

West Souris River Watershed – WCSM comments

1. What water control structures (including drains and dams) are within provincial jurisdiction in this watershed?

- Pipestone Creek
- Pipestone Creek Diversion
- Belleview Drain
- Plum Creek
- Oak Lake Dam
- Maple Lake Drain
- Ross Dam and Reservoir
- Snyder Dam
- Napinka Dam and Reservoir
- Hartney Dam and Reservoir
- Souris Dam

2. What major works are planned with respect to infrastructure in this watershed?

There are no major works planned currently in this watershed. However, IWMP may suggest major projects for implementation.

3. Is debris in creeks and streams a major cause of flooding in this watershed?

This could be one of the causes of flooding. It is a problem that does occur on many creeks and streams. Other major causes of flooding could be under capacity drains, erosion sediments deposits, and no maintenance of drains for decades. This issue could be investigated for streams where there are major flooding problems.

4. Where are the priority flood-related problems in this watershed?

From the draft IWMP, it reflects that most of the priority flood-related issues are in the northern half of the watershed.

WCSM suggests having a meeting with all RM foremen to further refine the list of problems and to draft some tentative solutions.

5. Where in the Watershed does it make sense to hold back water to reduce the impact of flood events?

Retention should be upstream in the western part of the watershed. cursory assessment indicates that the retention areas are in the upland due to topography.

6. It has been suggested that a large dam at Cromer alleviate flooding problems on Pipestone Creek and Plum Lakes and help to enhance Oak Lake. Can you provide comments related to this project?

An initial cursory assessment could be done by regional staff, who have specific knowledge of that area.

Water Supply

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.

Solutions

- Small water retention dams (retain water during wet times for later use) – *small dams shown to be effective in other areas, but they require feasibility study in each case to determine costs, benefits, and impacts.*
- Dam on Pipestone Creek @ Cromer (with no cottage development on the reservoir) – *require feasibility study*
- Extension of rural water pipelines across the watershed – *Office of Drinking Water*
- More control of upstream dams in Saskatchewan & U.S.A. – *Project Management Team*
- Increased drainage into creeks and streams – *Hydraulic analysis would be required to assess downstream and environmental impacts*
- Metering of all commercial & industrial water withdrawals – *Water Use Licensing*
- Exploration of new groundwater sources (e.g. Pierson Valley) – *Ground Water Branch*
- Water co-op in rural areas & community wells – *Office of Drinking Water*

Water Quality

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.

Solutions

- Small dams - *small dams shown to be effective in other areas, but they require feasibility study in each case to determine costs, benefits, and impacts.*
- Livestock exclusion fencing & offsite watering – *good idea*
- Increasing flows/ raise water levels of Oak Lake (dilution) – *require more information to comment*
- Grassed waterways/riparian buffers – *Grassed shown to be very effective to erosion control. Assessment at each site should be undertaken to determine feasibility.*
- 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

Flooding

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.

Solutions

- Small water retention dams to control and reduce runoff - *small dams shown to be effective in other areas, but they require feasibility study in each case to determine costs, benefits, and impacts.*
- Large dam at Cromer to control runoff on Pipestone Creek/Oak Lake - *require feasibility study*
- Retain wetlands and natural areas
- Installing gates & controls on culverts – slowing runoff & increasing in-stream storage – *can be effective in reducing runoff volumes. But all stakeholders should be involve to make sure there aren't negative impacts. There may be potential conflict between upstream and downstream landowners.*
- Better drainage and flood protection for agricultural lands (*need to assess case by case basis*) – strict delineation of agricultural lands and natural areas – (*could be beneficial to focus drainage where preservation work needed in natural areas*)

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.

Solutions

- Compensate landowners to preserve and/or restore natural areas – *good idea*
- RMs (who are members of a CD) should not do custom clearing of sloughs
- Educate landowners on the benefits of natural areas - *support*
- Environmental checklist for oil companies when drilling
- Build and replace small dams - *require feasibility study in each case in each case to determine costs, benefits, and impacts.*
- Remove dead trees from the beds and banks of streams (to allow for recreation) – *need to consider environmental and fisheries impacts.*

Groundwater Recharge & Groundwater Protection

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.

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

Aquatic Ecosystem Health

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.

Solutions

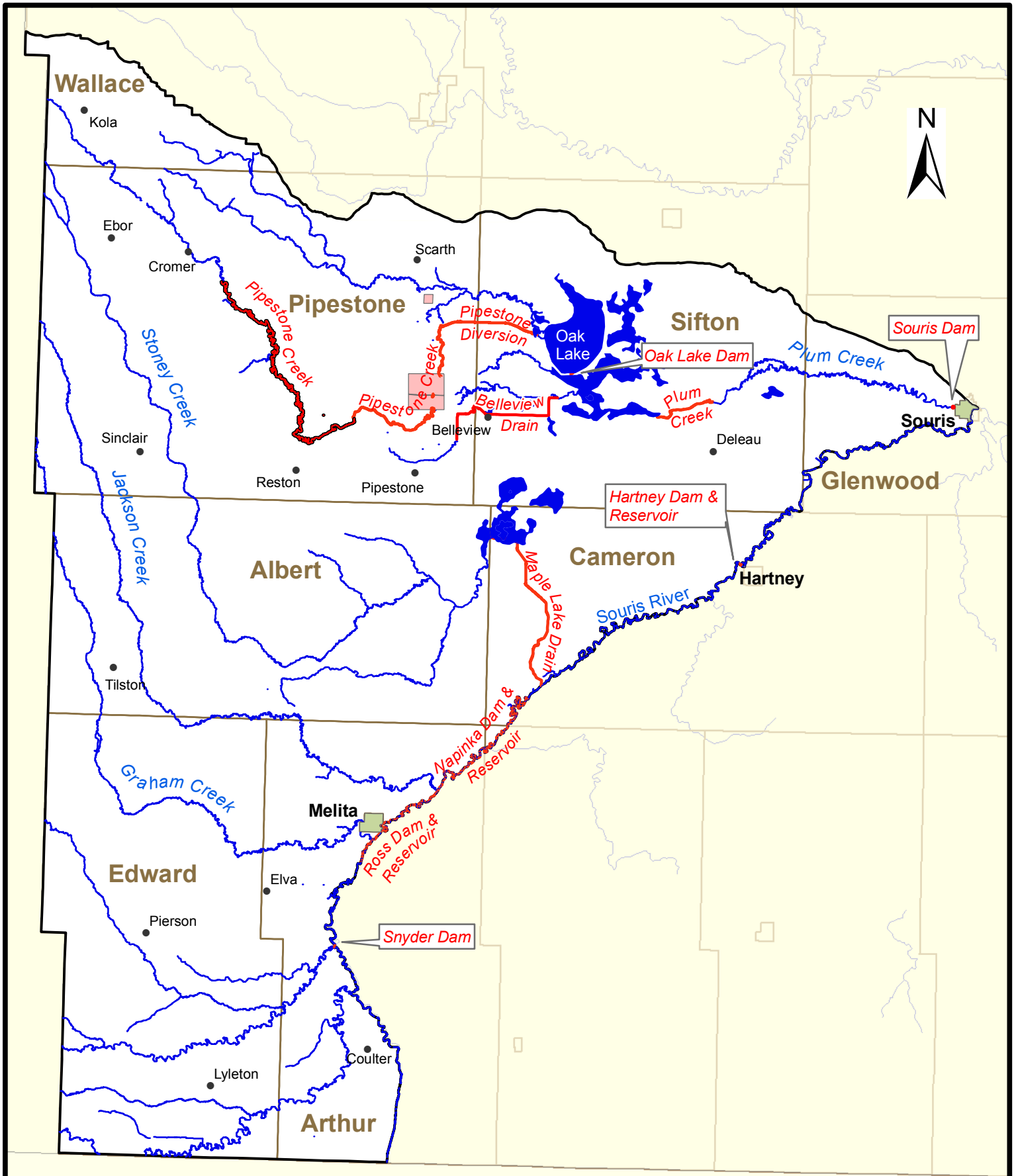
- Construct fish ladders at obstructions on streams (where appropriate) – *can be very beneficial. Need to assess case by case basis. In some cases, stepped pool and riffle could be more economically feasible.*
- Regulate water levels on streams through the construction of dams
- Aeration projects
- Maintain riparian health and water quality

Cross-Border Issues

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.

Solutions

- Build a dam under local control in Manitoba (i.e. Cromer Dam on Pipestone Creek) - *require feasibility study*
- Greater cooperation/agreements with Saskatchewan & USA on dam operation and control



West Souris River Watershed Including Provincial Waterways

- Provincial Waterways
- Provincial Waterways Excluding bridges and crossings

