Review of Riparian Management Policy in Alberta's Forests

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Sustainable Resource Development



Freedom To Create, Spirit To Achieve,

Review Objectives

- Establish goals for riparian management in forested areas in the green zone.
- 2. Describe **current riparian management policy** and its implementation.
- 3. Assess **consistency** of policy implementation.
- 4. Assess **success** of current policy in meeting SRD goals.
- 5. Provide direction for **future revisions** to riparian management policy.
- 6. Identify **knowledge gaps** (Research Priorities)





Riparian Area Functions

- 1. Trapping and storing **sediment.**
- Building and maintaining banks and shorelines.
- 3. Reducing and dissipating **energy**.
- 4. Minimizing changes in stream water chemistry.
- 5. Regulating water **temperature**.
- 6. Providing habitat for aquatic organisms
- 7. Providing habitat for terrestrial organisms





Assessment of Current Policy

3 Main Issues:

- 1. Designation of fixed-width buffers on permanent streams and lakes
- Lack of buffers on intermittent streams
- 3. Provision for "variances" allowing for buffer harvesting





Fixed-Width Buffers

Policy advantages:

- □Clear and relatively unambiguous
- ☐ Field layout simple
- □Not complex
- □Low total cost of implementation

Policy disadvantages:

- ■Perceived as arbitrary
- ■Poor science basis
- ☐ Insensitive to local conditions

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Fixed-Width Buffers

Policy alternatives

- □Objective / results-based policies
 - Natural disturbance model
 - More flexible site-level policy

Issues

- ■Need to know site level values
- ■Landscape level objectives
- ■Negative ecological impact of current policy?
- ■Does Natural disturbance model address all riparian values?
- ■Monitoring enforcement

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Fixed-Width Buffers

Conclusion:

Maintain fixed-width buffer policy at this time, but reassess after current research initiatives completed.

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Policy Needs

- ■Development of a decision support framework to provide an objective basis for riparian management practices
 - Addressing full suite of riparian goals
 - Criteria and Indicators thresholds





Policy Needs

- □ Riparian area contribution to landscape biodiversity. Issues include:
 - Landscape level old forest retention focused towards riparian areas
 - Stand level structure retention focused in riparian areas
 - Contribution of riparian buffers to landscape biodiversity objectives
- □ Ecological implications of not harvesting buffers
- □Implications of cumulative human activities on riparian management.

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Wet areas mapping





