

Developing Collaborative Planning Partnerships: Final Report



March 31, 2010

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The North Saskatchewan Watershed Alliance (NSWA) is a non-profit society whose purpose is to protect and improve water quality and ecosystem functioning in the North Saskatchewan River watershed in Alberta. The organization is guided by a Board of Directors composed of member organizations from within the watershed. It is designated the Watershed Planning and Advisory Council (WPAC) for the North Saskatchewan River under the Government of Alberta's *Water for Life Strategy*.

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EXECUTIVE SUMMARY

As a Watershed Planning and Advisory Council (WPAC), the North Saskatchewan Watershed Alliance (NSWA) has been mandated by the Government of Alberta (GoA) to develop an Integrated Watershed Management Plan (IWMP) for the North Saskatchewan River Watershed as a means of achieving the outcomes identified in the *Water for Life* Strategy.

Water for Life requires WPACs to develop their IWMP through a process of collaborative planning that engages four sectors:

1. **Industry:** chemical and petrochemical, forestry, irrigation/drainage districts, livestock, mining, oil and gas, power generation.
2. **Non-government organizations:** environmental, fishery habitat conservation, lake environment conservation, wetland conservation.
3. **Government of Alberta and provincial authorities:** Alberta Agriculture and Food, Alberta Economic Development Authority, Alberta Energy, Alberta Environment, Alberta Health, Alberta Science and Research Authority, Alberta Sustainable Resource Development.
4. **Other government:** federal, First Nations (one representative for each Treaty area), large urban, Métis Settlements, rural, small urban.

In December 2009, **Abells Henry Public Affairs** submitted a report to the NSWA outlining recommendations for a collaborative planning engagement strategy, supported by a communications strategy and work plan.¹ Following the recommendations contained in this report, the NSWA agreed to:

1. Shift the NSWA's IWMP engagement strategy from an approach that considers the entire watershed as a single region and engages each of the four sectors identified above separately on a region-wide basis, to one where the watershed is divided into three sub-regions (Headwaters, Central and Downstream) with community leaders from all four sectors invited to participate, so they can work together as a cross-sectoral planning team in each of the sub-regions.
2. Hold one cross-sectoral **IWMP collaborative planning forum** every three months in each of the sub-regions of the watershed until the IWMP report is ready to be submitted to GoA. (A total of 15 forums; three in each of March, June, September, December 2010 and March 2011.)
3. Add a new section to the NSWA website to provide all forum participants, NSWA members and the public with access to all information, presentations and reports prepared for these forums. This website section will be interactive, offering visitors the opportunity to not only read the information, but to join the discussion by sending their comments and feedback to NSWA for inclusion in the collaborative planning process.
4. Develop brief Coffee Shop Discussion Papers (1-2 pages only) as a way of being responsive to the information needs of forum participants. Their purpose is to interpret complex scientific information in a form that is readily accessible and interesting to a general audience.

¹ Abells Henry Public Affairs. *Developing Collaborative Planning Partnerships*. Prepared for the North Saskatchewan Watershed Alliance. December 2009.

5. Attend conferences, trade shows and community events to promote the NSWA and its efforts to protect the watershed, including the IWMP, directing people to the website to participate in the discussion.

This report focuses on the implementation of this collaborative planning strategy from December 2009 to March 2010. The first section describes in detail the decision making framework the NSWA has developed to support its collaborative planning process. The second section describes the steps taken to implement the collaborative planning strategy.

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ACKNOWLEDGEMENTS

The NSWA wishes to thank Susan Abells and Mike Henry of Abells-Henry Public Affairs for their diligent work on this report. Valuable comments on the draft report were brought forward by members of the NSWA Board of Directors and the Integrated Watershed Management Plan Steering Committee.

1.0 Section One: Decision Making Framework

1.1 GoA's legislative and policy framework

In their December 2009 report, the consultants described the challenging policy and planning context facing organizations tasked with implementing collaborative planning processes. In their report, the consultants reviewed the evolving policy and planning context within GoA, including:

- The *Water for Life* Strategy (2003).
- The renewal of the *Water for Life* Strategy, and the Alberta Water Council's emphasis on shared governance and its recommendations for a watershed management planning framework (2008).
- The Land-use Framework (LUF) adopted in 2008.
- Enactment of the *Alberta Land Stewardship Act* (ALSA) in the spring of 2009, which requires cumulative effects management in regional planning.

Recognizing the challenges stakeholders face understanding their roles, responsibilities and accountabilities associated with the concepts of shared governance and shared responsibility identified in *Water for Life* and LUF, the consultants highlighted the synergies between all of these GoA initiatives, and how they work together to create a policy framework to support collaborative planning vertically between scales (federal/provincial/regional/local) and horizontally between sectors.

Recent reports from the Canadian Institute of Resource Law (CIRL)² remind us, however, of the continuing challenges organizations like the NSWA face when trying to respond to the mandate of developing an IWMP. These reports emphasize that while collaborative watershed planning has been adopted by GoA as a method of managing water and land in an integrated way, there is as yet no statutory framework in place to support the adoption and implementations of such plans.

Several attempts have been made by the Alberta Water Council to clarify the role of WPACs and how an IWMP resulting from such a collaborative planning approach might be implemented.³ However, endorsement or approval of these plans by GoA and other stakeholders remains voluntary; there is currently no legislative obligation for stakeholders in the watershed to implement an IWMP, even if the IWMP is approved by GoA.⁴ Therefore, the concept of accountability embedded in the notions of shared governance and shared responsibilities remain "more of a moral than legal nature."⁵ In the shared governance model, "each party to the partnerships' decisions assumes responsibility for implementing them through its own legal authority."⁶ The Alberta Water Council, in its report on *Recommendations for a Watershed Management Planning Framework*, also states that the WPACs "must have a process for sign-off. That is, members must have a way to indicate they agree to the plan's

² Wenig, Michael R. *Understanding Local Alberta's Role in Watershed Planning – Will the Real Blueprint Please Step Forward?* Canadian Institute of Resource Law, CIRL Occasional Paper #28, February 2010;

Unger, J. *Consistency and Accountability in Implementing Watershed Plans in Alberta: A Jurisdictional Review and Recommendations for Reform*. Canadian Institute of Resource Law, December 2009.

³ The Alberta Water Council. *Strengthening Partnerships*. September 2008.

<http://www.albertawatercouncil.ca/Portals/0/pdfs/SharedGov%20-%20Strengthening%20Partnerships%20FINAL.pdf>

The Alberta Water Council. *Recommendation for a Watershed Management Planning Framework*. December 2008.

<http://www.albertawatercouncil.ca/Portals/0/pdfs/SharedGov%20-%20Watershed%20Management%20Plan%20FINAL.pdf>

⁴ As Wenig (2010, p. 18) describes it, "these roles are not "captured in legislation", therefore the partnerships have a "challenge" in trying to implement their decisions "in areas in which they have no authority"."

⁵ Wenig (2010, p. 19)

⁶ Wenig (2010, p. 18)

recommendations and actions, and can endorse it and eventually implement the actions assigned to them in the plan.”⁷ To acquire such endorsement, the Alberta Water Council strongly encourages WPACs to use consensus in their decision-making process. However, even if WPACs use a consensus model of decision making and acquire the endorsement of a wide cross-section of their stakeholders, without a supporting statutory framework, the plans are not legally binding.⁸ In the absence of such a framework, the NSWA has developed a decision-making framework that works within its own legal authority.

1.2 NSWA’s Decision-Making Framework

As a non-profit organization constituted under the *Societies Act*, the decision making framework developed by the NSWA conforms to the society’s by-laws. First, it is important to note that although the shared governance model requires a commitment to consensus decision making, the NSWA Board has decided to use a majority principle (50%+1).

In 2007, the NSWA Board conducted a workshop to develop its own framework for developing an IWMP, which includes a table outlining the decision making process.⁹ Here, the NSWA’s Board of Directors is identified as being accountable to its members for ensuring that when the NSWA’s Steering Committee develops the IWMP:

1. GoA water requirements (such as instream flow needs, water conservation objectives, and water transfer/allocation requirements) are known, so that any recommendations of the IWMP meet these requirements.
2. NSWA requirements (such as guiding principles, use of the plan, fiduciary concerns and procurement guidelines) are specifically identified and met.
3. The work of the IWMP Steering committee, including the initial outline (Table of Contents) and the work plan, is approved to ensure they meet the NSWA and GoA requirements (AENV will be asked to review the Table of Contents and work plan to ensure GoA requirements have been met).
4. The budget is approved and resources are allocated based on the work plan, or requests resulting from the work plan.
5. Drafts of the IWMP are reviewed, to ensure requirements are being met.
6. Recommendations to GoA in the form of a final IWMP are made.

The role of the NSWA’s IWMP Steering Committee is to:

1. Develop and approve an outline of the plan (Table of Contents) for approval by the NSWA Board.
2. Develop a work plan for approval by the NSWA Board.
3. Draft the IWMP according to the Steering Committee’s 2005 Terms of Reference, which include: major steps or phases; sources of expertise; consultation plan; communications plan; training, technical skills; drafting of the plan; review/revisions process; verification.
4. Direct the work of preparing a draft of the IWMP, including consultation with stakeholders and experts.

A Technical Committee of scientists/experts is also identified as overseeing data, studies and technical information to ensure quality control of scientific information used to inform the IWMP.

⁷ The Alberta Water Council. *Recommendation for a Watershed Management Planning Framework*. December 2008, p. 25.

⁸ Wenig (2010, p. 22)

⁹ McMillan, W. Equus Consulting. *Integrated Watershed Management Plan Framework Session*. North Saskatchewan Watershed Alliance. February 21, 2007.

1.3 The role of stakeholders in developing the IWMP

At the time this decision making framework was developed (2007), the NSWA was considering establishing Regional Advisory Committees (RACs) comprised of stakeholders from the North Saskatchewan River watershed to provide advice, support, local knowledge and networking. The role of these RACs was envisioned to be purely advisory. They were not assigned any decision-making authority.¹⁰

The current sub-regional/cross-sectoral IWMP collaborative planning forums can be considered similar to the envisioned RACs. Participants in these forums are asked to provide the same services (advice, support, local knowledge and networking), and are not assigned any decision-making authority.

For this IWMP collaborative planning process, *stakeholders* are defined as:

- Community leaders participating in the IWMP collaborative planning forums.
- NSWA members engaged in the collaborative planning process through their online participation, where they provide comment and feedback through the NSWA website.
- Any member of the public engaged in the collaborative planning process through their online participation, where they provide comment and feedback through the NSWA website.

1.4 The NSWA's Commitment to Public Participation (The IAP2 Process)

Consultant's Recommendation:

Because NSWA is not assigning decision making authority to stakeholders, the level of public participation the NSWA should be prepared to commit to (from an IAP2 perspective) is to INVOLVE them. This is interpreted as a commitment:

- To work directly with stakeholders to ensure their concerns and aspirations are consistently understood and considered (based on the IAP2 Public Participation Goal for the level INVOLVE).
- To work with stakeholders to ensure their concerns and aspirations are directly reflected in the alternatives developed and to provide participants with feedback on how their input influenced the recommendations included in the IWMP (based on the IAP2 Promise to the Public for the level INVOLVE).

Therefore, the role of stakeholders is to consider IWMP recommendations (in the form of goals, objectives and actions) drafted by the IWMP Steering Committee. Stakeholders will be asked to consider the implications/impacts such recommendations may have on the way they currently live and do business in the sub-region. They will then be asked if they can support these statements, or if they have alternatives they would like to suggest.

¹⁰ North Saskatchewan Watershed Alliance. *Integrated Watershed Management Plan Framework Session*. February 21, 2007.

1.5 The decision making framework within the public participation process

Based on this IAP2 level of public participation (INVOLVE), the NSWA will work to ensure the following decision making process is implemented throughout the IWMP collaborative planning process:

- Work with stakeholders to craft a clear statement (goal/objective/action) that reflects their values.
- Work with stakeholders to identify information that will be considered, as well as share and explain all information and sources considered.
- Work with stakeholders to identify criteria that reflect their values.
- Work with stakeholders to develop alternatives that meet the stated criteria and incorporate their values and concerns.
- Work with key stakeholders to evaluate alternatives.
- Use results of this evaluation to prepare a final draft of the IWMP recommendations.
- Announce the IWMP recommendations and clearly describe the rationale used and how stakeholder input influenced the result.

The following section describes in detail steps taken to implement NSWA's IWMP Collaborative Planning process.

2.0 Section Two: Implementation of the IWMP Collaborative Planning Process

2.1 Step 1: Engaging Rural Municipalities

The NSWA collaborative planning effort to engage stakeholders in the development of the IWMP for the North Saskatchewan River Watershed began with the engagement of rural municipalities. NSWA initiated meetings with this sector in February 2009.¹¹ Representatives from 16 of the 20 rural municipalities within the watershed attended this forum, plus representatives from a number of urban municipalities, counties outside the watershed, observers from environmental, community and industrial organizations, and from the Government of Alberta.

Presenters at the February 2009 forum shared information about how they expected the *Water for Life* planning process to integrate with other emerging planning processes (Land-use Framework) and legislation (*Alberta Land Stewardship Act*), and how they anticipated watershed management plans would be implemented. The report from the forum revealed that participants raised concerns regarding the need for clarity surrounding roles, responsibilities and accountabilities in light of the rapidly changing policy and planning context within GoA. They voiced concerns around the uncertainty presented by these various strategies, and how their municipal planning efforts would fit within the context of these broad GoA frameworks. Forum participants identified:

- The need to foster cooperation/understanding between neighboring counties.
- The need for inter-jurisdictional coordination.
- The need for more knowledge and information to better understand the pressures on the watershed, particularly concerning better wastewater technology and the concern over the supply and quality of potable water.
- The need for stakeholder education and awareness around watershed stewardship.
- Concerns regarding costs and capacity associated with effective water and land management practices.

2.2 Step 2: Responding to Concerns Raised by Rural Municipalities

In December 2009, the NSWA organized a second Rural Municipalities Round Table. The consultants utilized this opportunity to lay the groundwork for the IWMP collaborative planning forums to follow. The consultants helped the NSWA:

- Organize the Round Table to initiate a process that would act as a template for future forums.
- Organize participants into three groups representing the sub-regions of the North Saskatchewan River watershed: Headwaters, Central and Downstream.
- Engage participants from each sub-region in round table discussions to examine local implications of the information presented.
- Develop questions to guide discussion at the round tables so that participants would:

¹¹ North Saskatchewan Watershed Alliance. *Engaging Rural Municipalities: Forum Final Report*. February 9, 2009. <http://www.nswa.ab.ca/iwmp/regional-forums/engaging-rural-municipalities>

- Examine how the vulnerabilities identified in the State of the Basin (SOB) report¹² were affecting their sub-region, thereby identifying watershed issues relevant to each sub-region.
- Identify other stakeholders in their sub-region who should be involved in the discussion by inviting them to join the upcoming IWMP collaborative planning forums.

2.3 Step 3: Establishing open, transparent and responsive communications

To establish an open, transparent and responsive communications process with forum participants, NSWA members and others interested in watershed planning, a new section was added to the NSWA website inviting all visitors to join the collaborative planning discussions (see Box #1). This new section of the website is designed to be interactive, as visitors are invited to not only read but respond to the reports from the two engagement forums held for rural municipalities.

Reports from the second Rural Municipal Round Table were developed as templates for future IWMP collaborative planning forums. These reports included:

- An annotated agenda – so visitors can quickly review the highlights of topics covered.
- PowerPoint Presentations – so visitors can review slides presented by each of the speakers.
- Summary reports of discussions held at each of the round tables - so visitors can review how forum participants responded to information presented.

Visitors to the website are also invited to respond to what they are reading by clicking [\[send feedback\]](#) as they read through the reports so they can quickly and easily provide their input. (See **Appendix 1** of this report: Communications Products.)

2.4 Step 4: Identifying Issues and Stakeholders

The NSWA has been laying the groundwork for the IWMP for over four years. From 2005 to 2008, the NSWA conducted various background studies to characterize the watershed, developed a State of the Watershed (SOW) report, and identified watershed management issues by hosting various meetings throughout the watershed (community cafés). The NSWA used these studies, reports and meetings to develop a preliminary list of draft recommendations that provide the foundation for the upcoming

¹² Partners FOR the Saskatchewan River Basin. *From the Mountains to the Sea. Summary of the State of the Saskatchewan River Basin.* 2009.

Box #1: NSWA Home Page - Left Hand Sidebar

[Home](#) » Planning Forums *NEW*

Contents

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You are invited to join the discussion!

The NSWA is engaging with community leaders who live and do business within the North Saskatchewan Watershed. Discussion began in February 2009 with Rural Municipalities. A second meeting was held with this group in December 2009. We are now opening up these meetings to other community leaders in the watershed. You are invited to join the discussions taking place in each of the Headwaters, Central and Downstream sub-regions. Please go to our [Planning Forums](#) section for more details...

IWMP collaborative planning forums. These draft recommendations will be used as “straw dogs” for forum participants to respond to.¹³

The purpose of continuing to identifying watershed management issues with collaborative planning forum participants is to help prepare them to respond to the draft recommendations. This process helps participants identify the watershed management issues they want to raise, examines how stakeholders feel about the issue, and sets the stage for discussing the implications of the IWMP draft recommendations in light of these issues.

2.4.1 Identifying Issues – Second Rural Municipalities Round Table (December 2009)

The vulnerabilities presented in the SOB Report for the Saskatchewan River Basin provided an excellent way of organizing the discussion around watershed management issues. The list of vulnerabilities created the structure needed to ensure the discussion of issues remained focused on scientific findings. The list of vulnerabilities not only provided a way of organizing the discussion, but also a way of organizing the summary reports of the round table discussions, so other stakeholders could join the discussion online through the NSWA website, and the IWMP Steering Committee can review the discussion in light of the scientific evidence presented in the SOB Report.

2.4.2 Identifying Stakeholders – Headwaters and Downstream Forums

The participants at the second Rural Municipal Round Table (December 2009) also identified a list of stakeholder sectors in each sub-region they thought should join future IWMP collaborative planning forums. Based on these lists, NSWA Board and Steering Committee members from the Headwaters and Downstream were asked to identify community leaders from their sub-region who could represent the views of these stakeholder sectors. These NSWA representatives were instrumental in organizing the March cross-sectoral forums. They not only identified and invited community leaders, but also identified co-hosts for the events.

The fact that the IWMP March forums were held in the sub-regions proved to be important. One participant commented that he was pleased *the suits from Edmonton were coming to them*. It reinforced for these stakeholders that the NSWA considers their communities important, that the NSWA values what they have to say, and is willing to enable much broader participation from their communities. The Headwaters forum in Drayton Valley (March 4, 2010) attracted 24 participants from the sub-region. The Downstream forum at Lakeland College in Vermilion had 16 participants from the area, attracting some stakeholders NSWA had had difficulties persuading to participate in the past. One participant commented that *he would not have been able to attend had the meeting been in Edmonton*.

2.4.3 Identifying Stakeholders - Central Forum

While the forums scheduled for the Headwaters and Downstream proceeded within the proposed March timeframe, the forum in the Central sub-region is taking more time to organize. With over 1.5 million people living in this sub-region, the number of potential stakeholders makes this area more complex. NSWA’s Executive Director met twice with staff of the Capital Region Board (CRB), which represents 25 municipalities in the Capital Region, and has three presentations scheduled: CRB Planning Committee (April 19, 2010), CRB Land Use Committee (May 6, 2010) and the CRB (May 20, 2010). It is anticipated that IWMP collaborative planning forums for the Central sub-region will be organized over April, May and June, 2010.

¹³ North Saskatchewan Watershed Alliance: IWMP Table of Draft Recommendations, January 22, 2010. Internal Document.

2.5 Step 5: Communications Products Developed for the March Forums

While the new section on the NSWA website creates the mechanism to facilitate an open and transparent planning process (key components for building trust between the NSWA and stakeholders), a successful collaborative planning process must also be responsive to the information needs of stakeholders. If the NSWA can present timely information in plain language, which is perceived to present the science in an unbiased, straightforward manner, this too will build trust in the collaborative planning process. To begin the implementation of this aspect of the communications strategy, the NSWA is developing short briefs called Coffee Shop Discussion Papers. Their purpose is to:

- Interpret available scientific data in light of the specific issue at hand.
- Bring information on best practices around specific issues.
- Provide advice on how to consistently address similar issues across the North Saskatchewan River watershed in ways that contribute to and are supportive of the development and implementation of IWMP recommendations.

These short briefs will help to position the NSWA as a **bridging organization**. A bridging organization is one that helps develop shared understanding of watershed issues across sectors and sub-regions of the North Saskatchewan River watershed, in order to lead to the adoption of best practices and the cultivation of a stewardship ethic that supports the health and well-being of the watershed as a whole (the vision, purpose and mission of the NSWA). While NSWA will continue to be involved in the development and updating of scientific research, these short briefs will focus on the interpretation of existing scientific information and the promotion of best practices.

As an interpreter of scientific information, the NSWA has the opportunity to bridge understanding between sectors, helping competing interests find shared understanding of the impacts, while guiding the development and implementation of best practices. It is through these types of briefs that learning and understanding will be fostered among the non-scientific community, enabling them to become the effective stewards of the North Saskatchewan River watershed envisioned in the IWMP collaborative planning process.

2.5.1 Coffee Shop Discussion Papers – March 2010 Forums

In preparation for the first series of forums in March, the NSWA developed five Coffee Shop Discussion Papers, providing stakeholders with some basic information about the upcoming IWMP collaborative planning process. The following papers were developed to provide participants in the collaborative planning forums with background information about the NSWA, watersheds and watershed planning:

- **What is NSWA**
- **What is a Watershed?**
- **Watershed Components**
- **Why a Watershed Approach?**
- **Water Quality**

These papers were posted on the website and distributed by the NSWA representatives responsible for inviting community leaders to participate in the March IWMP forums (see **Appendix 1: Communications Products**).

2.6 Step 6: Introducing the IWMP process

When developing the agenda for the March forum, the consultants had two objectives in mind. The first was to bring forward the discussion with rural municipalities from the December 2009 Round Table, to suggest a direct link between the two. The purpose here was to create a sense of moving forward with a purpose by building upon information presented in the previous session. The morning was focused on reviewing the issues identified in the Rural Municipal Round Table (of December 2009), which were based on the vulnerabilities identified in the SOB Report. This enabled a wider cross-section of stakeholders to consider and discuss the watershed issues they are facing in their sub-region.

The second objective of the March forums was to introduce the IWMP collaborative planning process. The consultants reviewed the engagement strategy (as described in this report) with forum participants, and the NSWA presented the IWMP process, which included:

- A description of IWMP goals and objectives.
- The process undertaken by the NSWA since 2005 to lay the groundwork for this collaborative planning process.
- Underlying assumptions: what the NSWA understands the research is saying about the condition of the mainstem, watershed and groundwater.
- Existing federal and provincial water quality policy requirements (a policy of no further degradation).
- Information contained in an IWMP.
- Next steps.

The discussion with stakeholders was focused on reviewing the underlying assumptions for the IWMP (based on the scientific research) and the existing federal/provincial policy framework of *no further degradation*, within which the IWMP must fit. Recognizing and accepting these assumptions is a critical first step, if there is to be a strong basis for shared understanding going forward.

With the assumptions and current policy framework clearly explained and discussed, the last half of the afternoon was spent discussing the four long-term goals of the IWMP, which were drafted by the NSWA's IWMP Steering Committee. Questions guiding the discussion asked participants to consider the impact these goals might have on the way they currently live and do business, considering the types of actions that may be taken to achieve these goals. Participants were asked if they could identify examples of actions they could, or could not, support.

See **Appendix 2: Reports from the March 2010 IWMP Collaborative Planning Forums**, including annotated agendas and Summary Reports from the Headwaters Forum in Drayton Valley (March 4, 2010) and the Downstream Forum in Vermilion (March 10, 2010).

2.7 Step 7: Work Plan for Upcoming IWMP Collaborative Planning Forums

2.7.1 IWMP Steering Committee to Review Forum Reports

The NSWA's commitment to INVOLVE stakeholders in this level of IAP2 public participation process requires the NSWA to consider the information received from stakeholders, and to inform them how this input is beginning to shape the content of the IWMP and its recommendations. The Summary Reports of discussion held with stakeholders during the first IWMP collaborative planning forums in March will now be reviewed by the NSWA's IWMP Steering Committee.

Following the template developed and implemented for the March forums, the following schedule is proposed for upcoming IWMP Collaborative Planning Forums:

June 2010

- Presentation by NSWA concerning how stakeholder input provided during the March Forum has influenced their thinking about the IWMP
- Review of NSWA Proposed Site-Specific Water Quality Objectives for the Mainstem of the North Saskatchewan River
- Consider Objectives and Actions related to IWMP Goal #1

September 2010

- Presentation by NSWA concerning how stakeholder input provided during the June Forum has influenced their thinking about the IWMP
- Consider Objectives and Action related to Goal #2

December 2010

- Presentation by NSWA concerning how stakeholder input provided during the September Forum has influenced their thinking about the IWMP
- Consider Objectives and Action related to Goal #3 and #4

March 2011

- Presentation by NSWA concerning how stakeholder input provided during the December Forum has influenced their thinking about the IWMP
- Review of the IWMP Draft Plan
- Consider how stakeholder input influenced the overall result.

See **Appendix 3: NSWA Cross Sectoral Engagement Work Plan: December 2009 to March 2011**
(As appended to Consultant's December 2009 Report)

Appendix 1: Communications Products Developed to Support the IWMP Collaborative Planning Engagement Strategy

Planning for the new IWMP Collaborative Planning engagement strategy began with the Rural Municipal Watershed Planning Round Table (December 10, 2009). This meeting was used to establish the foundation for the NSWA engagement strategy going forward. This meeting shifted the approach:

- From a region-wide sector-based to a sub-regional (place-based) cross-sectoral approach.
- From a forum to deliver information to one that engaged participants in lively discussion regarding how the information presented was relevant to what was happening in their sub-region.
- From a reporting process that presented a single large final report on the information presented at the meeting to an interactive approach that enabled others who were not in attendance at the forums to comment and add their perspective to the discussions.

Following is a list of communications products produced to support the design and implementation of the IWMP Collaborative Planning Engagement Strategy. The purpose of these products was to implement a communications strategy that supported an **open, transparent and responsive** collaborative planning process.

I. Website Development

The NSWA website was expanded to support a new section for the Regional Watershed Planning Forums (<http://nswa.ab.ca/iwmp/regional-forums>). This section not only posts information developed for the forums, but also solicits comments from NSWA members and the public (anyone visiting the site can comment. Comments are not restricted to the membership).

II. Information prepared for the rural municipal watershed planning round table: Wednesday, December 10, 2009

a. Annotated Agenda – public reporting on the proceedings

- <http://nswa.ab.ca/iwmp/regional-forums/agenda-dec-10>

b. Review results of Rural Municipal Forum on Feb. 10, 2009

- Main issue identified: integration of different planning processes under Water for Life (W4L), Land-use Framework (LUF) and Cumulative Effects Management System (CEMS), rural planning under the Municipal Government Act (MGA), and now the implementation of watershed plans.
- Information is needed to translate, interpret and provide information and data to local governments to enable or support their planning activities, and our collaborative planning efforts.
- Highlights presented from the 2009 Report "Engaging Rural Municipalities, Forum Final Report: http://nswa.ab.ca/resources/nswa_publications/engaging_rural_municipalities

c. NSWA's Engagement and Consultation Strategy

- Described how all the different planning processes (W4L's "shared governance", LUF and CEMS) have very similar principles.
- All the different planning initiatives converge around the same opportunities and challenges: how knowledge, regulation and stewardship work together to achieve desired outcomes.
- Described how this meeting lays the foundation for future discussions with the counties and other stakeholders, by first describing the challenges faced in the Saskatchewan River Basin, the specific watershed issues the counties face in relation to these basin-wide challenges, and then by identifying other stakeholders who should join the discussion on how to address these challenges.
- Presentation: <http://nswa.ab.ca/userfiles/Dec%2010%20Rural%20Municipalities.ppt>

d. Overview of the State of the Saskatchewan River Basin Report (SOB)

- Reviewed the key vulnerabilities facing the Saskatchewan River Basin including: landscape modification; water supply; water use trends; in-stream flow needs (IFN); dams and diversions; municipal water needs, storm water and waste water disposal; climate change; floods and droughts; invasive species; institutional development needed to meet these challenges.
- Presentation: [http://nswa.ab.ca/userfiles/From%20the%20Mountains%20to%20the%20Sea%20-%20NSWA-web\(1\).pdf](http://nswa.ab.ca/userfiles/From%20the%20Mountains%20to%20the%20Sea%20-%20NSWA-web(1).pdf)
- Report : link to [State of the Basin Summary and full reports](#)

e. SOB Report Continued: Facilitated Discussion of Vulnerabilities

- Facilitated group discussion regarding how these identified vulnerabilities at the Basin scale translate into issues at the local municipal/county scale.
- Comments recorded during this discussion are included in the summary reports for each round table discussion (see #g below)

f. Overview of Beaver Hills Initiative (BHI)

- Focused on the value of working together to meet challenges that impact us all.
- Presentation: http://nswa.ab.ca/userfiles/NSWA%20Forum%20II%20_091210_BW_ppt.pdf
- Round Table Discussion on Managing Watershed Vulnerabilities in Local Areas
- Participants were divided into four tables for group discussions: Headwaters, Downstream and two tables discussing Central watershed issues.

g. Summary Reports from regional watershed discussion groups:

- Headwaters Report - <http://nswa.ab.ca/iwmp/regional-forums/upstream#report-from-discussion>: Key issues: information about water (water bodies; ground water; water for livestock; drainage of wetlands); surface run-off from cut-blocs. Stakeholders: We should invite developers and real estate agents (development has a huge impact on the watershed) and stewardship groups.
- Link to [Downstream](#) Report - <http://nswa.ab.ca/iwmp/regional-forums/downstream#table-report>: Key issues: loss of wetlands and illegal drainage; access to information; Ecological Goods & Services (EG&S). Stakeholders: Grain producers.

- Link to [Central](http://nswa.ab.ca/iwmp/regional-forums/central#table-report) Report - <http://nswa.ab.ca/iwmp/regional-forums/central#table-report>:
Table A: Key issues: climate change impacts; invasive species. Stakeholders: Ducks Unlimited and land trusts (to help address invasive species issue). Table B: Key issues: septic compliance for private sewage systems; water supply for livestock; country residential sprawl; access to information; stakeholders: Developers; Approval authorities.

Each of the above three summary reports were designed so that readers could [send feedback](http://nswa.ab.ca/contact) (<http://nswa.ab.ca/contact>) and add their voice to the conversation.

IV. Coffee Shop Discussion Papers

These short papers (1-2 pages only) are being developed by the NSWA as a way of being responsive to the information needs of people living and working in the watershed. They are designed to interpret complex scientific information in a form that is readily accessible and interesting to a general audience. The following papers were developed to provide background information on watershed and watershed planning in preparation for the next series of meetings held in March 2010:

What is NSWA? <http://nswa.ab.ca/userfiles/WHAT%20IS%20NSWA.doc>

What is a Watershed? <http://www.nswa.ab.ca/userfiles/WHAT%20IS%20A%20WATERSHED.doc>

Watershed Components- <http://www.nswa.ab.ca/userfiles/Watershed%20Components%20.doc>

Why a Watershed Approach? <http://www.nswa.ab.ca/userfiles/Why%20a%20Watershed%20Management%20Approach%20.doc>

Water Quality - <http://www.nswa.ab.ca/userfiles/Water%20Quality.doc>

V. Water Quality Objectives (WQO) Report

The Water Quality Objectives Report entitled *Proposed Site-Specific Water Quality Objectives for the Mainstem of the North Saskatchewan River* prepared by the NSWA was edited (shortened and simplified) into a more public-friendly document, then posted on the NSWA website for comment. http://nswa.ab.ca/resources/nswa_publications/water-quality-objectives. Future water quality in the North Saskatchewan River is a fundamental part of watershed planning that must be addressed in the NSWA's Integrated Watershed Management Plan.

VI. NSWA Members Meeting: February 27, 2010

A meeting of NSWA members was held to give members an update on NSWA activities and inform them of the upcoming IWMP collaborative planning engagement process. Power Point Presentations were given by:

- Dave Trew, Executive Director: Update about the organization, its activities, and finances. - <http://nswa.ab.ca/sites/default/files/NSWA%20Briefing%20Winter%202010%20Members'%20meeting.ppt>
- Graham Watt: NSWA's new Basin Atlas
- Sharon Reedyk, Chair, IWMP Steering Committee: *Why Develop an IWMP?* - <http://nswa.ab.ca/sites/default/files/reedyk-IWMP-members-meeting.ppt>
 - Including information on IWMP goals; objectives; the process to date; issues identified; what the research says about the condition of the mainstem, watershed and groundwater; current watershed policy; what an IWMP process contains; and next steps

- Gord Thompson: New Technical studies underway at the NSWA - <http://nswa.ab.ca/sites/default/files/NSWA%20IWMP%20Projects%2010.02.ppt>
- Graham Watt: Update on the Vermilion River Watershed Management Project - <http://nswa.ab.ca/sites/default/files/grahamwatt-feb27-2010.ppt>
- Abells Henry Public Affairs- *Working Together: Engaging NSWA Stakeholders* - <http://nswa.ab.ca/sites/default/files/Engaging%20our%20stakeholders%20.ppt>
 - Including information about the IWMP collaborative planning engagement strategy; the March 2010 forums; schedule of upcoming collaborative planning meetings (to March 2011); the invitation to community leaders, NSWA members and the public to participate in the collaborative planning process.
- Jayme Nelson: Live demonstration: NSWA website – the new interactive features to receive public feedback

These presentations form the basis for the March 2010 Collaborative Planning forums

VII. NSWA Displays for Tradeshows and Conferences

NSWA attended the following tradeshows and conference:

- AFGA: Alberta Fish & Game Association Trade Show (February 18-19, 2010)
- AAMD&C: Alberta Association of Municipal Districts and Counties Trade Show (March 15, 2010)
- CWRA: Canadian Water Resources Association Conference (March 28-30, 2010)

NSWA plans to attend the following tradeshows and conference:

- Farm & Ranch Show (April 8-10, 2010)
- River Day Edmonton (June 12, 2010)
- Other regional events

The purpose and goals of attending these tradeshows and conferences is to:

- Promote the NSWA to a wider audience and introduce the role the organization plays as a Watershed Planning and Advisory Council.
- Build a sense of place and community around the North Saskatchewan River watershed.
- Inform a wider audience of the importance of the IWMP and how they can become engaged in developing and supporting IWMP recommendations as active participants in a collaborative planning process.

All tradeshows feature the following communication products:

- Coffee Talk Sheets (Who is NSWA, What is a Watershed, Watershed Components, Why a Watershed Approach, Water Quality)
- General Information Sheets
- Base map & land cover maps of the watershed
- Display copies of all NSWA publications
- Post Cards (Aerial photos showing the river in relationship with the surrounding watershed)
- 1-page Trivia Sheets about the Watershed (e.g.: area in km²; number of counties, etc.)
- Placemats (maps from the atlas project)

Presentations at each event were tailored to match the interests of each target audience:

- AFGA: River Guides were available for sale and promoted to fish and game enthusiasts
- AAMD&C: Municipal Guides were available free of charge; demonstration of an interactive computer-based map of the Sturgeon Watershed was available for tradeshow guests to experience, with guidance from NSWA booth attendants; legal-sized copies of the Land Cover map from the forthcoming NSWA Watershed Atlas were available free of charge.
- At future tradeshows, a set of 4 postcards featuring aerial shots of the North Saskatchewan River will be available.
- Currently designing a framed fabric booth display that will showcase a changing array of communications products (photos, maps, and messages) targeted for audience education and development.
- NSWA-stamped promotional items (such as maps, pens, coffee mugs, magnets, etc.) are in the design stage.

Presentations at CWRA are more technically based and designed to inform water science professionals about NSWA's knowledge advances, technical products and collaborative planning progress.

- Dave Trew: Integrated Watershed Management Planning for the North Saskatchewan River basin in Alberta - <http://nswa.ab.ca/userfiles/NSWA%20Briefing%20to%20CWRA%20Mar%2029%202010.pdf>
- Mike Sullivan: Cumulative Effects Assessment of the NSRB using ALCES
- Gordon Thompson: Proposed Site – Specific Water Quality Objectives for the Main stem of the North Saskatchewan River - http://nswa.ab.ca/userfiles/NSR%20Water%20Quality%20Objectives%20-%20CWRA%20Conf%2010_03_29.pdf
- Graham Watt: Development of a watershed management Plan for the Vermilion River - <http://nswa.ab.ca/userfiles/watt2010vermilion-cwrajan30.pdf>
- Stephanie Neufeld: Source water protection planning for Edmonton's Drinking Water Supply

VIII. The Atlas Project – Maps for the North Saskatchewan, Vermilion and Sturgeon Rivers

A selection of maps from the forthcoming NSWA Watershed Atlas were formatted and printed for distribution at the NSWA Members Meeting (February 27, 2010) and at each of the March 2010 Watershed Forums. Twelve (12) poster-sized maps were printed for display; laminated handouts of base maps (sub-watersheds & municipalities) as well as land cover maps were given to meeting participants. Maps were accompanied by messages informing people of the forthcoming atlas and the relevance of maps to the IWMP process.

IX. Social Media Strategy

NSWA has initiated a social media strategy to increase awareness of NSWA's IWMP collaborative planning activities among broader audiences. NSWA staff members are beginning to implement the strategy by testing various social media initiatives and gauging response by monitoring increased traffic to the main NSWA website. Social media activities include:

- Developing a Facebook group page for the North Saskatchewan River watershed -

- Publishing NSWA news items, publications, and events on staff & NSR watershed Facebook pages
- Updating Wikipedia entries related to the North Saskatchewan River to reference the NSWA website and NSWA publications
- Podcasts featuring board members and stakeholders

The NSWA social media strategy will be adapted as lessons learned are applied to improve NSWA's social media presence.

X. Briefing Materials and Presentations to be developed for March Watershed Forums

- Forum Agenda - <http://nswa.ab.ca/sites/default/files/AGENDA%20-%20March%202010%20forums.doc>
- Presentation: Overview on NSWA initiatives by Dave Trew - <http://nswa.ab.ca/sites/default/files/dave-NSWA%20Briefing%20Downstream%20Watershed%20Forum%20Mar%2010%202010.ppt>
- Presentation: Overview on IWMP progress by Tom Cottrell - <http://nswa.ab.ca/sites/default/files/tom-IWMP%20downstream%20Consultation%20Vermilion,%2010.ppt>
- Presentation: IWMP Engagement Strategy by Susan Abells – <http://nswa.ab.ca/sites/default/files/susan-IWMP%20Engagement%20Strategy.ppt>
- Presentation: IWMP Assumptions Facilitated Discussion by Susan Abells - <http://nswa.ab.ca/sites/default/files/susan-IWMP%20Assumptions%20-%20Facilitated%20Discussion.ppt>
- Briefing notes & discussion guide: Summaries of watershed issues by Region, from Dec 10, 2009 Round Table - <http://nswa.ab.ca/sites/default/files/Morning%20discussion%20-%20Downstream%20%20Issues.doc>
- IWMP Goals: Questions and notes for facilitated discussion - <http://nswa.ab.ca/sites/default/files/Aft%20discuss%20-IWMP%20Long%20term%20Goal01.doc>

Appendix 2: Reports from the March 2010 IWMP Collaborative Planning Forums

Note: The Following reports will be uploaded to the NSWA website:

Reports from the Headwaters IWMP Collaborative Planning Forum, March 4, 2010:

- Annotated Agenda
- Summary of Morning Discussion: Watershed Issues in the Headwaters
- Summary of Plenary Discussion: IWMP Assumptions
- Summary of Afternoon Discussion: IWMP Goals

Reports from the Downstream IWMP Collaborative Planning Forum, March 10, 2010:

- Annotated Agenda
- Summary of Morning Discussion: Watershed Issues in the Headwaters
- Summary of Plenary Discussion: IWMP Assumptions
- Summary of Afternoon Discussion: IWMP Goals



NSWA INTEGRATED WATERSHED MANAGEMENT PLANNING FORUMS

HEADWATERS: DRAYTON VALLEY, THURSDAY, MARCH 4, 2010

Annotated AGENDA

Goals:

- Discuss the NSWA approach to engage stakeholders in the IWMP collaborative planning effort
- Review the results of the Rural Municipal Watershed Planning Round Table Dec 10 2009
- Continue dialogue with stakeholders on issues raised
- Learn about IWMP, foundational philosophy and potential implications
- Present and discuss the four IWMP goals drafted by the NSWA IWMP Steering Committee

| TIME | TOPIC | SPEAKER |
|------|-------|---------|
|------|-------|---------|

24 participants attended this first NSWA Integrated Watershed Management Planning (IWMP) forum held in Drayton Valley in the Headwaters sub-region of the North Saskatchewan River.

9:30 a.m. Introductions and welcome Dave Trew

- The Executive Director provided an overview of the NSWA organization: the number of members; the composition of the board, its vision and mandate; current projects; how the organization is funded.

9:40 NSWA approach to stakeholder engagement going forward Abells Henry

- NSWA plans to engage community leaders (watershed stakeholder) who are actively interested in watershed planning, as well as NSWA members and the public in a collaborative planning process to develop recommendations for an integrated Watershed Management Plan (IWMP)
- NSWA is committed to a process that is open, transparent and responsive.
- The focus will be on building a shared understanding among those who live and work in the watershed on how to best protect, maintain and restore the North Saskatchewan River (NSR) Watershed.
- NSWA plans to host three forums every three months in each of the Headwaters, Central and Downstream regions of the watershed until March 2011 when final recommendations will be made to the Government of Alberta.
- Reports from each forum will be posted on the NSWA. Those visiting the site can post their feedback and join the discussion. All input received will form an integral part of the IWMP report.

9:50 Explanation of the organization of the discussion and the day Abells Henry

10:00 Demonstration of new interactive features on NSWA website Billie Milholland

- NSWA staff demonstrated how easy it is to send comments to the NSWA from the Website and encouraged participants to encourage their colleagues and friends interested in watershed planning to participate by sending their comment via the web.

Presentation: NSWA briefing notes (Coffee Shop Discussion briefs)

- The purpose of the short briefs is to respond to the information needs of people living and working in the watershed. They are designed to interpret complex scientific information in a form that is readily accessible and interesting to a general audience:
 - What is NSWA?
 - What is a Watershed?
 - Watershed Components
 - Why a Watershed Approach?
 - Water Quality

10:30 Coffee

10:45 The three NSWA Board members who invited participants to attend the forum were why this meeting was important to them:

- **Pat Alexander (Reeve, Clearwater County; Vice-president, NSWA):** *We want to hear what our stakeholders have to say. What should be in this plan? Everyone needs to understand the issues and how we can work together.*
- **Bob Kitching (Councillor, Brazeau County; Member, IWMP Steering Committee):** *Look at the horsepower in this room. I do it to represent the community and the agriculture community. It affects all our lives and businesses. We need the involvement of the people in this room.*
- **Bob Winship (Forestry; Board member, NSWA):** *We are only going to be able to address trade-offs in a satisfactory way if we work together – we do not need more regulations – what we need is more working together. In the Headwaters, everyone is very concerned about what we do. There are two big industries that operate in the Green Zone – Forestry and Oil & Gas. I would like to thank the Oil & Gas sector for coming to this meeting. How we are going to get things done in each of our sectors depends on our ability to work together.*
- If the recommendations in the IWMP have wide support, then there is good reason for Alberta Environment to support it. They would have a hard job not doing so.

Review of Rural Municipal Planning Round table Dec 10, 2009

Abells Henry

Round Table Discussions

- In December 2009, rural municipalities met to discuss the State of the Saskatchewan River Basin Report. This report identified a number of vulnerabilities facing the Basin, and participants were asked to discuss how these vulnerabilities were impacting their region. Issues regarding the Headwaters that were identified at the December 10 meeting were presented to participants at this meeting for further discussion.

(Link to summary of morning round table discussions)

11:45 Summary of table discussions

Noon Lunch

1:00 p.m. Over View of IWMP

Tom Cottrell

- Including information on IWMP goals; objectives; the process to date; issues identified; what the research says about the condition of the mainstem, watershed and groundwater; current watershed policy; what an IWMP process contains; and next steps

(Link to Tom Cottrell’s Presentation)

1:30 Facilitated Discussion between IWMP Panel & Forum Participants regarding assumptions underpinning the IWMP.

Abells Henry

- Discussion focused on key elements of the previous presentation, which form the assumptions upon which the IWMP is based: What the research says about the condition of the river’s mainstem,

watershed and groundwater in the North Saskatchewan River Watershed, and current watershed policy. (Link to summary of facilitated discussion)

2:30 Coffee

2:45 Round Table Discussion: Discussion of four (4) IWMP long term goals Abells Henry

- Participants were presented with four (4) long term goals drafted by the IWMP Steering Committee. These goals represent what people living and working in the NSR watershed want to achieve through the implementation of the IWMP recommendations.
- Thinking about the types of actions that might have to be taken to achieve these goals, participants were asked to consider how these goals could positively or negatively impact the way the live and do business in the Headwaters. (Link to summary of afternoon round table discussion)

3:45 Summary of table discussion

4:15 Next steps

- The next forum is scheduled for early June. It will be held in the Headwaters sub-region of the NSR watershed. Location, date and time TBA. If you are interested in participating please contact Jayme Nelson at the NSWA office: Jayme Nelson Jayme.Nelson@edmonton.ca or call (780) 442-6363

4:30 p.m. End.

Thank you for your participation!

Summary of Morning Round Table Discussion: Watershed Issues in the Headwaters - March 4, 2010

In December 2009, rural municipalities met to discuss the State of the Saskatchewan River Basin Report. This report identified a number of vulnerabilities facing the Basin, and participants were asked to discuss how these vulnerabilities were impacting their region.

Following is a summary of issues raised concerning how each of the vulnerabilities facing the North Saskatchewan River Basin are affecting the Headwaters sub-region. Participants in the table discussion were from the counties of Brazeau, Clearwater, Leduc and Parkland.

1. Vulnerability Issue: Landscape Modification: (how human activities were disturbing and changing the natural landscape)

Comments from the Dec 2009 Round Table Discussion

Alignment of policies/regulations between jurisdictions (example: stormwater retention policy)

- Brazeau County - over half of our municipality is under the control of the Government of Alberta (GoA), so there is split jurisdiction between regulations under the Municipal Government Act (MGA) and other GoA ministries. Alberta Environment has the lead jurisdiction, but provides us with little support. For example, our subdivision processes have implemented a stormwater retention policy, but AENV has no such policy.

Run-off (from cut blocks)

- Cut blocks increase run-off and erosion. Forestry companies do put in water course barriers, but that does not do much. The creeks do not run clear anymore.

Land clearing

- We do not have a lot of tools to prevent land clearing. The county has little control over private land. For example, land is purchased as farmland, and then owners chop down trees, fill in wetlands and apply for a re-development permit.

Using wood as biofuels

- The biofuel plant in Drayton Valley is making things worse. Before, only a third of every tree was used, and the rest was chipped and shredded. Now all the waste wood is being used. It will be removed from forest floor and turned into ethanol. On the one hand we put the waste wood to mulch, and on the other we put it into methane development

Draining wetlands

- Parkland: Cormie Ranch was drained of wetlands. We do not understand re-charge. We don't know what was there. (Cormie Ranch is now Tomahawk Ranch)

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

Alignment of policy/regulation

- Municipalities have to have stormwater retention plans, but industry doesn't. Is this fair?
- There are too many levels of approval for land use and too many loop holes.

- Need a flow chart of jurisdictions. A guide for navigating between them all.
- What suggestions do you have for integrating so many levels of authority?
- Companies have to deal with many different govt. agencies regarding what they are doing on land

Run-off – from road construction

- Runoff from forest cut blocks is less of a concern. Runoff from roads is the greater source of erosion! The ***focus should be on road construction***, but public perception is putting the blame on cut blocks. It's crucial to address perceptions but to separate fact from fiction.
- The sheer volume of road development is a big issue. Is there some way to cooperate with road use? (oil/gas, municipal and forestry)
- Road development and the effect on streams and run-off/erosion causing silt.
- Erosion is a huge issue from multiple roads/trails built for all types of development by many different parties; no coordination; no integration of purpose of roads; no notion at all of assessing cumulative effect of all different roads;
- Modern road construction practices are much better and run-off and sediment control is much better
- Construction considerations are different for temporary versus permanent roads; temporary roads are reclaimed (or at least are supposed to be reclaimed)

Use of wood as biofuel

- Scandinavia harvests biomass from forest floors to use as biofuel, and they're affecting nutrient levels in their forests! They now have to apply fertilizer to their forest floors in order to have vegetation actually grow, because by removing the biomass they've removed the natural fertilizer. If biofuel is to be introduced here, there should be targets set as to how much biofuel can be removed to ensure that doesn't happen.

Draining Wetlands

- Drainage practices in the past and the effect of past policies have caused drainage actions by land owners

Other issues

Alberta Stewardship Act:

- Will it have an impact on what private owners can do?

Education:

- The best tool we have is education
- The attitude among people that there is lots of water in the region has to change. There is a belief that there is lots of water so we can use it for anything

Monitoring:

- If we want to start a restorative process, where do we start if we don't know what was there. Monitoring is critical.

Impact of recreational land riparian areas:

- There needs to be an emphasis on recreational land use and its impact on stream banks and green areas.
- Degradation of landscape from widespread and indiscriminate use of ATVs and recreational vehicles for personal recreational purposes; very extensive impact on streams and riparian vegetation and land in the Green Zone particularly

Land-use Framework:

- The role of the Land Use Framework needs to be understood.

Wetland policy:

- We need to know what the wetland policy will have in it.

Headwaters not developing so Downstream users have clean water

- Upstream area will be charged with the responsibility to supply good quality and quantity of water for the City of Edmonton and so the upstream areas won't be allowed to develop because they will have to protect Edmonton's interest - what is the effect on the Drayton Valley area?
- Who are we protecting the water for? Upstream area shouldn't be charged just with protecting Edmonton's purpose

2. Vulnerability Issue: Water Supply

Comments from the Dec 2009 Round Table Discussion

Supply is not seen as an issue yet.

- Towns pull water from the river and rural residents use groundwater. There are some concerns with water supply in some towns.

Alignment of policy/regulation

- The Water Act requires a water study if there are more than 6 lots/parcels – but these wells add up. AENV does not back us up when we try to put the breaks on digging more wells.

Mapping of Groundwater

- Mapping needs to be done.

Headwaters not developing so Downstream users have clean water

- Perception in the Headwaters is that the Headwaters are vulnerable. 75% of water in the river arrives in the river prior to Stony Plain. So when Edmonton wants more water, they ask for more water to be released from Brazeau dam. So we have to pay for downstream users.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

Supply is not seen as an issue yet.

- Every straw also has a return back to the river, and not everyone realizes this.
- Why would you want to put the breaks on wells?
- The kneejerk management reaction shouldn't be restriction, it should be reduction.
- Do we know what we use domestically? I can tell you how much my cows drink, but I don't know how much I use.
- We need more information on new technology for saving and cleaning water.

Alignment of policy/regulation

- The O&G industry and agricultural industries are treated differently regarding treatment of waste and land spreading of drilling mud and manure on frozen ground
- Why is there so little water monitoring?

Mapping of Groundwater

- Aquifer mapping is key. Need aquifer mapping

Headwaters not developing so Downstream users have clean water

- If the Industrial Heartland upgraders go in, or if there's more water reserved for their use, that means we in the Headwaters will just have to sit and watch the water go by since we won't be able to use it for our own industrial use.
- Downstream users have to pay for their downstream users, and so do we. Everyone has to be responsible.

Other issues raised:

- There is a difference between water used and returned and water not returned to NSR
- Run-off from urban areas is an addition of extra water supply to streams
- Most of agriculture water consumed (i.e., in cattle) is returned
- Permanent grass lands are very good at storing water and holding back run-off
- Not much problem in upstream areas regarding run-off from ploughed fields because not many ploughed fields
- Municipal sewage treatment has improved a lot by use of better technology

3. Vulnerability Issue: Municipal Waste Water

Comments from the Dec 2009 Round Table Discussion

- Brazeau: Disposal of effluent from sewage lagoons, using sewage lagoons as primary treatment. Where do we dump it?...into a watercourse.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

Using fresh water for industrial purposes

- Use of fresh water, especially high-quality municipal drinking water for flooding and fractionation (separation) of underground oil formations, for enhanced oil recovery – what a waste.... Oil companies are using municipal drinking water from the Town of Drayton Valley and Brazeau County. Yes, the Oil & Gas companies pay for the water, but it is still a waste. O&G companies get permits from AENV to take water from streams for these purposes.
- Need a balance between economic development and use/protection of the environment; can't have any development without some impact

4. Vulnerability Issue: Instream Flow Needs (IFN)

(How much water needs to remain in the river to maintain the natural aquatic environment)

Comments from the Dec 2009 Round Table Discussion

- IFN is used against the municipality – we can't develop due to IFN.
- AENV asked us for impacts of taking gravel out of the river's streambed. They are asking way too much. What a municipality needs for stream bed maintenance is way less than what the IFN is said to be. It's a constraint for municipalities.
- Agricultural producers (cow/calf operations) – when surface water supplies dried up, they could haul water or do dugout pumping, but they couldn't access water from recreational lakes. Farmers living beyond two miles from the river (pipe length), couldn't get water for their herds.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

- Can't hold upstream areas responsible for meeting IFN needs of downstream areas
- Need to use better technology to minimize water use to leave more water in the river
- The constraints will get worse, not better, and that's okay.
- Balancing the health of the watershed to the impacts in crucial. Also the impacts on economics and infrastructure.
- Hwy 55 gravel pits are a problem

Questions:

- Is dissolved oxygen higher in summer or winter?
- If oil & gas to truck water in - what is the impact on the watershed?
- Is there an issue with recreation users having direct access to the lake?

5. Vulnerability Issue: Water Use Trends

Comments from the Dec 2009 Round Table Discussion

- Increasing use of both ground water and surface water.
- Need much better monitoring.
- There are declining recreational lake levels.
- **Information needs:** Municipality's need to make a list of what info is useful; what they have; what they do not have – perhaps NSWA can help them find the information they need.
- **Lack of information:** we don't know how our decisions impact other things. We don't have enough info to make good decisions.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

- Why are lake levels declining? It is climate change, or is it the amount of straws (i.e. Red Deer irrigation)
- Is there an environmental inventory at the watershed level? Is this provincial responsibility?
- Dilution is the mitigation for pollution, it is not the solution!

6. Vulnerability Issue: Dams and Diversions

Comments from the Dec 2009 Round Table Discussion

- GoA says we may need more storage – more info is required here! If and when the next high water event/year occurs, maybe we need to revisit the issue of creating new dams or additional storage.
- Brazeau dam - we've added a lake, now we have ospreys. A whole new natural culture has been built up around a water body, hydro power and clean energy. We need more info on the positive/negative effects of this.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?

- What information do you need to help answer these questions?

Comments from March 4, 2010 Round Table Discussion

Questions about dams

- Are dams so bad? They have positive and negative effects. You create an ecosystem, and there are birds now where there didn't use to be.
- If you build a dam, economics says you'll build around it, because that's where the water is, so a town or development will grow around that dam. If the dam is built and you're not near it, then you're out of luck on that economic issue.
- 50% of the river is already allocated to Saskatchewan. Are allocations in perpetuity? Can that be changed? Are the current allocations important enough to stay untouched? What about hoarding in an emergency? If we create a water market, who owns the unallocated water?
- If a company builds a dam, who owns the water they're holding back? Do they decide how much to hold back? That water has a value to them. The water is required for the ecosystem, but it has a higher value if it's held back. So what happens? What's the cost of that water and who pays for the ecosystem to get water?

Summary of Afternoon Plenary Discussion: IWMP Assumptions - March 4, 2010

Facilitator asked NSWA representatives to describe the IWMP process

IWMP approval process

- The Integrated Watershed Management Plan (IWMP) will be submitted to Alberta Environment (AENV) in March 2011
- Under the Water Act, An AENV Director is required to review aspects of the plan for approval
- How long will that take? Not known. Perhaps less than one year.

IWMP and LUF

- AENV's approval will be influenced by the Land-use Framework (LUF) and the North Saskatchewan Regional Plan (NSRP).
- Two of LUF's seven regional plans are currently underway – Lower Athabasca Regional Plan (LARP) and the South Saskatchewan Regional Plan (SSRP). The NSRP may be implemented by the fall of 2010.
- We hope to have the IWMP ready for consideration by the NSRP Regional Advisory Committee (RAC) for inclusion in their regional plan.

Role of NSWA

- Our approach to developing the IWMP is to hold discussion with stakeholders, like this one, and build commitment to implementing the IWMP. This commitment is a social commitment.
- Only the Government of Alberta (GoA) can regulate water use under the Water Act. We do not have a regulatory role. Our role is limited to planning and to making a persuasive case so that the AENV Director and the NSRP RAC will adopt aspects of the plan.
- The role of the NSWA is to build commitment to the plan so that all water users are committed to implementing it.

Role of GoA

- Once adopted by AENV, we will be relying on both AENV and Sustainable Resource Development (SRD) to incorporate IWMP recommendations into their regulatory frameworks – that is GoA's role.
- LUF (and the NSRP) will create an overall policy framework that is to be approved by Cabinet. This will influence the regulatory decisions of GoA ministries.
- If the NSWA's IWMP can influence the LUF regional plan for the North Saskatchewan, then this will influence the policy/regulatory framework GoA is committed to.
- LUF regional plans are approved by Cabinet, which should include the IWMP recommendations.

Role of the Counties

- Counties can regulate land use using by-laws (which impacts water quality).

Comments from Forum Participants

- Yes, we often get to the point of recommendations, but to be implemented the recommendations need to be supported by regulations with teeth – only this will make a difference.
- Regulations need to be enforced – punish the polluter.
- Recommendations need to be turned into regulation.

NSWA's Response:

- To do this, NSWA needs to demonstrate support for the recommendations contained in the IWMP. GoA (through AENV) must then approve the IWMP, and then develop and enforce regulations that support IWMP recommendations. Only GoA and the counties can regulate.

Comments from Forum Participants

- Does NSWA collaborate with other Watershed Planning and Advisory Councils (WPACs)? Do the WPACs work together?

NSWA's Response:

- Yes, all 10 WPACs have the same mandate under AENV's *Water for Life* Strategy. The NSWA is the largest in terms of its organization. We have been around a long time, and were a non-profit organization before we were given the WPAC mandate. We also have one of the most complex and populated watersheds – but each WPAC faces its own unique set of challenges, and very different issues. There is some communication between the province's 10 WPACs. We hold quarterly meetings, share information and have an annual conference. But we all face very unique challenges.

Facilitator asked the NSWA how they plan to address the trade-offs involved in developing any plan

- Lessons learned from the Eastern Slopes planning process (1979) – a plan is suppose to tell you not only what you have to do but also how to do it.
- This is the first time cumulative effects (CE) has come into a planning process.
- There are a lot of regulations that respond to specific issues – but not regulations that guide how we are to consider CE.
- CE requires us to think beyond the needs of any one project, and to consider the cumulative effects of all projects on the landscape. This will result in trade-offs – where we may have to make sacrifices in one area in order to accomplish our outcomes in other areas.

The need to work together

- We are only going to be able to address trade-offs in a satisfactory way if we work together – we do not need more regulations – what we need is more working together.
- In the Headwaters, everyone is very concerned about what we do. The Green Zone was originally created in order to protect the forest – not to protect the forestry industry. There are two big industries that operate in the Green Zone – Forestry and Oil & Gas. I would like to thank the Oil & Gas sector for coming to this meeting. How we are going to get things done in each of our sectors depends on our ability to work together.

Comments from Forum Participants

- Timing for this effort seems to be quite poor. LUF is suppose to name the RAC for this region in the spring – the IWMP will become subservient to the LUF regional plan.
- There is no guarantee that anything we say here will be incorporated into the LUF regional plan.
- How do we keep people involved when the LUF plan starts up?
- I don't think we should let GoA off the hook – they are putting huge resources into LUF and limited resources into IWMP.

NSWA's Response

- This plan has great potential to inform the NSRP, but our plan is just one piece of their puzzle.
- Municipal plans will have to align with the LUF plan. LUF will be quite a high level plan – but the level of detail in the IWMP should be greater. The IWMP has to fit under the LUF regional plan – and so do the municipal plans.
- The evolution of the LUF plans has been greatly delayed. There are still lots of uncertainty around the LUF plans. We will continue to work within our WPAC mandate and continue to develop the IWMP. We will provide information to the LUF process as it evolves.

Facilitator asked the NSWA representatives to review the assumptions with the audience:

NSWA:

- We were amazed when we first began with how much we did not know about water use. So we had to do a lot of technical work to do to understand how much was already allocated and how much is being consumed.
- What we found out is that approximately 27% is allocated – but not that much is consumed (<3%). We had to ask ourselves, does that mean that more can be allocated? What if Rocky Mountain House wants to grow?
- If the basic assumption is that there is no further degradation of water quality, how do we continue to grow?
- The assumptions are very profound and important statements. They set the course for everything else we do.

Comments from Forum Participants

- The assumptions seem accurate, but when there is a problem, people always look upstream. We want to improve water quality – but we also need to communicate that what we already do to maintain the good water quality we already have – municipalities, forestry, Oil & Gas already do a lot.
- I do not want to point fingers, but a lot of the finger pointing comes from the larger municipalities and they always point at us. They need to look at what they are doing – at their municipal waste.
- The quality is good in the Headwaters because we have done a lot of the work. We feel that downstream, they look at us and say, thanks for your effort – so that we can continue business as usual downstream.
- How do you now that 27% is allocated and only 3% is consumed? If I have a license for 1 gallon of water, a cow will use it all – it will go the packing plant with 800lb – 80% of which is water. Water comes out of a pipe – it is taken out and physically gone. What happens to the water?

NSWA's response:

- First, monitoring is important. Climate change will change the conditions. We need to be able to track changes over the long term – which then will change our course of action.
- But to answer your question, the information we have about water use is not ideal. Information about water use/consumption in agriculture is the weakest. We can do a briefing note about that.
- Modeling tells us a bit more – but it does not tell us what will happen – only what could happen under a certain set of assumptions. So modeling is based on assumptions – not facts. It is a tool – not a predictor – but it does give us a picture of how the system works.
- 50% of all natural flow in the North Saskatchewan River must be sent on to Saskatchewan – Alberta is only entitled to 50% of the flow. This means that the allocated 27% of the flow in the river

represents 54% of the flow that is available to us in Alberta – and the 3% consumption is actually 6% of the flow available to us. The only thing that prevents us from having a quantity problem is that most licenses are not using their full allocation.

- We have a pretty good quantity picture – but quality is much more complex.

Comments from Forum Participants

- Bullet #3 (mainstem assumptions) suggest that Edmonton is doing most of the polluting – it suggests the problem is Edmonton. But some of it is coming from the Headwaters.

NSWA:

- There is no question the Capital Region has the biggest footprint – Edmonton, Headwaters and Downstream need to work together, so that we are not solely dependent on the regulatory regime.

Comments from Forum Participants:

- What are the instream flow needs (IFN) – will there be thresholds? Targets?

NSWA:

- We will be examining fisheries habitat, riparian areas, flows needed for water quality and structural needs of the river. IFN targets will be proposed, along with Water Quality Objectives (WQO) – so both flow and quality targets.

Comments from Forum Participants:

- In the Headwaters the land is typically grassland – that requires little fertilizer. Around Edmonton farming becomes really intense and requires lots of fertilizer. Lots of testing has been done here.
- Yes, but we also sand every corner of the road – using nutrients (fertilizer) mixed with the sand.
- Coal fired generating plants emit a lot of Nitrous Oxide (NO₂) – which also contributes to the nitrate load in the water.
- We have to account for evaporation at the Brazeau Dam here – and not when it comes down as rain downstream (in Saskatchewan/Manitoba).

Comments from Forum Participants: Aquifers and groundwater

- Aquifers – there is not much information here. Modeling does not work well when there is not a lot of data. So we do not have a clear picture about the state of our aquifers.
- Groundwater – we do not know enough in Brazeau County. Where are the re-charge areas? Monitoring in the different townships suggest that different recharge areas have different recharge levels and time frame. We have a lot more questions than answers here.

Key Policy Assumption of Non-degradation: NSWA's comments

- The NSWA will post a report on proposed Water Quality Objectives (WQO). This report will be on the website. We hope you will read it and send us your comments.
- The NSWA is proposing a very protective regime that corresponds to policies of non-degradation already in place.
- The policy of non-degradation is one that is supported by the both the federal and provincial governments:
 - In 1999 – the Canadian Council of Ministers of the Environment (CCME) developed Canadian Environmental Quality Guidelines for the protection of Aquatic Life. In this report it states: *For water of superior quality or that support valuable biological resources, the CCME non-degradation policy states that the degradation of the existing water quality should always be avoided.*

- In 1999 – the Federal Government and three Prairie Provinces identified water quality objects under the Prairie Provinces Water Board Master Agreement on Apportionment that requires each jurisdiction *to maintain the water quality in the river reach, and for upstream jurisdictions to take measures to maintain water quality.*
- In 1999, Alberta Environment developed Surface Water Quality Guidelines for use in Alberta that has water quality targets. The document suggests that these targets can be used to develop objectives *to protect designated water uses and maintain the quality of ambient waters.*
- NSWa's report of Water Quality Objectives follows the same policy of non-degradation.
- This report is very important, and contains a major set of recommendations. We encourage you to go to our website (www.nswa.ab.ca) to read it and provide us with your feedback.

Summary of Afternoon Round Table Discussion: IWMP Long Term Goals – March 4, 2010

IWMP Long term Goal #1:

Protect or improve the water quality of the mainstem of the North Saskatchewan River by managing contaminant loadings to the river.

Questions

If we do more to manage contaminant loading to the river, what could this mean to the way you currently live and do business?

1. What could you support or live with?
2. What would you not be able to support?

Summary of comments

Cultural Values in the Headwaters

- The feeling that “this is my land – don’t tell me what to do with it” runs deep in the Headwaters – but there is also a profound sense of community.
- There is a stewardship ethic here – people look after their land, animals, and plants. We want to pass our land on to the next generation.
- “My land” does not mean “I can be reckless”. My land also means I want to take care of it.
- We assume that “unregulated” means short term vision – not necessarily. There is a deep attachment to the land here.
- There is a perception that we are lawless in the Headwaters – no, we are very regulated.
- Agricultural regulations – can we live with them now? Are they working now? These are fair questions.
- Yes, we can always improve best practices – instead of more regulation we need education on improving best practices by learning about new technologies.
- Incentives can include education and support for the use of new technology. Better partnerships with industry. Cooperation between competing interests.
- Forestry is a big economic component – we manage this landscape carefully and we take care of it.
- The urbanites are the ones who like to come in with their quads and camping gear and trash the place – they are ones lacking a stewardship ethic.
- The recreational industry (quads etc.) has really exploded – and it is having a huge impact – and creating an impressive amount of damage – there has been an amazing impact around the Brazeau Dam.
- There is, however, far better stewardship now than there was 20 to 30 years ago.

Waste water management:

- Tomahawk (town) is an open sewer, and the cattle downstream are severely impacted (some have even died!) by drinking the contaminated stream water. Who is monitoring places like Tomahawk? Why is this allowed? Where is the enforcement of the rules?
- Dry years mean no dilution, so the contaminants are even worse!
- In a perfect world, beaver fever is eradicated with UV, from a management and economic perspective, so do you (as a municipality) treat the water only coming in for drinking, or do you treat it as it goes out too? Who’s responsible?
- Who is paying for the water quality? Is no development alright?

Different standards in different communities

- We have to be honest about things like this. Why are there different standards for different industries? And different municipalities? Just because Tomahawk is small doesn't mean it has a small impact on the water. Cows are dying!
- We support stricter regulations on waste water for all municipalities of all sizes.

Soil contamination and run-off

- It also depends on the soil types too. Depending on your soil, some contaminants might leach into the ground right where you are, or they might runoff the soil until they hit a pocket of soil that can absorb them. People don't know this.
- How much manure is actually running off lands? Do we know? Can we find out?

Review/update of existing regulations

- Do the loadings limits from AENV stand the test of time/acceptability for current health?
- When were the loadings limits set, and do they reflect what we think is safe and healthy right now? Or do they need to be changed?
- What about non-regulated point sources, like golf courses and ag lands. How do we figure out what they are contributing?
- Need incentives for good performance and implementing best practices
- Already have enough regulations
- Don't tell people what to do on their own land like can't cut down trees; landowners won't be reckless

Monitoring and access to new technology

- We need monitoring of the regulations already in place
- What level of monitoring could your industry deal with? It depends on the level of technology being used. We need access to better technology. There is much better stuff being done in other places, but sometimes we don't even know about it.
- Need to do a better job of monitoring environment conditions; if the data shows a lack of performance to meet environmental protection requirements, then need to use strong enforcement actions
- Need better baseline data of environmental conditions
- Benchmark current state for each region

Road construction:

- Roads are water movers, so road construction needs to be looked at.

Acreage developments

- Are also an issue, because people don't get it.

Recreation

- Need better partnerships and cooperation among all people with an interest in an area of land, e.g., examine the impact of recreation industry on private and Crown land

Need for Information/Education

- Sometimes just knowing about the problem solves it, so if people know it's bad, maybe they'll fix it! Education.
- Need to promote an alternate conservation ethic
- More education in Best Practices
- More information on acceptable levels of contaminants and what kind of contaminants we have.
- Need to distribute information on Best Management Practices and provide incentives for taking action.

Summary of measures participants indicated they could support:

- We urge better monitoring and to step up enforcement. Use the tools we already have – we have enough regulations – they just need to be monitored and enforced.
- We need more testing of the water; better protection of riparian areas, education, incentives and collaboration.
- We should focus on incentives.
- We support stricter regulations on waste water for all municipalities of all sizes.
- Protecting riparian area
- Decisions based on science
- A risk-assessment system
- Incentives for managing contaminants.
- Cross-industry collaboration
- A range of loadings to work within – not a number
- Best Practices not more policy
- Risk assessment and mitigation
- Education or preventative measures for oil & gas & well sites.

Summary of measures participants indicated they could NOT support

- We are against capping development – we support more monitoring so that we do a better job enforcing regulations already in place. It is tough enough to enforce existing regulations.
- Infringing on the rights of private land owners.
- Having to contain all the run off on private property.
- More regulation.
- Decisions based on perception.
- Restricted access to water because of cumulative effects of impacts from other users.
- Being dictated by downstream needs when downstream does not have to meet same standards.

IWMP Long term Goal #2:

Maintain or improve the ecological integrity of the aquatic ecosystems in the sub-basins of the North Saskatchewan River watershed, including lakes, wetlands and tributaries.

Questions

If we do more to Maintain or improve the ecological integrity of the aquatic ecosystems in the sub-basins of the North Saskatchewan River watershed, including lakes, wetlands and tributaries, what could this mean to the way you currently live and do business?

1. What could you support or live with?
2. What would you not be able to support?

Summary of comments

Wetlands policy & the inclusion of muskeg:

- Any time and any where you want to build a road in Brazeau County, you're pulling out muskeg. It's not fair to us. Muskeg should be taken out of the wetlands policy, or at least some concession made for those who don't have a choice.

Standards for pipe

- Every pipe must be held to the same standards, regardless of the industry.

Regulation on private land

- In Africa, the people became the stewards of the land and own what's on it, so even the animals. They learned to manage them much better when they became responsible. "This is my land...don't regulate me, but trust me not to be reckless."

Summary of measures participants indicated they could support:

- We can support designated recreation areas.
- A replacement policy for wetlands – if you drain one wetland, you have to create an equal or better wetland. So no net loss of wetlands
- Modified land uses based on Best Management Practices
- Long-term land use plans
- Long term plan showing vision instead of short term 'trendy' ideas.

Summary of measures participants indicated they could NOT support

- Policy of never draining any wetland
- Total exclusion of traditional land use
- Private land being excluded from protecting wetlands
- Rules that only apply to industry and not other users

Long term Goal #3:

Maintain or improve groundwater quality and quantity.

Questions

Questions

If we do more to *maintain or improve groundwater quality and quantity*, what could this mean to the way you currently live and do business?

1. What could you support or live with?
2. What would you not be able to support?

Summary of measures participants indicated they could support:

- More ground water research
- Proactive protection
- More ground water monitoring
- Assessment and monitoring of groundwater
- More information on what impacts ground water

Summary of measures participants indicated they could NOT support

- No effort to protect ground water
- Ground water use that's not sustainable

Long term Goal #4:

Maintain mainstem hydrological function (water quantity and flow)so uses are protected.

Questions

If we do more to maintain mainstem hydrological function, what could this mean to the way you currently live and do business?

3. What could you support or live with?
4. What would you not be able to support?

Summary of measures participants indicated they could support:

- Discovering ways to assess and monitor function

Summary of measures participants indicated they could NOT support

- No comments made.



NSWA INTEGRATED WATERSHED MANAGEMENT PLANNING FORUMS

DOWNSTREAM: LAKELAND COLLEGE, VERMILLION: MARCH 10, 2010

Annotated AGENDA:

Goals:

- Discuss the NSWA approach to engage stakeholders in the IWMP collaborative planning effort
- Review the results of the Rural Municipal Watershed Planning Round Table Dec 10 2009
- Continue dialogue with stakeholders on issues raised
- Learn about IWMP, foundational philosophy and potential implications
- Present and discuss the four IWMP goals drafted by the NSWA IWMP Steering Committee

| TIME | TOPIC | SPEAKER |
|------|-------|---------|
|------|-------|---------|

14 participants attended this first NSWA Integrated Watershed Management Planning (IWMP) forum held at Lakeland College in Vermilion, in the *Downstream* sub-region of the North Saskatchewan River.

| | | |
|-----------|---------------------------|-----------|
| 9:30 a.m. | Introductions and welcome | Dave Trew |
|-----------|---------------------------|-----------|

- The Executive Director provided an overview of the NSWA organization: the number of members; the composition of the board, its vision and mandate; current projects; how the organization is funded.

| | | |
|------|---|--------------|
| 9:40 | NSWA approach to stakeholder engagement going forward | Abells Henry |
|------|---|--------------|

- NSWA plans to engage community leaders (watershed stakeholder) who are actively interested in watershed planning, as well as NSWA members and the public in a collaborative planning process to develop recommendations for an integrated Watershed Management Plan (IWMP)
- NSWA is committed to a process that is open, transparent and responsive.
- The focus will be on building a shared understanding among those who live and work in the watershed on how to best protect, maintain and restore the North Saskatchewan River (NSR) Watershed.
- NSWA plans to host three forums every three months in each of the Headwaters, Central and Downstream regions of the watershed until March 2011 when final recommendations will be made to the Government of Alberta.
- Reports from each forum will be posted on the NSWA. Those visiting the site can post their feedback and join the discussion. All input received will form an integral part of the IWMP report.

The following questions were asked of the NSWA Executive Director, Dave Trew:

- Will the NSWA get a seat on the LUF Board? We will submit names on behalf of NSWA.
- Did you say the government is looking into planning? Why didn't they continue? Are we reinventing the wheel with this process? The Alberta Government has not conducted comprehensive water resource planning over the last few years. They have now started up again. The *Water For Life* policy recommended creating Water Planning and Advisory Council (WPACs) – which NSWA now is - to support watershed planning in the community. There has never been integrated water and land

planning done systematically in Alberta. The *Land-use Framework* and *Water for Life* policies are trying to address this problem.

- Is there a federal umbrella? Water resource management is primarily a provincial responsibility, but Alberta has signed an agreement promising that 50% of the water in the North Saskatchewan River will flow to Saskatchewan.
- What about our neighbours to the south? There are transboundary government agreements on that between the United States and Canada, which applies to the Milk River in Southern Alberta.

9:50 Explanation of the organization of the discussion and the day Abells Henry

10:00 Demonstration of new interactive features on NSWA website Billie Milholland

- NSWA staff demonstrated how easy it is to send comments to the NSWA from the Website and encouraged participants to encourage their colleagues and friends interested in watershed planning to participate by sending their comment via the web.

Presentation: NSWA briefing notes (Coffee Shop Discussion briefs)

- The purpose of the short briefs is to respond to the information needs of people living and working in the watershed. They are designed to interpret complex scientific information in a form that is readily accessible and interesting to a general audience:
 - What is NSWA?
 - What is a Watershed?
 - Watershed Components
 - Why a Watershed Approach?
 - Water Quality

10:30 **Coffee**

10:45 Three NSWA Board members who were in attendance, were asked why the IWMP collaborative planning process is important to them:

- **Pat Gordeyko – Board Member; Councilor County of Two Hills; President of Two Hills Agricultural Society; farmer):** This is something I strongly support, talking cross-sectorally. The sooner our paths cross and we have these important conversations the better. It is absolutely essential we form these relationships now.
- **Candice Vanin – Secretary, NSWA; Land Use Analyst with the Agri-Environment Services Branch, of Agriculture & Agri-Food Canada:** My interests have always been in land and water conservation. The NSWA has been a model for *Water For Life*, and LUF has been watching us to see what we’re doing. The whole watershed planning concept is not formal in Alberta. How can communities and the formal systems be able to bring these ideas together? Maybe I’m an adrenaline junkie or crazy but overtime I have seen a lot of good stuff happen.
- **Bill Fox – Alberta Beef Delegate; Operates a mixed farm, Elk Point/Bonnyville:** After I became a delegate with Alberta Beef, many of the issues I kept hearing about is how Agriculture is causing all these problems, so I arranged a tour of St. Paul grazing reserve. The work being done out there was so good, and so well managed, that people were really impressed that Agriculture could be doing good instead of bad. I just think it’s necessary that people know this. WE all have to work together if we are going to make things better.

10: 50 Review of Rural Municipal Planning Round table Dec 10, 2009 Abells Henry
Round Table Discussions

- In December 2009, rural municipalities met to discuss the State of the Saskatchewan River Basin Report. This report identified a number of vulnerabilities facing the Basin, and participants were asked to discuss how these vulnerabilities were impacting their region. Issues regarding the

Headwaters that were identified at the December 10 meeting were presented to participants at this meeting for further discussion.

(Link to summary of morning round table discussions)

11:45 Summary of table discussions

Noon Lunch

1:00 p.m. Over View of IWMP

Tom Cottrell

- Including information on IWMP goals; objectives; the process to date; issues identified; what the research says about the condition of the mainstem, watershed and groundwater; current watershed policy; what an IWMP process contains; and next steps

1:30 Facilitated Discussion between IWMP Panel & Forum Participants Abells Henry
regarding foundational principles underpinning the IWMP.

- Discussion focused on key elements of the previous presentation, which form the assumptions upon which the IWMP is based: What the research says about the condition of the river’s mainstem, watershed and groundwater in the North Saskatchewan River Watershed, and current watershed policy.

The following comments were made about the assumptions:

- 3% consumption results from evaporative cooling at industrial sites.
- Wetland loss occurs as a result of human activities (drainage) and through drought
- Research by Ducks Unlimited Canada suggests that we have lost 2/3^{rds} of our wetlands in the white zone through farming and urban development.
- Vermilion has a comprehensive map of historic/current wetlands. This map was developed based on historical photographs: (Link to NSWA **Bulletin: Vermillion River wetlands and 5-year plans**)
- **Policy of No Further Degradation:** Does that mean a new user can’t have any impact? Or does that mean that current users have to reduce their impact and a new user must comply to stricter rules? These are the type of questions that will be discussed during the collaborative planning process.
- Ultimate question – How do we get there? If there is zero degradation does that mean that the new guy coming in has to have zero impact, or do the people already there have to reduce their impacts? In other words, do others already in the area have to make changes in order to accommodate new development? For example – the new minimal disturbance practices in Oil & Gas has to be widely adopted.

2:30 Coffee

2:45 Round Table Discussion: Discussion of four (4) IWMP long term goals Abells Henry

- Participants were presented draft of four (4) long term goals drafted by the IWMP Steering Committee. These goals represent what people living and working in the NSR watershed want to achieve through the implementation of the IWMP recommendations.
- Thinking about the types of actions that might have to be taken to achieve these goals, participants were asked to consider how these goals could positively or negatively impact the way the live and do business Downstream.

3:45 Summary of table discussion

4:15 Next steps

- The next forum is scheduled for early June. It will be held in the Downstream sub-region of the NSR watershed. Location, date and time TBA. If you are interested in participating please contact Jayme Nelson at the NSWA office: Jayme Nelson Jayme.Nelson@edmonton.ca or call (780) 442-6363

4:30 p.m. End.

Thank you for your participation!

Summary of Morning Round Table Discussion: Watershed Issues Downstream **March 10, 2010**

In December 2009, rural municipalities met to discuss the State of the Saskatchewan River Basin Report. This report identified a number of vulnerabilities facing the Basin, and participants were asked to discuss how these vulnerabilities were impacting their region.

Following is a summary of issues raised concerning how each of the vulnerabilities facing the North Saskatchewan River Basin were affecting the downstream sub-region. Participants in the table discussion were from the counties of Beaver, Thorhild, Vermilion River, Minburn, and Two Hills.

1. Vulnerability Issue: Landscape Modification: (how human activities were disturbing and changing the natural landscape)

Comments from the Dec 2009 Round Table Discussion

Loss of wetlands

- Similar to other regions: acreages, agriculture, wetland loss, drainage – loss of wetlands and illegal drainage, preservation of existing wetlands.
- Landowners/farmers – don't want anything done to limit or prevent their ability to drain wetlands in their fields as it is their land and they might be able to enhance their production, return and operation of farm machinery if they drain a slough.
- Counties lack the authority past the edge of a drainage ditch to address drainage on farm land.
- Counties can address wetland issues only under a sub-division proposal but can't address drainage issues in a farm field.

Preserving agricultural land

- Beaver County: Land use planning plays a part.
 - Sustainability initiatives: trying to conserve the inventory of agricultural land, building up more agricultural land near existing urban development.
- Vermilion River County: now has provision for four parcels out (sub-division of four parcels out of a quarter section of land). Beaver County has provision for one parcel out.
- Counties need tougher provisions in their Municipal Development Plans or Land-use By-laws to control land use and restrict the size and number of parcels in a subdivision.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

Loss of wetlands – legal drainage - Drainage Districts

- Legal drainage is not listed as an issue, such as by the Holden Drainage District
- Gate control structures we built by Alberta Environment to store water in lakes and storage ponds along the Vermilion River. But they are operated to drain water from those lakes and ponds and this causes damage

Illegal drainage

- Illegal drainage causes problems and the landowners don't pay taxes on that drainage. It causes problems with increased flow at certain times in a wet year.
- loss of wetlands by land owners draining wetlands and removal of surface cover
- Will landowners be compensated with these recommendations?
- *Question:* what's worse – draining several small wetlands into a consolidated slough or driving around multiple wetlands with tractors, ploughing, seeding, fertilizing, and spraying more than once? - Where is the tradeoff?

Increasing cooperation between Oils and Gas companies and the Counties

- Oil & Gas industry is regulated tightly and can't touch wetlands or cause drainage issues. Water for a well site is taken from a pumping station or maybe a farmer's dugout but not from wetlands.
- Communication and cooperation between Counties and Oil & Gas companies is better and improving. Oil & Gas activities appear to be better received, with less conflict.
- Oil & Gas companies are now building low disturbance well sites and roads

Subdivisions of agricultural land and loss to non-farm use

- Concern about conversion of farm land and crop rotation practices
- County of St. Paul allows four parcels out but they have to be grouped and a maximum of 20 acres total
- Counties are emphasizing conservation of wetlands and agricultural use of land. (County of Vermilion River held two public meetings in Kitscoty and Vermilion in February and March on the results of a study of the conservation of agricultural land; Graham has a copy of this study)
- Concern over feed lots

Subdivision development

- Construction of homes and buildings should not be allowed in flood plain areas that will be flooded in the future; development in the flood plain is a problem
- What are the regulations concerning expanding subdivisions and riparian protection?

Identification of environmentally sensitive sites

- Identify environmentally sensitive areas before development
- ****Request for information about sensitive areas in the region***

Reclamation of abandoned sites

- Concern over abandoned gravel pits/oil & gas sites and the need for reclamation
- Lack of reclamation of old, abandoned Oil & Gas development sites and orphan sites
- Reclamation of abandoned gravel pits and potential for restoration - who is responsible? Especially pits with ground water present - what can be potential use? We need an inventory of these sites.

Construction practices

- When we used to construct bridges across rivers, there was never a machine in the water – this has changed. We need to be concerned about **construction practices**.

Other comments

- Water comes from the mountains – forestry used to on flatlands – now it occurs right up to the tree-line. To manage water, all of our mountains should be managed as watersheds. Forests there need to be protected.
- There should be one-mile set-back from rivers. Buy the land back from the farmers – it will be cheaper to do that now than it will be a 100 years from now.

Questions raised:

- What is the extent and impacts of gravel extraction and oil and gas sector?
- Is there any effect from the salt plant?
- What's done with concentrated arsenic from cleaning well water?

- Is there any connection between Steam Assisted Gravity Drainage (SAGD) and arsenic?
- How much fresh vs. produced water is used in oilfield injection?
- What are the locations of springs?
- How can we be more resilient to these big-picture vulnerabilities?

2. Vulnerability Issue: Water Supply

Comments from the Dec 2009 Round Table Discussion

- Rurals remain on wells; urbans get hooked up to the mainstem.
- Because of the drought there are less surface water supplies.
- We rely on groundwater, but have very little data on it.
- Less water available for fighting fire (Sturgeon/Lamont/Strathcona Counties).

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

Groundwater

- Concerned about groundwater and lack of information about aquifers
- People who use groundwater wells need education
- Need better mapping of groundwater resources so people know where aquifers are located.
- Lack of knowledge of effects on groundwater of development activities and disturbance
- Education and awareness of status/health of water wells of individual owners and characterization of groundwater aquifers.
- Lack of proper well maintenance, use and testing of groundwater wells by individual owners.

3. Vulnerability Issue: Municipal Waste Water

Comments from the Dec 2009 Round Table Discussion

- Lack of available drinking water through a regional pipeline.
- Thorhild got rid of their last water treatment plant a while ago. Cannot justify having trained personnel for 200 people. Community wells and tank loaders are now all they have. If there is a problem, they lack the resources to manage the water quality. The second last plant was decommissioned in 1995.
- North East Alberta Water Management Coalition (NEAWMC) and Vermilion are seeking diversion from mainstem to combine 15 communities on one municipal water system.
- Source water protection is key for EPCOR and its regional distribution.
- Equity in pricing is an issue for communities on the system - those farthest out pay the most. EPCOR pilot at Bonnyville water treatment resulted in price increases from \$2/cu m to \$7 cu m.
- **Questions**
- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

Local water systems

- Aging infrastructure in Edmonton creates more costs for people downstream
- Regional water pipelines – and the associated vulnerabilities. What happens downstream, if there is too much demand upstream? Serious thought needs to be given to this type of dependency. Sustainability requires a certain amount of independence.
- Counties are encouraging development of local water systems for clustered rural developments

Waste water

- What is the effect of drainage of local sewage lagoons twice a year into a water course? Concern about drainage of sewage lagoons and the effect on tributaries
- Lagoons are drained into the Vermilion River in the fall when there isn't any water in the river. It smells. The only flow is lagoon water
- Water testing and arsenic – if we remove it – what do we do with it? How do you dispose of it?
- We need to look at better use of new technology to dispose of waste water from local systems.
- Legacy of heavy pollution of Vermilion River and degradation over many years. Now no water flowing at all most of the year
- People put 100 lbs of fertilizer on their lawns – you can imagine how much fertilizer is used in agriculture. We need to recognize that we are polluting through our use of fertilizer.
- Need to know about the impact of recycling waste water – both good and bad

Water rights

- Equitable access to water: who pays? Who owns? Who has rights to the water?
- Does Edmonton own the water that runs through it? Does Edmonton have the right to dictate water prices?
- The economics of serving a population of 1 million in Edmonton vs. 200 downstream – economics often dictates price.
- On the other hand, you need to look at the high cost of building your own water plant and managing that for 200 people.
- Key questions around who owns the water? Who pays for the water? What is a fair price for water?
- EPCOR – what if it turns into a publicly-traded corporation (City of Edmonton is currently the sole shareholder). There could be issues around the future cost of water.
- Are there examples of privately owned companies and what happens to the cost of water?
- What are the tools outside of Alberta? Private companies owning water; what's the cost to rural municipalities?

Value of Water

- Should NSWA make people understand what the value of water really is?
- One of the prime purposes of NSWA is to make people realize the value of water, and the cost of guaranteed quality of water.

4. Vulnerability Issue: Instream Flow Needs (IFN)

(How much water needs to remain in the river to maintain the natural aquatic environment)

Comments from the Dec 2009 Round Table Discussion

- There's a lot of uncertainty regarding prairie-fed tributaries with highly variable flow regimes.
- There's a huge difference between needs of the mainstem of the river and needs of a tributary.
- A basic definition is needed especially for tributaries. Problems arise from working from some presumed value. How does Instream Flow Needs affect rural areas? GoA has never studied that. No

baseline for that. (Note: NSWA is planning to prepare major report in 2010, tackling the Instream Flow Needs in the mainstem.)

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

- Concern about loss of flows/degradation from tributaries
- Does Instream Flow Needs apply to tributaries? If so, how?

5. Vulnerability Issue: Institutional Development

(How people organize themselves to develop and implement the policies, regulations and best practices needed to manage the watershed)

- Conservation of land now includes conservation of wetlands. No net loss policy. Developers have to replace any loss. Municipalities with this policy can enforce their own protection of wetlands. Developers can choose their own approach, which may include compensation to the municipality.
- Counties need tougher provisions in their Municipal Development Plans or Land-use By-laws to control land use and restrict the size and number of parcels in a subdivision.
- Lack of coordinated action among counties, and different approaches by neighbouring counties.
- What to do when dealing inter-provincially as well as inter-municipally? Vermilion River often has to be concerned about what is happening on the Saskatchewan side of the border.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

- Impact of Land-use Framework on water management issues.
- How will the conversation about trade-off happen?
- Recommendation: province needs to address long-term water capacity issues.
- We need to recognize the connection of all other things to the watershed – like air quality. Our concern about the water shed should extend beyond water and land to include air. We need to be concerned about the prevailing winds blowing from the west.
- Federal government (Department of Fisheries and Oceans) involvement – impact of putting Sturgeon on the list of species-at-risk
- Communicate with older people; educate the younger ones

6. Vulnerability Issue: Water Use Trends

Comments from the Dec 2009 Round Table Discussion

- Thorhild: all hamlets have regional water. Installing meters resulted in consumption dropping in half. Start measuring and people can see their use and conserve or be aware of their water use.

- Non-potable use may increase demand for irrigation and recreational opportunities. Defining recreational lake levels caused water use issues.
- Information needs:
 - Lack of information about some aspects of groundwater, like amount, quality, location, reliability of delivery, etc.
 - Lack of availability of current information or it doesn't relate to the important issues.
 - Translation of water quality information into useful information for land-use decisions.
 - Farmers and developers lack of information, awareness and understanding of environmental value of wetlands and sloughs.
- Need information about the value of **ecological goods and services** (EG&S): the cost of operation for a farmer versus the value of leaving a wetland. Where do municipalities get funding to finance preservation and restoration of wetlands?

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

- Potential of inter- basin transfer of water from Athabasca River to supply drinking water to small communities along the northern side of the North Saskatchewan River watershed
- The County of Vermilion River is not using the ALUS (Alternate Land Use Services) of Delta Waterfowl from Manitoba. ALUS promotes having farmers keep some areas as wetland and natural habitat; the farmers get paid a small amount per acre for the land in wetlands, grasslands and growing trees.

7. Vulnerability Issue: Dams and Diversions

Comments from the Dec 2009 Round Table Discussion

- High Gate Dam: County of Vermilion River participated in a multi-jurisdictional discussion about this. There were challenges from First Nations, although Pound Maker Band came on side and were willing to put money into it. There were also concerns about sturgeon fish. We need a supply to draw from – we would be at the headwaters of this dam.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

- Issue – placement and operation of dams and control gates that cause a deficit of water
- Storage capacity – what are the province's plans?

8. Vulnerability Issue: Drought and Floods

Comments from the Dec 2009 Round Table Discussion

- There is flooding due to a big flush of water in the spring and lack of water holding capacity on the land to slow down the flooding.

Questions

- Do the comments made about this issue sound right to you?
- What else needs to be said to flesh out the issue?
- If you could ask the experts questions about this issue – what questions would you ask?
- What information do you need to help answer these questions?

Comments from March 2010 Round Table Discussion

No comments recorded on this topic.

Summary of Afternoon Plenary Discussion: IWMP Assumptions - March 10, 2010

Clarifications:

- 3% consumption results from evaporation and transfer (it goes to Saskatchewan/Manitoba)
- Wetland loss occurs as a result of human activities (drainage) and through drought
- Ducks Unlimited Canada (DUC) research suggests that we have lost two-thirds of our wetlands in the white zone through farming and urban development.
- Vermillion has a comprehensive map of historic/current wetlands. This map was developed based on historical photographs

Request: Copy of Vermillion River wetlands and plans for next 5 years.

Policy of No Further Degradation

- Ultimate question – How do we get there? If there is zero degradation does that mean that the new guy coming in has to have zero impact, or do the people already there have to reduce their impacts? In other words, do others already in the area have to make changes in order to accommodate new development?
- For example – the new minimal disturbance practices in Oil & Gas has to be widely adopted.

Summary of Afternoon Round Table Discussion: IWMP Long Term Goals – March 10, 2010

IWMP Long term Goal #1:

Protect or improve the water quality of the mainstem of the North Saskatchewan River by managing contaminant loadings to the river.

Questions

If we do more to manage contaminant loading to the river, what could this mean to the way you currently live and do business?

3. What could you support or live with?
4. What would you not be able to support?

Summary of comments

Integrated planning

- Planning has to be more inter-related, integrating social, economic and ecological.
- Who makes the management decisions for wasteload allocation? How will we accommodate future growth with present loadings? These are complex questions: timing, permits, locations – lots of politics involved.
- Need continuous planning with clear description of implementation.

Accountability and Enforcement

- Who would do it and under what accountability? Who is the administrator/manager/ controller of this? Right now these responsibilities are split up all over the place.
- Need accountability on the “backstop” - how will regulation help.
- Needs to be defined accountability for the process to work.
- Enforcement needs to be set up to be feasible for each of the different sectors, must be carefully designed with smart enforcement (i.e. “ladder of enforcement”).

Education and training

- Key need is more education and training, including for regulatory staff.
- Would support better partnerships with universities and research community.

Implementation costs

- Implementation must consider full costs!

Summary of measures participants indicated they could support:

Low impact development approach:

- Support policy to collaboratively reduce impact so low-impact development can continue.

Risk management approach:

- All major players should be at the table for a risk management approach – everyone who is using or impacting watersheds.

Stormwater:

- Better planning & treatment methods for stormwater contaminants.
- Explore alternatives to road salt.
- Would Support a policy for regulation of storm water from urban areas.
- Regulate urban use of pesticides and fertilizers.

Incentives

- New development potential shouldn't be limited by existing standards and the requirement of no further degradation; should support collective reduction of current loadings to make room for new loadings by providing incentives to existing industry to reduce.

Summary of measures participants indicated they could NOT support

Offset credits

- Should not have pollution compensated outside of the area / water body / sub-watershed where occurs.
- Would not support a policy of one industry that is polluting water to buy an offset in another area.
- What if the offset credit was applied locally? Yes, if it is in close proximity to where the pollution is occurring. For example: if you have three small wetlands, and you want to get rid of two, but build up the third. But that has to be applied for and approved, to make sure there is actually a net benefit to what you are doing – like the one you select to build up is the one that is connected to the recharge area, etc.
- The principle we are after: it has to be a site-specific offset – where compensation does happen somewhere else.
- Yes, but you need to be cautious even locally – the positive has to outweigh the negative impacts, so that adverse effects are actually mitigated.
- There has to be a process, where the request for change is considered.

IWMP Long term Goal #2:

Maintain or improve the ecological integrity of the aquatic ecosystems in the sub-basins of the North Saskatchewan River watershed, including lakes, wetlands and tributaries.

Questions

If we do more to Maintain or improve the ecological integrity of the aquatic ecosystems in the sub-basins of the North Saskatchewan River watershed, including lakes, wetlands and tributaries, what could this mean to the way you currently live and do business?

3. What could you support or live with?
4. What would you not be able to support?

Summary of comments

- We need better enforcement of existing regulations.
- The backstop is good – but everyone needs to be involved in the decision to develop new regulations
- Look at response to first set of goals – collaborative approaches in particular apply

Summary of measures participants indicated they could support:

Wetlands inventory

- Need wetland inventory performed across watersheds.
- Support a policy of re-establishing, protecting and maintaining riparian areas that are continuous along rivers and streams
- Support wetland enhancement

Stream crossings

- Manage & remove barriers to fish travel. Support a policy of construction of stream crossings that allow fish passage and not crossings that impede fish passage

Sensitive areas

- Limit access in sensitive areas and during sensitive times – adaptive, site-specific cumulative effects management (e.g. winter wheat, spawning bed protection)

Low-impact development and setbacks

- Municipalities need to specify development setbacks from water bodies
- would support appropriate setbacks from waterways, with ecological integrity, continual cover, natural riparian conditions
- *Question:* how do we better zone development to be on appropriate soil types and geological settings and encourage sensitive (i.e. Low impact) development that would allow natural treatment of runoff?
- Have natural treatment of sewage.
- Agricultural Operations Practices Act (AOPA) guidelines need to be enforceable

Increasing penalties

- would support policy increasing penalty for illegal activities in water bodies (wetland drainage, Off Highway Vehicle - Recreation in streams)

Education, monitoring, enforcement, incentives

- Increased dollars needed for education, monitoring and ENFORCEMENT.
- Better enforcement.
- Support incentive and education programs that encourage landowners to keep wetlands using compensation.

- Positive incentives with fair compensation combined with education then monitoring and enforcement when needed.
- Enforcement of regulations to keep vehicles and livestock out of water bodies

Ecological Goods and Services

- Support a policy of payment to land owners for maintenance of ecological goods and services values on private land

Conservation easements

- Important to have long-term continuity in conservation, too, i.e. Conservation easements, which allow some appropriate activity (i.e. Hay cutting in right season & during drier periods)
- Support a policy to use conservation easements

Summary of measures participants indicated they could NOT support

- poorly integrated regulation without monitoring
- Not support a policy of preventing landowners from managing their own land and drainage without compensation to leave wetlands

Long term Goal #3:

Maintain or improve groundwater quality and quantity.

Questions

If we do more to *maintain or improve groundwater quality and quantity*, what could this mean to the way you currently live and do business?

5. What could you support or live with?
6. What would you not be able to support?

Summary of comments

- better regulation of activities
- more fundamental research & knowledge needed

Summary of measures participants indicated they could support:

Groundwater

- Identify & protect aquifer recharge areas.
- NEED WAY MORE INFORMATION about /monitoring of groundwater.
- Needs to be better integration of monitoring activities with good information sharing.
- Key need for sewage and surface water risk assessment to groundwater resources.
- Education & workshops for well owners, municipalities, etc.
- Technological improvements need to be widely adopted.

Oil & Gas and groundwater

- We need better planning. For example, drilling for gas – there needs to be more minimal impact drilling on the surface. For oil wells, there needs to be better planning for selecting well sites.
- Down-hole technology is pretty good. Seismic is very different now than it was. Much lighter charges are used to prevent cracking.
- Identify and manage abandoned water and oil & gas wells that have not been properly reclaimed.
- Liabilities of old sites need to be better managed.
- Better study of ground water and the effect of oil and gas drilling on domestic water wells of land owners and farmers.
- Protective policies need to be in place for preventing contamination due to oil & gas activity.
- Support policies discouraging use of fresh water in oil well injection.
- What are the risks of seismic activity? May be increasing now?

Practice of spreading manure on the land

- Monitoring effects of manure spreading, i.e. Residual antibiotics entering water.

Summary of measures participants indicated they could NOT support

- oil and gas activities which are carried out without long-term planning
- not willing to support complete limitations on development

Long term Goal #4:

Maintain mainstem hydrological function (water quantity and flow) so uses are protected.

Questions

If we do more to maintain mainstem hydrological function, what could this mean to the way you currently live and do business?

7. What could you support or live with?
8. What would you not be able to support?

Summary of comments

- We need emphasis placed on protecting the public good for the future.
- What is the status of longer-term agreements?
- Should there be monitored and have more conditions on renewal?
- Key for plan preparation is to not rush the process, have lots of thought, input and discussion with all stakeholders.

Summary of measures participants indicated they could support:

Monitoring

- Need good monitoring of water use in basin, better than current monitoring.

Instream Flow Needs

- Would support policies that would maintain flow as close as possible to natural flows.
- Would support comprehensive instream flow needs study to establish flow objectives (expensive!)

Water allocation and use

- We need to look at potential for future dams
- Support a policy to have water licences more realistic in terms of water allocated and water needed.
- More realistic allocation in relation to actual need/use.
- Have adequate quantity and flow of water in rivers for municipal water purposes.
- Have adequate water for aquatic ecosystem as an identified use.
- Have to rationalize all uses of water in the river so as to protect uses satisfactorily during years of very low flow

Risk assessment approach:

- Stakeholders to prioritize all uses of water, and design criteria for rationing water use before crisis arise.
- We need a strategy/plan for managing a crisis situation – a plan for how we manage the lowest-flow. How we are going to ration water so we are prepared for the worst-case scenario?

Summary of measures participants indicated they could NOT support

- Would not support selling one's water use / share / portion to others. This increases actual use.
- Would not support inter basin transfer beyond North Saskatchewan River Basin.

Question: how are we to deal with major new uses (i.e. Irrigation)?

| Appendix 3: NSWA Cross Sectoral Engagement Work Plan: December 2009 to March 2011 (As appended to Abells Henry Public Affairs: Report from December 2009) | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar - 10 | Apr - 10 | May - 10 | Jun - 10 | Jul - 10 | Aug - 10 | Sep - 10 | Oct - 10 | Nov - 10 | Dec - 10 | Jan - 11 | Feb - 11 | Mar - 11 | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Rural municipal Round Table – Dec 10, 2009 | Invitation to Rural Municipal Councillors, planners, ag services, NSWA staff, Board and Steering Committee members | Agenda; Sask. River Basin (SRB) Report; Beaver Hills Initiative Newsletter; Table Discussion Questions | NSWA to approve budget and expenditures; NSWA to act on next steps suggested by forum participants | Inform participants about SRB vulnerabilities; Discuss local impacts of these vulnerabilities; watershed issue identification | Dec 10, 2009 | | | | | | | | | | | | | | | | | | |
| Assessment of Current Consultation Strategy | | | | | | | | | | | | | | | | | | | | | | | |
| Assessment of Current Consultation Strategy | Discussion with NSWA staff and Communications Committee | Report to the NSWA Board | NSWA to approve engagement strategy | Assessment Report | Dec 16, 2009 | | | | | | | | | | | | | | | | | | |
| NSWA Presentations for Trade shows and Conferences Atlases for North Saskatchewan; Vermilion and Sturgeon Rivers February 2010 NSWA Members Meeting – To update members on NSWA activities and upcoming collaborative Planning Forums | Opportunities for the public to meet with NSWA staff and learn about the organization and its activities, including the IWMP collaborative planning process. Opportunity for the public to receive maps and learn about the NSWA and the NSR watershed. Invitation sent to all 181 NSWA members (86 organizations and 95 individual members) | Information, reports, and maps Maps from the Atlas project PPT presentations: - NSWA update - IWMP update - Abells Henry: Collaborative Planning Strategy - demonstration on new interactive NSWA website feature | NSWA Board, SC, staff and consultants prepare presentations for the general public and the members | <ul style="list-style-type: none"> Promote the NSWA to a wider audience Introduce NSWA’s role as a WPAC Build a sense of place and community around the NSR watershed Inform a wider audience of the importance of the IWMP and how they can become engaged in developing and supporting IWMP recommendations as active participants in a collaborative planning process. | Feb 27, 2010 | | | | | | | | | | | | | | | | | | |

| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar -10 | Apr -10 | May -10 | Jun -10 | Jul -10 | Aug -10 | Sep - 10 | Oct -10 | Nov -10 | Dec -10 | Jan - 11 | Feb - 11 | Mar - 11 | |
|--|--|---|---|--|-----------------------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|----------|----------|----------|--|
| | | | | | | | | | | | | | | | | | | | | | | | |
| March 2010 Watershed Planning Forums - Planning for NSWA Engagement Forums - one in each subregion | <ul style="list-style-type: none"> Identify co-host(s) Task board and SC members in each sub-region to identify and invite community leaders that represent sectors identified in Dec 10 rural municipalities forum in each sub-region | Stakeholders/website visitors encouraged to review and provide further input to posted final and summary reports from the Dec 10 09 rural municipalities forum | NSWA staff/board/SC and to review and approve invitation list | Invitations to community leaders | Jan 15, 2010 | | | | | | | | | | | | | | | | | | |
| Development of Communications Products for March 2010 forums | <ul style="list-style-type: none"> Discussion with NSWA staff, Board and IWMP Steering Committee (SC) regarding strategy for presentation of IWMP information at March forum. Review of information needs from Dec 10 Round Table Develop products that respond to information needs and offer opportunities for feedback | Reports for Dec 10 roundtable: <ul style="list-style-type: none"> Annotated Agenda Reports and presentations (5) Summary reports of table discussions (3) Coffee shop discussion papers (5) Edit (shorten and simplify) the Water Quality Objectives and post it on the NSWA website | NSWA staff/Board/SC to approve communications products | <ul style="list-style-type: none"> Website design to enable feedback from website visitors Uploading of all reports and presentations Completion of Coffee Shop Papers | Jan 15 - Feb 15, 2010 | | | | | | | | | | | | | | | | | | |
| Implementation of March Cross sectoral NSWA Watershed Planning Forums | <ul style="list-style-type: none"> Community leaders representing all sectors interested in/ impacted by watershed planning within the sub-region of the NSR Two meetings with Capital Region Board (CRB) to inform them about IWMP. | As posted on NSWA website | As approved by the NSWA Board and SC | <ul style="list-style-type: none"> One-day forum held in Headwaters and Downstream regions Meetings held with CRB to develop Central Region forum Consideration of IWMP Assumptions and Goals | Mar 4-10, 2010 | | | | | | | | | | | | | | | | | | |
| Final Reports on 3 Forms | NSWA staff and consultants to prepare annotated agendas and reports from table discussions | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report regarding March forums | Mar-30-2010 | | | | | | | | | | | | | | | | | | |

| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar - 10 | Apr - 10 | May - 10 | Jun - 10 | Jul - 10 | Aug - 10 | Sep - 10 | Oct - 10 | Nov - 10 | Dec - 10 | Jan - 11 | Feb - 11 | Mar - 11 | |
|---|---|---|---|--|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| | | | | | | | | | | | | | | | | | | | | | | | |
| June 2010 Watershed Planning Forums Planning for NSWA Engagement Forums - one in each subregion | <ul style="list-style-type: none"> Identify co-host(s) Task board and SC members in each sub-region to review stakeholder list and ensure all sectors potentially impacted by watershed planning are invited to attend Presentations to 2 Capital Region Board (CRB) committees and finalize Central IWMP Engagement Forum | Reports from March forums <ul style="list-style-type: none"> Annotated Agendas Reports and presentations Summary reports of table discussions Presentations to Capital Region Board Committees Develop draft of the IWMP report, reviewing draft recommendations with IWMP engagement forums | NSWA staff/board/SC and approve stakeholder invitation list and review feedback from March forums | <ul style="list-style-type: none"> Invitations to community leaders in Headwaters and Downstream to attend June forums Development of Central Region forum with CRB and other key stakeholders in Central sub-region | April 15, 2010 | | | | | | | | | | | | | | | | | | |
| Development of Communications Products for June series of forums | <ul style="list-style-type: none"> Review information needs from March forums Develop products that respond to information needs and offer opportunities for feedback Develop social networking strategy to promote NSWA watershed planning process and to drive interested people to the website to provide feedback. | <ul style="list-style-type: none"> Development of Coffee Shop Discussion Papers (2 to 3 brief papers 1-2 pages long) Review and consolidate web-based feedback and make it available on the website for public review | NSWA staff/Board/ SC to approve communications products | <ul style="list-style-type: none"> Uploading of all reports and presentations from March forums Completion of Coffee Shop Papers for June forums | Apr 15 - May 15, 2010 | | | | | | | | | | | | | | | | | | |
| Implementation of 3 cross sectoral NSWA Watershed Planning Forums | Community leaders representing all sectors interested in/ impacted by watershed planning within the sub-region of the NSR | As posted on NSWA website | As approved by NSWA Executive Director | <ul style="list-style-type: none"> One-day forum held in each region Water Quality Objectives considered Objectives/Actions related to IWMP Goal #1 considered | June 1 - 15, 2010 | | | | | | | | | | | | | | | | | | |

| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar - 10 | Apr - 10 | May - 10 | Jun - 10 | Jul - 10 | Aug - 10 | Sep - 10 | Oct - 10 | Nov - 10 | Dec - 10 | Jan - 11 | Feb - 11 | Mar - 11 |
|--|---|---|---|--|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Final Reports on 3 Forms | NSWA staff and consultants to prepare annotated agendas and reports from table discussions | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report regarding June forums | June 30, 2010 | | | | | | | | | | | | | | | | | |
| September 2010 Watershed Planning Forums Planning for NSWA Engagement Forums - one in each subregion | <ul style="list-style-type: none"> Identify co-host(s) Task board and SC members in each sub-region to review stakeholder list and ensure all sectors potentially impacted by watershed planning are invited to attend | Reports from June forums <ul style="list-style-type: none"> Annotated Agendas Reports and presentations Summary reports of table discussions Updated IWMP recommendations, as necessary | NSWA staff/board/SC to approve invitation list and review feedback from June forums | Invitations to community leaders to attend September forums | July 15, 2010 | | | | | | | | | | | | | | | | | |
| Development of Communications Products for September series of forums | <ul style="list-style-type: none"> Review information needs from June forums Develop products that respond to information needs and offer opportunities for feedback Develop social networking strategy to promote NSWA watershed planning process and to drive interested people to the website to provide feedback | <ul style="list-style-type: none"> Development of Coffee Shop Discussion Papers (2 to 3 brief papers 1-2 pages long) | NSWA staff/board/SC to approve content of communications products | <ul style="list-style-type: none"> Uploading of all reports and presentations from June forums Completion of Coffee Shop Papers for September forums | July 15 – August 15, 2010 | | | | | | | | | | | | | | | | | |
| Implementation of 3 cross sectoral NSWA Watershed Planning Forums | Community leaders representing all sectors interested in/ impacted by watershed planning within the sub-region of the NSR | As posted on NSWA website | As approved by Executive Director | <ul style="list-style-type: none"> One-day forum held in each region Objectives/Actions related to IWMP Goal #2 considered | Sept 1-15, 2010 | | | | | | | | | | | | | | | | | |
| Final Reports on 3 Forms | NSWA staff and consultants to prepare annotated agendas and reports from table discussions | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report regarding September forums | Sept 30, 2010 | | | | | | | | | | | | | | | | | |

| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar - 10 | Apr - 10 | May - 10 | Jun - 10 | Jul - 10 | Aug - 10 | Sep - 10 | Oct - 10 | Nov - 10 | Dec - 10 | Jan - 11 | Feb - 11 | Mar - 11 | |
|---|--|---|--|--|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| | | | | | | | | | | | | | | | | | | | | | | | |
| December 2010 Watershed Planning Forums Planning for NSWA Engagement Forums - one in each subregion | <ul style="list-style-type: none"> Identify co-host(s) Task board and SC members in each sub-region to review stakeholder list and ensure all sectors potentially impacted by watershed planning are invited to attend | Reports from September forums <ul style="list-style-type: none"> Annotated Agendas Reports and presentations Summary reports of table discussions Updated IWMP recommendations as necessary | NSWA staff/board/SC to approve invitation list and review feedback from September forums | Invitations to community leaders to attend December forums | Oct 15, 2010 | | | | | | | | | | | | | | | | | | |
| Development of Communications Products for September series of forums | <ul style="list-style-type: none"> Review information needs from September forums Develop products that respond to information needs and offer opportunities for feedback Develop social networking strategy to promote NSWA watershed planning process and to drive interested people to the website to provide feedback | <ul style="list-style-type: none"> Development of Coffee Shop Discussion Papers (2 to 3 brief papers 1-2 pages long) | NSWA staff/board/SC to approve content of communications products | <ul style="list-style-type: none"> Uploading of all reports and presentations from September forums Completion of Coffee Shop Papers for December forums | Oct 15 – Nov 15, 2010 | | | | | | | | | | | | | | | | | | |
| Implementation of 3 cross sectoral NSWA Watershed Planning Forums | Community leaders representing all sectors interested in/ impacted by watershed planning within the sub-region of the NSR | As posted on NSWA website | As approved by Executive Director | <ul style="list-style-type: none"> One-day forum held in each region Objectives/Actions related to IWMP Goals #3 and #4 considered | Dec 1-15, 2010 | | | | | | | | | | | | | | | | | | |
| Final Reports on 3 Forms | NSWA staff and consultants to prepare annotated agendas and reports from table discussions | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report regarding December forums | Dec 30, 2010 | | | | | | | | | | | | | | | | | | |

| Task | Participation Opportunity | Communications products | Decision Making Framework | Key Mileposts | Timeline | Nov - 09 | Dec - 09 | Jan - 10 | Feb - 10 | Mar - 10 | Apr - 10 | May - 10 | Jun - 10 | Jul - 10 | Aug - 10 | Sep - 10 | Oct - 10 | Nov - 10 | Dec - 10 | Jan - 11 | Feb - 11 | Mar - 11 | |
|--|---|---|---|---|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| | | | | | | | | | | | | | | | | | | | | | | | |
| March 2011 Watershed Planning Forums Planning for NSWA Engagement Forums - one in each subregion | <ul style="list-style-type: none"> Identify co-host(s) Task board and SC members in each sub-region to review stakeholder list and ensure all sectors potentially impacted by watershed planning are invited to attend | Reports from December forums <ul style="list-style-type: none"> Annotated Agendas Reports and presentations Summary reports of table discussions Updated IWMP recommendations, as necessary | NSWA staff/board/SC to approve invitation list and review feedback from December forums | Invitations to community leaders to attend March forums | Jan 15, 2011 | | | | | | | | | | | | | | | | | | |
| Development of Communications Products for March series of forums | <ul style="list-style-type: none"> Review information needs from December forums Develop products that respond to information needs and offer opportunities for feedback Develop social networking strategy to promote NSWA watershed planning process and to drive interested people to the website to provide feedback | <ul style="list-style-type: none"> Development of Coffee Shop Discussion Papers (2 to 3 brief papers 1-2 pages long) | NSWA staff/board/SC to approve content of communications products | <ul style="list-style-type: none"> Uploading of all reports and presentations Completion of Coffee Shop Papers for March forums | Jan 15 – Feb 15, 2011 | | | | | | | | | | | | | | | | | | |
| Implementation of 3 cross sectoral NSWA Watershed Planning Forums | Community leaders representing all sectors interested in/ impacted by watershed planning within the sub-region of the NSR | As posted on NSWA website | As approved by Executive Director | <ul style="list-style-type: none"> One-day forum held in each region Review of IWMP draft plan | March 1-15, 2011 | | | | | | | | | | | | | | | | | | |
| Final Reports on 3 Forms | NSWA staff and consultants to prepare annotated agendas and reports from table discussions | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report for the March series of forums | March 30, 2011 | | | | | | | | | | | | | | | | | | |
| Final Report on the NSWA Collaborative Planning Process | NSWA staff and consultants to review the collaborative planning process (December 10, 2009 to March 31, 2011) and make recommendations for future planning processes | Final Report | To be accepted by NSWA Executive Director | Completion of Final Report on the NSWA Collaborative Planning Process. | March 30, 2011 | | | | | | | | | | | | | | | | | | |
| Final Report on the IWMP | Board to approve final draft of IWMP | Final report | NSWA Board to present report and final recommendation to the Alberta Government | Completion of the IWMP with Final recommendations made to the Government of Alberta | | | | | | | | | | | | | | | | | | | |