BATTLE RIVER
WATERSHED ALLIANCE

Non-native and Invasive Species:
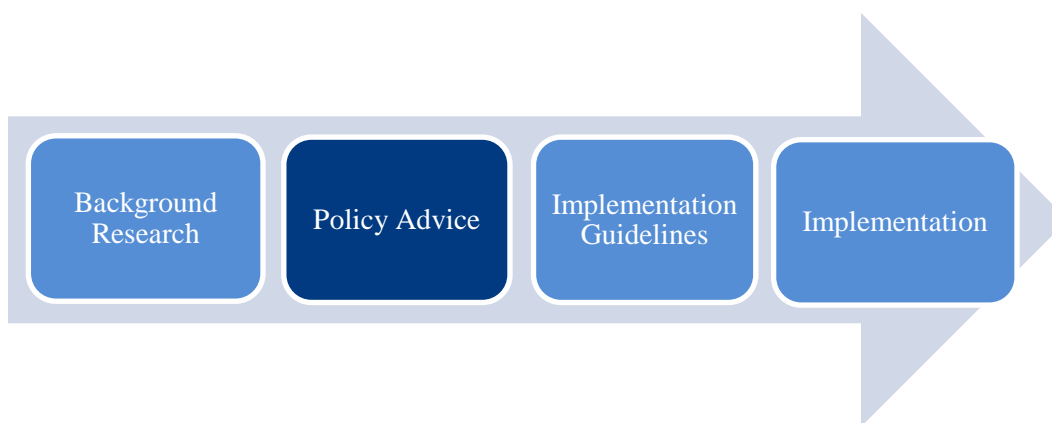# Policy Advice

Leafy Spurge near the Battle River
(photograph courtesy of Flagstaff County)

Serving the Battle River and
Sounding Creek watersheds
in Alberta

December 2017

About This Document

Non-native and invasive species management is one component of the BRWA's watershed management planning (WMP) process. For each component, a background research report, policy advice, and implementation guidelines are developed. This process is outlined in the figure below, and more information is also provided on page 9. The following document outlines the BRWA's policy advice for non-native and invasive species management in the Battle River and Sounding Creek watersheds in Alberta.

BRWA Watershed Management Planning Process

This advice was developed with broad input from watershed residents, stakeholders and decision-makers, and is supported by information compiled in the BRWA's *Non-native and Invasive Species Management: A Review of Policies and Practices* report[1].

Accompanying Guidelines for Implementation

This policy advice document is accompanied by corresponding implementation guidelines[2]. The policy advice outlined below puts forward an overarching policy direction for non-native and invasive species management, while the implementation guidelines document describes options for management strategies to support the implementation of this policy direction.

Alberta Water Council Recommendations

The Alberta Water Council recently released recommendations for aquatic invasive species management in Alberta.[3] The BRWA supports these recommendations and encourages their implementation in the Battle River and Sounding Creek watersheds of Alberta.

The Alberta Water Council recommends that the Government of Alberta:

- continue working with governments and national, regional and local partners to enhance the effectiveness of the provincial Aquatic Invasive Species (AIS) program, focusing particularly on: prevention; increasing public awareness of AIS and their potential impacts, targeting high-risk audiences; and supporting AIS-related stakeholder communication and coordination networks
- collaborate and support industry, non-government organizations, academia and governments to develop and disseminate effective AIS tracking and control options for long-term management
- work with its partners to communicate success stories of AIS management
- work with the Alberta Environmental Monitoring, Evaluation and Reporting Agency *[now the Government of Alberta's Environmental Monitoring and Science Division*] to develop and begin implementing a provincial AIS monitoring plan for fish, invertebrates and aquatic plants, with assistance from stakeholders including citizen scientists
- maintain the mandatory watercraft inspections element of the AIS program and also begin inspecting other vectors of potential introduction. This should include working with stakeholders where inspections are planned to raise the profile of the issue and increase buy-in from the public
- have a protocol in place to ensure fishery officers and fishery guardians are educated and trained on their authority to enforce AIS legislation
- share information on enforcement activities and potential penalties with stakeholders and the public to raise the profile of the AIS issue

Policy Statement

The objective of this document is to provide policy advice for the prevention, early detection, and management of non-native and invasive species in the Battle River and Sounding Creek watersheds of Alberta.

Policy Advice Goals

This policy advice seeks to manage non-native and invasive species in the Battle River and Sounding Creek watersheds through:
- local and regional invasive species prevention, early detection, and management strategies and actions,
- invasive species monitoring, supported by citizen science and education, and
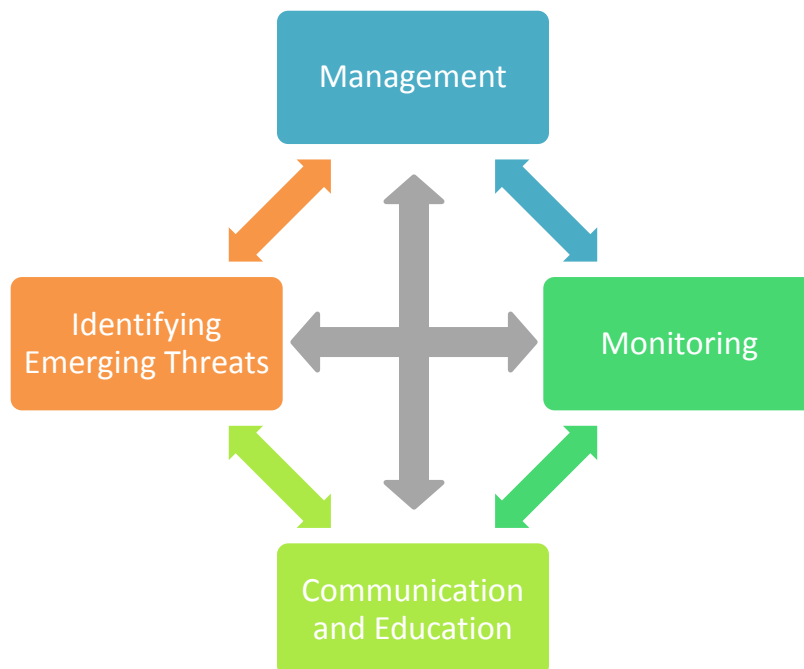- ongoing investigation of emerging invasive species risks.

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. See page 9 for a map of these watersheds.

The BRWA's WMP process is non-regulatory. This means that 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.

Invasive Species Management Framework

The invasive species management policy advice and implementation guidelines are organized into four interrelated categories (see figure below). Coordinated management strategies, plans, and practices are supported and informed by ongoing monitoring efforts, communication and education work, and the identification of emerging invasive species threats. In turn, each of these areas of work may support and inform the other areas.

BRWA Invasive Species Management Framework

Policy Advice

1   Invasive Species Management

Invasive species are defined as any species whose introduction or spread causes or may cause harm to the local environment, human health, society and economic activity. Watershed-scale invasive species management encourages collaboration and coordination of efforts among many jurisdictions, organizations, and communities.

Policy Advice

It is recommended that a comprehensive and coordinated terrestrial and aquatic invasive species management approach be developed and implemented in Alberta, with direction for watershed-specific actions required in the Battle River and Sounding Creek watersheds. Such an approach should include the development of management strategies with provisions for the early detection, rapid response, and long-term management of invasive species.

2   Invasive Species Monitoring

Ongoing monitoring is essential to the prevention and early detection of new invasive species. The earlier an invasive species is detected, the greater the likelihood that it may be contained or eradicated altogether.

Policy Advice

It is recommended that current aquatic and terrestrial invasive species monitoring programs in the Battle River and Sounding Creek watersheds be continued and expanded, and that new programs be developed where gaps exist (related to the species monitored, locations covered, etc.). Where possible, citizen science should be incorporated into these programs.

3   Invasive Species Communication and Education

Communication and engagement of watershed residents, stakeholders and decision-makers is required in order to create broad-based support for invasive species monitoring, prevention and management programs. Educational efforts also help to promote desired behaviours that support these programs.

Policy Advice

It is recommended that invasive species communication, education and engagement programs be expanded in the Battle River and Sounding Creek watersheds.

4   Identification of Emerging Invasive Species Threats

Early identification of emerging threats is required to determine which species may have the potential to be invasive in a particular region. Although not currently a known threat, identification prior to introduction will reduce potential harm.

Policy Advice

It is recommended that ongoing research be undertaken to determine key invasive species threats in Alberta, including geographically-based risk assessments to evaluate probabilities of invasive species arrival, establishment, spread and impacts across Alberta.

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*[4], as the designated Watershed Planning and Advisory Council (WPAC) for the Battle River and Sounding Creek watersheds within Alberta. See page 10 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.
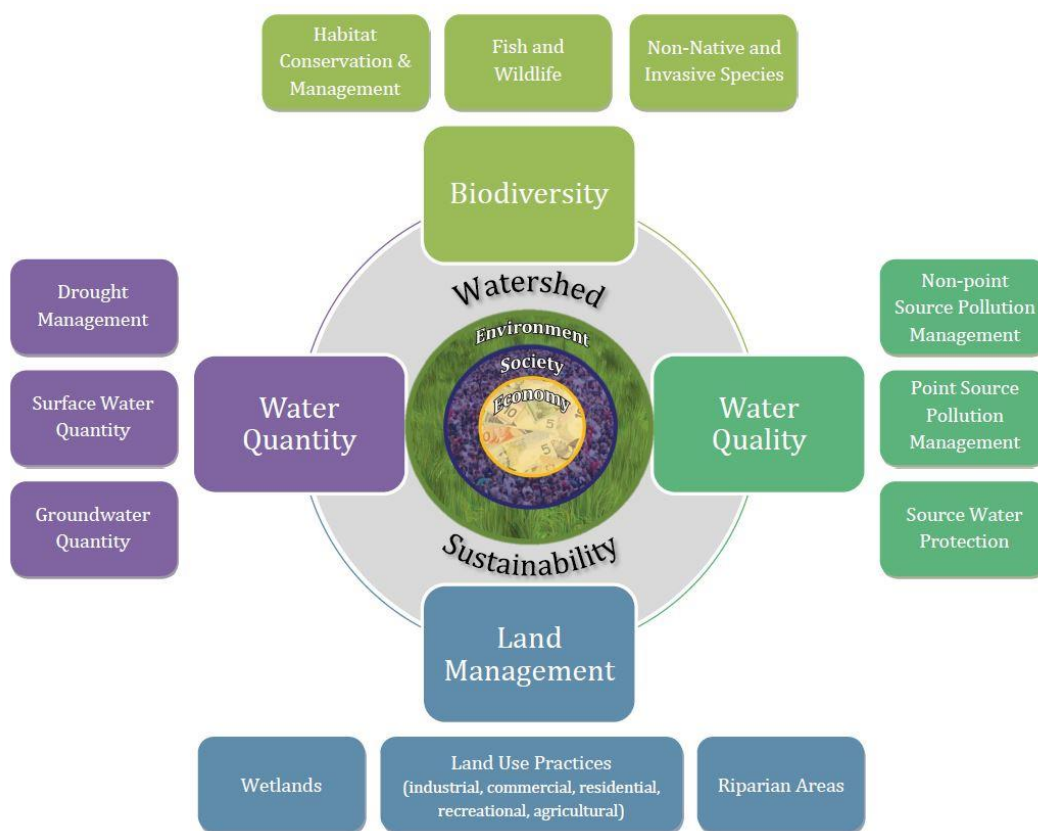
About BRWA's Watershed Management Planning Process

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*[5].
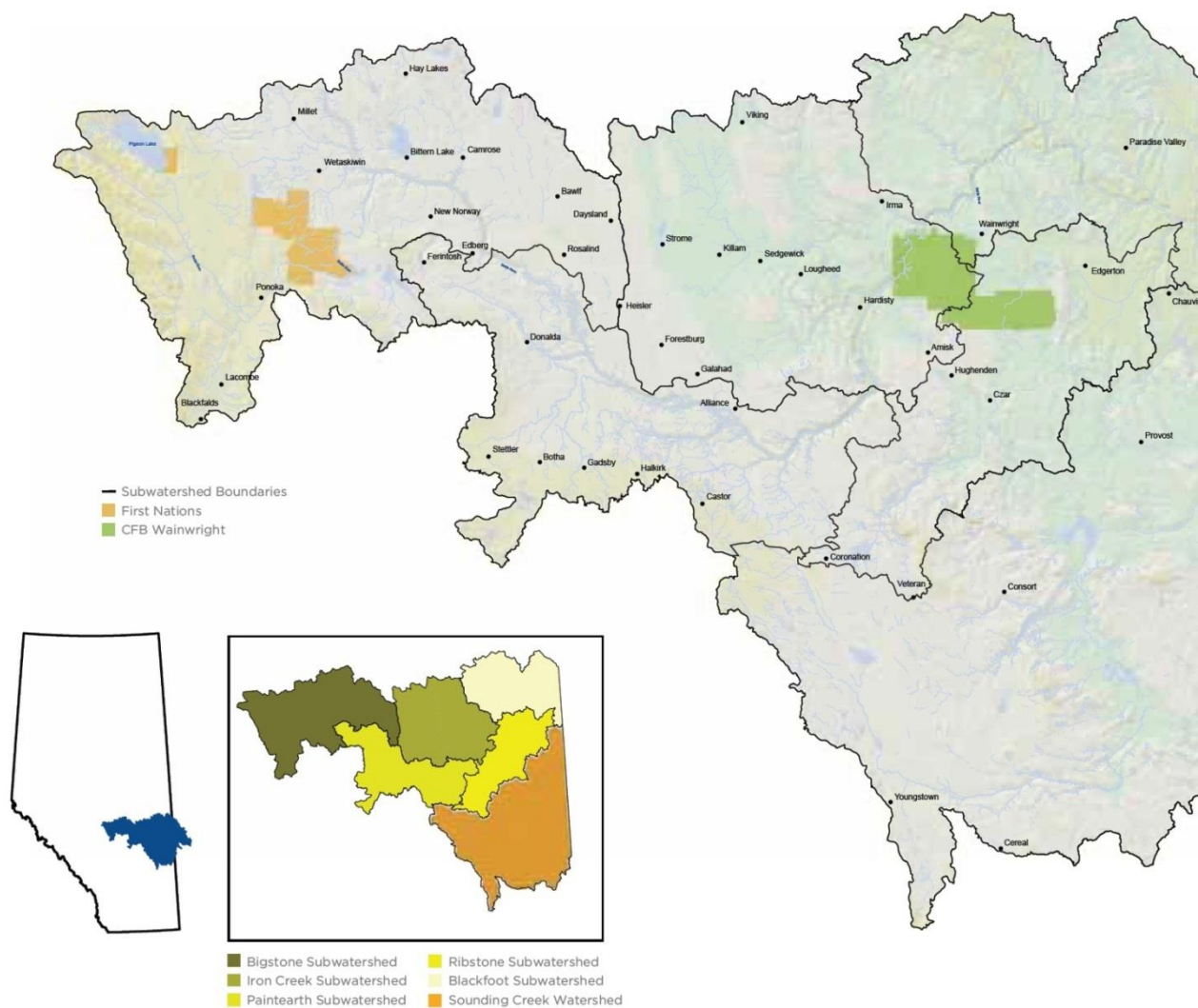
The Watershed Management Planning Process will address a number of watershed management priorities that have been identified through the BRWA's 2011 State of the Watershed Report[6] and extensive public engagement. These priorities are outlined in the figure below.

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] Battle River Watershed Alliance (BRWA). 2016a. *Non-native and Invasive Species Management: A Review of Policies and Practices*. BRWA Watershed Planning Document, 66 pages.

[2] Battle River Watershed Alliance (BRWA). 2016b. *Non-native and Invasive Species Management: Implementation Guidelines*. BRWA Watershed Planning Document, 20 pages.

[3] Alberta Water Council. (2016). *Recommendations to Improve Aquatic Invasive Species Management in Alberta*. Edmonton, Canada: Alberta Water Council.

[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.

This is our battle: the watershed we all share, and the fight to maintain a healthy environment, vibrant communities and a stable economy.

Battle River Watershed Alliance

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Connecting People to Place for Action

Goats eating Leafy Spurge along the Battle River (photo courtesy of Flagstaff County)