

NSWA Perspective on North Saskatchewan River Water Resource Planning



North Saskatchewan Watershed Alliance

Canadian Water Resources Assn
Industrial Heartland Workshop
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Presentation Outline

- ◆ NSW & Integrated Watershed Management Planning (IWMP)
- ◆ Industrial Heartland (IH) Water Management Framework
- ◆ Issues & Challenges

What is NSWA?

- ◆ Non-profit organization of stakeholders concerned with the NSR watershed, formed in 1999
- ◆ The Watershed Planning Advisory Council (WPAC) for NSR under Water for Life since 2005
- ◆ Implementing the Shared Responsibility / Partnership model for watershed management


How Does NSWA Operate?

- ◆ Broad membership: government (Federal, Provincial, municipal), First Nations, NGO's, industry, agriculture, forestry, utilities, ...
- ◆ Small staff, use both voluntary (stakeholder) and contracted resources
- ◆ Stakeholder funded (WFL currently largest source)

NSR Watershed Planning

- ◆ Authorized by Alberta Environment to prepare an *Integrated Watershed Management Plan (IWMP)* for NSR
- ◆ IWMP Terms of Reference 2005
- ◆ IWMP Steering Committee of stakeholder representatives to direct the process

Watershed Reports

- ◆ State of the North Saskatchewan Watershed
 - ◆ IFN Scoping Study
 - ◆ Current & Future Water Use
 - ◆ Water Supply Assessment
 - ◆ Climate Change Effects on Supply
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NSWA IWMP Overview

- ◆ Identify NSR issues and concerns (basin-wide)
- ◆ Develop environmental indicators and objectives (water quality, IFN, ...)
- ◆ Develop modelling/forecasting capability
- ◆ Engage all stakeholders in watershed planning to meet objectives
- ◆ Timeframe – 2010

Industrial Growth Pressures

- ◆ AENV moving toward managing cumulative environmental effects
- ◆ Many new upgraders & petrochemical plants proposed in IH
- ◆ IH became a CEM priority
- ◆ Set targets for environmental quality: air, land, water & biodiversity

IH Water Management Framework

- ◆ Developed by a joint AENV, industry, municipal, NSWA committee
- ◆ Focused on the Devon – Pakan reach only
- ◆ Recognized limits to water withdrawal and wastewater discharge to the NSR in this reach
- ◆ Announced October 2007

IH WMF Concepts

- ◆ No further NSR degradation, future improvement
- ◆ Municipal effluent recycled for industrial water supply
- ◆ Minimize existing & future municipal & industrial waste discharge to NSR
- ◆ Include existing industry in the Region
- ◆ Integrated regional system, phased in, fully implemented by 2041

IH WMF Implementation

- ◆ Steering Committee (GoA-chair, NCIA, SIA, NSWA)
- ◆ Actions:
 - Baseline Science – River and discharge information, evaluate concepts
 - Engineering – concept systems and costing
 - Governance & Finance
 - Communications

Issues

- ◆ IH CEM water planning overlaps NSW IWMP mandate
- ◆ Complex interface with AENV (Central & Northern Regions, WFL, IH WMF)
- ◆ CEM being built into Land Use Framework Planning
- ◆ Current economic reality

Challenges

- ◆ New approach to watershed planning - still evolving
- ◆ Get active participation of all stakeholders (capacity & \$)
- ◆ Clarifying roles and responsibilities of AENV, NSWA, IH WMF Steering Comm., & others

Challenges

- ◆ Align IWMP (basin-wide including non-point sources) with IH WMF (limited scope – industrial and municipal point sources)
- ◆ Link to LUF Plans (Capital & North Saskatchewan Regions)
- ◆ Optimize use of resources

Conclusion

- ◆ BOTH THE IWMP AND THE IH WATER MANAGEMENT PLAN ARE NEEDED TO MANAGE THE NSR WATER RESOURCE, and
- ◆ ALIGNMENT IS ESSENTIAL