

Chapter 8.0 Recommendations







State of the North Saskatchewan Watershed Report 2005 A Foundation for Collaborative Watershed Management

State of The Watershed Report

8.0 RECOMMENDATIONS

The following recommendations are a result of report data analysis, NSWA member and public comments, examining the needs of future State of the Watershed Reports and information required for wise use and management of the North Saskatchewan Watershed. These recommendations are for the review and consideration by NSWA members, NSWA partners and watershed stakeholders. The recommendations are:

- i. To support municipal government initiatives that promote wise use and management of their portion of the watershed such as urban sustainability initiatives (Smart Growth), conservation planning, riparian area protection zones, wetland restoration and upgrades to wastewater and stormwater treatment.
- **ii.** To encourage municipal governments to incorporate watershed function in planning and development policy reviews. Riparian areas, native and perennial tame vegetation, and wetlands are key elements in watershed protection. The NSWA should work with and encourage municipalities to develop and implement land use policies that protect these features.
- **iii.** To discuss with the federal, provincial and municipal governments the provision to the public of digital data collected and created with public dollars. A major constraint of this project was obtaining digital data from government and the lengthy process that this required.
- **iv.** To encourage the federal, provincial, municipal governments and Non-government Organizations (NGO's), industry and others, to undertake a review of their respective non-digital data sources and translate these to georeferenced digital data for the purpose of GIS layer completeness (i.e. water quality and fisheries data).
- v. To create a water quality working group to identify all agencies and volunteer organizations currently collecting water quality information in the watershed to ensure that monitoring efforts are adequate to address watershed health. This could be accomplished through a series of workshops or forums. This group could also share water quality data and ensure a consistent approach to data collection, and create a water quality report using existing data from throughout the basin. This would have value in further understanding the watershed's water quality not based solely on the Alberta Surface Water Quality Index (ASWQI).
- vi. To encourage the provincial government and research organizations to systematically assess a suite of biological indicators in order to properly evaluate this aspect of watershed health. Alternatively, the NSWA should consider an initiative to collect biological indicator data that were absent from this report.
- vii. To work with the Cows and Fish Program, and other riparian assessment experts, to develop a collective GIS-based riparian assessment process that is objective, universal, unconstrained by sharing issues and more accessible to the public. As a component of this, the NSWA should consider undertaking a thorough review of acceptable riparian buffer widths for all land uses, and determine best practices to be consistently incorporated into government land management practices and policies.
- viii. To gain a better understanding of the cumulative impact of land disturbance, comprehensive assessments of provincial river basins should be a component of the province's 'state of the environment' reporting.









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- **ix.** To work with other Watershed Planning and Advisory Councils on adopting a consistent wetland classification system and scale (e.g. Stewart and Kantrud or Cowardin) to be used throughout the province. The NSWA should then encourage and support conservation groups and agencies to collect wetland digital data using this consistent classification system.
- x. To undertake with other agencies and partners a comprehensive wetland resource inventory, including drained wetlands, as a key component of a complete land use inventory for the North Saskatchewan Watershed. This is an essential tool that would enable planners to effectively address source water protection, water storage and restoration needs in the watershed. A priority for the inventory would be areas of medium to high agricultural intensity and land drainage.
- **xi.** That the provincial government develop and implement a Wetland Policy through the Alberta Water Council that effectively addresses both wetland loss and restoration.
- **xii.** To encourage the province and research organizations to undertake research in the area of glacier recession and snow pack change in the North Saskatchewan Watershed. This research should then be linked to climate change models for predictive scenarios.
- **xiii.** To encourage and support the province to fund groundwater quantity and quality assessments for major groundwater sources in the watershed. This should include an assessment of groundwater quantity to ensure adequacy and scale of existing data.
- **xiv.** To support and encourage federal and provincial governments to continue to invest in research of emerging issues such as waterborne human and livestock pharmaceuticals. Research should focus on beneficial management practices to decrease their concentrations at the source (such as livestock waste and municipal wastewater treatment facilities) and increase proper disposal.
- **xv.** To encourage all levels of government to support and promote management practices that result in increased biodiversity in the watershed.
- **xvi.** To develop a system to record and track improvements to watershed protection and continue to evaluate the effects of these improvements through regular state of the watershed reporting.
- **xvii.** The indicators of watershed health used in this study were selected and ranked by the NSWA. NSWA should re-evaluate these indicators based on the current report for relevance, and encourage the focus of future data collection efforts by all partners in the watershed, where data gaps have been identified.
- xviii. In future 'State of Watershed' reporting, the impact of resource extraction practices needs to be assessed relative to watershed health.





