Watershed Management Plan: Land Management Component



Riparian Area Management: Policy Advice



April 2016



About This Document

Ecosystem health and land use in the Battle River watershed plays a large role in watershed sustainability. Degradation of riparian areas poses a threat to water quality, water quantity, and the overall health of aquatic ecosystems in this watershed. Lack of healthy riparian areas has implications for the quality of life in our communities and the stability of our economy. Riparian health within the Battle River watershed is, on average, healthy but with some problems¹. Relatively little is known about the health of riparian areas in the Sounding Creek watershed. It is important to build a greater understanding of riparian health in this watershed in order to manage it effectively.

The following document outlines the BRWA's policy advice for the management of riparian areas in the Battle River and Sounding Creek watersheds in Alberta. Riparian area management is one component of the BRWA's watershed management planning (WMP) process. For more information about this process, see page 8.

This advice was developed with broad input from watershed residents, stakeholders and decisionmakers, and is supported by information compiled in the BRWA's *Understanding the Policy Context for Riparian Area Management in the Battle River and Sounding Creek Watersheds* report.

Accompanying Guidelines for Implementation

This policy advice document is accompanied by corresponding implementation guidelines. The policy advice outlined below puts forward an overarching policy direction for riparian areas management, while the implementation guidelines document describes options for management strategies to support the implementation of this policy direction.



Policy Statement

The objective of this policy advice is to improve (and where applicable maintain) the health of riparian areas in the Battle River and Sounding Creek watersheds in Alberta through alternative land use and land management techniques.

Policy Advice Goals

- Improve and maintain riparian area health for all waterbodies, flowing and non-flowing, within the Battle River and Sounding Creek watersheds by addressing social, economic, and ecological spheres of influence;
- Increase knowledge of riparian area health in the Battle River and Sounding Creek watersheds.

Policy Application

This policy advice applies to the Battle River and Sounding Creek watersheds within Alberta, and is intended for all residents, stakeholders and decision-makers within these watersheds. This includes all four orders of government (municipal, provincial, federal and First Nations), urban and rural residents, agricultural producers, business and industry, environmental and community organizations, academia and watershed stewardship groups.

The BRWA's WMP process is non-regulatory. Implementation of the policy advice and implementation guidelines developed for each of the BRWA's 12 watershed management priority areas is dependent on the voluntary actions of watershed residents, stakeholders and decision-makers. The BRWA will work to support the implementation of policies and management practices that align with the goals and objectives outlined in this document.



Policy Advice

1 Society and Economics

Riparian areas are areas important for recreation, historical locations, and ecological services.

They also are important for economic reasons, including agricultural and industrial operations.

Policy Advice

Trade-off decisions should take economic value of riparian services into consideration before buffers are set or development occurs.

Programs to compensate landowners or to provide economic incentives to establish buffers beyond their recommended minimum buffer width and implement further land use management BMPs should be considered.

2 Ecology & Natural Areas

Riparian areas provide important fish and wildlife habitat, as well as many other ecological functions.

Riparian areas also provide opportunities for recreation

Policy Advice

Riparian areas should be maintained, improved, and if possible restored within the Battle River and Sounding Creek watersheds.

Fish habitat should be protected and restored within the Battle River and Sounding Creek watersheds.

Allowance for beavers and beaver management should be implemented to foster healthy riparian areas to help manage for extremes.

3 Water Supply

Riparian areas act as natural buffer zones, capturing runoff and sediment and filtering out nutrients and other pollutants. As such, they play a significant role in protecting water quality and reducing adverse water quality impacts associated with non-point source pollution.

Riparian areas slow water and help store water in flood and drought events.

Policy Advice

Flood and drought mitigation plans should include maintenance and restoration of riparian areas.

Efforts should be undertaken to bring attention to these issues and ensure that management improvements are not cost-prohibitive.

Research should be undertaken to identify critical source areas in the Battle River and Sounding Creek watersheds, understand the degree to which different land covers and land uses contribute to non-point source pollution, and evaluate the relative effectiveness of various beneficial management practices in reducing non-point source pollution in different regions of the watershed

4 Land Use

Research has shown that providing support and incentives for the implementation of beneficial management practices may be a more effective and positive approach than requiring compliance through regulations.

Nutrient losses from agricultural lands and erosion are recognized as significant contributors to surface water quality degradation in Alberta. Beneficial management practices may have significant economic, social and ecological benefits.

Policy Advice

Implementation of water quality beneficial management practices should be supported through incentive programs and other support mechanisms.

Land use and recreation policies should be developed or amended to facilitate protection of riparian/lakeshore areas in regards to off-highway vehicles.

Land management practices which limit removal or damage of riparian areas and other adverse ecological impacts should be promoted, while ensuring that the economic viability of operations is not impeded by these practices.

Land use regulations should be reviewed to ensure that they adequately address water quality concerns in all regions of Alberta.

5 Riparian Health, Management, and Restoration

On-going monitoring and management of the health of riparian areas is vital to ensure further losses are minimized and to encourage restoration efforts.

Policy Advice

A Riparian Areas Monitoring and Restoration Strategy should be developed and implemented for the Battle River and Sounding Creek basins.



A framework/model should be developed to guide the creation of environmental easements, buffers, and setbacks for lotic and lentic waterbodies.



About the Battle River Watershed Alliance

The Battle River Watershed Alliance (BRWA) was created in 2006 as a non-profit society. Shortly after its formation, the BRWA was selected by Alberta Environment, under *Water for Life: Alberta's Strategy for Sustainability*, as the designated Watershed Planning and Advisory Council (WPAC) for the Battle River and Sounding Creek watersheds within Alberta. See page 9 for a map of the Alberta portions of these watersheds.

Under Alberta's *Water for Life* strategy, WPACs have a role to report on the state of the watershed, lead in watershed planning, develop best management practices, educate users of the water resource and foster stewardship activities within the watershed.

The BRWA works in partnership with communities, individual watershed residents, watershed stewardship groups, all four orders of government (municipal, provincial, federal and First Nations), industry, academia, and environmental organizations to promote the health and sustainable management of the land and water resources of the Battle River and Sounding Creek watersheds using the best science and social science available.

We exist to have a watershed that sustains all life by using sound knowledge, wisdom, and wise actions to preserve our watershed for future generations.



About BRWA's Watershed Management Planning Process

As the provincially designated Watershed Planning and Advisory Council (WPAC) for the Battle River and Sounding Creek watersheds within Alberta, the BRWA has a role to lead in watershed planning.

The BRWA's Watershed Management Planning Process was initiated in 2011. This planning process will ultimately result in a comprehensive Watershed Management Plan for the Battle River and Sounding Creek watersheds in Alberta, and is guided by the *Battle River Watershed Management Planning Process Phase Two Terms of Reference*.

The Watershed Management Planning Process will address a number of watershed management priorities that have been identified through the BRWA's 2011 State of the Watershed Report and extensive public engagement. These priorities are outlined in the figure below.

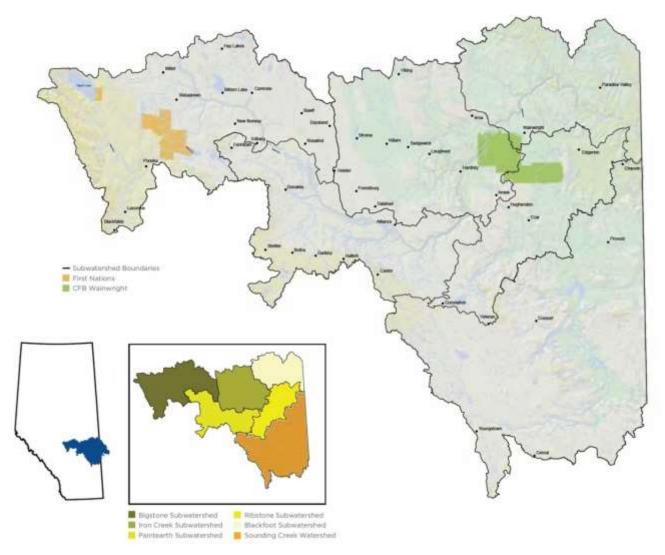
Policy advice and implementation guidelines will be developed for each of these priority areas. These documents will comprise the Watershed Management Plan for the Battle River and Sounding Creek watersheds in Alberta.



Key components of the BRWA's Watershed Management Planning Process



Battle River and Sounding Creek Watersheds within Alberta





Endnotes

- ¹ Spicer-Rawe, K., O'Shaughnessy, K., & Bach, N. (2010). Battle River watershed riparian areas and health summary. Red Deer, Alberta: Cows and Fish – Alberta Riparian Habitat Management Society.
- ² Bruneau, S. (2014). Understanding the policy context of riparian areas in the Battle River and Sounding Creek watersheds. BRWA Watershed Planning Document, * pages.
- ³ Battle River Watershed Alliance (BRWA). 2013c. *Non-point Source Pollution Management: Implementation Guidelines (Nutrient Management Focus)*. BRWA Watershed Planning Document, 31 pages.

⁴ Government of Alberta. 2003. *Water for Life: Alberta's Strategy for Sustainability*. 31 pages.

- ⁵ Battle River Watershed Alliance (BRWA). 2012. Battle River Watershed Management Planning Process Phase Two Terms of Reference. Battle River Watershed Alliance Watershed Planning Report, 36 pages.
- ⁶ Battle River Watershed Alliance (BRWA). 2011. *State of the Battle River and Sounding Creek Watersheds Report 2011*. Battle River Watershed Alliance, 64 pages.



Battle River Watershed Alliance

This is our battle: the watershed we all share, and the fight to maintain a healthy environment, vibrant communities and a stable economy. Gateway Centre 4825 51 Street (2nd floor) Camrose Alberta T4V 1R9 1 888 672 0276

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