

# **Setting targets, managing blocks, and assessing regeneration at the multi- block scale**

**Pat Martin  
Greg Taylor**

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# Outline

- **Introductory comments**
- **Some of the issues**
- **A possible solution in FSJ**
- **Summary**
- **Discussion**

# Introduction - The punch line

**We believe that**

- 1 setting reforestation targets,**
- 2 managing a reforestation program, and**
- 3 assessing reforestation**

**is best done at the multi-block (or  
landscape) scale.**



# Issues

## Drainages

- Often difficult to reforest
- May have significance for values other than future volume, such as, biodiversity
- Usually occupy a small portion of the harvested area
- In a landscape level strategy silviculture regimes can be moderated and harvest maintained



Drainage

# Issues

## Mixedwood Forest

- **Reforestation activity will require landscape level monitoring to assure sustainability of both deciduous and conifer volumes**
- **In managing conifer reforestation areas of deciduous can be left to provide for diversity and contribute to future deciduous volume**
- **Opportunity will vary from block to block**

# Aspen clone in Lodgepole pine block



# Aspen Clones in conifer block



# Why landscape scale?

- Provide the reforestation manager with a direct measure of success and/or corrective action required
- Provide third parties (PAG, certification bodies, etc.) and regulatory agencies with a measure of success
- Provide reforestation managers with a tool to incorporate other values or different species while maintaining future harvest
- It is not practical to manage for all values block by block

## **A possible solution - FSJ**

- **Fort St. John (FSJ) Code Pilot Project will be managed under an SFM plan that is currently under construction**
- **SFM plan will include a new multi-block (landscape level) approach for the management of reforestation**
- **Build on previous work**
  - **Riverside/MoF/JST developed a landscape level strategy for TFL 49**

## **A possible solution - FSJ**

- **To facilitate the multi-block approach, we adopt future volume as the indicator of reforestation performance**
- **We have yield tables that predict future volume/ha from early stand condition (stocking, height, and species composition) and site index.**
- **We set a target for total future volume production required from all blocks harvested in 1 year.**

## **A possible solution - FSJ**

- **Survey these blocks 15 years post-harvest.**
- **Input the survey data to the yield tables to estimate expected future volume.**
- **Job-well-done when expected  $>$  target future volume totalled over all hectares.**

# Summary

- **The multi-block approach provides:**
  - **Opportunity to invest first in those sites and treatments which yield greatest gains at least cost**
  - **More freedom for forester to manage (to respond to operational realities)**
  - **Government oversight at the multi-block level (not on a block-by-block basis)**
  - **A better link to forest level planning**

# Summary

- **The multi-block approach provides:**
  - **A more explicit link between reforestation and the long-term goal of growing volume for future harvest**
  - **Harmony with ecological objectives: more difficult areas are often the very areas in which less intensive management provides environmental benefits**
  - **The ability to evaluate over the landscape values other than timber sustainability**

# Summary

## Mixedwood

- In the Peace a significant area of the working forest is mixedwood (conifer/deciduous) where a multi-block management system will be necessary to monitor the sustainability of different species

## Certification

- Certification systems recognize that forests are diverse with a variety of values and require managers to manage for that diversity; this system provides the manager with a tool to manage and measure completing values.

# Summary

In the FSJ code pilot area we propose that:

- 1 Targets (and minimums) should be specified **for groups (a population) of blocks**
- 2 Individual cutblocks should be managed **as though they are part of this larger group**
- 3 Reforestation success should be assessed **in aggregate over multiple blocks**

Your thoughts?