



Watershed Management Planning for the North Saskatchewan River Basin

Annual General Meeting
Edmonton
June 16, 2010

Why Develop an IWMP

Mandated by Government of Alberta under:

Water For Life Strategy (2003)

Three strategic goals and outcomes reconfirmed in

Water For Life, a Renewal (2008)

- Safe, secure drinking water supply
- Healthy aquatic ecosystems
- Reliable, quality water supplies for a sustainable economy

Purpose of the IWMP

- To provide stakeholders with recommendations to maintain and improve the North Saskatchewan Watershed. It will present goals, objectives and actions that reflect the current understanding of the optimum balance among environmental, social and economic needs and interests that span the length and breadth of the watershed and its sub-watershed regions.

Objectives of the IWMP Process

- Develop strategies to sustain drinking water, aquatic ecosystems and quality water supplies for the economy
- Identify land-use practices that impact water resources and develop strategies to reduce negative impacts
- Identify critical gaps in watershed knowledge and identify agencies or programs to address them
- Consult with stakeholders so the plan will meet environmental, social, economic needs and interests

IWMP Process to Date

- 2001 - 2007: characterize watershed, SOW report, identify issues (community cafes), background studies and research, initiate planning
- 2008 - 2009: further identification of issues, complete background studies (e.g. water quality objectives), stakeholder engagement, begin preparation of plan
- 2010 onward: complete draft plan, extensive stakeholder engagement, develop recommendations and strategies to meet objectives, submit draft plan to Alberta Environment and other stakeholders

Issues Identified by Stakeholders

- Protect water quality for human use and aquatic ecosystem: mainstem, tributaries and lakes
- Protect water quantity for aquatic ecosystem
- Maintain fisheries
- Health of riparian areas
- Quality and quantity of ground water impacted by oil and gas exploration and development
- Loss of wetlands
- Cumulative effects of municipal and industrial expansion, and land-use changes

What the Research Told Us - Mainstem

- Water quantity in the NSR for current and future use (i.e. < 3% used) is not at risk as a priority issue but on-going in-stream flow needs should be examined
- Upstream of Edmonton, water quality is relatively good, but shouldn't be degraded further if we want to sustain current and future uses
- Downstream of Edmonton, water quality has been improved for many parameters, should be improved for a few others and should not be allowed to degrade further

What the Research Told Us – Watershed

- Water quality in the major tributary sub-watersheds is impacted by land use and management, resource development practices and construction of stream crossings
- Future growth without changing current practices will degrade water quality and aquatic ecosystem health further
- Drainage of wetlands and loss of riparian habitat leads to degradation in water quality and other effects

What the Research Told Us – Ground water

- We need a lot more information and research
 - on the importance of recharge function of foothills region
 - to delineate aquifers and recharge areas across the watershed; on quality and quantity of ground water
- Need to identify and protect recharge zones for shallow aquifers
- More consistent monitoring is required
- Need to consider the impact of industrial resource development on groundwater supplies

What Water Quality Policy Tells Us

- Current policy of *no further degradation* in water quality is supported by CCME, Alberta Environment and the Canada, Alberta, Saskatchewan, Manitoba “Master Agreement on Apportionment”
- NSWA is proposing to continue this policy through “Proposed Site-Specific Water Quality Objectives for the Mainstem of the North Saskatchewan River”
 - Work together to maintain and improve quality in face of continued growth and development

What Will the IWMP Contain?

- High level goals of what we want to achieve in the watershed
- Objectives that must be met to achieve the goals – implications and conditions for how we operate in the watershed
- Actions, strategies and best practices – detailed statements of who does what to achieve the objectives

Next Steps

- Complete first draft plan by the end of July
- Extensive stakeholder engagement through fall and winter
- Complete IWMP by March 2011
- Submit plan to Alberta Environment and other stakeholders for implementation
- Monitoring of plan implementation
- Undertake sub-basin planning with local watershed groups
- Ongoing education, communication and information exchange
- Advice, assistance and support to users of the IWMP