

Non-Point Source Pollution and Riparian Conservation: AWC Recommendations

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Background

- In June 2010 the Council agreed to launch the Non-Point Source Pollution Project Team
- This project team is tasked with making recommendations to advance efforts in managing the impacts of non-point source pollution in Alberta

Project Objectives

- Develop a working definition for *NPS pollution*
- Understand the current “state of” knowledge on NPS pollution
- Examine the tools that characterize and aid in the management of NPS pollution
- Make recommendations to better manage NPS contaminant loadings in our watersheds

Process

1. Information Gathering

- The team hired two consultants to work with the team to complete the information gathering phase of the project:
 - I. Phase I Report: The State of NPSP: Data, Knowledge and Tools
 - II. Phase II Report: The Review of Policy, Practices and Regulation in Alberta and Selected Jurisdictions

2. Recommendations and Strategies

- The team used some of the findings from the consultant's reports to develop the recommendations and strategies

3. Sector Engagement

- Team members engaged their sectors for feedback on the team's draft report with criteria.

4. The team finalized their report based on sector feedback, which is the document before the board today

Key Lessons/Learnings



Key Issues- From State Of Report

- Extent and risk is unknown in Alberta
- Streams, tributaries and lakes seem to be most affected by NPSP
 - Fish habitat for these areas are of concern
- NPSP understanding and management : watershed level
- Knowledge levels and management solutions vary by sector
- Traditionally managed at the sector level- lack of cumulative impact knowledge
- Knowledge gaps still exist particularly for BMPs
- Quantification of NPSP remains a challenge on multiple scales

Key Learnings from other Jurisdictions

- Clear lead
- Monitoring that provides good baseline data
- NPSP management plan
- Sound regulatory framework
- Partnerships with other regulatory agencies
- Partnerships with non-regulatory bodies
- Awareness and education
- Adequate funding
- Implementation and enforcement
- Ongoing monitoring
- Watershed approach
- Measures to address municipal NPSP

Current Policy Framework for NPSP

- LUF Water Quality Management frameworks focus on main stem reaches only- NPSP manifests itself largely in lakes and tributaries
 - Current monitoring does not specifically address NPSP
- WPACs have limited capacity to progress towards proper data and management for NPSP
- Need a strategic direction to address NPSP with focused monitoring, research, management and implementation at a provincial scale

Needs for Improved Management of NPSP

- Proactive approach
- Need to know:
 - How much there is (quantification)
 - Where it is coming from (research)
 - If it is a problem (evaluation)
 - What we can do about it (mitigation)
 - Includes improved BMPs
- Without the right decision-making tools, policy makers and managers cannot make meaningful, informed decisions around NPS management

Recommendations for Improved NPSP Management in Alberta

Recommendation 1:

GoA, with Alberta Environment and Sustainable Resource Development, within one year of the approval and release of this report, identify an internal Non-point Source Pollution lead that will coordinate and facilitate the development of a multi-stakeholder process to set the direction on how to better manage NPSP.

Recommendation 2:

GoA, with ESRD as lead, through the multi-stakeholder process, coordinates and promotes the development and implementation of a provincial strategic approach. This will set provincial level outcomes and priority research needs for NPSP management.

The provincial strategic approach will also outline alignment with existing policy frameworks and the development of regional plans and associated management frameworks. This approach to NPSP will be completed within two years of the approval and release of this report.

Recommendation 3:

GoA, with ESRD as lead, within two years of the approval and release of this report, will coordinate a Multi-Sector Implementation Advisory Partnership that will recommend cost effective and practical solutions to address NPSP and support implementation.

Recommendation 4:

GoA, with ESRD as lead, within two years of the approval and release of this report, create and coordinate an NPSP Cumulative Effects Research Partnership to address the gaps in scientific knowledge of all aspects of NPSP in Alberta.

Recommendation 5:

GoA, with ESRD as lead, in collaboration with the NPSP Cumulative Effects Research Partnership, develop an NPSP research strategy within two years of the approval and release of this report, which will lead to better understanding and improved management of NPSP.

Long Term Research Strategy

- Export coefficients and event mean concentrations
- Monitoring
- Land Data
- Quantify cumulative reduction strategies
- Models
- Data management and access

Interim Research and Management Strategies

- Pilot Program- Risk analysis and mapping for high risk areas in various watersheds
- Economic Analysis
- Undertake concerted lake management
- Mitigation strategies with water features
- Improve education and awareness
- Headwater recreation activity and conservation pilot project
- Sector involvement

DRAFT Recommendations for Improved Riparian Conservation and Management in Alberta

Recommendation 1:

AESRD within six months identify a lead who is accountable for the coordination and integration of riparian land conservation and management in the province and including the implementation and annual publicly available reporting on the progress of the remaining recommendations in this report.

Recommendation 2:

Recommendation 2: Alberta Environment and Sustainable Resource Development within one year and in consultation with stakeholders, establish a provincial riparian land conservation and management vision that recognizes the ecological, social and economic importance of riparian lands and their functions.

Recommendation 3:

AESRD within one year and in consultation with Alberta Agriculture and Rural Development, Alberta Municipal Affairs, Alberta Health, other key Ministries and stakeholders, lead the development of desired provincial level riparian land conservation outcomes that are consistent with the provincial vision and that support integrated management. AESRD should also provide a framework for the development of aligned and more specific outcomes at multiple scales.

Recommendation 4:

Alberta Environment and Sustainable Resource Development within three years, and as frameworks and regional plans are developed, in consultation with stakeholders including other Ministries, ensures that the riparian land conservation and management vision and desired outcomes are integrated into regional land use planning, watershed management planning, as well as other relevant plans and frameworks including municipal planning as guided through the *Municipal Government Act*.

Recommendation 5:

Alberta Environment and Sustainable Resource Development within three years 8 undertake a cross-Ministry review of legislation and regulation to facilitate revision of policies and 9 programs, to ensure policy alignment and remove barriers or disincentives to riparian conservation 10 and management. Consultation with stakeholders during this process is critical.

Recommendation 6:

Recommendation 6: The Government of Alberta within three years initiate and support the 13 development and implementation of incentives, including conservation and stewardship tools, that 14 are targeted toward the provincial outcomes for integrated riparian land conservation and 15 management, with ongoing reporting and review.

Recommendation 7:

Alberta Environment and Sustainable Resource Development within three years and in consultation with relevant Ministries, improve implementation and ensure consistent enforcement of legislation and application of policy relevant to riparian lands, with ongoing review and improvement.

Recommendation 8:

The Government of Alberta, in consultation with Municipal Affairs and municipalities, within three years will improve riparian land conservation and management in municipalities by ensuring regulatory support and building capacity.

Recommendation 9:

The Government of Alberta within three years and in partnership with stakeholders, develop and implement an integrated province wide strategy to improve the sharing of knowledge and information regarding riparian lands. The strategy should increase sector and public understanding and stewardship of riparian lands functions, values, conservation and management, with on-going implementation and review.

Recommendation 10:

Alberta Environment and Sustainable Resource Development within five years in partnership with stakeholders, lead the identification and adoption of accepted methodologies to delineate and map the extent of riparian lands in Alberta at multiple scales, and then map riparian lands as a coordinated on-going activity.

Recommendation 11:

Alberta Environment and Sustainable Resource Development within one year and in partnership with stakeholders, lead the review, adoption and on-going implementation of a provincial riparian health and function assessment framework that includes well accepted and currently practiced methods that are compatible at multiple scales.

Recommendation 12:

The Government of Alberta within two years and in partnership with stakeholders identify, adopt and support ongoing implementation of beneficial/best riparian management practices and approaches that align with nested outcomes.

Recommendation 13:

The Government of Alberta within five years and in partnership with 5 stakeholders, produce a publicly available “Alberta State of Riparian Lands Conservation and 6 Management” progress report, and update and re-publish every five years thereafter.

Questions?

