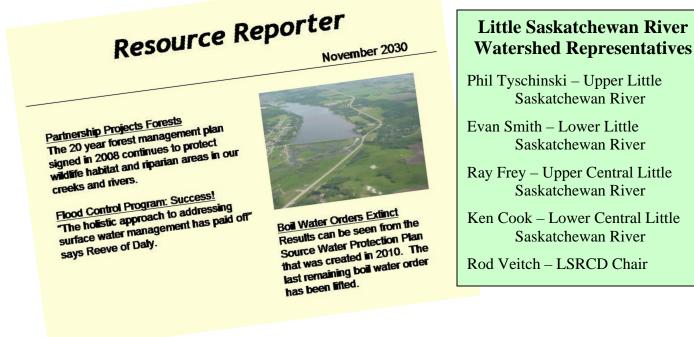
Possible Future Headlines



Conclusion and Invitation

Within this document the management concerns as they relate to surface and ground water, drinking water protection, habitat, and soils have been identified by professionals. We need you to tell us which issues are important to you and how you would like to see them addressed. If you would like more information on any of the material presented here or on our watershed in general please see our State of the Watershed Report. The State of the Watershed Report and other detailed information is available online at: http://www.uarcd.com/IWMP.htm or at your local Conservation District.

We need your input to ensure that the integrated watershed management plan addresses your needs and concerns. Three open houses (see schedule) are being held, if you are unable to attend any of these events, please return the attached form to the Little Saskatchewan River Conservation District. To ensure that we can include your input in the integrated watershed management plan, we would appreciate receiving your comments by August 31, 2008.



Little Saskatchewan River Watershed **Summary of Resource Management Concerns**

Welcome to the summary of the natural resource management concerns for the Little Saskatchewan River watershed. You are receiving this document because you live in, work, and value this watershed and we want your opinion!

The Little Saskatchewan River Conservation District is coordinating the preparation of an integrated watershed management plan (IWMP) for the watershed. The plan is a roadmap that provides the direction, based on your priorities, to conservation agencies for the stewardship of natural resources that are the most meaningful to you, the people who live, work, and play here.

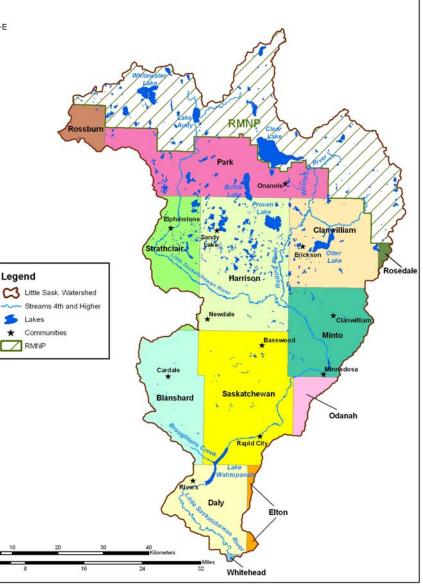
This document contains the management concerns for our watershed based on input from a team comprised of representatives from government departments and nongovernment agencies in each of five resource areas. Your awareness of and experiences in the Little Saskatchewan River watershed are the other half. As you read through this document ask yourself "What are the natural resource and environment issues that concern me the most?"











Surface Water

Surface Water Management and Drainage

Water has largely been managed at the individual property scale, often without any form of comprehensive, long-term planning with a connection to land use.

Nutrient Enrichment

Nutrient enrichment is one of the most important water quality issues in Manitoba. Excessive levels of phosphorus and nitrogen fuel the production of algae and aquatic plants.

Ground Water Data

The current lack of data regarding the location of wells (active or abandoned), contribution of groundwater to stream base-flow, aquifer delineation, and groundwater quality pose challenges in the understanding and management of groundwater.

Wellhead Protection

As humans, our actions can affect groundwater. The decisions we make about the location of a well, materials used in their construction, and maintenance may impact well water throughout the province.

Abandoned Wells

Historically, wells have been located in areas of convenience, often in the same general area as potential contaminants. Neglected, abandoned, or unused wells can act as a direct conduit for contaminants from the surface to enter our aquifers.

Sustainable Groundwater Development

Sustainable yield values have not been determined for aquifers in the watershed. Therefore, the amount that can be withdrawn from the aquifers without depleting them over time is unknown.



Source Water Protection

Drinking Water Exceeding the Canadian Drinking Water Quality Guidelines

Initial data collection indicates that Rivers and Rapid City may exceed the acceptable levels of trihalomethanes. Further sampling over the next year is required to assess and confirm these levels.

Drinking Water Susceptibility

There are 14 public drinking water sources in the watershed serving nine communities. Ten of these drinking water sources serving six communities in the watershed were identified as being highly susceptible to potential pollution.

<u>Habitat</u>

Habitat Loss, Degradation, and Fragmentation

Habitat loss continues at a rate greater than preservation and restoration efforts.

Loss and Draining of Wetlands

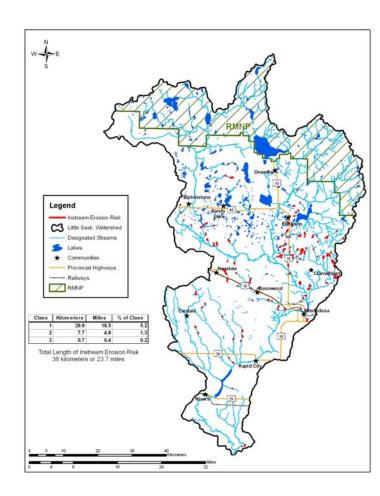
Draining wetlands has ecological impacts. Loss of wetlands impacts not only habitat but may also have consequences for water quality and quantity.

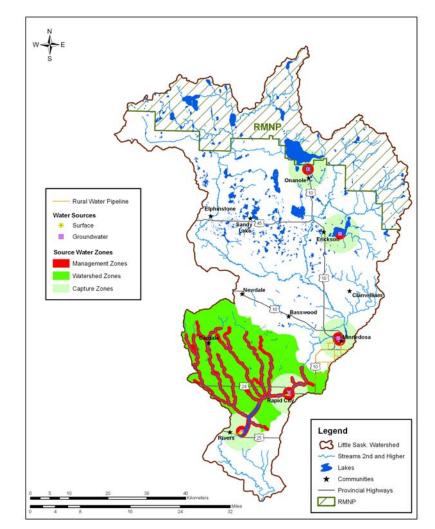
Riparian Management

Riparian areas serve as key wildlife habitat, play an important role in the movement of wildlife, and they help to filter runoff before it enters a water body. Human activities continue to encroach upon and eliminate riparian habitat. Loss of riparian habitat has detrimental effects on wildlife and fish as well as water quality due to the loss of the filtering capacity of riparian areas.

Aquatic Ecosystem Health

There is concern that natural and human induced changes to the quantity and timing of water flow is altering and impairing the health and sustainability of aquatic and riparian ecosystems. Specifically, some of the streams in our watershed suffer from periods of low water flow which fall below the historical flows.







Soils Soil Salinity

Soil salinity is a limitation where plant growth is reduced due to the presence of soluble salts in soil. Approximately 75,000 acres of cropland within the Little Saskatchewan River watershed has been classified as moderately saline.

Surface Soil Erosion

Water erosion removes topsoil resulting in a decrease in soil productivity. Water which is laden with eroded soil will also have negative consequences for aquatic life and downstream infrastructure such as culverts and drains. Approximately 186,000 acres of cropland are in areas of high and severe water erosion risk. Appropriate management practices will significantly reduce the risk of erosion. Approximately 76,000 acres of forest cover in the watershed may be lost, affecting precipitation runoff.

Riparian Areas Most at Risk of Soil Erosion

There are approximately 24 miles of waterways in the watershed that are present on cropland subject to high or severe erosion risk and have no riparian buffer present.

Wind Erosion

Wind erosion removes topsoil, the soil layer best fitted to support life. Any reduction in the quantity of topsoil reduces the soil's ability to support plant life by reducing its ability store water, nutrients and air. There are approximately 23,000 acres of cropland in the Little Saskatchewan River watershed subject to high or severe wind erosion risk. It is important to note that this wind erosion risk is based upon bare soil, management practices such as zero till or conversion to permanent cover will significantly reduce the risk of erosion.