

A photograph of a dense forest of evergreen trees. In the foreground on the left, a large, textured tree trunk is visible. The background is filled with a thick canopy of green trees. The text is overlaid on the upper and middle portions of the image.

Enhancing Silviculture Policy in Ontario

Silviculture Symposium

March 21, 2017

Thunder Bay, Ontario



- Introduction
 - ❖ How did we get here?
 - ❖ Where are we now?
 - ❖ Where are we going?
 - ❖ How will we get there?



How did we get here?

- Auditor General of Ontario -
 - ❖ “To better ensure that the province’s Crown forests are successfully regenerated after harvesting ... “;
 - ❖ “To ensure that the Silviculture Effectiveness Monitoring (SEM) program adequately assesses the effectiveness of industry-reported renewal efforts ... “




How did we get here?

- Silviculture Enhancement Initiative
 - ❖ Review of silviculture program (2012)
 - ❖ Questionnaire to practitioners (2013)
 - ❖ Discussion paper including opportunities for improvement (2014)
 - ❖ Planning and Monitoring Team (2014)
 - ❖ Decision Notice ER # 012-0913 (2016)



Where are we now?

- Forest Management Planning Manual
- Forest Operations and Silviculture Manual
 - ❖ Associated policies
- Forest Information Manual
 - ❖ Technical specifications



**Where are
we going?**

- New manual implementation July 2017
- Phase-in according to provisions in new manual and the planning cycle of the forest



Opportunities for improvement

- Regeneration Standards
 - ❖ *How do I want the stand to grow?*
- Assessment of regeneration status
 - ❖ *Is the stand developing as expected?*
- Past silvicultural results
 - ❖ *What is growing in the forest?*
- Reconciliation to targets
 - ❖ *Am I on the right track?*

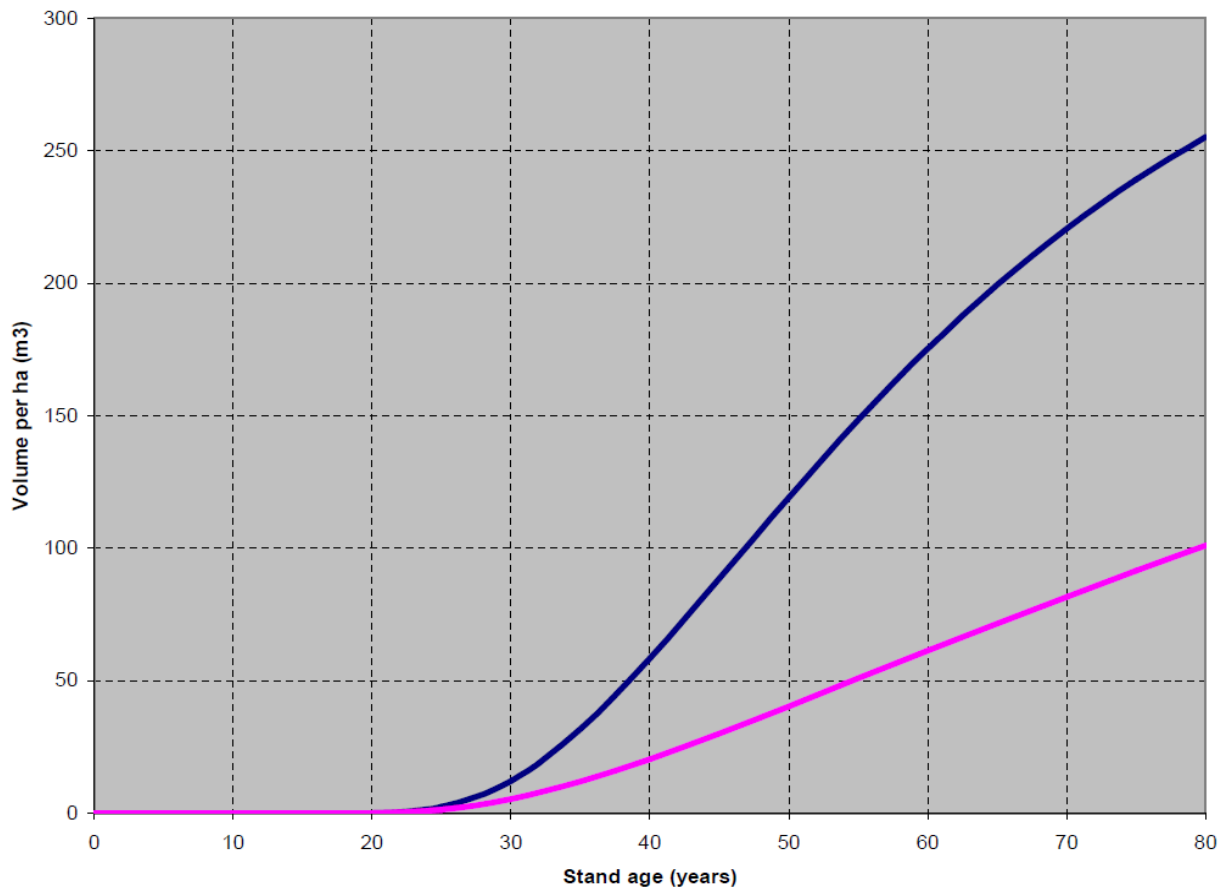


Regeneration Standards

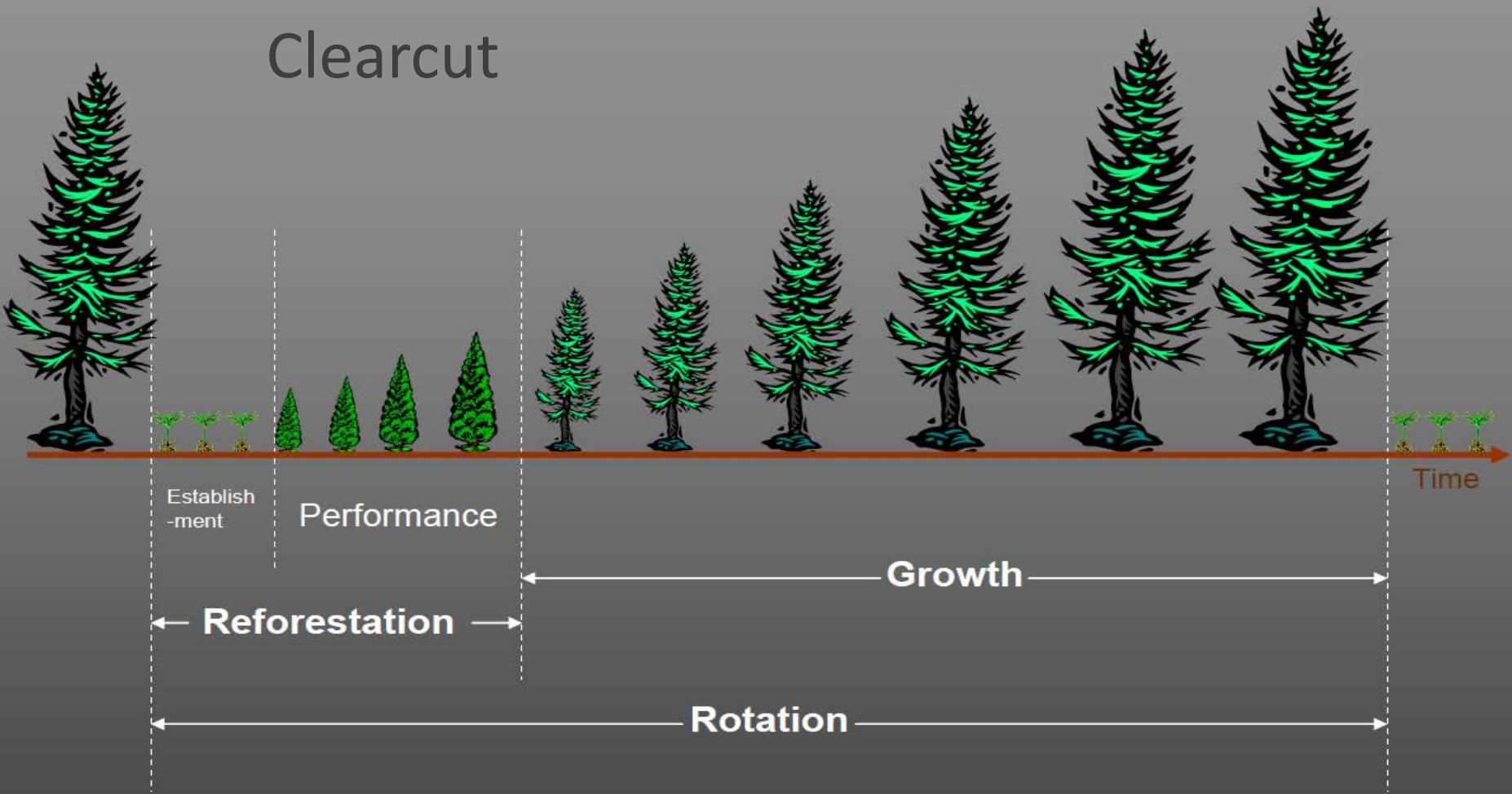
- A regeneration standard is a measurable goal that provides an early indication that a stand will develop as predicted in the forest management plan.



Regeneration Standards

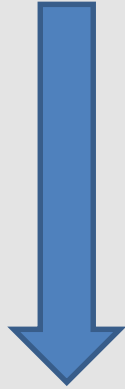


Clearcut



Shelterwood

Time



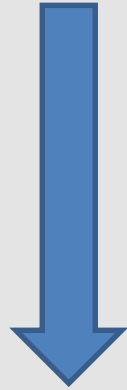
Establishment



Performance

Selection

Time



Establishment



Performance



Assessment of Regeneration Status

- Replacing free-to-grow with establishment and performance
- Regeneration assessments determine the status of regeneration in relation to targets described in the regeneration standard



Assessment of Regeneration Status

- All harvested stands measured for establishment
- Information will meet a pre-determined standard for accuracy and precision
- MNRF will validate information before it gets included in an annual report



Assessment of Regeneration Status

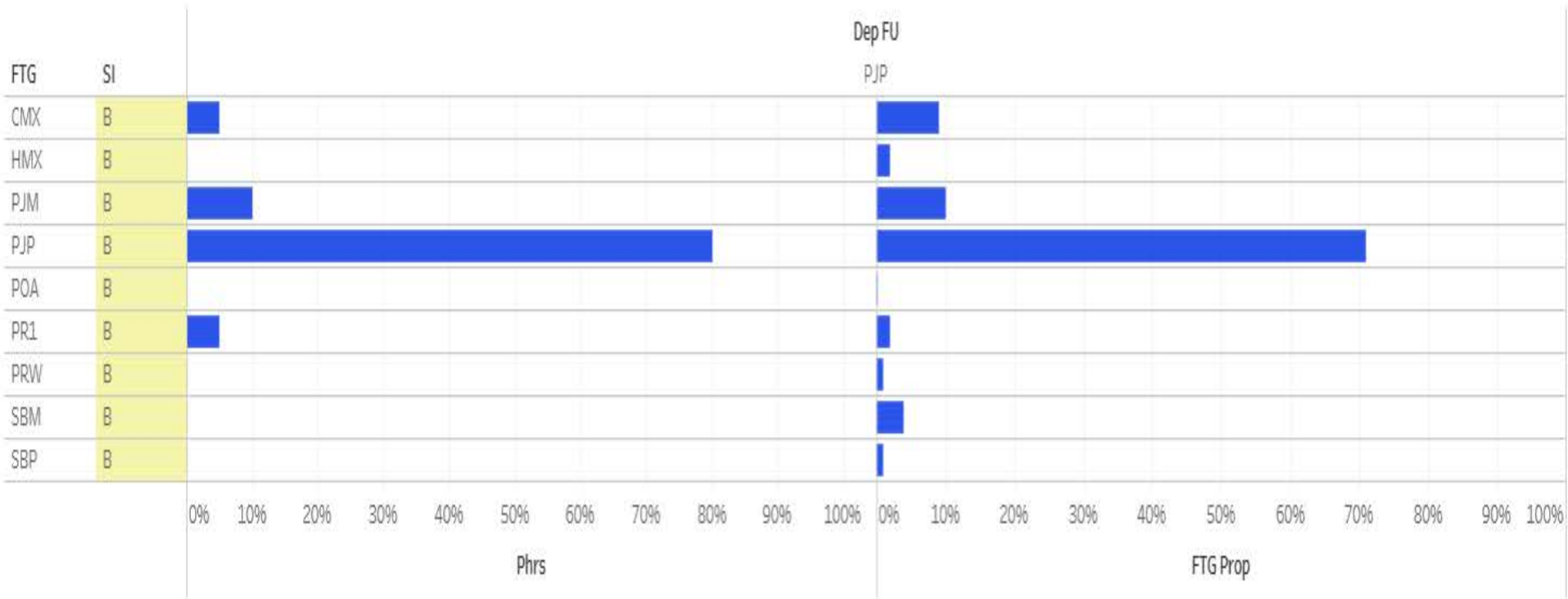
- A sample of the silvicultural stratum will be measured for performance
- Forest managers will provide a measure of quality assurance



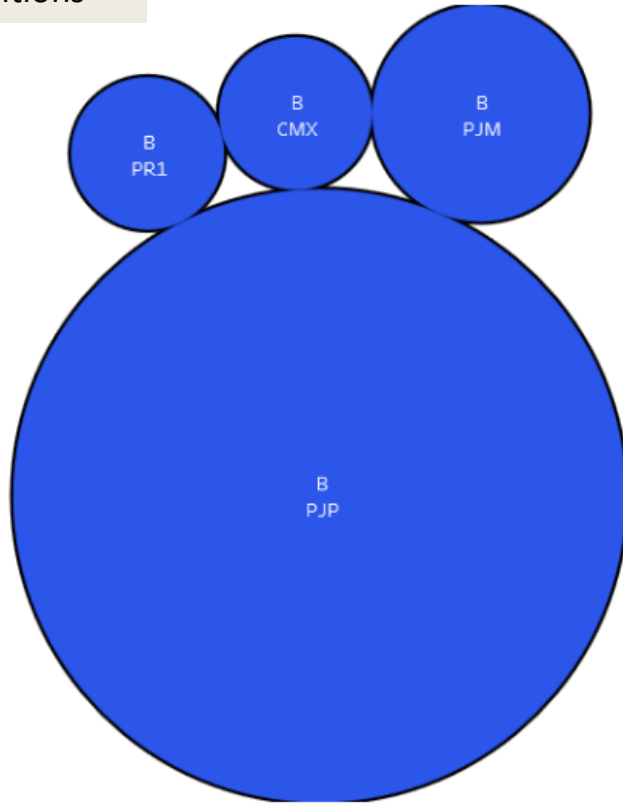
Past Silvicultural Results

- Reported silviculture results will directly inform silviculture inputs.
- Adjustments to treatments that lead to change to the inputs will be documented. Monitor the treatment to ensure that it happens.

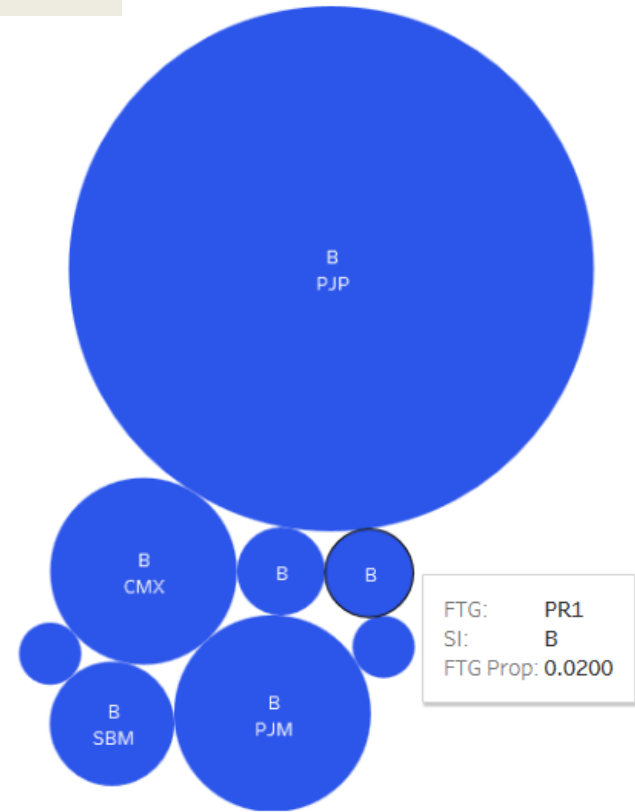
FTG vs. Planned



Modeled Transitions

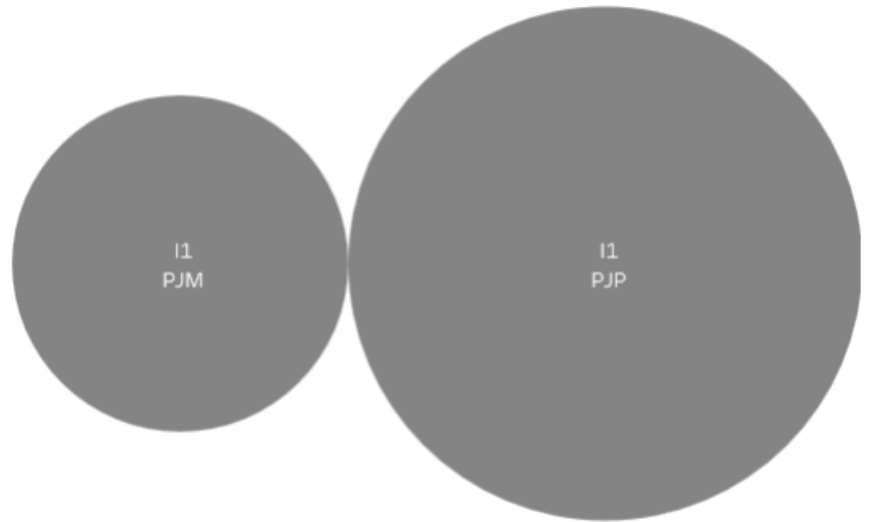
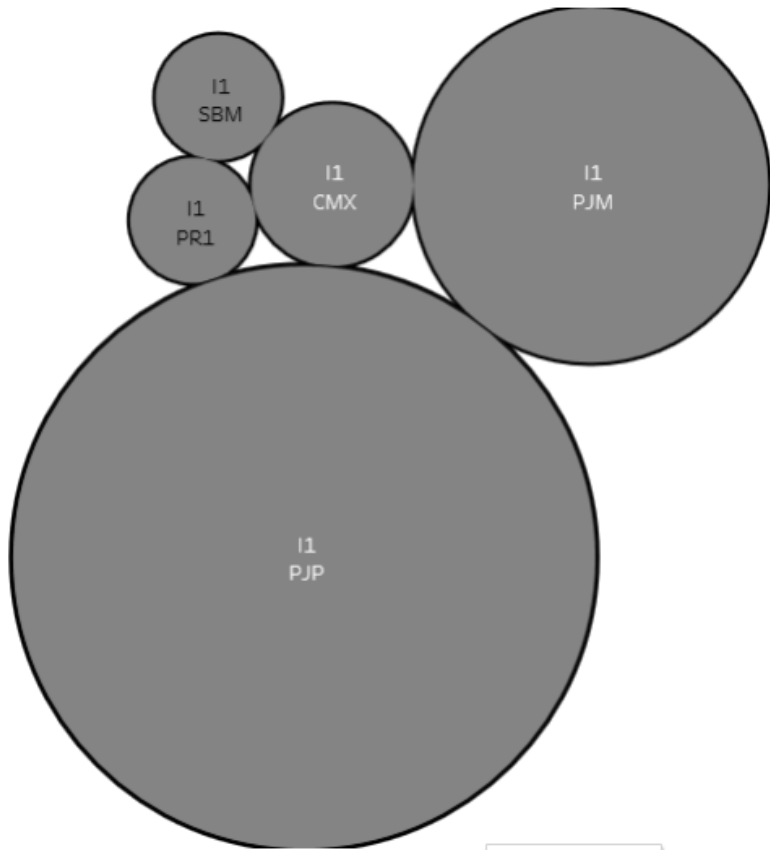


Assessed Results



PHRS

FTG



FTG: PJP
SI: I1
Phrs: 0.6500



Reconciliation to targets

- Reconcile the progress of actual regeneration to the silvicultural targets in the FMP in enhanced annual reports.
- Results-based rather than process based reporting.



Reconciliation to targets

- Leads to better decision making in development of annual work schedules and future plans.
- Enhanced annual reports beginning with 2017/18



Implementation

- Three MNRF task teams have been established to develop policy and procedures described in the decision notice.
- These requirements will be implemented along with FMPPM2017.



Discussion