



Vermilion River

WATERSHED ALLIANCE

Summary of: Vermilion River Watershed Management Plan (2012) Review

Introduction

This document summarizes the 10 March 2017 review of the 2012 Vermilion River Watershed Management Plan (VRWMP). Vermilion River Watershed Alliance (VRWA)-affiliated participants were asked to review each of the five VRWMP Goals along with the Goals’ associated Directions, and answer the following questions:

- Is the goal and are the management directions still current?
- Are changes or additions required and if so what are they?
- Should the 2012 priorities for the management directions be changed?
- What might be potential implementation activities for high priority management directions?

A full workshop report drafted by LTG Consulting is available by request from the VRWA.

Summary

<p><i>Goal 1: Develop capacity and knowledge in the Vermilion River watershed.</i></p>	<p>1.1. Improve capacity for watershed management planning and implementation in communities (P)*</p> <p>1.2 Improve information, knowledge and understanding of watershed function and stewardship (P)</p> <p>1.3 Improve regulatory compliance and enforcement</p> <p>1.4 Improve cooperation and communications among planning initiatives (P)</p>
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*(P) indicates a priority action

Discussion: Ensure that the public and watershed stakeholders are informed, and understand watershed function and their roles in contributing to a healthy watershed.

Other comments on the Goal, changes in priority, and implementation activities:

- Improve understanding of regulatory frameworks and determine how enforcement will be addressed.
- Incorporate stakeholders’ local knowledge in decision-making.
- Determine role of VRWA as a) an on the ground implementation organization or b) a research, policy and advocacy organization or some combination of the two roles.
- Change Direction 1.3 to “Guide improvements to regulatory compliance and advocate for enforcement.”
- Action 1.4 continues to be and will likely become a higher priority.
- Determine if the VRWA should remain under the umbrella of the NSWA or move towards being more independent with its own long-term funding and staff.
- Create public buy-in; Think of new ways to engage people, including social media.

<p><i>Goal 2: Improve reliability of surface water supply in the Vermilion River watershed.</i></p>	<p>2.1 Improve knowledge and understanding of surface water supply, trends and variability (P)</p> <p>2.2 Assess flow requirements for the Vermilion River to inform water management directions</p> <p>2.3 Manage water quantity to support flow requirements in the Vermilion River</p> <p>2.4 Increase natural and constructed water storage capacity to mitigate damaging flooding and increase base flow</p>
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Discussion: There was a conversation about “reliability” of surface water supply since the system is inherently unreliable and unpredictable. There may be a need to look at storage capacity off the mainstem due to unpredictability and reliability related to elevation, timing and number of runoff events and variable precipitation.

Direction 2.3 is important particularly in the headwaters. Direction 2.4 is relevant for replacement of wetlands; a limitation may be the cost of implementation (structures) and land acquisition.

Other comments on the Goal, changes in priority, and implementation activities:

- Communications, information, knowledge and understanding of people living in the watershed was identified as critical to successfully implementing the WMP.
- Focus on specific, measurable outcomes to address problems and create results, for example develop outcome and action statements that address flood mitigation in some areas versus drought mitigation in other locations.
- Any study results should be made available to landowners using plain, easy to understand language with a “how it affects me” meaningful message.
- Anticipate that the addition of the Vermilion River Operations Advisory Committee (VROAC) and the VRWA will help through more knowledge sharing.



<p><i>Goal 3: Maintain or improve surface water quality in the Vermilion River watershed.</i></p>	<p>3.1 Improve knowledge of surface water quality in the Vermilion River watershed (P)</p> <p>3.2 Develop and adopt Water Quality Objectives for long-term monitoring sites on the Vermilion River</p> <p>3.3 Manage contaminant loads entering the Vermilion River from all point-sources to achieve Water Quality Objectives (P)</p> <p>3.4 Identify and reduce non-point source pollution by implementing beneficial management practices in the Vermilion River watershed (P)</p>
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Discussion: All of the Directions are priorities with 3.1 and 3.2 most relevant to the VRWA. With the VRWMP, there is momentum in the watershed to improve water quality. This Goal may create a capacity issue that reinforces clear roles for the province and municipalities in ensuring the health of the watershed.

Other comments on the Goal, changes in priority, and implementation activities:

- Push for better reporting on point sources.
- Direction 3.3 is not a “doable” action at this time – need to increase communication about importance of water quality before the action is achieved.
- Direction 3.4 may be expensive to continue to implement unless grants are available, the Direction needs to match what’s realistic ensuring that there is capacity to handle it.
- Video is a great step in sharing what’s happening in the watershed; use existing landowner partners to encourage additional participation.
- Overlay and compare information on water quality and quantity and use it to develop a “hot spot” map for remediation and restoration.

<p><i>Goal 4: Maintain or improve aquatic ecosystem health in the Vermilion River watershed.</i></p>	<p>4.1 Improve knowledge of aquatic ecosystem health in the Vermilion River watershed (P)</p> <p>4.2 Develop and adopt Aquatic Ecosystem Health Objectives for the Vermilion River watershed.</p> <p>4.3 Integrate Aquatic Ecosystem Health Objectives into science-based planning and decision-making.</p> <p>4.4 Develop and implement incentive policies and programs to support the adoption of beneficial management and other stewardship practices to improve aquatic ecosystem health. (P)</p> <p>4.5 Encourage responsible tourism and recreation use emphasizing agricultural and ecological attributes.</p>
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Discussion: It would be helpful, then, to define “aquatic ecosystem health” in the context of the Vermilion River and establish a benchmark or outcome (measurable) for aquatic ecosystem health, perhaps on a river reach specific or sub-watershed area specific basis within watershed.

Other comments on the Goal, changes in priority, and implementation activities:

- Potential merge Directions 4.2 – 4.5 under goals 2 and 3 – if you don’t have water quality and quantity then you won’t have a healthy aquatic ecosystem.
- Direction 4.1 is a priority and Directions 4.2 and 4.3 follow from 4.1.
- Direction 4.5 presents an opportunity for people to engage with landowners.
- VRWA could network with “farm days” groups and other relevant partner events.
- The information should be river reach specific “what’s in my own back yard.”
- Provide VRWA project signs to bring attention to successful restoration activities.

<p><i>Goal 5: Protect and sustain groundwater quality and supply in the Vermilion River watershed.</i></p>	<p>5.1 Improve knowledge and understanding of groundwater quality and quantity. (P)</p> <p>5.2 Develop and implement management strategies and plans to protect groundwater quality and quantity. (P)</p>
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Discussion: There is a need for information on recharge rates and areas within the watershed although data availability may be a challenge. Regional groundwater reports are available but somewhat dated (i.e. 2006). There may be capacity limitations for municipalities to interpret and use groundwater data.

There may be complacency among some people living in the watershed since there is regional water supply provided by EPCOR. However, not everyone in the watershed is served by the regional water supply system. There is value in ensuring that people understand the importance groundwater quality and supply and how both can be affected by human activity in the landscape.

Other comments on the Goal, changes in priority, and implementation activities:

- Abandoned well data and conditions might be considered as an Action priority.
- Focus on education/awareness and leave the monitoring/assessment to the appropriate Government agencies.
- There may be a requirement to determine the balance between support for public learning and projects versus technical knowledge and research.
- Elements of 5.1 don't seem to be realistic or cost effective; there may be a way to get these data from other sources.
- Information showing groundwater reservoirs may be helpful.
- Priorities regarding groundwater may have changed for some watershed residents since the water supply pipeline has changed reliance on groundwater for domestic use.
- Groundwater interpretation and how to understand it from a "lay person's" perspective could be helpful in increasing awareness, understanding and knowledge (e.g. add a "Groundwater Interactions 101" to the VRWA website).

Consideration of an Additional or Revised Goal

There was discussion among Board members of a revised or additional Goal focusing on awareness, outreach and learning, to be included as part of a revised plan. The Goal would be structured to reflect the significance of "Information, Education, Knowledge Exchange" that incorporates priority Directions that are currently articulated in the 2012 VRWMP.

