2: Weighted ranking of individual issues based on priority level

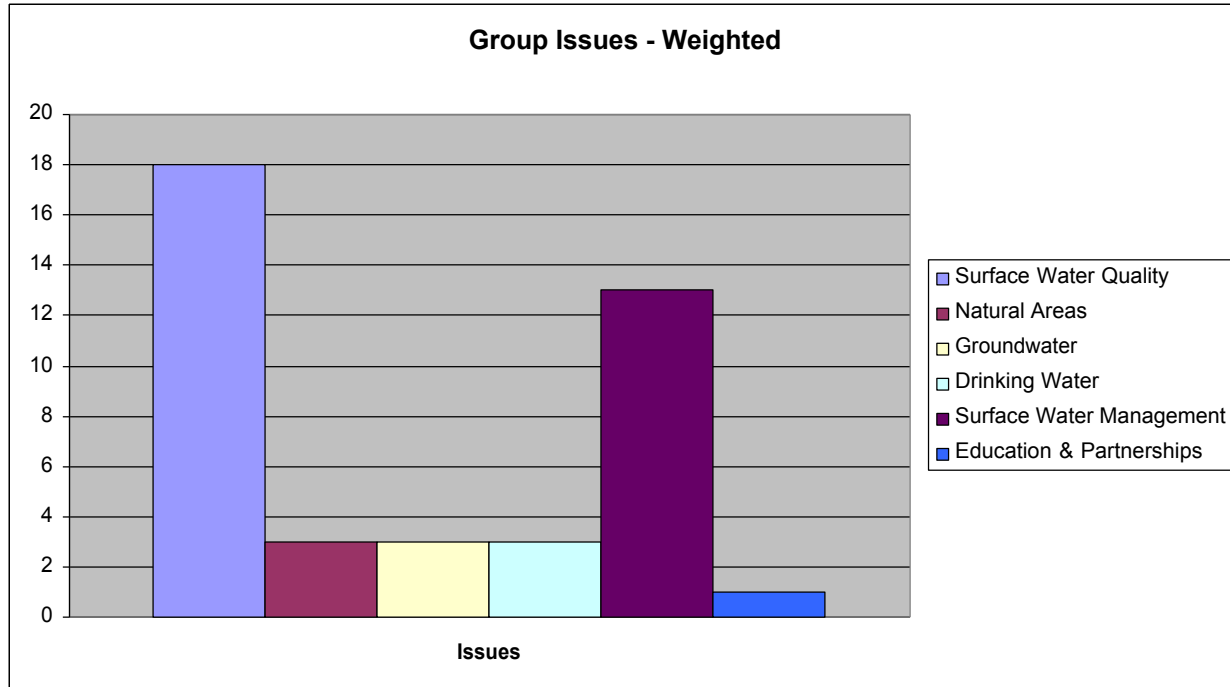


Figure 3: Weighted ranking of group issues based on priority level

The results from the individual and group results are similar, clearly placing Surface Water Quality as the most important issue to local residents. The top five local priorities were surface water quality, natural areas, surface water management, drinking water, and ground water; these five issues received 91% of the weighted support from individuals and 98% of the weighted support from groups.

- Public Priorities:**
- 1. Surface Water Quality**
 - 2. Natural Areas**
 - 3. Surface Water Management**
 - 4. Drinking Water**
 - 5. Groundwater**

Sub-Categorization of Issues

In order to provide more specific direction for the integrated watershed management plan the five highest priority areas of concern were further broken down into sub-categories. These sub-categories are outlined here in order to allow for a better understanding of the nature of the concerns and will, therefore, assist in the design of better and more relevant solutions. A glossary, explaining each of the sub-categories can be found at the end of this document.

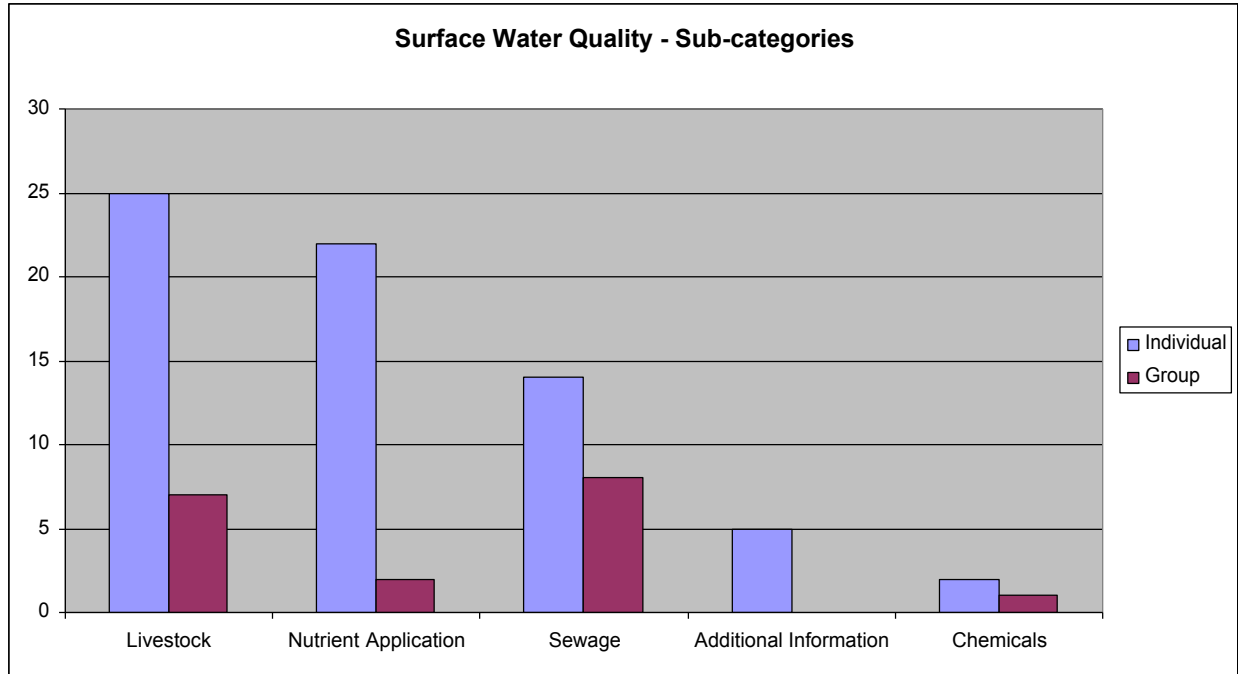


Figure 4: Sub-category issues related to surface water quality

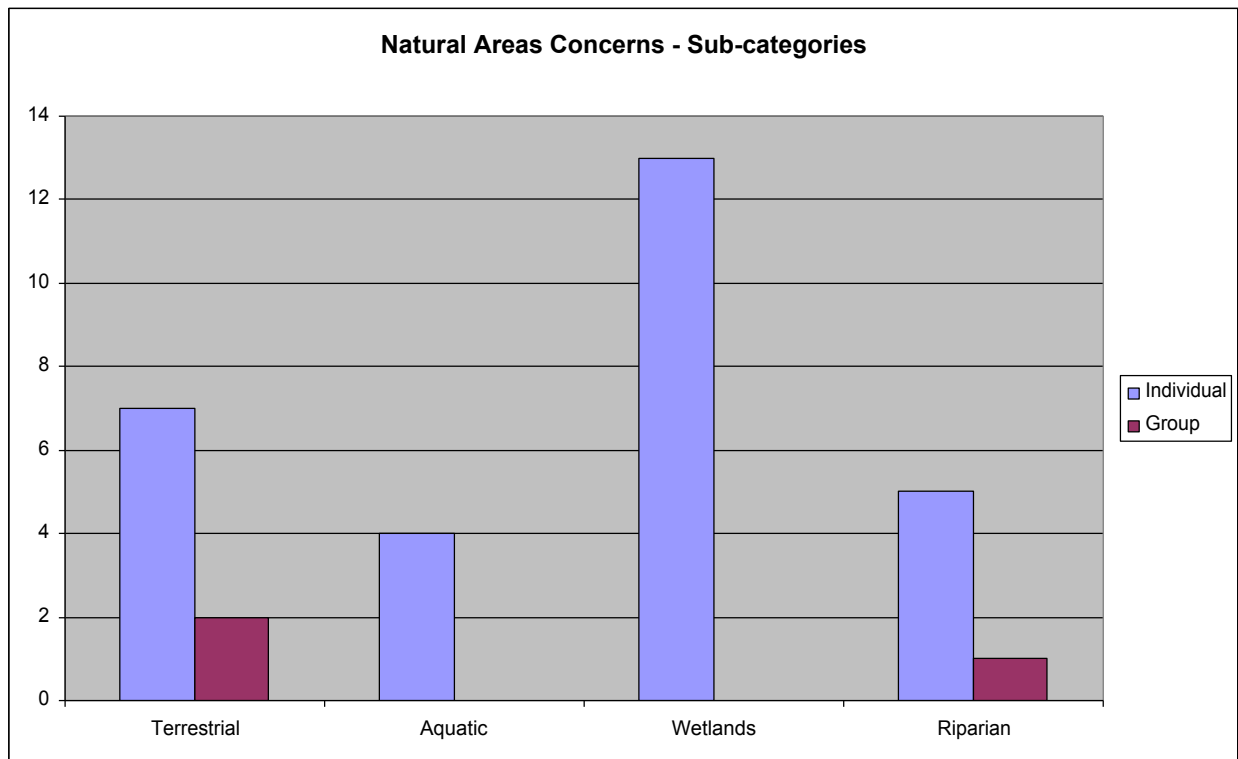


Figure 5: Sub-category issues related to natural areas

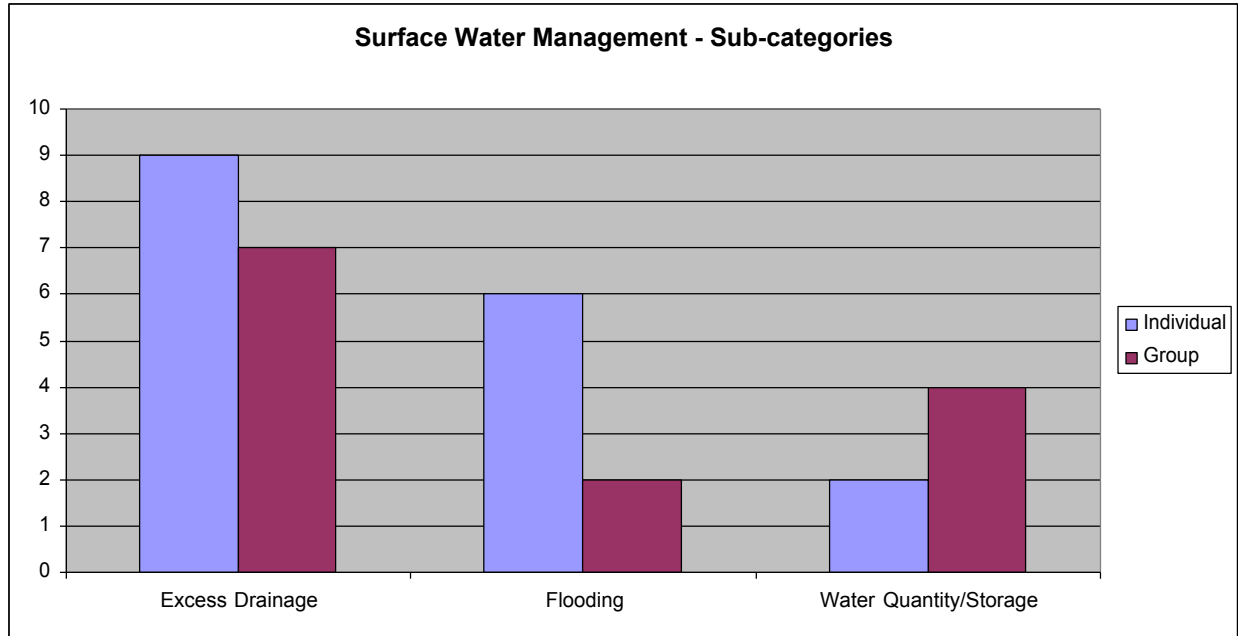


Figure 6: Sub-category issues related to surface water management

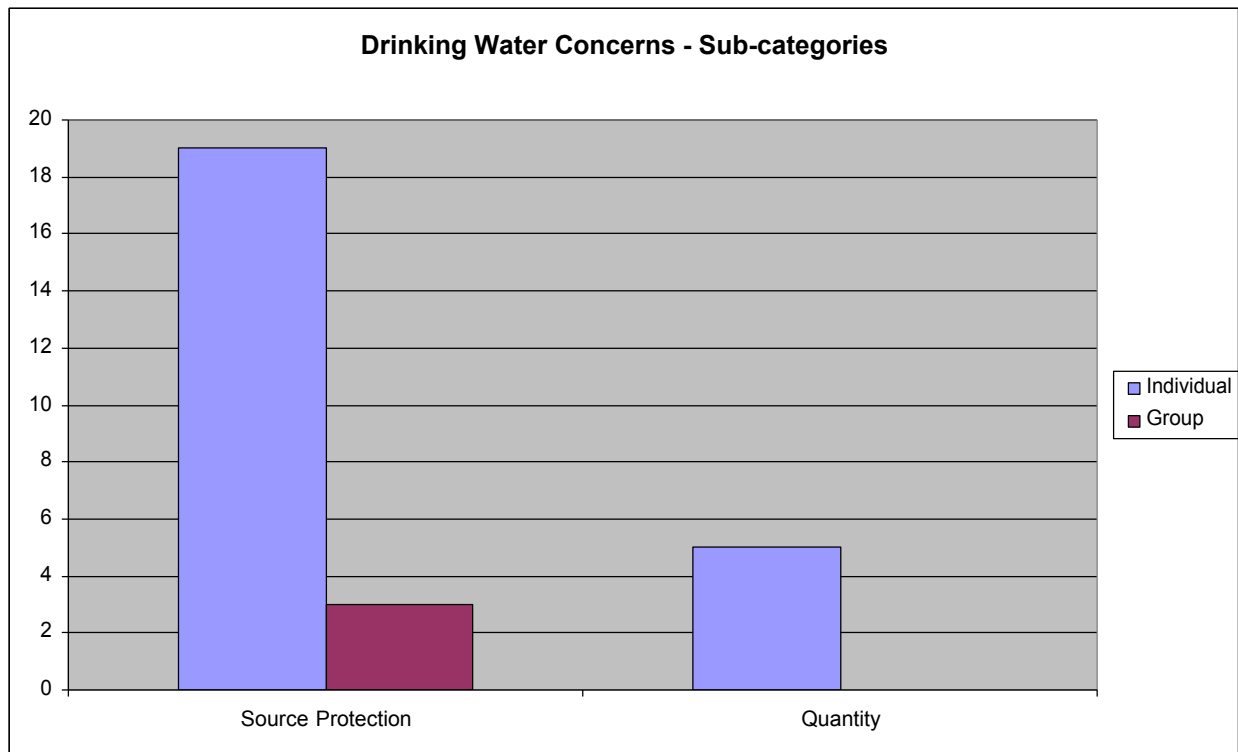


Figure 7: Sub-category issues related to drinking water

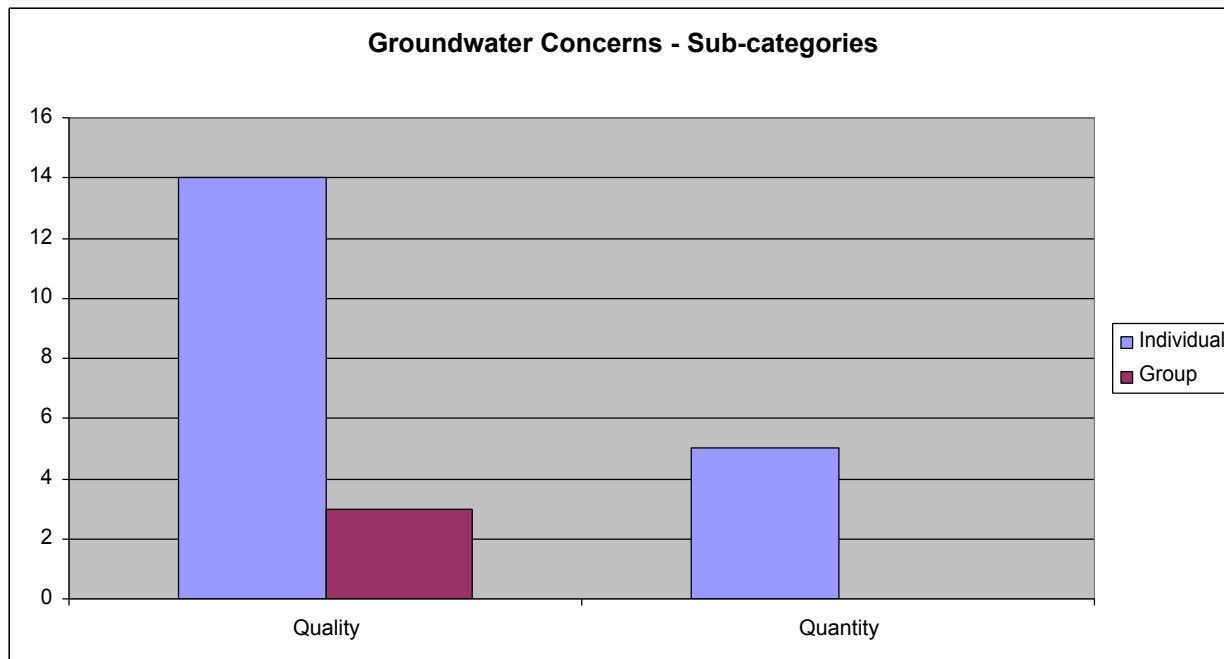


Figure 8: Sub-category issues related to groundwater

Target Locations

Surface Water Quality

Key areas identified for surface water quality concerns included: Sandy Lake with concerns of sewage and nutrient application. These concerns were generally echoed for all recreational lakes in the watershed including Clear Lake, Minnedosa Lake, Lake Wahtopanah, and Otter Lake.

Natural Areas

The riparian area along the Little Saskatchewan River was identified by respondents as an area of concern. Concerns included unstable river banks. Protecting the Clear Lake aquatic ecosystem was also identified as a local target area.

Drinking Water

The key target area for drinking water protection identified by respondents was the source water zones as mapped in the drinking water section of the State of the Watershed report.

Groundwater

The key area for groundwater identified by respondents was areas where sand and gravel aquifers are located at or near the earth's surface as mapped in the groundwater section of the State of the Watershed report.



Summary

This document was prepared for the benefit of the PMT, all watershed stakeholders, and the public at large in order to provide an overview of the concerns voiced by residents of the Little Saskatchewan River watershed. The five key issues in the Little Saskatchewan River watershed, as identified by the public, are: surface water quality, natural areas, surface water management, drinking water, and groundwater. The breakdown and analysis of the public input will be used by the PMT, in conjunction with the technical and scientific input, in the preparation of the Little Saskatchewan River IWMP.

Glossary

Main Categories

Main categories were established based on the statements provided to the PMT by the public. The PMT used the following definitions when categorizing comments into main categories.

Surface water quality – The health of any water body on the surface of the land including water runoff, creeks, rivers, wetlands and lakes

Surface water management – The control of surface water, primarily runoff, through the drainage network

Drinking water – Water for human consumption

Groundwater – Encompassing both the quality (health) and quantity (volume) of the water found under the Earth's surface in aquifers

Natural areas – A generic term referring to wetlands, riparian areas, woodlands, wildlife habitat and parks. This term does not necessarily refer to water but may refer to areas that are typically seen as beneficial to water quality.

Education and Partnerships – This category refers to a lack of public knowledge and/or a need for relationships amongst stakeholder groups.

Soil – The impact of soil on waterways and lakes which primarily refers to soil and shoreline erosion.

Sub-Categories

Sub-categories were established based on the statements provided to the PMT by the public. The PMT used the following definitions when categorizing comments into sub-categories.

Chemicals – Primarily refers to agricultural chemicals such as: herbicides, pesticides and insecticides; and industrial chemicals

Livestock – The waste produced by domesticated animals

Nutrient application – Primarily refers to fertilizers such as nitrogen and phosphorous in agricultural, recreational, or urban applications

Additional information – A general shortage of historical/baseline data, limited monitoring capability, or uncertainly; may also indicate a lack of public awareness

Sewage – The waste derived from humans, includes both municipal and individual sources

Terrestrial – Grassland and woodland ecosystems

Aquatic – Aquatic ecosystems such as rivers, lakes, and other waterbodies

Wetlands – Wetland ecosystems including swamps, sloughs, bogs, and fens



Riparian – Riparian ecosystems are transitional areas between uplands and waterbodies

Quality – Refers to the health of the groundwater

(Groundwater) Quantity – Volume of water that is typically accessible from aquifers

Source protection – Providing safe drinking water

Drinking Water Quantity – Ensuring an adequate volume of drinking water, including one which is resilient to drought

Flooding – Excess water which causes damage to private property, crops, or infrastructure or which is found on the land for extended periods of time

Water Quantity/Storage – An area of land designated to be a water holding area, this could include wetlands or small retention dams

Excess Drainage – Refers to the removal of surface water at a rate or on a scale which is significantly different from an unaltered landscape, and which may have consequences to ecosystem health, water quality, and/or water quantity

Note: If you would like more information on the procedure we used or have further questions please feel free to contact Colleen Cuvelier, LSRC Manager at (204) 566-2270.