

# Central Assiniboine and Lower Souris River Watershed

Public Consultation – What you told us

June 2010



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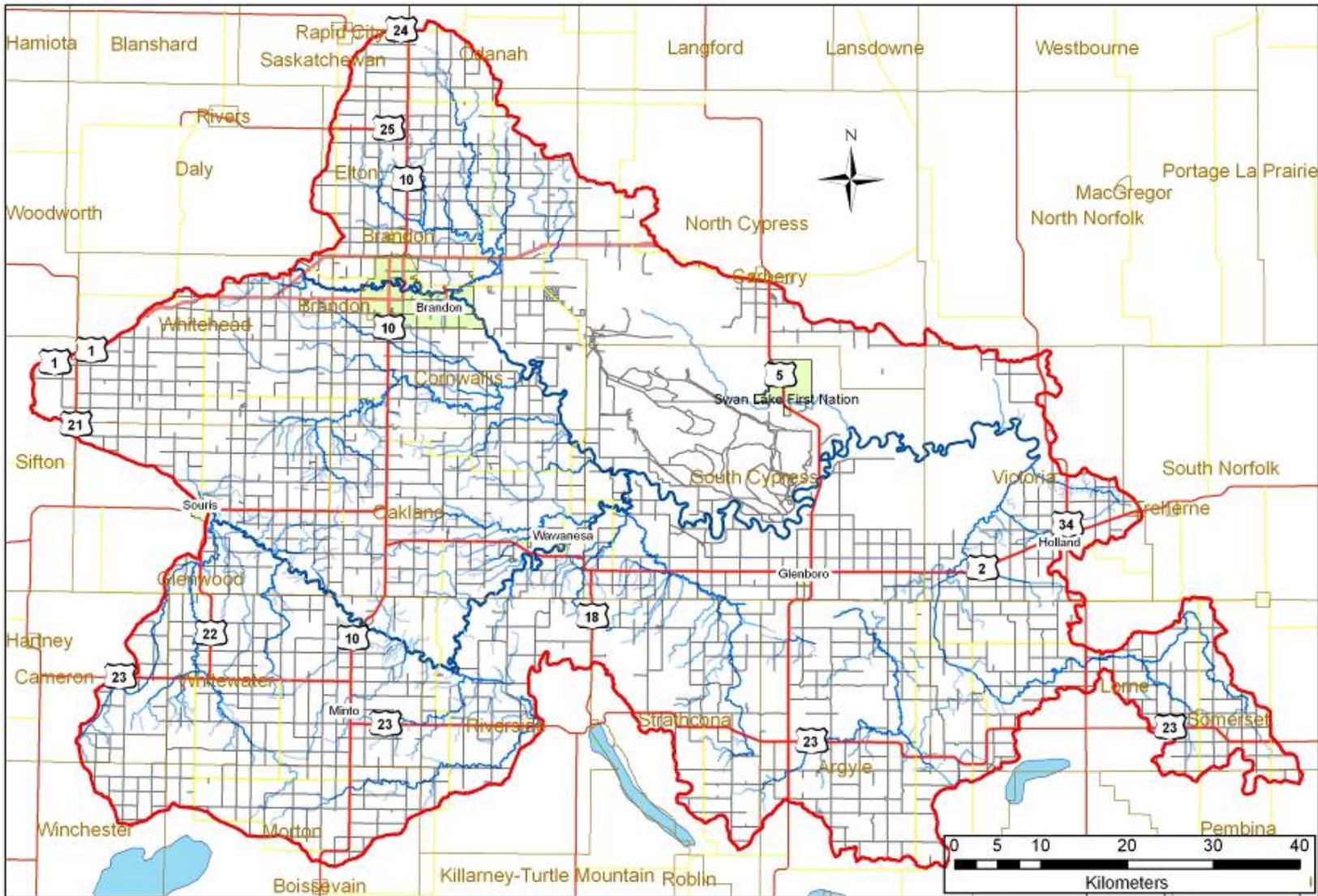


Figure 1. The Central Assiniboine and Lower Souris River Integrated Watershed Management Planning Area.

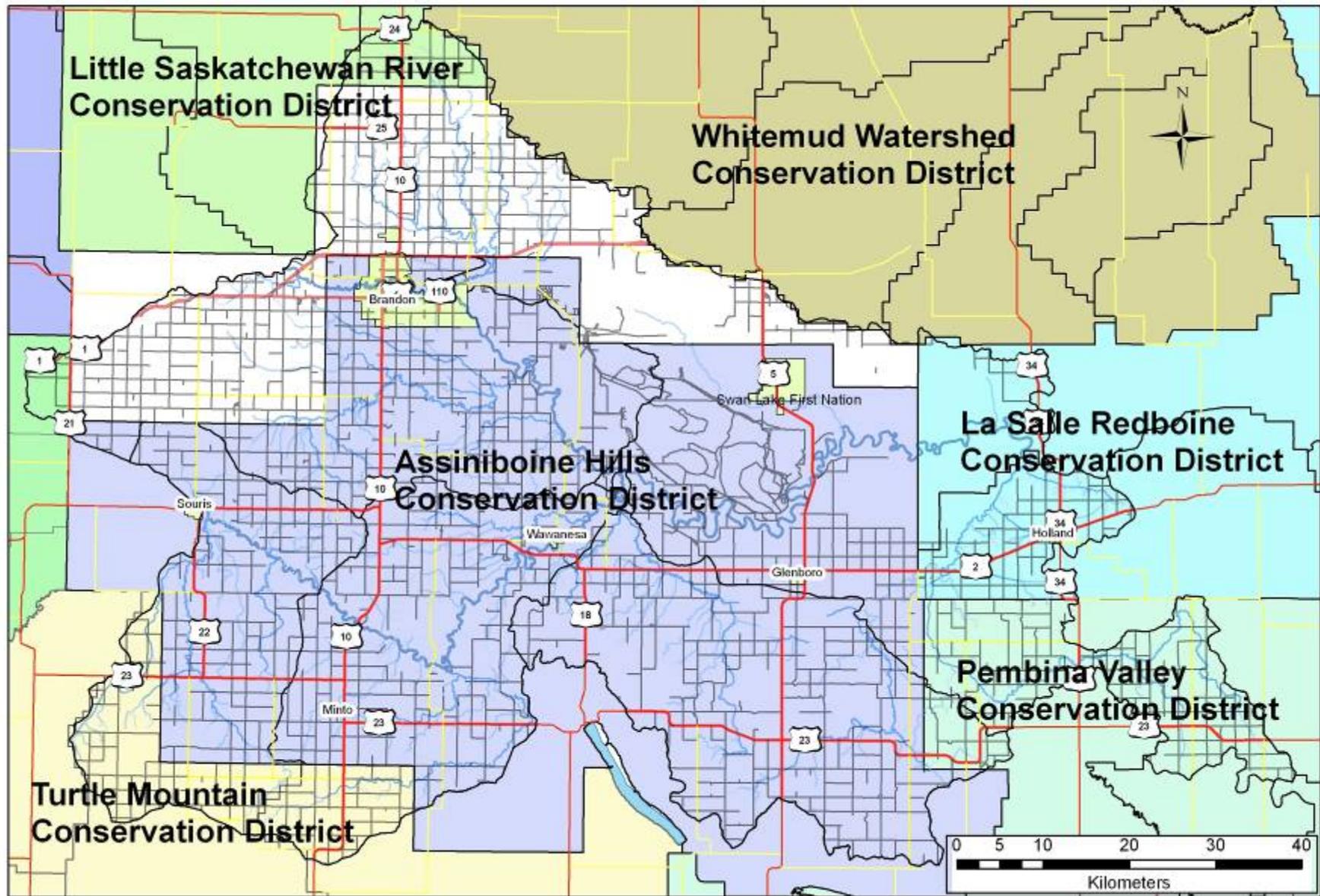


Figure 2. The Conservation Districts within the Central Assiniboine and Lower Souris River Watershed.

## Introduction

In 2009 the Assiniboine Hills Conservation District (AHCD) was designated as the Watershed Planning Authority for watersheds 05MH and part of O5NG by the Province of Manitoba (see Figure 1). In order to undertake this planning process across the watershed, all the municipalities formed a partnership, including those not a member of a conservation district. A project management team was formed to lead the planning process, with the help of technical support. The first step in the development of this watershed plan was to hold public forums.

## Methods

The project management team organized six public forums. The meetings were held on March 9, 11, 16, 18, 23, and 25, 2010 in Wawanesa, Glenboro, Holland, Minto, Souris, and Brandon, respectively.

At each of the public meetings the attendees were asked to fill out a **three** part worksheet. The following information was gathered:

- Step 1. As an individual watershed residents list your “Watershed Values” – What you value in the watershed. In addition, list any watershed issues or threats to these values.
- Step 2. Work with a group to rank the top watershed issues for the Central Assiniboine and Lower Souris River Watershed. Develop a list of logical and attainable solutions.
- Step 3. Provide specific locations on a map where issues and problems need to be addressed in the watershed.

The project management team, with technical support, read through all comments and selected representative statements to include in this report. The map illustrated in Figure 2 outlines all the problem sites and associated descriptions identified at the public meetings. The results of the three part public consultation process are shown below.

## Results of Public Consultation

### Step #1

#### Individual Watershed Residents

**Question #1** - What do you value in this watershed? – Summary of 139 responses from 66 individuals:

Response Category	Percent of Responses	Rank <sup>1</sup>
Clean, unpolluted water for drinking	35.3	1
Healthy and abundant wildlife populations	9.4	2
A strong rural economy	9.4	
Natural habitats	6.5	3
Drain maintenance and managed flows	5.0	4
Water for recreation	4.3	5
Healthy creeks and waterways	3.6	6
Good fishing	2.9	7
Consistent river flows	2.9	
Healthy riparian areas	2.9	
Productive farmland	2.2	8
Grasses for livestock	2.2	
Riparian stabilization	1.4	9
Freedom to drain and use land to earn an adequate income without the hindrance from city people who do not know how farming works	1.4	
The variety of habitat and landscapes	1.4	

<sup>1</sup> Each of the 66 individual respondents were asked to provide three values statements about the watershed. A total of 139 value statements were provided. First place ranking equates to 49 separate value statements that were categorized as 'clean, unpolluted water for drinking.'

Other watershed values submitted:

- Urban Economy
- Wind and water erosion controls
- Water for livestock
- Good hay crops
- Water for irrigation
- Good cattle production
- Pothole wetland near Baldur
- Dry basements

## Step #1

**Question #2** - What are the top watershed issues and threats? - Summary of 66 individual responses.

Response Category	Percent of Responses	Rank <sup>1</sup>
Excessive and unlicensed drainage	16.4	1
Erosion	9.0	2
Clearing of natural cover	7.4	3
Large-scale irrigation	7.4	
Water pollution (industrial, urban, agricultural)	6.6	4
Well water contamination	5.7	5
Riverbank erosion and destruction	5.7	
Run-off that is too quick	5.7	
Wetland loss	4.9	6
Chemical run-off	4.9	
Loss of wildlife habitat	3.3	7
Agricultural run-off	3.3	
Sewage management	3.0	8
Flooding	2.5	9
Livestock in waterways	2.5	
Salinity	2.5	

<sup>1</sup> Each of the 66 individual respondents was asked to describe watershed issues and threats. A total of 122 statements were provided. First place ranking equates to 20 separate value statements that were categorized as 'excessive, unlicensed drainage'

Other issues and threats submitted:

- Lack of science on phosphorus and nitrogen
- Excess water
- Tree diseases
- Low cattle prices make changes expensive
- Municipal waste
- Loss of hayland
- Loss of Spirit Sands in SWPP
- Lack of action in addressing the fundamental issue of soil moisture holding capacity and groundwater recharge
- City people making decisions
- Damage to drains
- DFO enforcement
- Loss of production due to ponding
- Poor beaver control
- RMs not signing on to the process
- Fertilizer run-off in Little Saskatchewan River
- Leafy spurge
- Loss of rail corridors

## Step #2

### Small Working Groups of Watershed Residents

**Question #1** - What are the top watershed issues and threats? - Summary of (16 x ~5) small working groups.

Response Category	Percent of Responses	Rank <sup>1</sup>
Agricultural Drainage	18.6	1
Drinking Water Quality (wells)	16.2	2
Agricultural Flooding	15.4	3
Infrastructure Flooding	13.5	4
Loss of Natural Areas	13.1	5
Soil Loss and Erosion	12.5	6
Drinking Water Quality (surface)	10.7	7

<sup>1</sup> Each of the 16 small working groups was asked to rank seven watershed issues and threats.

When asked what their number **one concern** was:

Response Category	Percent of Responses	Rank <sup>1</sup>
Drinking Water Quality (groundwater)	42	1
Agricultural Drainage	26	2
Agricultural Flooding	16	3
Drinking Water Quality (surface)	10	4
Infrastructure Flooding	6	5
Natural Areas, Wetlands, and Riparian Areas	0	
Soil Loss and Erosion	0	

<sup>1</sup> Each of the 16 small working groups was asked to rank seven watershed issues and threats.

Other issues and threats submitted:

- Water quantity
- Salinity
- Septic regulation
- Tree planting
- Waste water management
- Urban flooding
- Poor drainage
- Good stewardship
- Farming systems to increase organic matter

## Step #2

**Question #2** - What are some logical and attainable solutions to these threats? – Direct quotes from small working groups (16 x ~5).

### Drinking Water Quality (wells)

- Cap off old wells
- Control onsite waste
- Well capping program and water testing
- Water quality education
- Seal abandoned wells
- Monitor groundwater
- Cap old wells
- Wellhead contour management
- Cap wells. Reduce run-off contamination
- Develop public/private rural water system
- Raise well heads above flood zone
- Proper well placement and maintenance
- Continued monitoring of aquifer
- Well maintenance to prevent contamination
- Capping old wells properly
- Install treatment systems

### Drinking Water Quality (rivers and lakes)

- Since hauled water comes from Brandon the Assiniboine River water needs to be kept high quality.
- Protect the marsh at Alexander's that is feeding the well that is providing Elton's water.
- More riparian areas.
- Control of urban wastewater discharges and run-off.
- Monitor the sewage from cottages and towns.
- Stop dumping sewage into lakes and rivers.
- Get cities to clean up their water/waste.
- Everyone needs to clean up.

### Flooding (agriculture)

- Need a proper plan for managing run-off water.
- "How are we the community going to manage our water"
- Proper livestock management
- Control of drainage and better planning by RMs and Province
- Proper planning to implement control structures. Proper financing
- New management ideas
- Better drainage systems. Drainage maintenance plan with grass root inputs
- Flow control
- Organized engineered drainage on private land and public land
- Ability to drain water off YOUR land. Create a network of drainage
- Establish weirs in certain waterways and ravines
- Properly sized infrastructure

- Grassed waterways and backflooding of retention areas

- Reduce livestock in riparian areas. Proper drainage enforcement.

### Flooding (infrastructure)

- Replace undersized culverts
- Proper planning and sizing of infrastructure
- Control drainage (gated drainage)
- Proper sizing. Proper water holding detention structure
- Flow management

- Proper culvert maintenance. Proper sizing of culverts
- Slowing water with dams, and healthy riparian areas
- Slow the rate of flow to structure
- Proper maintenance of infrastructure

### Soil loss and erosion

- Shoreline stabilization of meandering creeks.
- Control drainage. Zero or minimum till.
- Keep animals away from creeks and trees. Incentives for grassed waterways, and environmental farm plan.
- Grass waterways. Alternative crops.
- Proper maintenance of ditches so soil does not change ditch grade. Also snow clearing ditches.

- Slow the water, proper grassed waterways.
- Slow down water flow. Educate people on environmental farming methods.
- Structured drainage. Slow down water. Use grassed waterways.
- Maintain established drains
- More forages and grasses seeded.
- Encourage minimum till. Cover crops.

### Agricultural drainage

- Slowing down water.
- Need a proper plan for managing run-off water. Make the plan an informed plan so the public knows what is going on.
- Compensation like ALUS for saving wetlands. Allowing drainage on agricultural land and consolidated drainage.
- Coordinated drainage.
- Control drainage with gates. Short term storage (regulation enforcement)
- Licensing and enforcement. Drainage management plan that

landowners can understand and be consulted on.

- Identify problem areas. Education
- Improving highway and road drainage ditch. Roads are causing poor soil fertility conditions. Proper sizing of drainage infrastructure.
- Proper plan, gates, flow management.
- Government assisted engineered drainage.
- Allowed to drain as necessary. Proper culverts in roads.
- Enforcement of pipe sizing, and compensation for holding water.

- Proper licensing of drainage facilities. Retention pond to regulate

flows.

### Natural areas

- Fence off streams. Incentives to keep natural, concentrated livestock numbers.
- Find value added uses of wetlands.
- Protect lakes from phosphate loading. Keeping livestock fenced off waterways. Financial assistance for producers to do this.
- Pay to hold water ALUS. Protection
- Whitewater lake should be preserved. Preserve marshes.
- ALUS and EG&S
- Keep existing grass waterways from being taken out. Incentives to promote the protection of natural areas or creating new areas.
- Funding to encourage keeping natural areas.
- Pay landowners proper value for special land like wetlands.
- Protect them from extreme long term flooding.
- Incentives (lots of money) EG&S.

### Salinity

- Remove beaver dams
- More vegetation in certain areas

### Sewage and septic regulation

- Grey water management. Remediation using plants to clean water.
- Waste water management. More monitoring of urban centres (Brandon)

## **Step #3**

### **Watershed Maps**

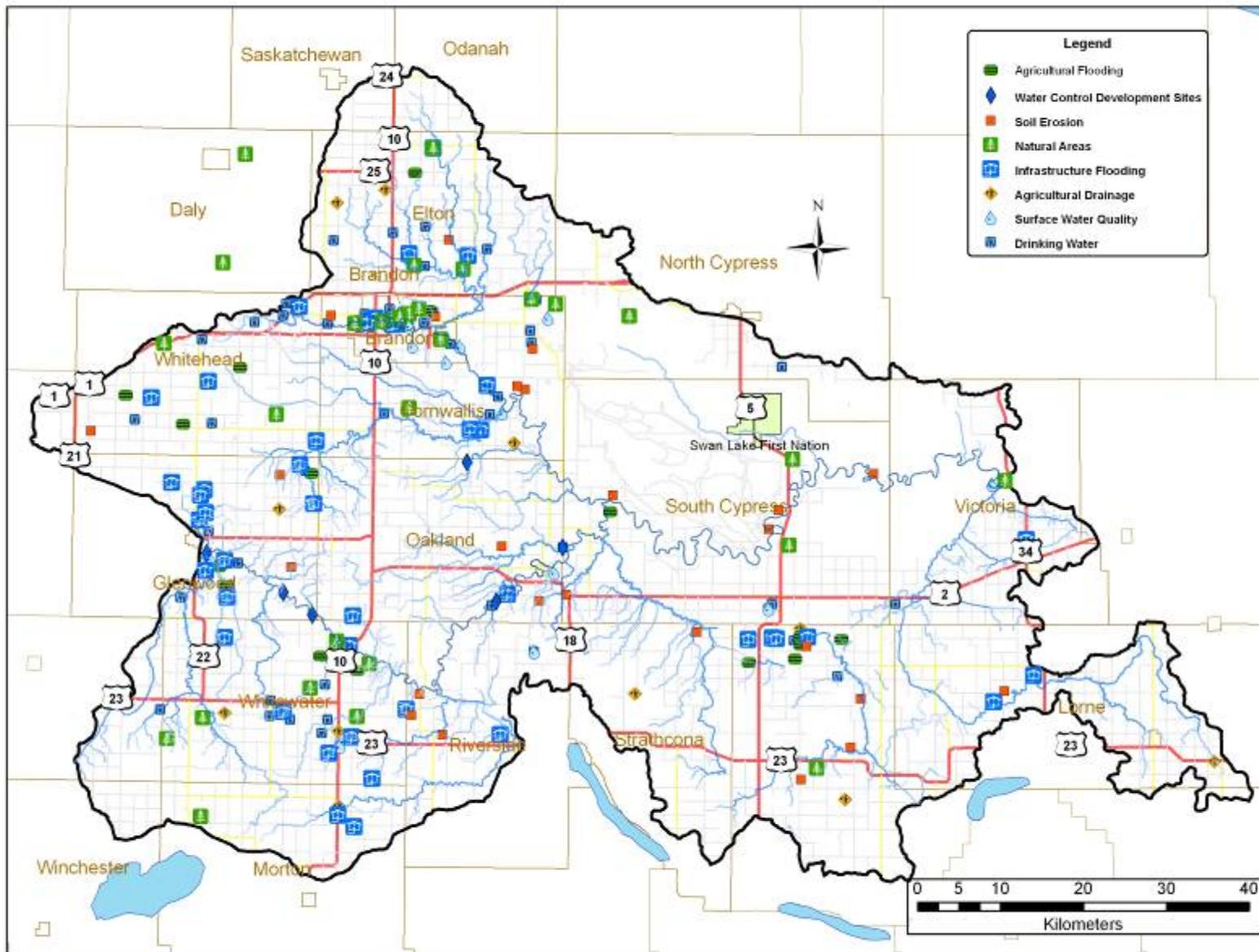


Figure 3. Points showing issues and threats as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

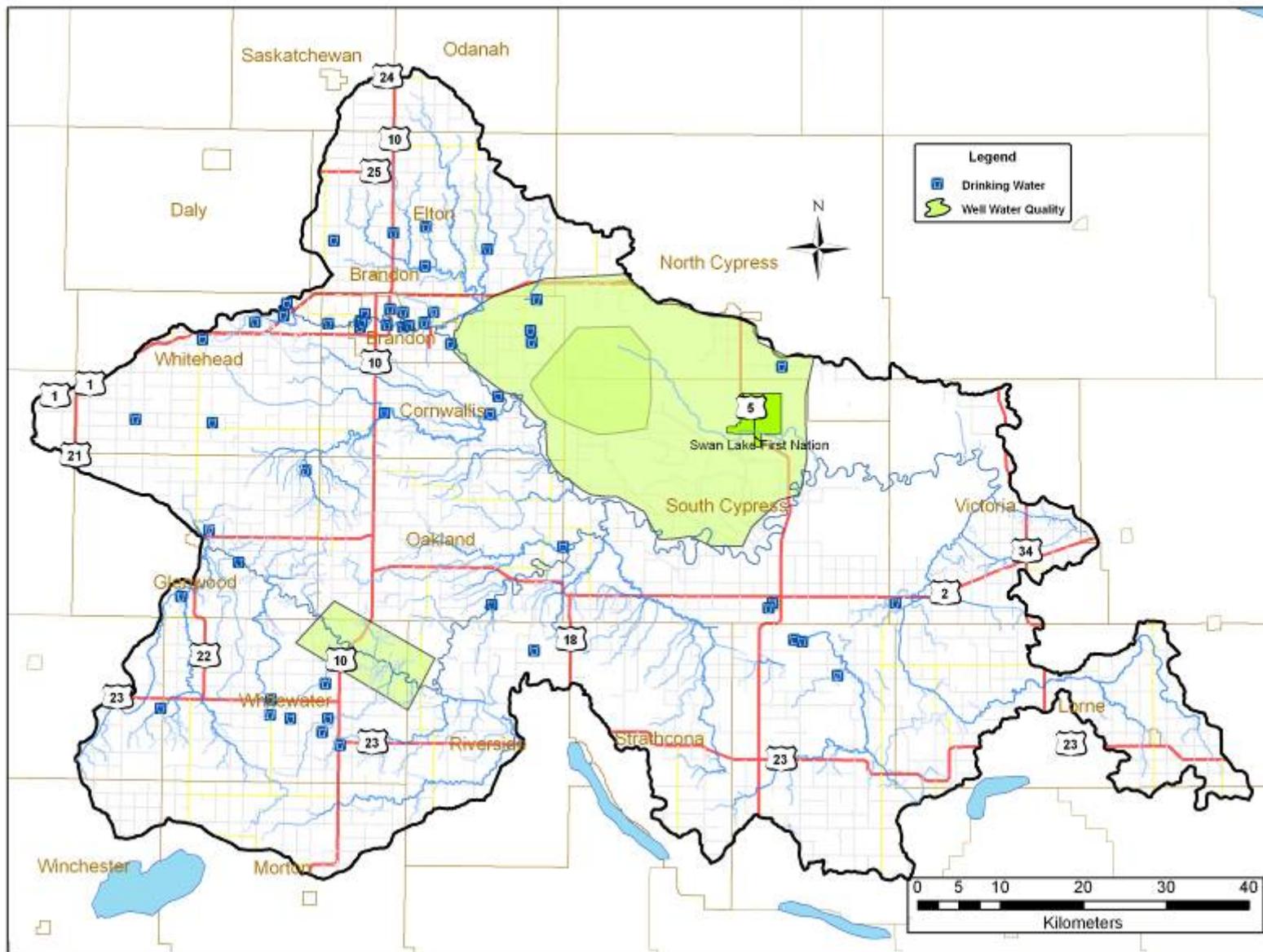


Figure 4. Points and areas that require drinking water quality improvement and preservation, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

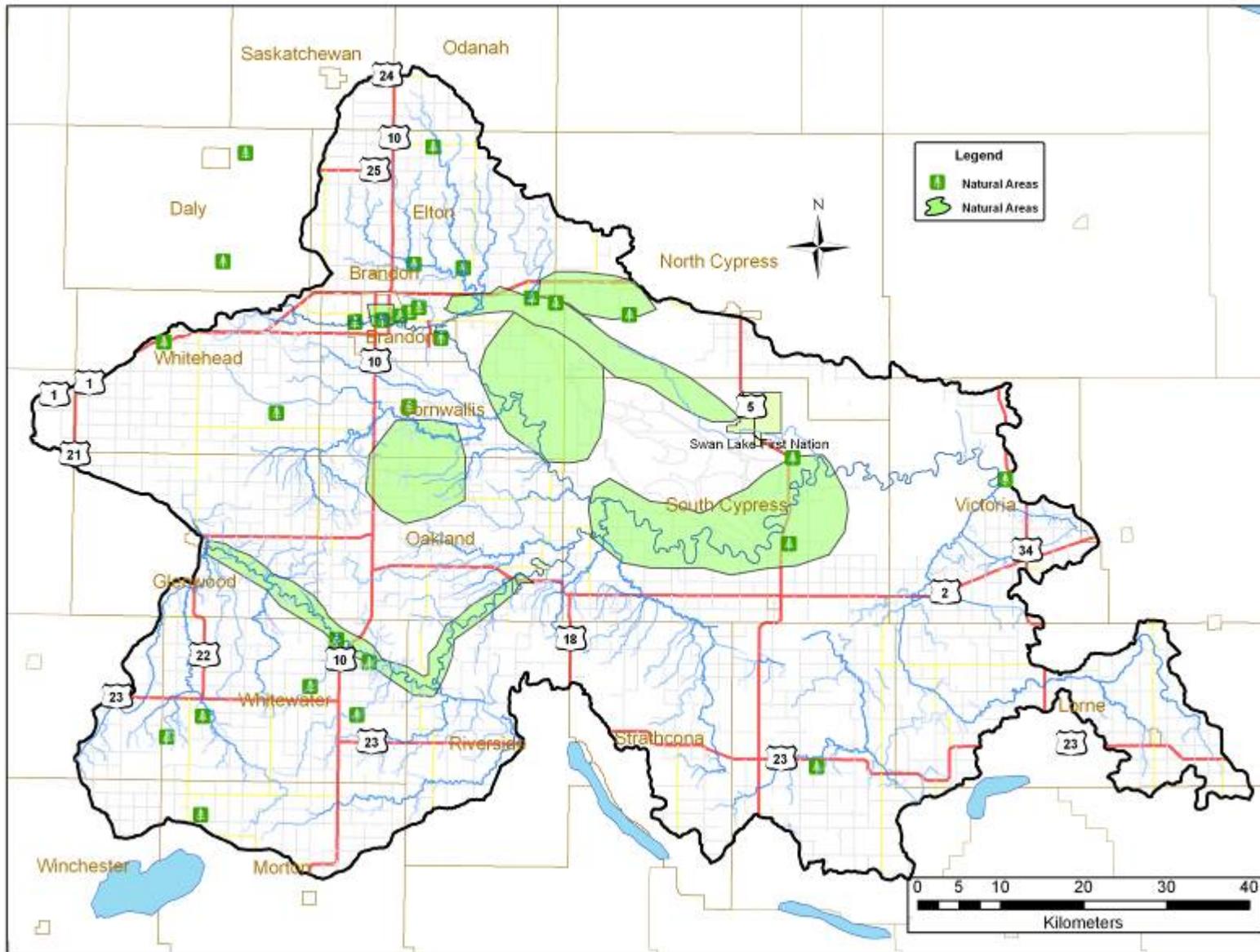


Figure 5. Points and areas that require the natural area conservation (riparian, wetlands, protected areas), as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

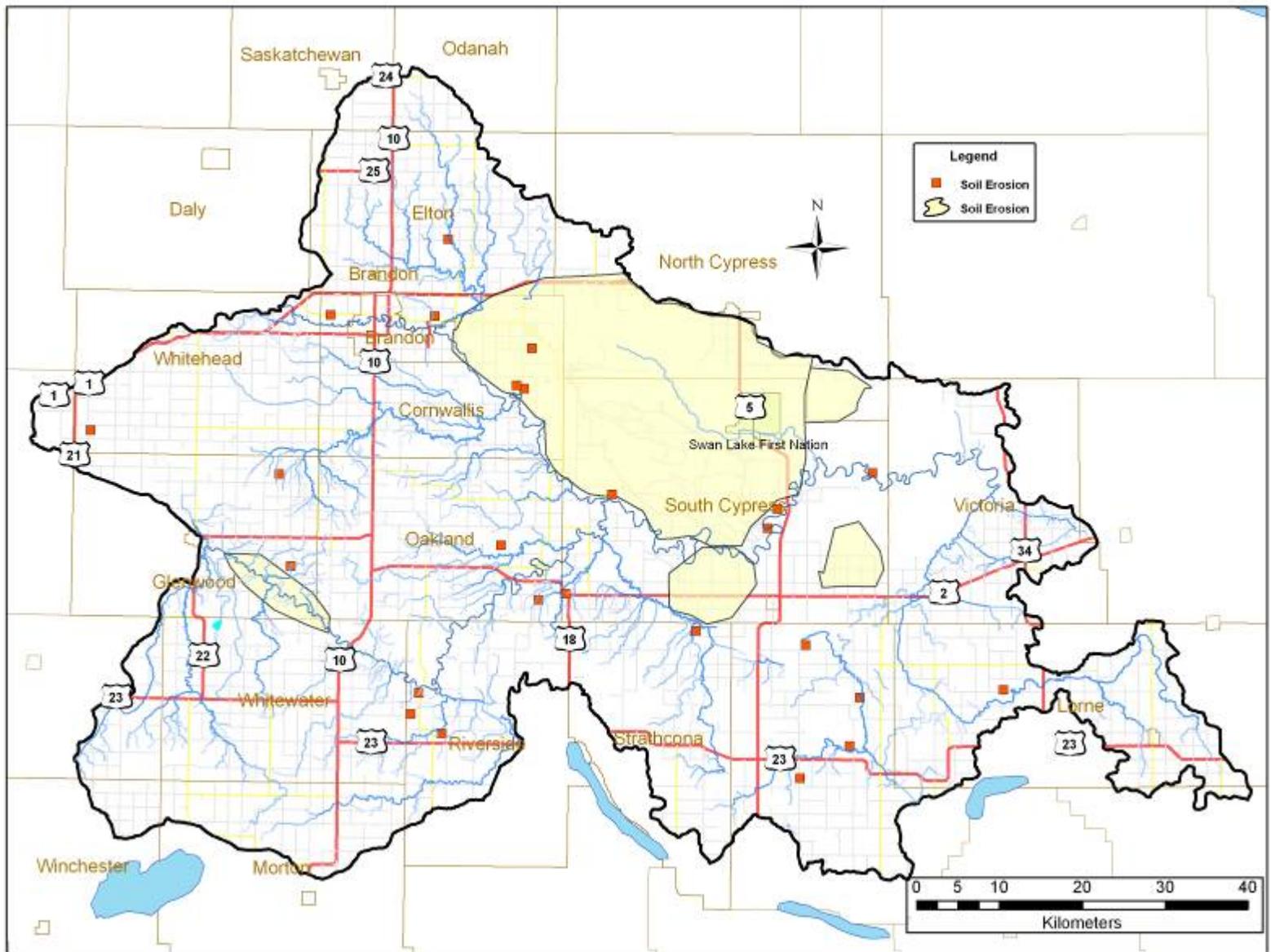


Figure 6. Points and sites that experience soil erosion, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

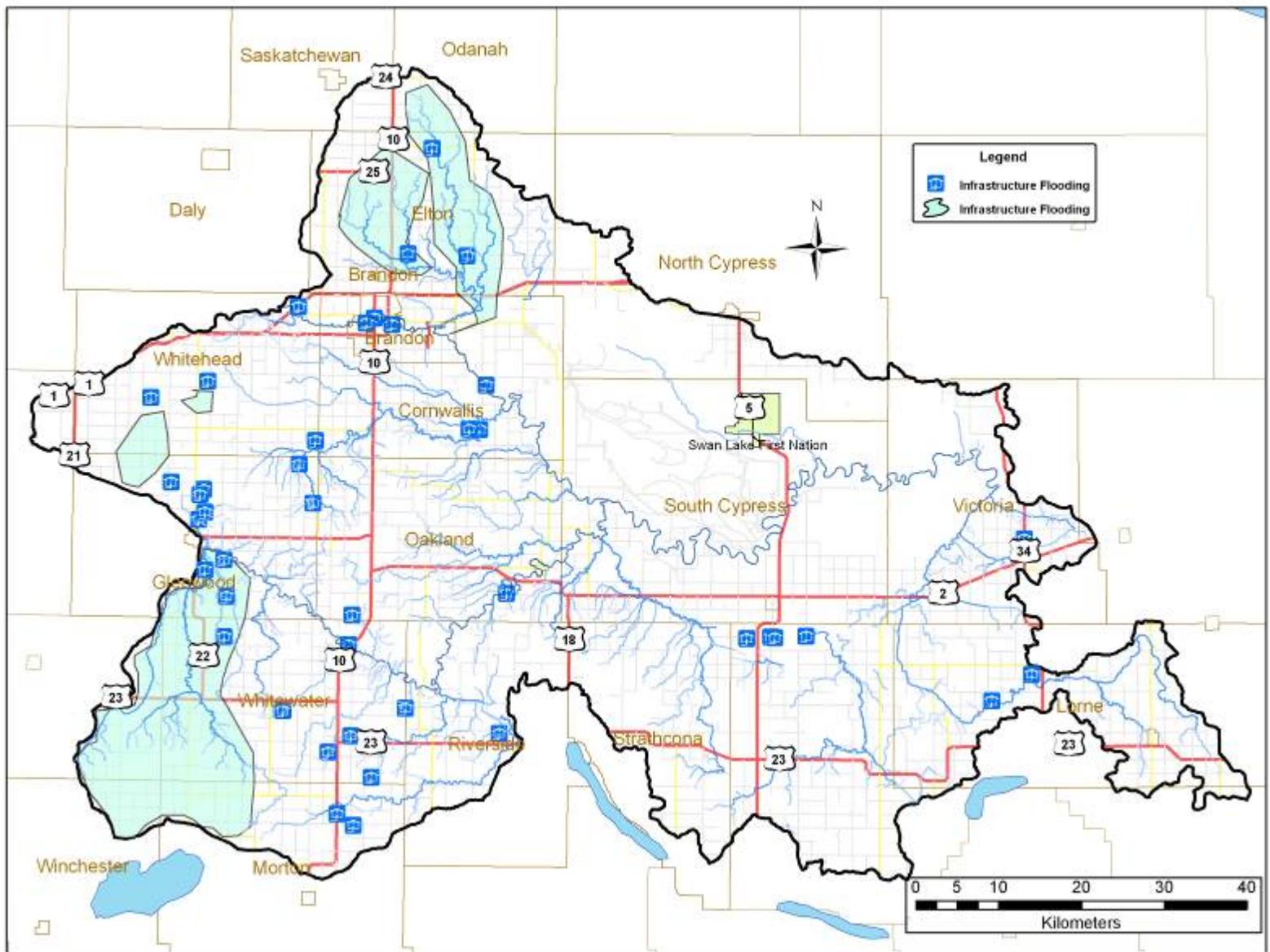


Figure 7. Points and areas that experience problems with infrastructure flooding, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

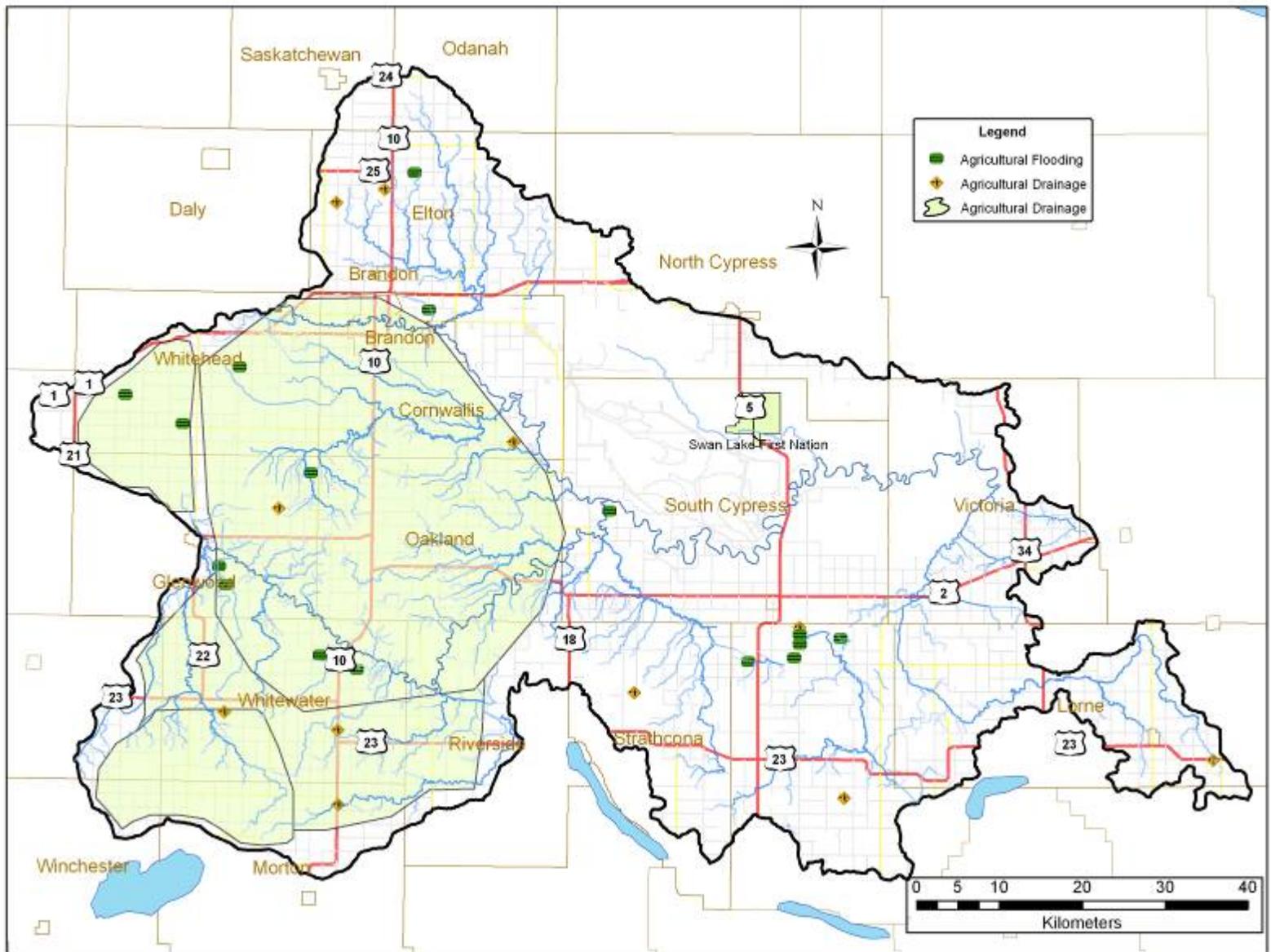


Figure 8. Points and areas that experience problems with agricultural drainage and flooding, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

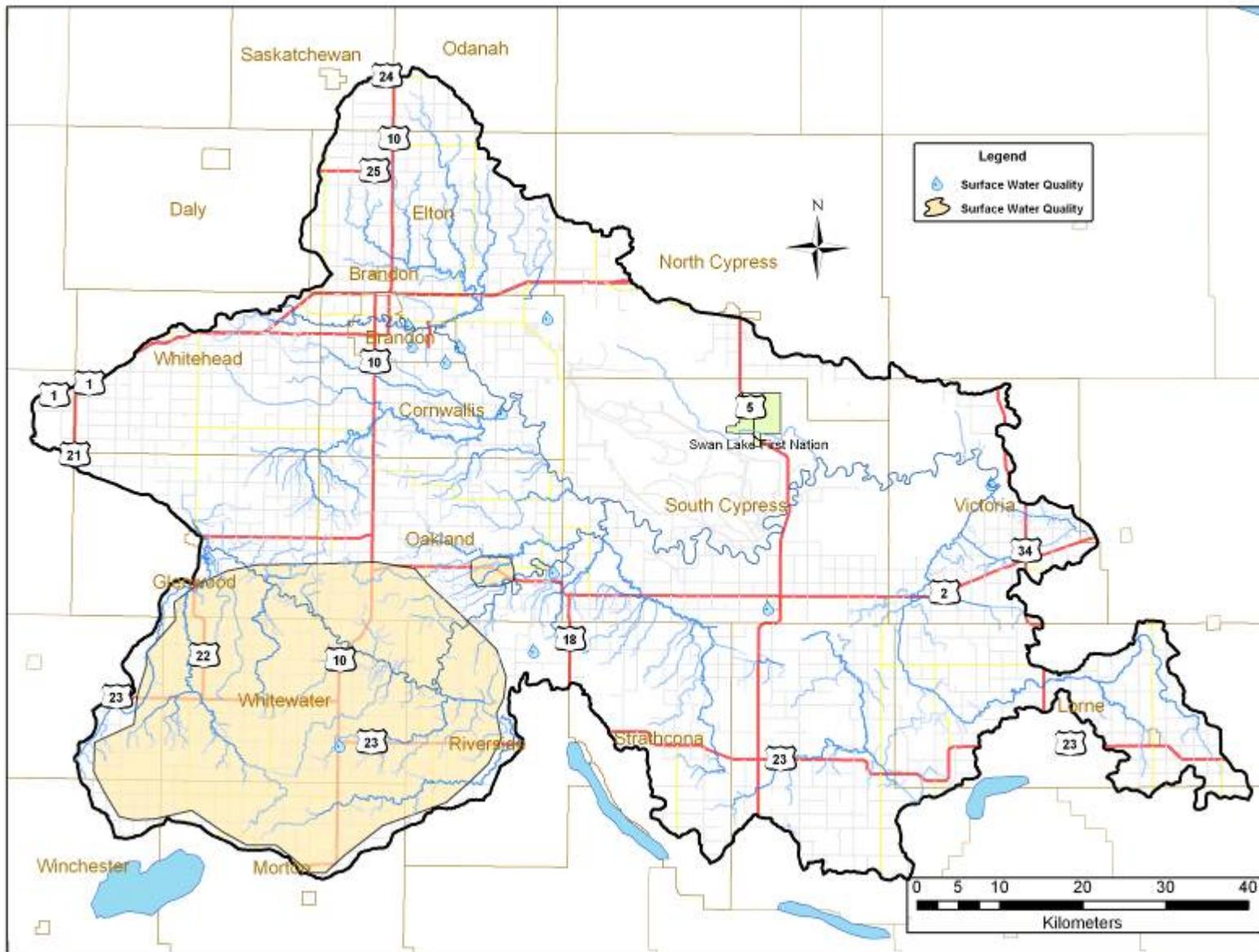


Figure 9. Points and areas with poor surface water quality, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

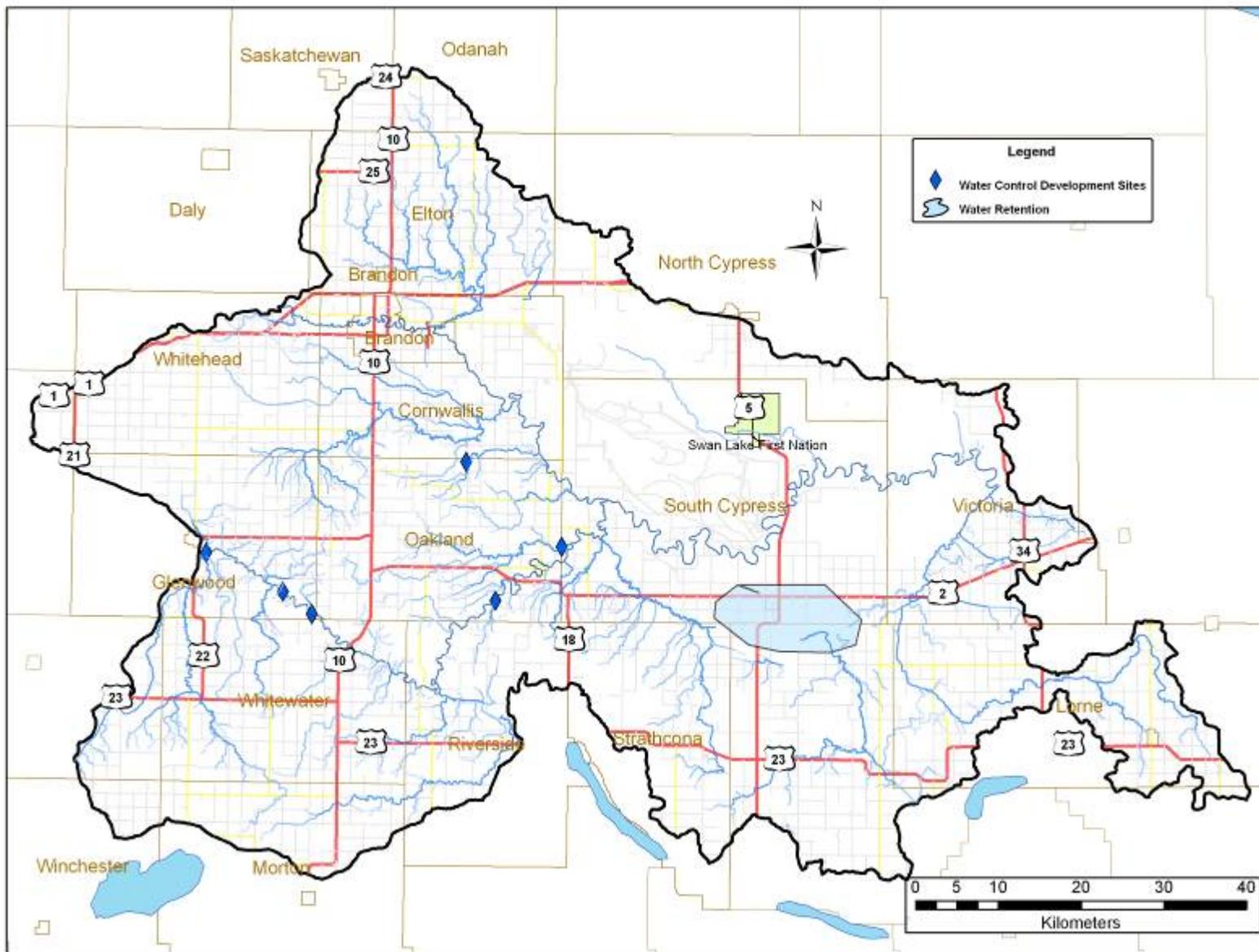


Figure 10. Suggested water control development sites and water retention sites, as identified by the residents of the Central Assiniboine and Lower Souris River Watershed.

## Summary

The project management team has summarized the public comments into **three** Central Assiniboine and Lower Souris River Watershed **Value Statements**. These statements provide insight into what resident's value in this watershed.

**Water** – We value water for its ability to provide for human, wildlife and plant survival in the watershed. High quality water is essential for drinking and recreational purposes for humans, and is also essential for the creation of natural habitats for plants and animals. Flows in rivers and streams need to be properly managed for the benefit of all life in the watershed.

**Natural Environment** – Indicators for the natural environment of our watershed need to include water quality and quantity and also the health of the wildlife population. The preservation of healthy natural habitats is critical.

**Rural Economy** – The coexistence of a strong rural economy with the natural environment needs to be recognized and enhanced without significant impact by either upon the other.

The project management team has also summarized the public responses into **six** Central Assiniboine and Lower Souris River Watershed **Problem (Issue) Statements**. These statements provide greater clarity into how these problems are felt by residents in the Central Assiniboine and Lower Souris River watershed.

**Excessive and unlicensed drainage** - The present drainage management practices need to be reviewed and a new system implemented that will be of benefit to all life in the watershed. While a system of licensing drainage works is in place, it is not a practical instrument as can be attested by the many unlicensed drains. A replacement system needs to be developed where by there are incentives for those who comply with land drainage practice and penalties for those who do not comply. One land owner should not have an economic advantage over another land owner by simply sending their land drainage issue further downstream.

**Erosion** - While erosion has not shown to be a significant issue in the watershed (see figure 6), soil erosion does exist and is in need of efforts to reduce it. Erosion of river and stream banks needs to be evaluated to determine where and when erosion prevention measures are needed.

**Clearing of natural cover and shelterbelts** - As farming practices have changed over the years (larger equipment, volatile crop prices, climatic changes) the land and water environment has changed. Clearing of natural cover and shelterbelts have caused overland water flows to change, plant and wildlife have been impacted to the detriment of the natural environments. Management practices/policies and incentives need to be developed to provide greater balance.

**Large scale irrigation** - A balancing of irrigation farming with the ability of aquifers and rivers to sustainably deliver the resource to the basic driver of the rural economy (ability to grow a variety of crops) needs to be developed. Licensing of aquifer users needs to be more than a permit. It needs an education component to connect farming with sustainable water use practices.

**Well Water Contamination** - old wells need to be capped and sealed from contamination potential. An inventory of abandoned wells needs to be developed and a process established to properly seal these wells.

**Riverbank erosion and destruction** - There will always be loss of riverbank due to the natural processes of spring floods, and ice thaws, summer drought, and sudden surcharging of river channels due to wet climates. Stabilization of riverbank is needed both for urban centres and rural areas mainly for economic development reasons. Methods of stabilization need to be established within the watershed such that there are acceptable best practices established for river bank stabilization.

According to the watershed residents, if this watershed management plan is successful it will ensure the coexistence of human and natural needs without significantly impacting one upon the other. It will ensure that a symbiotic system is in place such that there is a process of checks and balances to allow for this coexistence. Partnerships will be formed between all governments and agencies, which will allow for better management of our natural resources.

Information collected in this public consultation process will serve as the foundation for this integrated watershed management plan. This report will be critical in identifying watershed priorities and setting long-term goals.