



Draft Best Management Practices for forests in the Interior Douglas-Fir

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DRY BELT DOUGLAS-FIR
COMMITTEE

Agenda

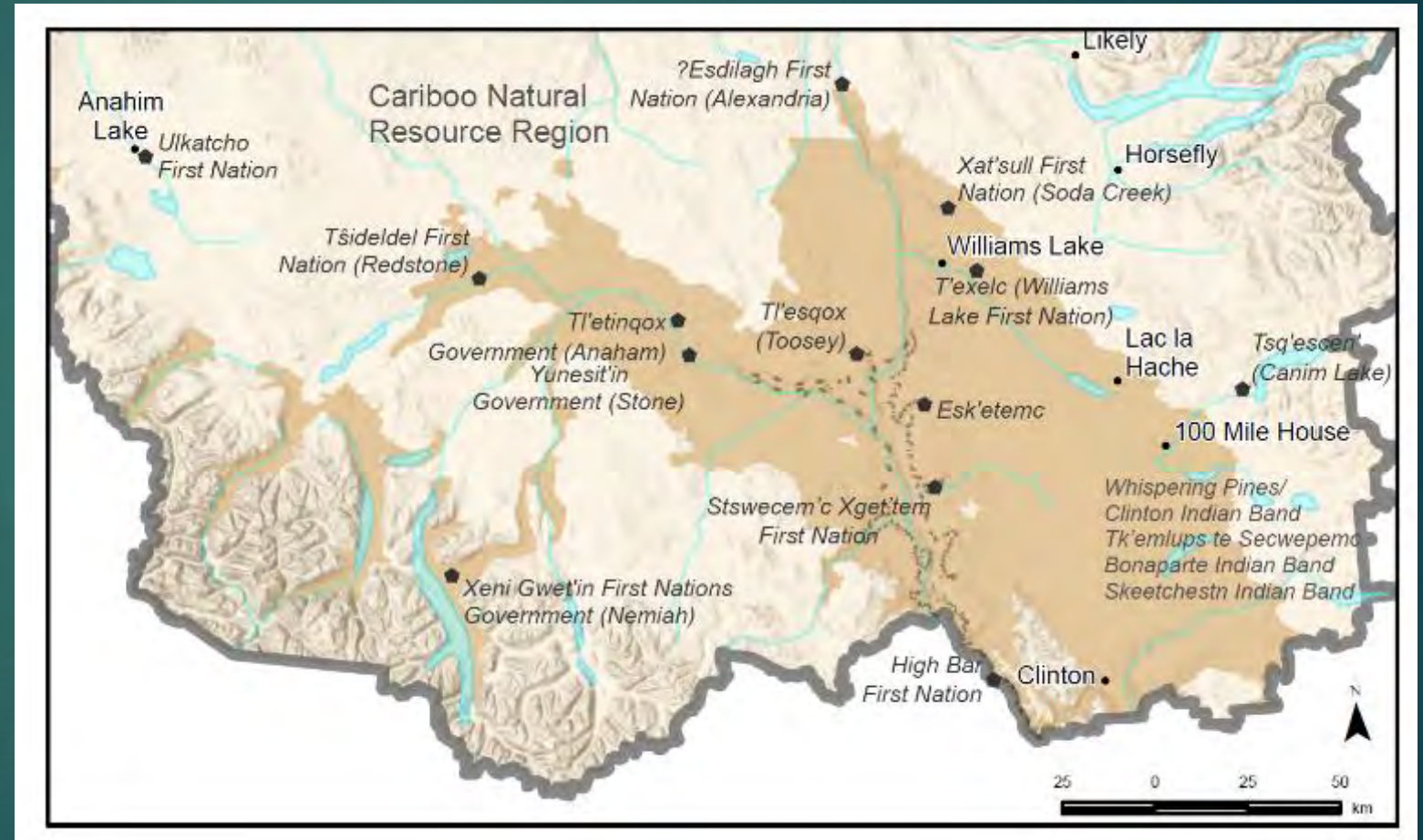
Welcome and
Introductions

Fire history and
past forests in
the Interior
Douglas-Fir

Strategic Plan

Best
Management
Practices

Discussion and
Input





Fire History in the Cariboo IDF

Mean fire return intervals varies between studies,

- ranges between 5-49 years and
- averages between 15 and 23 years

Mostly low with some moderate to high severity

We have a fire deficit extending up to 150 years or 7-10 fires

“Indigenous fire and land stewardship historically maintained pyrodiversity in a high-frequency, mixed-severity fire regime...”

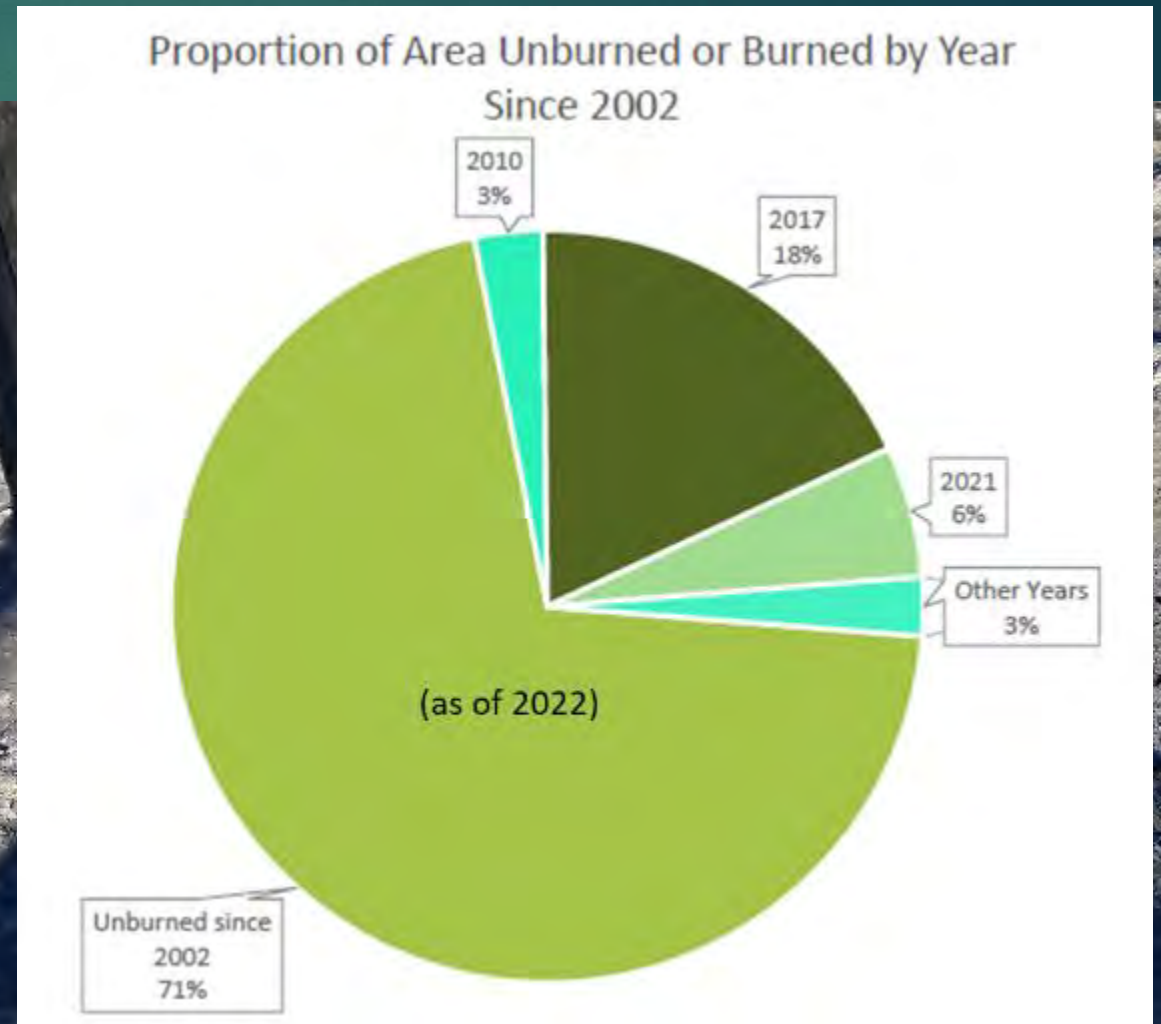
Copes-Gerbitz (2021)



Current Stands



FIRE HAS CHANGED ON THE LANDSCAPE



Moving Ahead With Management

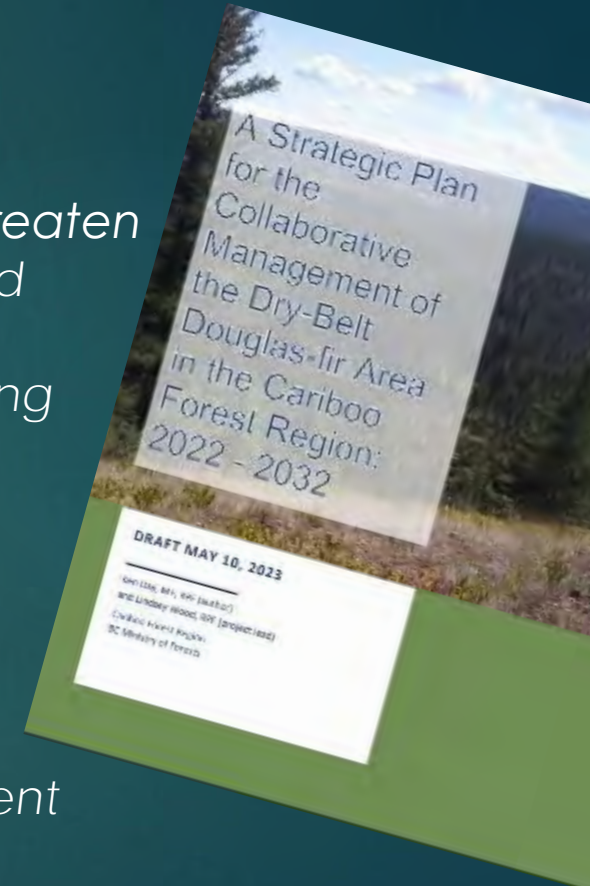
Strategic Plan

- ▶ Collaborative process
- ▶ Vision: “... We seek to promote resilience, meet goals and balance multiple values”
- ▶ Principles
- ▶ Goals
- ▶ Values and Interests
- ▶ Objectives Indicators and Targets to achieve the goals
- ▶ An Agenda for Change

<https://drive.google.com/file/d/14IWjLMgDMTiiN1iBhPwinpg-uUqvLCOs/view?usp=sharing>

“The current conditions ... threaten human life, critical values and achievement of forest management goals – meaning that management needs to adapt.”

“Making changes ... requires a coordinated effort to change policies, working relationships and management practices.”



Moving Ahead With Management

An Agenda for Change

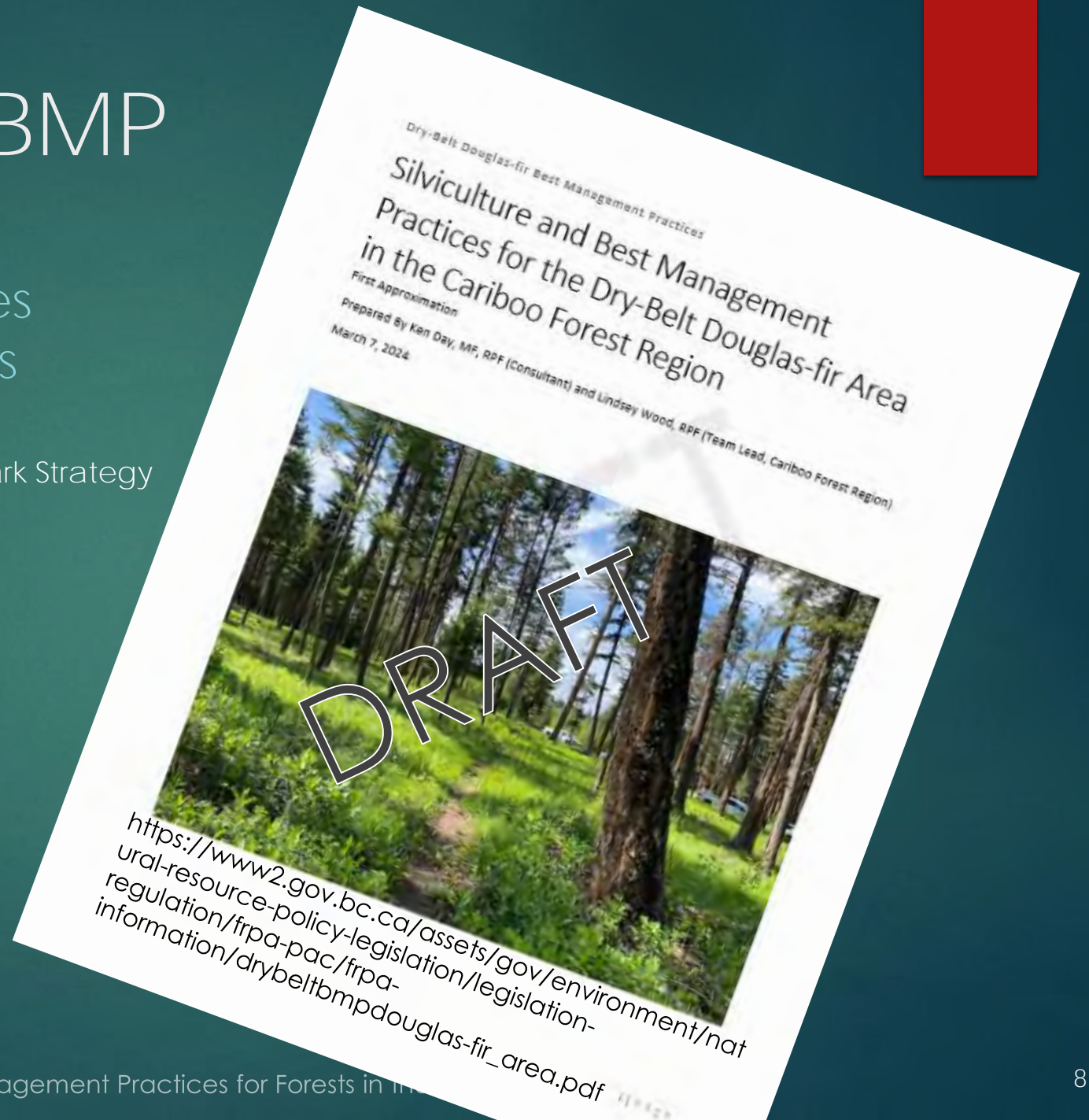
1. Draft and implement a Land Act Order Objective
2. Create guidance and training to support the implementation
3. Identify barriers created by policy and procedures and work to address them
 - Pilot projects
 - Stocking Standards
 - Research
 - Discussion Papers
4. Identify conflicting direction and work to resolve conflicts
5. Connect with others regionally and provincially



Silviculture and BMP

Our Management Pursues Desired Future Conditions

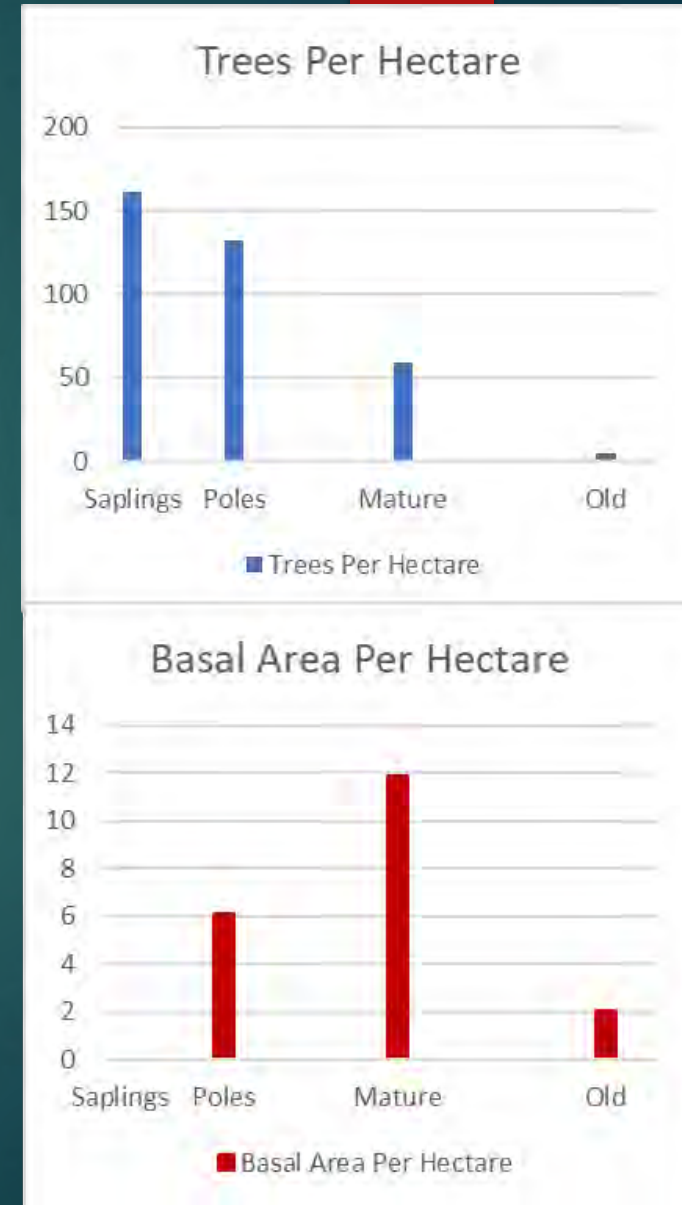
- ▶ Grasslands and Open Forests
 - ▶ According to Grassland Benchmark Strategy
- ▶ Lodgepole Pine Stands
 - ▶ Thinning regime
 - ▶ Shift to Douglas-fir
- ▶ Aspen Stands
 - ▶ Burning regime
 - ▶ Investigate aspen silviculture
- ▶ Spruce Stands
 - ▶ Retention
 - ▶ Protection from fire
- ▶ Douglas-fir Stands



Desired Future Condition

Douglas-fir Stands

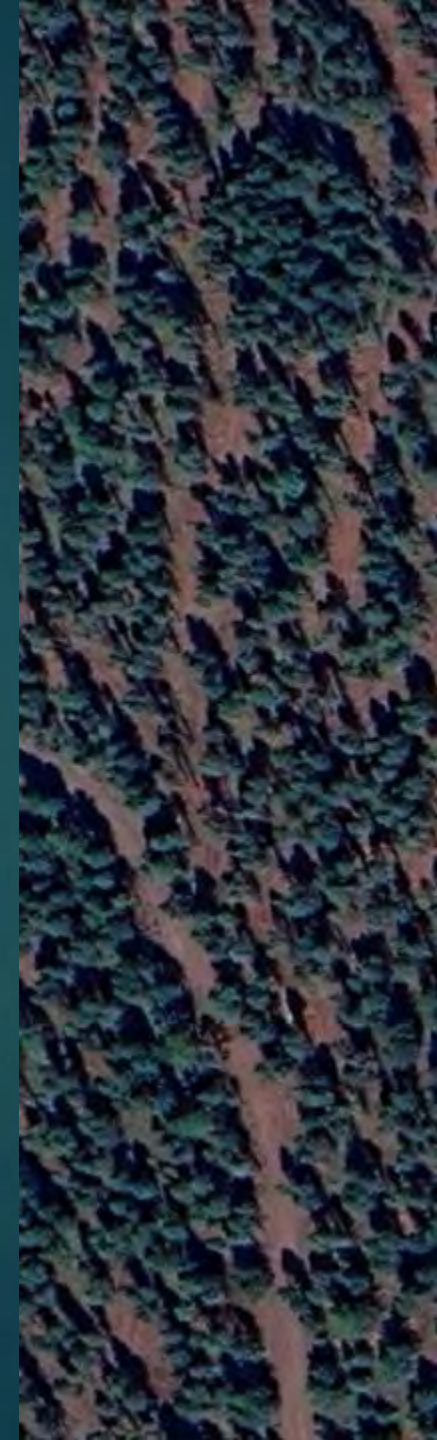
- ▶ Our management will take us toward
 1. At least 70% Douglas-fir species composition;
 2. Presence of large old trees;
 3. Presence of culturally important plants of sufficient vigour to bear fruit;
 4. Presence of thickets to provide cover for animals;
 5. Sheltered gaps supporting regeneration of Douglas-fir; and
 6. Low surface fuel and sufficient fuel strata gap to allow the stand to survive a wildfire.
- ▶ Recognize that many stands need more than one entry to achieve this condition



Guiding us to the Desired Future

Best Management Practices

1. Appropriate Silvicultural Systems
2. Enhancing Characteristics of Douglas-fir Stands (PI & At Leading)
3. Restoration Thinning and Stocking Control
4. Retain Large Old Trees
5. Appropriate Regeneration Density
6. Access Structures
7. Resilience to Disturbance
8. Resistance to Pests and Pathogens
9. Key Structural Attributes for Biodiversity



Guiding us to the Desired Future

Best Management Practices

1. Appropriate Silvicultural Systems

- ▶ Restoration Thinning principal activity
- ▶ Uneven-aged management of Douglas-fir
- ▶ Small gaps - < 25 m wide
- ▶ Return for next thinning approx. 30 years
- ▶ Retain 2 m²/ha of large trees (>67.5 cm DBH)



Block 44H – Farwell Canyon

Guiding us to the Desired Future

Best Management Practices

2. Enhancing Characteristics of Douglas-fir Stands (PI & At Leading)

- ▶ Uniform Shelterwood in two entries
 - ▶ Retain overstory Douglas-fir & 2 m²/ha of largest trees at removal cut
- ▶ Adaptive management approach



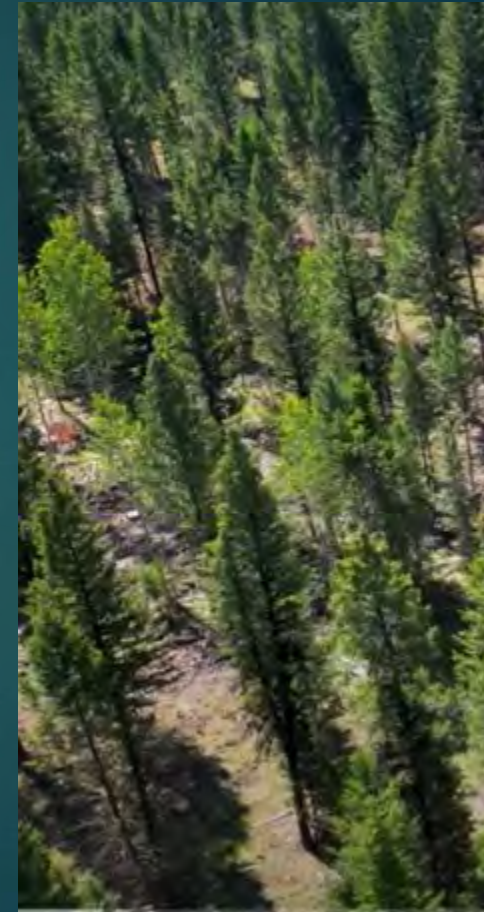
Lodgepole pine over fir regen

Guiding us to the Desired Future

Best Management Practices

3. Restoration Thinning and Stocking Control

- ▶ Commercial thinning from below to reduce understory and mid-story density
- ▶ Producing commercial timber products and retaining overstory trees
- ▶ Yielding biomass, pulp & sawlog volume
- ▶ Harvesting directed to the high-risk saplings and poles (tall and slender) between 5 and 30 cm DBH.



Brunson Lake WLFN

Guiding us to the Desired Future

Best Management Practices

4. Retain Large Old Trees

- ▶ Retain or promote 10% of stand basal area in live trees >67.5 cm DBH
- ▶ 2 m²/ha basal area, 5-6 trees/ha
- ▶ Old trees with large limbs, fire scars and other signs of cultural or ecological importance are preferred
- ▶ Thin away to reduce ladder fuels



Guiding us to the Desired Future

Best Management Practices

5. Appropriate Regeneration Density

- ▶ Overstory Retention Standard:
20 m²/ha
- ▶ Even-Aged Regeneration Standard
1800 Stems/ha
- ▶ Combination Standard



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Best Management Practices

6. Access Structures

- ▶ Roads thoughtfully located
 - ▶ Fuel Breaks and defensible space
- ▶ Reduce road density
 - ▶ 300 m skid distance
 - ▶ Renovate old roads
- ▶ Skidding to landings
 - ▶ Not roadside processing
- ▶ Landings < 0.25 ha, serve 25-30 ha



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Best Management Practices

7. Resilience to Disturbance

- ▶ Abate fuels < 7 cm
 - ▶ Head Fire Intensity < 4,000 kW/m
 - Rank 4 fire behaviour
- ▶ Target ladder fuels in thinning
- ▶ Thinning should facilitate cultural and prescribed fire
 - ▶ Reduce fuels under leave trees
- ▶ Collaboration and adaptive management to support thinning & burning



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Best Management Practices

8. Resistance to Pests and Pathogens

- ▶ Bark beetles, defoliators
- ▶ Windthrow assessment as part of Site Plan process
- ▶ Reduce mechanical damage
- ▶ Consistent monitoring, reporting and communications



Guiding us to the Desired Future

Best Management Practices

9. Key Structural Attributes for Biodiversity

- ▶ Retain deciduous and infrequent shrubs
- ▶ Retain and promote culturally important shrubs and plants
- ▶ Retain large live trees, thin away ladder fuels, prune to 3.5 m, reduce surface fuels under drip line
- ▶ Retain wildlife trees & large Coarse Woody Debris
- ▶ Retain skips of unthinned – 10% of net area
 - ▶ Anchored on features
- ▶ Cut gaps for regen – 10% of net area, max 25 m width



Questions & Clarification ?

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Next Steps (Process)

Planned

- ▶ Consult on Land Act Order Amendment
- ▶ Input on BMPs
- ▶ Implement LAO Amendment
- ▶ Establish working groups to advise
- ▶ Extension to stakeholders
- ▶ Pilot implementation, voluntary
- ▶ Amend Forest Stewardship Plans
 - ▶ Or transition to Forest Landscape Plans

Planned

- ▶ Linkages to other activities
 - ▶ Forest Landscape Plans
 - ▶ Timber Supply Review
- ▶ Training and extension
- ▶ Implement broadly

What Else?

- ▶ Your recommendations for additional steps?


Stay Connected

Opportunities to participate

- ▶ Provide input on draft BMPs
- ▶ Request a presentation to your organization

What else?

- ▶ Your recommendations for additional participation?
- ▶ Please email your input to FLP.Cariboo@gov.bc.ca



Thank you for your input!

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