

Swan Lake Integrated Watershed Management Plan

Public Consultation Summary

INTRODUCTION

In November 2008, the Province of Manitoba designated the Swan Lake Watershed Conservation District (SLWCD) as the Watershed Planning Authority for the Swan Lake watershed (Figure 1). This designation granted the SLWCD the authority to create an integrated watershed management plan (IWMP) for the Swan Lake watershed.



Figure 1: Swan Lake Watershed

During the planning process the SLWCD formed a Project Management Team¹ to guide development of the Swan Lake IWMP. One of the first steps in the development of the plan was to

¹ Project Management Team Members: Walter Pacamaniuk (Chairman, Councilor – RM of Minitonas), Bob Davies (Vice-Chairman, watershed resident), Andy Miller (watershed resident), Wade Cable (Louisiana Pacific), Brent Erlendson (Manager – SLWCD), Holly Urban (SLWCD), and David Jones (Watershed Planner – Manitoba Water Stewardship).

hold public forums to explore the land and water concerns of local residents and other stakeholders within the planning area. Four public meetings were held in April 2010: Birch River (April 19), Minitonas (April 20), Benito (April 21), and Swan River (April 22). The issues identified at these public forums are reported in this document and will provide direction to the SLWCD on the scope and priorities of the integrated watershed management plan.

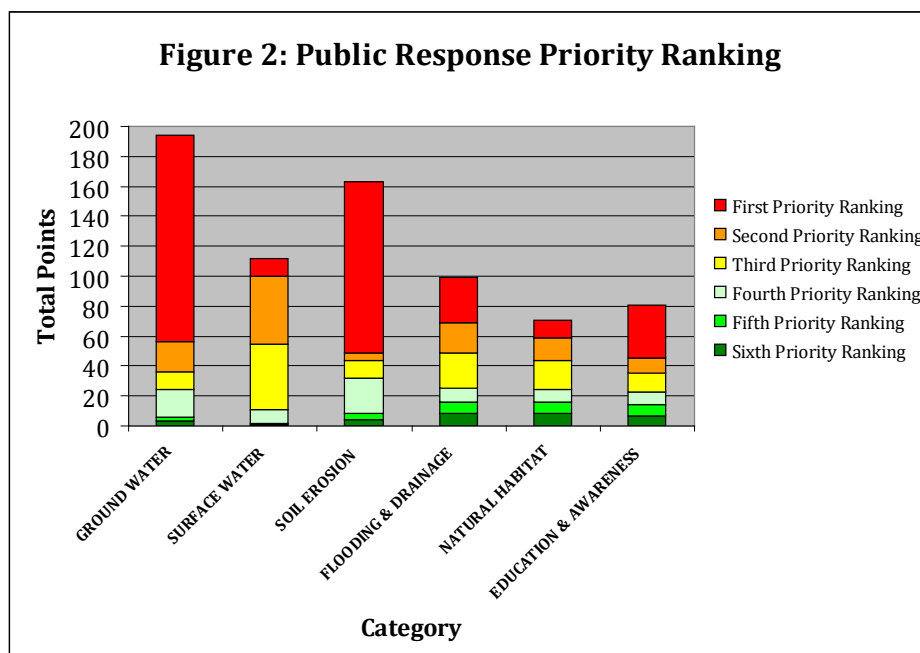
At each public meeting, participants were asked to complete a worksheet to prioritize land and water issues in the watershed. They were then encouraged to provide additional information on their issues, including suggested solutions. Participants then worked in small groups to discuss the priority issues in the watershed. The groups suggested possible solutions to the issues raised, and where possible, identified the geographic location of watershed issues on a large map. All of the rankings and comments were collected and compiled verbatim in a digital format, and are attached to this document.

PUBLIC CONSULTATION RESULTS

Total attendance at the public consultation meetings was 28 (12 in Birch River, 6 in Minitonas, 4 in Benito, and 6 in Swan River). This does not include members of the Project Management Team that were in attendance.

The Project Management Team collected worksheets at the public meetings, through mail-ins and letters and compiled the results displayed below. Each category was ranked using a weighting process that gave six points for each first priority response, five points for each second priority response, four points for each third priority response, three points for each fourth priority response, two points for each fifth priority response and one point for each sixth priority response received. All points were tallied for each category, indicating the overall level of priority.

As a result of the ranking process, Groundwater received the highest priority ranking, followed by Soil Erosion, Surface Water, Flooding & Drainage, Education & Awareness and Natural Habitat (see Figure 2)



INDIVIDUAL COMMENTS FROM QUESTIONNAIRES (VERBATIM)

GROUND WATER

- Ongoing monitoring of ground water quality is the most important aspect. Sustainable use of ground water resources by RMs and Municipalities is important for water conservation.
- Need source water database.
- We depend on this because of the natural cleansing and filtration of the upper layers and vegetation (wells, springs, aquifers).
- A water testing station would be handy and nice in Swan River. (x13)
- Need to test water from wells.
- Continue water testing in Birch River and manage infrastructure, sealing abandoned wells properly, inventory of all abandoned wells, and maybe current wells.
- Continued testing and management for control contamination from unused wells. Improvement.
- We need more knowledge as to how and what is harming our drinking water.
- Encourage farmers to leave some pot holes un-drained to provide habitat, as some areas are just un-drainable.

SURFACE WATER

- Nutrient run off from agricultural/municipal sources can have adverse impacts. Management of riparian areas and streams adjacent to these sources is important for water conservation.
- Protect aquatic ecosystems.
- Water quality testing continued.
- Promote BMP for producers/agriculture.
- Pin point problem areas.
- Rivers, lakes and oceans (ready, quick and easy). Lucky for town they depend on wells.
- Have a concern about livestock being fed along creeks and the manure going down the river in spring runoff.
- Continue regular testing. Probably should be No. 1.
- Runoff water contaminates streams. Quick, high input from towns. Pavement cement surface?
- Chemicals, livestock, and drainage need more control, but with common sense used
- Encourage (financially?) farmers to plant or maintain shelter belts – more and more farmers are removing trees/shelterbelts resulting in increase soil erosion.
- Nutrient run off from agricultural/municipal sources can have adverse impacts. Management of riparian areas and streams adjacent to these sources is important for water conservation.

SOIL EROSION

- Incorporate management practices such as buffer zones along erosion prone areas such as high sloped areas.
- Encourage farmers to plant buffer strips and incorporate BMPs.
- Set up station monitoring at different parts of streams to determine point sources of pollution.
- Erosion of soil by wind/water – grassed waterway
- Wind + water are not the enemy – as end users we had to take responsibility for ditching and planting and ground cover.
- Keeping from erosion in spring runoff by burning at night and keeping the fire in the rows only.
- If we could burn wheat straw at night, the fire would burn only the rows, thus keeping the stubble in the runs, to catch the water, or keep the soil.(x11)
- Would like to be able to burn my straw at night so that the fire does not get away and burn the field black and then it erodes so much.
- Concerned about the wind and water erosion that could be reduced with burning straw at night verses the day when fields tend to burn black.

SOIL EROSION (CONTINUED)

- Allow night time burning w/consideration of humidity and neighbours, towns.
- Vegetation on rocks needed to slow water down. If done well could be a tourist or recreation spot.
- Major issues take priority.
- Is this much of a problem in the valley?
- Allow burning of stubble @ night instead of daytime to prevent the burning of the whole field black – resulting in wind/soil/water erosion. This also helps reduce soil borne disease and may eliminate some applications of fungicide.
- Due to being so far north, we need to burn our straw in fall. Burning in the daytime from 11AM to sundown burns the field to Black

FLOODING & DRAINAGE

- Work with RMs to make sure their infrastructure, such as culverts are up-to-date and functioning.
- Have management plans for each separate RM to fit certain needs.
- Incorporate beaver management in troubled areas.
- Public Awareness
- Flood plains and eager ditching have to be planned more wisely for the long term. Hydraulics isn't so obvious and simple.
- Consider grassing in the highest flow water ways.
- Coming under control.
- Sharp bends to be ~~cut, back slopes to be pulled up to~~
- Control drainage properly and flooding will not be a big problem.
- Ease restrictions on draining farmland- Allowing farmers to work more efficiently, saving time not travelling around potholes, etc which cost's fuel, fert., chemical, etc, which can affect the environment.
- We need to be allowed to do drainage within reason.

NATURAL HABITAT

- Make protection of existing riparian areas a main priority.
- Have riparian enhancement a main focus as well.
- Promote riparian areas → landowner assessments + develop management practices.
- This is the surface – this is where we all live (plants + animals)
- Has to be preserved + protected
- Education
- Preserve all possible. Hard to restore!
- Stop draining wet-land areas.

EDUCATION

- Simply getting people involved in water conservation efforts is the biggest step toward water conservation.
- More education towards public of statues + proposed solution.
- This covers it all, have a clear simple consistent message to awaken people to think + make associations.
- Educating the general public about the importance of conserving our watershed.
- Needs to be through schools and public through partnership with ducks Unlimited, etc.
- Presentation in schools.
- Use post grad students for information.
- Sorry! You can't teach people what they don't want to know.
- Explain to people in urban area's why farmers do what they do – example burning stubble, spraying, draining.

Are there other related issues you see facing the Swan Lake Watershed? What actions would you suggest we focus the majority of our efforts on over the next ten years?

- I think you are over reacting. I don't believe there is a problem, why fix something that's not broke!
- Degradation of water quality from recreational sources (ORVs, camping, etc.)
- Depletion of fish resources from overfishing and removal of spawning areas (Porcupine & Duck Prov. Forest)
- We need to protect waterways and spawning areas
- Work with park officials and Manitoba Conservation to manage resources
- Majority of efforts towards stream bank protection and stabilization
- Co-management with First Nation Groups – educate them
- Chemical damage throughout the whole watershed
- Identify + priorities the most toxic problems to tackle.
- Water sampling at the upper mouth of the Shoal regularly to track what is in the watershed.
- All above Education being a huge start
- Water quality, erosion, flooding – drainage.
- Wildlife habitat.
- Cleaning up our surface water ways.
- To prevent Erosion we need to be allowed to burn our wheat swaths in the evening when the wind dies down.

What programs do you feel are required in the watershed to address these issues?

- Student participation – stream bank stabilization and water quality testing
- Ongoing monitoring of water quality at set stations
- Stream bank stabilization + protection
- Up-to-date infrastructure (culverts, etc.) – BMPs (sediment, blankets, buffer strips, rip-rap)
- Abandon well sealing, cost share ground water testing
- Water sampling and detailed analysis 4 x year at regular stations to establish base line and constant monitoring to graph out cycles + bends to lead to better planning
- Riparian fencing/off site watering, beaver control
- This information should target Landowner maybe through Agriculture programs or forestry open houses or even join in a health seminar
- Research and solution for the best for our land
- Abandoned wells
- Enforced regulations against contaminating our water ways
- We don't understand why we can't burn in the Swan River Valley because of Winnipeg & Brandon. It could also be monitored (evening Burning) due to wind & humidity.

Miscellaneous comments?

- Concerned for Natural Habitat + Awareness

Letter attached to survey outlining following concerns:

- People who feed their cattle on the river ice all winter. I see this when I snowmobile the river in the winter. Is this legal?
- People who own commercial high-clearance AG sprayers who wash off their trucks, trailers and sprayers every summer at the low-level crossing in Harlington with high pressure pumps. Obviously not an angler who eats his catch.
- People who unload treated seed into the river at the same location. After I seen these things it put a halt to my fish consumption downstream from that crossing.
- Pig farmers whose steeply sloped pens/pastures border the Thunder Hill Creek. All that runoff has been happening for the last 60 years.
- These are only things that I have witnessed firsthand; I can only imagine what other atrocities that must be going on in our river. When will we stop using the Swan as a dumping ground? Maybe we need to lay some charges and heavily fine a few of the biggest offenders.

GROUP DISCUSSIONS DURING PUBLIC CONSULATION MEETINGS

GROUND WATER		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Potential contamination from chemicals and animal feces 	<ul style="list-style-type: none"> ➤ Sprayer tank – fill with water and spray back onto field where original chemical was applied. Education & Enforcement? ➤ Offer incentive programming to move livestock away from groundwater and surface water sources ➤ Continue educating – most effective long term plan to make change
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Need inventory of old wells ➤ Residents are not as informed as they <u>need</u> to be on water quality and what may be available for solutions ➤ Need to have staged water quality testing (possibly at time of inventory) 	<ul style="list-style-type: none"> ➤ Education on present groundwater quality, testing and protecting. ➤ Ground water testing & manage improvements ➤ Program in place> sealing abandoned wells properly ➤ Complete GIS inventory of ALL wells ➤ Identify priority wells with close proximity of main drinking water sources (High Priority) and we should do it
MINITONAS	<ul style="list-style-type: none"> ➤ Unknown supply of quality spring fed ground water sources ➤ General hardness concern for quality of water ➤ Insufficient public knowledge on present aquifer status throughout the watershed ➤ Ammonia occurring at higher levels in more populated areas 	<ul style="list-style-type: none"> ➤ Research & mapping of spring water resource, artesian flow ➤ Testing made available through C.D. ➤ Gather information on reasons for increased ammonia levels
SWAN RIVER	<ul style="list-style-type: none"> ➤ Potential contamination 	<ul style="list-style-type: none"> ➤ Gather existing ground water test information from Province, Towns & Villages ➤ Test areas of concern with priority testing program

SURFACE WATER		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Potential contamination from chemicals and animal feces 	<ul style="list-style-type: none"> ➤ Sprayer tank – fill with water and spray back onto field where original chemical was applied. Education & Enforcement? ➤ Offer incentive programming to move livestock away from groundwater and surface water sources ➤ Continue educating – most effective long term plan to make change
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Rain water going directly into storm system and directly into river ➤ Rainfall in urban areas enters rivers faster than from rural land. Instant increased levels and erosion ➤ Quality Issues <ul style="list-style-type: none"> ▪ Salt ▪ Feedlots in lower areas or situated so they drain into rivers/creeks/tributaries 	<ul style="list-style-type: none"> ➤ Education <ul style="list-style-type: none"> ▪ For potential revisions in new developments ▪ Public on what is going down the storm systems ➤ Continued water testing (min. 10 years) and expanded testing where concerns arise <ul style="list-style-type: none"> ▪ Pinpoint issues/areas of concern
MINITONAS	<ul style="list-style-type: none"> ➤ Difficult to get timely water testing done for surface sources such as dugouts ➤ Lack of coordination with entire watershed, i.e.: Saskatchewan side <ul style="list-style-type: none"> ▪ Saskatchewan wants to be part ➤ Education on water sampling is presently very poor i.e. one stop shop ➤ Limited supply of aggregate for required stabilization projects 	<ul style="list-style-type: none"> ➤ Have system in place for ease in getting samples tested to cover normal regime and also for harmful parasites ➤ District pursue negotiations with Municipal partners on Saskatchewan side to coordinate required activities/programming from SLWCD & IWMP ➤ C.D. start a one-stop water testing program (preventative also) ➤ C.D. start securing and stock piling field stone for future management projects
SWAN RIVER	<ul style="list-style-type: none"> ➤ Livestock access – non-confined ➤ Agricultural runoff – chemicals, pesticides & nutrients ➤ Urban fertilizing of yards ➤ Lagoons dumping from second cell into streams/rivers 	<ul style="list-style-type: none"> ➤ BMO programs – extension ➤ Implement stringent & consistent surface water sampling ➤ Spot testing June 1st – August 1st to see potential effect from Agricultural lands ➤ Province has put in regulations on urban lawn fertilizing ➤ Look at alternatives for lagoon dumping into waterways – irrigation, utilize in agriculture

SOIL EROSION		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Not being allowed to burn stubble at night. Shorter window here to incorporate stubble burning compared to areas further south. Burning in heat of day causes fields to burn black, leaving no residue and fields are very susceptible to wind and water erosion. Degrades soil and surface water quality. ➤ Lands in area are fairly highly classified/susceptible to wind and soil erosion- slope 	<ul style="list-style-type: none"> ➤ Allow residents of the Valley to do control burning at night to allow proper control of burn ➤ Have restrictions for evening burning i.e. amount/humidity ➤ At the very least – a pilot project ➤ Valley does not have “inversion” issue ➤ C.D. have map on website that depicts conditions that allow control burning
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Spring Melt or higher rainfall results in faster flows. Melt from mountains and Ag Land coming at closer window (numerous factors effect this) ➤ Riverbank Erosion <ul style="list-style-type: none"> ▪ Natural change in rivers – sharper turns and eventually oxbows ▪ Corners eroding ➤ What is priority? <ul style="list-style-type: none"> ▪ Direct value ▪ Direct negative effect of situation ▪ Public perception- Ensure education on best practice & knowledge 	<ul style="list-style-type: none"> ➤ Grassed waterways (surface water management) ➤ Shelterbelts – promoting/education ➤ Straighten out some sharp turns in rivers to reduce major erosion or rivers changing their path ➤ Do inventory of areas where substantial erosion is occurring on Swan River & Woody River <ul style="list-style-type: none"> ▪ Look at potential solutions and pursue required approvals
MINITONAS	<ul style="list-style-type: none"> ➤ Water moving fast, causing erosion ➤ Stubble burning during daytime burns field black leaving very susceptible to erosion ➤ Lack of education 	<ul style="list-style-type: none"> ➤ Education & Programs ➤ Look at economical/feasible means to slow runoff down ➤ Lobby government to allow controlled stubble burning at night to reduce present damage(soil erosion) <ul style="list-style-type: none"> ▪ CD establish best management for night burning i.e. humidity ➤ Grassed waterway program to slow erosion and reduce flow/nutrient ➤ BMPs for lands along waterways and wetlands ➤ Partnerships with organizations that promote wetlands (DU) or riparian areas i.e. MHHC, cows & fish ➤ Programs to promote wooded buffers

SOIL EROSION (Continued)

SWAN RIVER

- Reduced forest fires - decreased carbon getting into water
- Constant erosion & sediment moving into streams/creeks/rivers

- What effect is there from decreased forest fires and decreased carbon
- BMPs to reduce soil erosion and changes to day time stubble burning to reduce soil erosion
- Review air photos to assess sediment loading in Swan Lake
- Slow down flows:
 - Restore wetlands where possible
 - Structures to slow flow
 - Grassed waterways
 - What % reduction would be required to make positive improvement

FLOODING & DRAINAGE		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Beavers & dams creating stagnant water lowering quality and when large rainfall events break dams causing severe erosion issues. 	<ul style="list-style-type: none"> ➤ Beavers <ul style="list-style-type: none"> ▪ Education ▪ Proper management-subsidize more than present to reduce problem beavers
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Swan/Woody/Birch Rivers <ul style="list-style-type: none"> ▪ Increased drainage over time by Province, Municipalities & Landowners 	<ul style="list-style-type: none"> ➤ Major issues need to be addressed to deal with flooding concerns on lower reaches of 3 main rivers ➤ Need buy in from all Departments and Levels of government ➤ Provide venue for local input to technical analyzing of particular Flooding/Drainage situation to arrive at "BEST" solution ➤ Need a one-stop-shop to get assistance with logical process
MINITONAS	<ul style="list-style-type: none"> ➤ Water flow from spring runoff or major rainfall events causing flooding along rivers & streams ➤ Lower lying areas continually flooding 	<ul style="list-style-type: none"> ➤ Drop structures – costly – need extensive involvement of Provincial and Federal Governments ➤ Province increase investment in drainage flow control structures vs. cut back ➤ Inventory of drainage system in watershed to prioritize drop structure req. ➤ Land-use changes in low lying areas
SWAN RIVER	<ul style="list-style-type: none"> ➤ Beavers are big issue and is increasing ➤ Possibly not enough coordination between various disciplines in charge of drainage 	<ul style="list-style-type: none"> ➤ Nuisance Beaver program needs to adapt to increased beavers, less trappers & no price for pelts ➤ C.D. look at options in surface water management plan for coordination or potential solutions

NATURAL HABITAT		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Grassed willow runs are being developed 	<ul style="list-style-type: none"> ➤ Grassed waterway incentive program by C.D. <ul style="list-style-type: none"> ▪ Education on proper BMPs until established
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Land – use within Riparian areas changing and these areas comprise large portion of natural habitat remaining in ag. area <ul style="list-style-type: none"> ▪ Clearing for continuous cropping ▪ Clearing for permanent forage ▪ Grazing for livestock ▪ Recreational activity ▪ Residential (rural) ➤ Loss of Riparian areas 	<ul style="list-style-type: none"> ➤ Education of uses within Riparian areas that can be beneficial for landowner and Riparian area ➤ Establish partnerships with groups that are involved in programs to manage natural habitats i.e. - Ducks Unlimited, cows & fish, MHHC ➤ Inventory of areas with significant value and ways to protect.
MINITONAS	<ul style="list-style-type: none"> ➤ Natural habitat is reducing ➤ Awareness of what are natural habitats and for whom, why & what is important for the watershed ➤ Value of wooded areas along Riparian areas is not recognized. ➤ Lack of education on “Natural Habitat” 	<ul style="list-style-type: none"> ➤ Education on value of particular areas vs. present proposed use ➤ Economical and sustainable management BMPs required ➤ Partnerships with organizations to protect/enhance areas ➤ C.D. have resources readily available to residents on options
SWAN RIVER	<ul style="list-style-type: none"> ➤ Heritage Resources areas not being considered in management and development 	<ul style="list-style-type: none"> ➤ Compile inventory of Heritage Resources/sites: Presently ongoing ➤ Ensure that Heritage Resources are considered in all development plans and fully recognized in the IWMP

EDUCATION		
	ISSUE(S)	SOLUTION(S)
BENITO	<ul style="list-style-type: none"> ➤ Not enough ➤ C.D. program not visible enough. 	<ul style="list-style-type: none"> ➤ Work with schools ➤ C.D. needs to be more public ➤ Education to sub-districts & partners ➤ Not enough funds allocated to make real change ➤ Look at opportunities, i.e. Welcome Wagon ➤ Website ➤ C.D. should have 1-800# that is private for callers to report issues or concerns
BIRCH RIVER	<ul style="list-style-type: none"> ➤ Lack of 	<ul style="list-style-type: none"> ➤ Better dissemination of information ➤ Newsletter (insert in a mail out) ➤ Newspaper – Star & Times and PQ ➤ Partner in local seminars ➤ Public school system ➤ Source funding to have University students research particular priority area as master thesis – everyone wins!
MINITONAS	<ul style="list-style-type: none"> ➤ Younger children are not as informed as they need to be to manage the watershed ➤ Landowners not aware of consequences of field erosion to downstream 	<ul style="list-style-type: none"> ➤ Education of healthy vs. degraded or disturbed ecosystems to young (SHOW!!!) ➤ Education to get people thinking on sub-watershed and overall watershed health/sustainability ➤ BMPs for healthy watershed information on not just doing but re-doing or maintaining ➤ Must be willing to make changes to management for the health of the watershed i.e. preserving grassed waterways by mapping and turning off sprayer off to maintain vegetation.
SWAN RIVER	<ul style="list-style-type: none"> ➤ Younger children are interested in various aspects of water (critter dipping, etc) ➤ It is harder to get the 14+ age 	<ul style="list-style-type: none"> ➤ Kids bring parents to events ➤ Tours for landowners of BMPs ➤ Adopt a river <ul style="list-style-type: none"> ▪ Get external ➤ Yellow Fish <ul style="list-style-type: none"> ▪ Continue ▪ Kids name on the fish from last program CD did and re-paint each year. ▪ More follow-up