New Approaches to Interior Broadleaf Management

Interior Broadleaf Working Group

Woodlots BC AGM, Quesnel
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Vision

- To promote resilient, healthy ecosystems by developing broadleaf management strategies that ensure a wide range of values, including timber and non-timber values are managed spatially and temporally on the landscape.
- To articulate a process that guides the TSAs through their area specific broadleaf strategies and regimes to achieve local priorities

What Do Woodlotters Need to Know For the Next 5 Years?

- Increasing interest in broadleaves
- Approaches to developing broadleaf management strategies
  - Landscape and stand level
- Related values and objectives
- Setting a target
- Modelling and Stocking Standards
  - PG Study Area
- Discussion

Landscape Approach

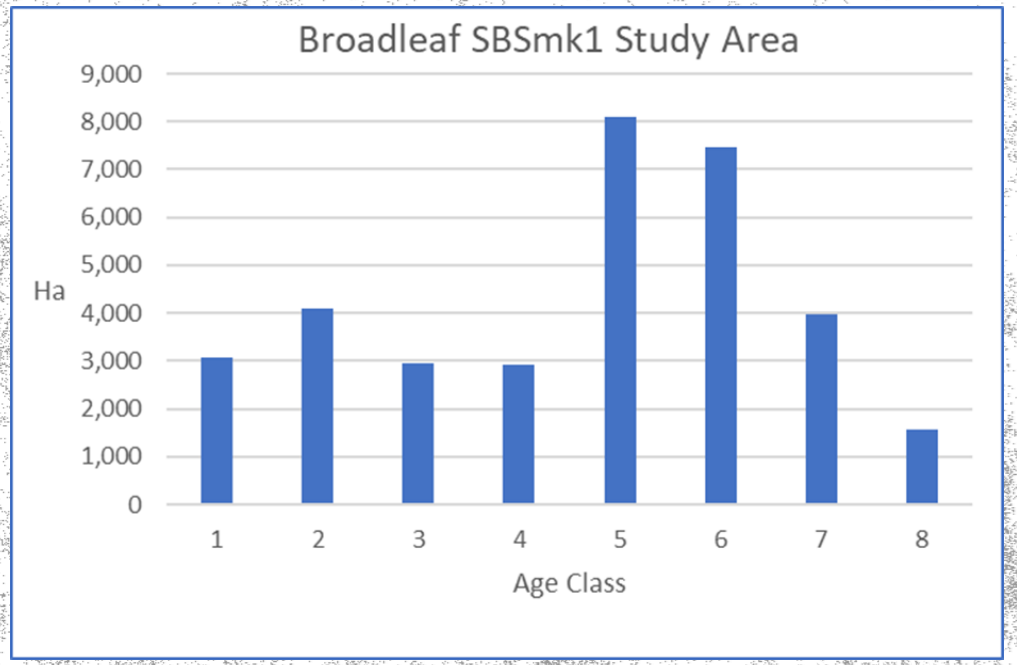
- First Nations engagement
- Analyze current resource - VRI, PEM, brushing history, etc
- Assess future landscape - CCISS
- Consider age class distribution
- Assess values/objectives
- Set a target
- Develop broadleaf management strategies or stewardship practices
- Develop stocking standards, regimes
- Set ranking criteria to select candidate blocks
- Consider timber supply impacts
- Adaptive management plan - monitor

First Nations Perspectives & Involvement

- Want to see an increase in broadleafs and management that aligns with natural processes
- First Nations Forestry Forum identified broadleafs as a key issue
- Values are not separate but inter-connected to wildlife, water, wildfire, biodiversity
- Not just about trees but shrubs and herbs, and for food and medicine
- Engage early

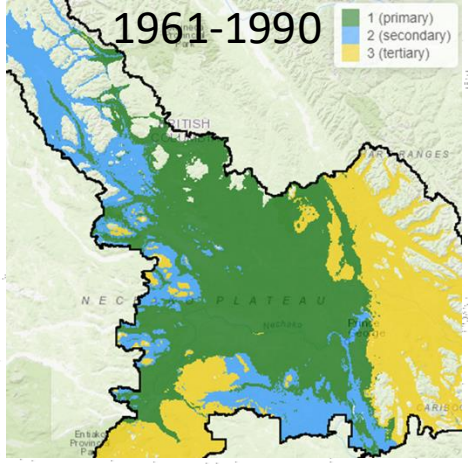
Analyze the Resource

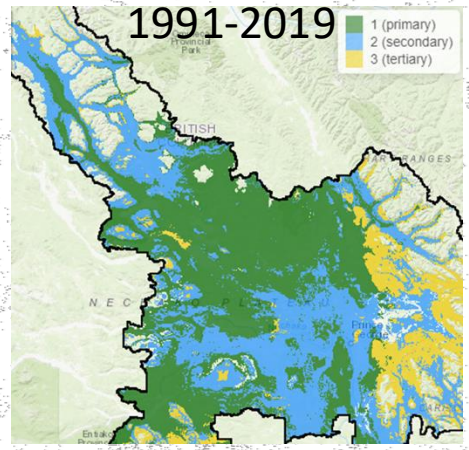
- Where do broadleaf species grow well?
- What are the important values and objectives?
- What vulnerabilities exist?
- How much broadleaf area is enough?

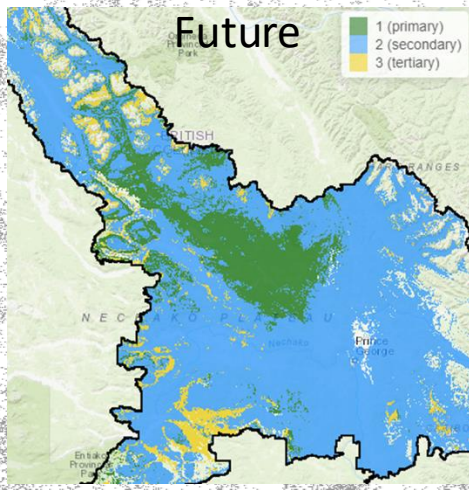


Biodiversity, Resilience, Climate Change

- Broadleaf species generally seen as increasing resilience
- Aspen area expected to decline in PG TSA. Some shift from SBS to ICH
- Broadleaf forest health issues
- Where can we manage broadleaf species strategically?







Wildlife Values/Objectives

Spatial

- Tree level
  - Large legacy trees
- Stand level
  - Species %
  - Patch size
  - Heterogeneity
- Landscape level
  - Connectivity
  - Seral stage
  - Broadleaf %

Temporal

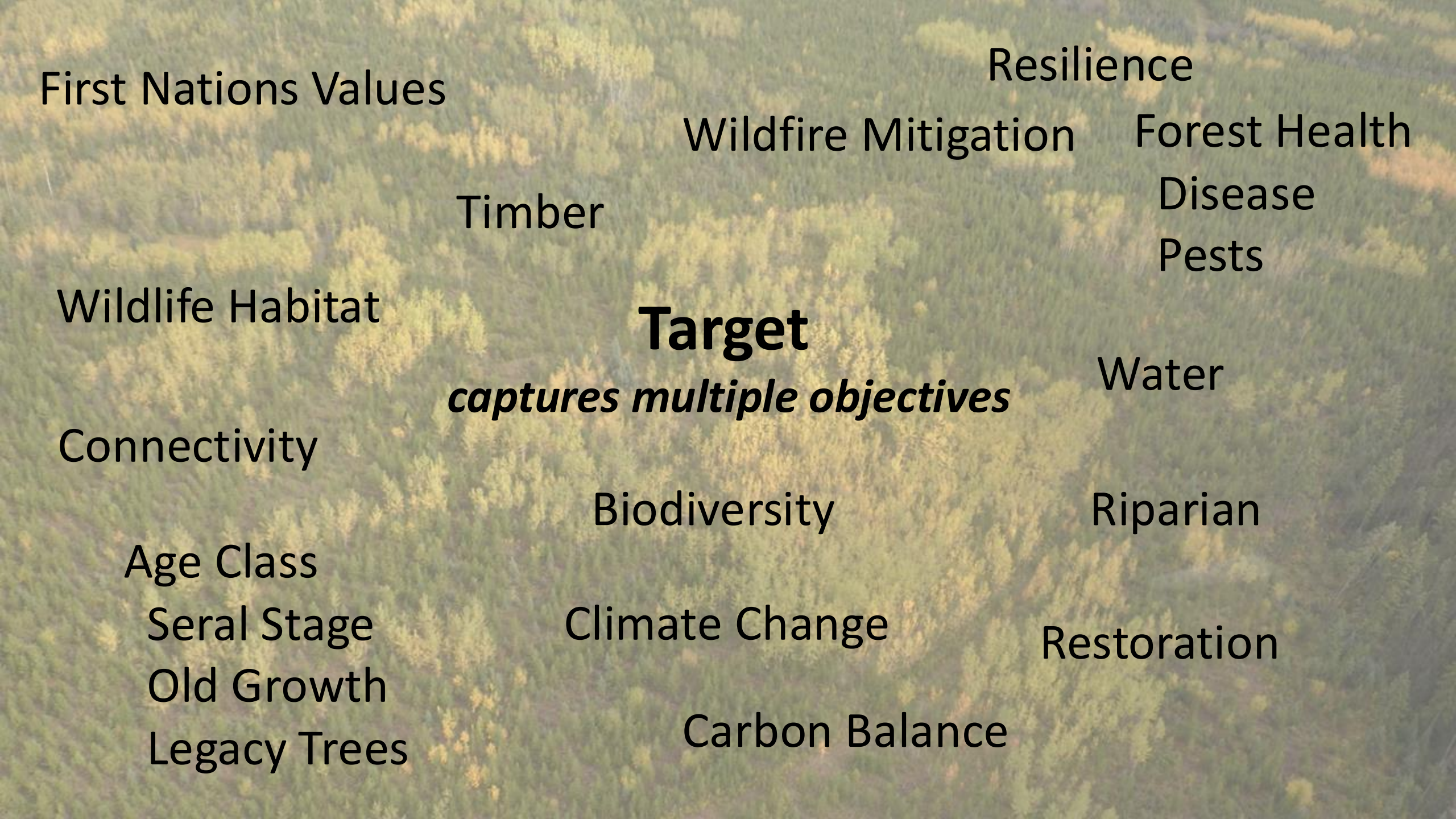
Early

Mid

Late Seral

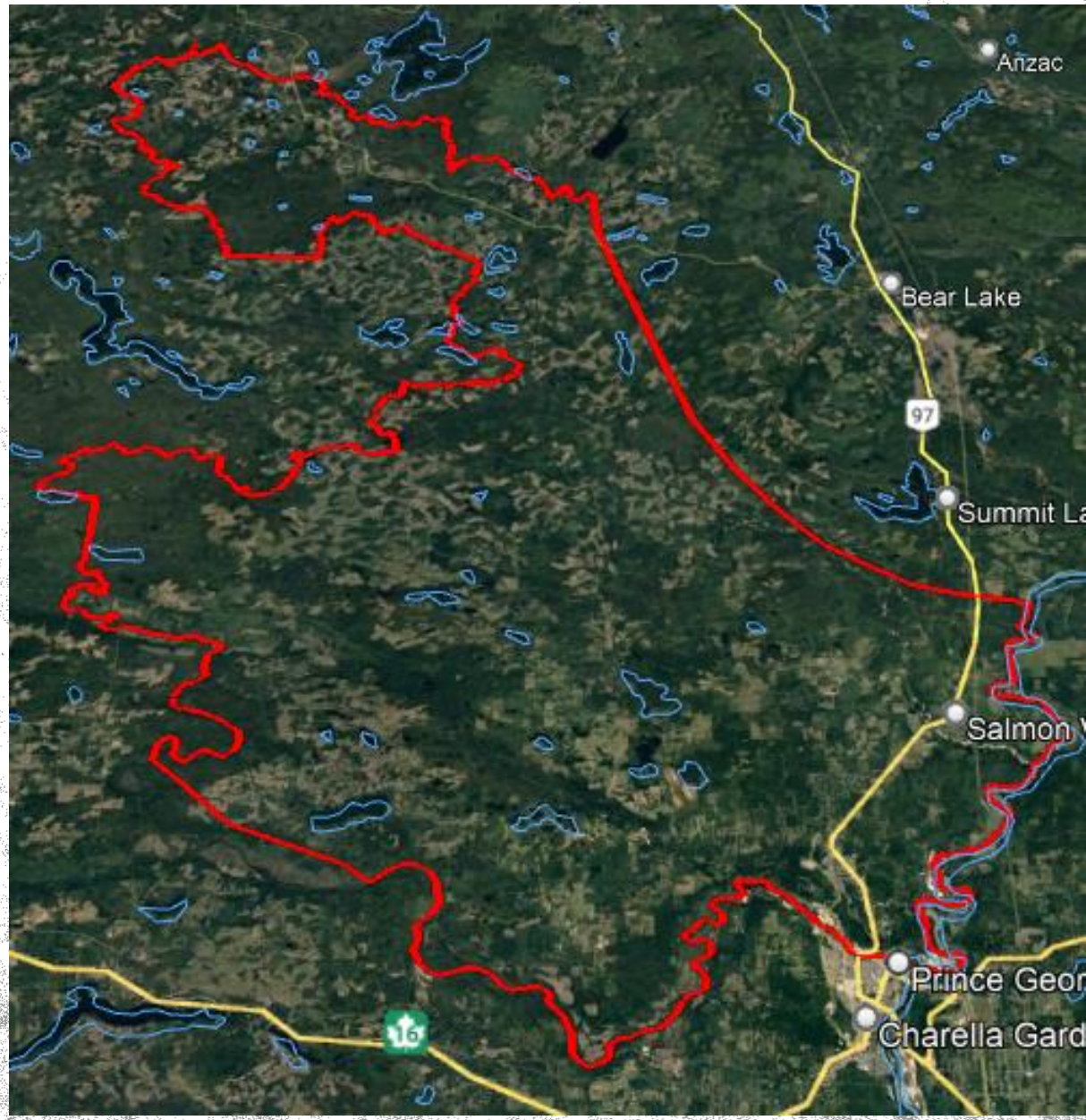
Broadleaf Management Strategies to Mitigate Wildfire Risk

- Connect with fire resistant features especially riparian areas
- Size matters, our current stratification rules do not allow large enough patches.
- Actively create new fire fences as old fences transition from low fire risk to higher fire risk.
- Diversity, mosaic of broadleaf patches on the landscape
- More analysis needed


First Nations Values
Resilience
Wildfire Mitigation
Forest Health
Timber
Disease
Pests
Wildlife Habitat
Target
captures multiple objectives
Water
Connectivity
Biodiversity
Riparian
Age Class
Seral Stage
Old Growth
Legacy Trees
Climate Change
Restoration
Carbon Balance

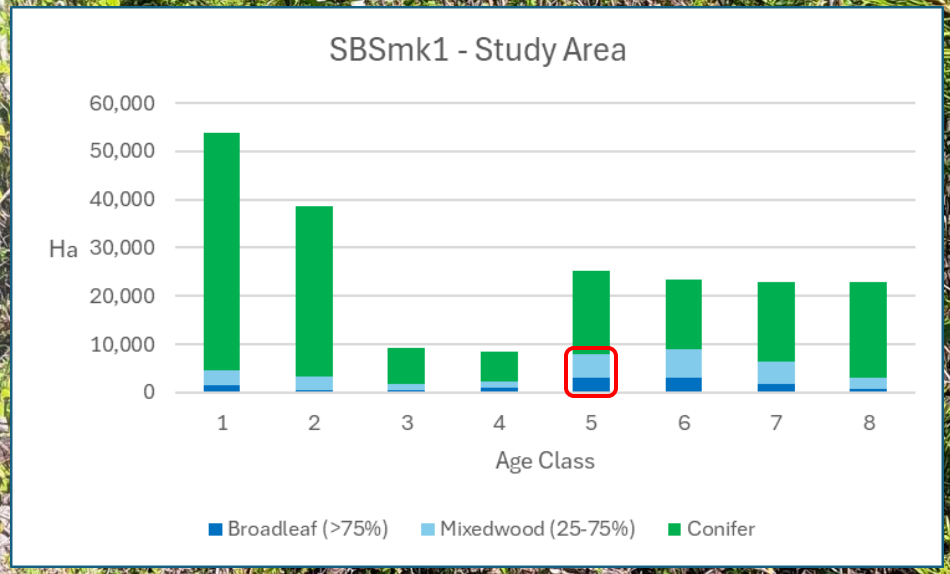
PG Pilot Study Area

- Trial process
- Establish broadleaf targets
- Spatially identify where best to manage broadleaf/mixedwoods
- Address aspen brushing
- Model stocking standards
- Adaptive management



Study Area Target

- Target based on 80-100 yr area
- Mixedwood Growth Model projected stand types at yr 80:
  - *Broadleaf* >75% broadleaf
  - *Mixedwood* 25-75%
  - *Successional* 10-25%
  - *Conifer Volume* <10%
- Adaptive Management



Approach we took for PG pilot:

Area was heavily impacted my MPB salvage. Many blocks close to FG with significant aspen component.

Revisit block objectives. Identify best sites for deciduous to achieve other values and amend to broadleaf and mixed-wood standards.

Design harvesting and reforestation strategies to achieve broadleaf objectives.

Short-term Outcome – brush less and convert about 3,000 ha from conifer to broadleaf management .

Longer-term – targeted broadleaf regeneration and retention on the landbase to maintain current level of broadleaves.

Stand Level

- Let’s not say “non-deleterious”
- There are options to reduce brushing
- Within FRPA sec 46, e.g. stratification
- Manage by objectives
- Admin options
  - Variance
  - FS 660 decision key
  - FSP amendment

Adaptive Management

- Broadleaf management poorly understood, information gaps
- “Just try stuff” - *Jeff Werner*
- Don’t wait to figure it all out, learn from operational outcomes
- Some urgency to demonstrate
- Set some baselines
- Monitor
- Adjust

THANK YOU!

ANY QUESTIONS?