



**Managing Natural Range  
Barriers under the  
*Forests and Range Practices  
Act***



## **Managing Natural Range Barriers (NRBs) under FRPA:**

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## Introduction

***FRPA Section 48:*** A person carrying out a forest practice or range practice that directly or indirectly removes or renders ineffective a natural range barrier must carry out measures that are (a) specified in an operational plan for the area, or (b) authorized by the minister to mitigate the removal or the ineffectiveness of the natural range barrier.



## **What is a Natural Range Barrier?**

**Definition: Natural range barriers are naturally occurring features that stop or impede livestock movement to and from an adjacent area. They may include rivers, rock faces, shrub thickets, and standing or downed timber.**



## **Managing Cumulative Effects of Forest Operations on Natural Range Barriers**

- Cutblock and road development over time by multiple forest licensees can eventually render NRBs ineffective at stopping or impeding livestock movement.
- Collaborative planning and communication is essential





## **Benefits of Maintaining the Integrity of Natural Range Barriers**

- Reduces operational costs for both range and timber licensees when impacts to NRBs are minimized
- Livestock not trespassing and mixing with adjacent herds
- Leads to better use of forage and other range resources
- Less damage to sensitive riparian areas, aquatic ecosystems and alpine habitats
- Less risk of water quality impacts, especially in CWS



## **Planning Forest Operations with Consideration of NRBs**

- Best practices to avoid and/or mitigate impacts to NRBs:
  - Identify NRBs
  - Host information sessions on an annual basis
  - Consult range agreement holder(s)
  - Specify measures in operational plans



## Measures in Forestry Operational Plans

In order to be approved, measures in FSPs and WLPs are expected to:

- Specify **actions** that will **effectively achieve** their intended **result**;
- Be **reasonable** and **appropriate**, given the circumstances; and,
- Be **enforceable** (i.e., precise in terms of actions being committed to, **who** will complete the actions, **where** or under **what** circumstances the actions will be carried out, and **when** the actions will be completed).





## Measures in Forestry Operational Plans

Desirable elements of measures for natural range barriers include:

- **Communication** between the forest licensee and the range agreement holder;
- **Identification** of natural range barriers within the planning area;
- Specification of **mitigation** actions; and
- **Follow-up** to ensure mitigation actions are effective.



## **Considerations for FSP and WLP Content**

### *Communication and Identification:*

- Commit to notifying affected range agreement holder(s)
  - Specify location of harvesting and road operations (include maps)
  - Request comments by specified date
  - Offer to meet in person to discuss proposed operations (using maps) and their potential implications to NRBs
- Contingency Plan
  - In the event the range agreement holder does not respond to the initial notification



## Considerations for FSP and WLP Content

### *Communication and Identification:*

- Dispute Resolution
  - Include a **mechanism** to **resolve disputes** with the range agreement holder about whether mitigation is required and/or mitigation options
- Update Range Information
  - Commit to periodically **updating range tenure information** in the event that pasture or tenure boundaries, or tenure holders, change over the term of the operational plan, or if an area is no longer being used



## Considerations for FSP and WLP Content

### *Mitigation and Follow-up:*

- Set appropriate context for mitigation measures, include in the operational plan a **definition** of 'natural range barrier' that is based on mutual understanding with the range agreement holder
- Specify **who** will implement the mitigation actions, **where** they will be implemented, and the **timeframe** for mitigation following the removal or impact to the natural range barrier





## Considerations for FSP and WLP Content

### *Mitigation and Follow-up:*

- Commit to **following-up** with the range agreement holder after forest operations have been completed, to ascertain whether natural range barriers have been **impacted**, and to confirm mitigation actions and their timing
- Commit to preparing a **mitigation plan** that summarizes the above follow-up commitments, mitigation actions, and timeframes. The plan should be agreed-to and signed by the range agreement holder





## Recovering Costs of Mitigating Impacts to NRBs

- The cost of fencing, cattleguards, and debris barriers may be included in the forest licensee's cutting authority appraisal
- Forest licensees must plan their natural range barrier mitigation actions *before* submitting their cutting authorities
- There are options to revisit the appraisal or submit for costs in a future cutting authority
- Submit your costs!!!



## **Options to Mitigate Impacts to NRBs**

- Conventional range developments (all require S. 51 FRPA District Manager authorization) recognized in the stumpage appraisal system
  - Cattleguards & different types of fencing and debris placement
- Alternatives not recognized in appraisal system
  - Adjusting cutblock &/or road locations to avoid NRBs
  - Retain a buffer of trees wide enough to significantly impede the movement of livestock; and
  - Strategically falling trees within the buffer



## **Managing Livestock Movement in the Absence of Effective NRBs**

- Range agreement holders may need to adjust grazing schedules to accommodate forest operations
- Range agreement holders should take steps to control livestock distribution for the periods of time when natural range barriers have been breached but not yet replaced
- If a rancher's livestock damage a riparian area they can be in non-compliance, expect ranchers to be asking for more retention and the use of debris barriers



## Summary

- NRBs are essential to the safe, effective management of livestock on range tenures
- When forest operations remove or render ineffective a natural range barrier, the economic, social and environmental consequences may be significant
- Communication and consultation is very important
- Use the options that are available to mitigate impacts to NRBs and recoup the costs through the appraisal system



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## **Case Study – What is at stake?**



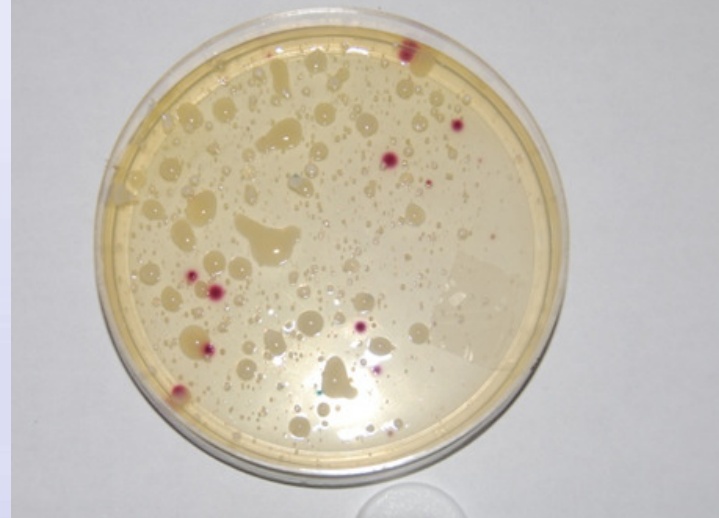


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## What's at Stake?

- Other resource values:
  - Water quality & quantity
  - Fish & fish habitat
  - Biodiversity
- Livestock are attracted to water and forage
- Rancher may not be able to meet legislative requirements
- Riparian damage occurs and management costs increase





### **What the data says:**

- 2014 & 2015 rangeland health assessments show 20% of streams functioning below acceptable levels
- Erosion and embeddedness of bed materials is common
- Riffle bed materials and gravels are not free of sediment
- Riparian habitat structure has not been maintained
- Bank shearing, soil compaction and bare ground are common
- Logging, silviculture, roads and livestock grazing are the main sources of fine sediments



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## What the data says:



- Vegetation traps sediments and filters pollution
- Vegetation stabilizes and helps build stream banks



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## What the data says:





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## **What's in it for you?**

- Better overall resource stewardship
- Protection of other values
- Minimizing cumulative effects
- Less fence building and maintenance requirements for timber and range licensees leads to decreased costs



## **What you can do:**

- Build a relationship - refer development plans annually with one another to discuss impacts on one another's business
- Submit costs for riparian protection through the Appraisal System (\$250/100 metres for debris barriers)
- Stay up to date with current science and use science based decisions and creative solutions



## Discussion & Questions

