

Collaborations in Environmental Management: Alberta-Pacific & the ABMI



ABMI workshop
January 30, 2019

Elston Dzus



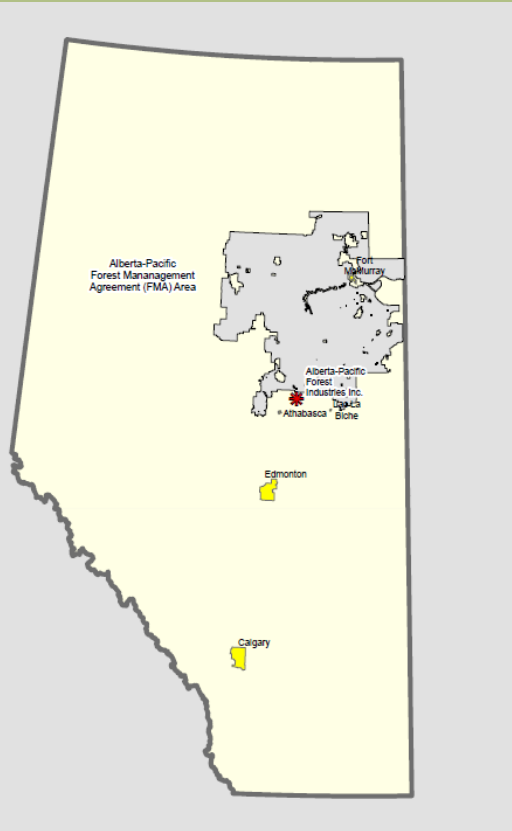
Overview

- **AI-Pac**
- **Ecosystem-based management:**
 - stand & landscape
- **ABMI & AI-Pac:**
 - Regional monitoring
 - Effectiveness monitoring
 - Value-added



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Alberta-Pacific



- Producer of pulp / power / methanol
- ~7 million ha
- ~ 28% merchantable forest
- 10% of Alberta landbase
- Forest is FSC® certified

Ecosystem-based Management

- **Natural Disturbance Model**

- Wildfire
- Variability is key
 - In space & time

- **Key Assumptions**

- Biodiversity



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From Landscape to Stand, Every Harvest Area Looks Different



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Convergence ??



2

Poor Match



2



15



15



30

Better Match ??



30

Good Match ???



60



60

Post-Fire



>125



>125

Post-Harvest

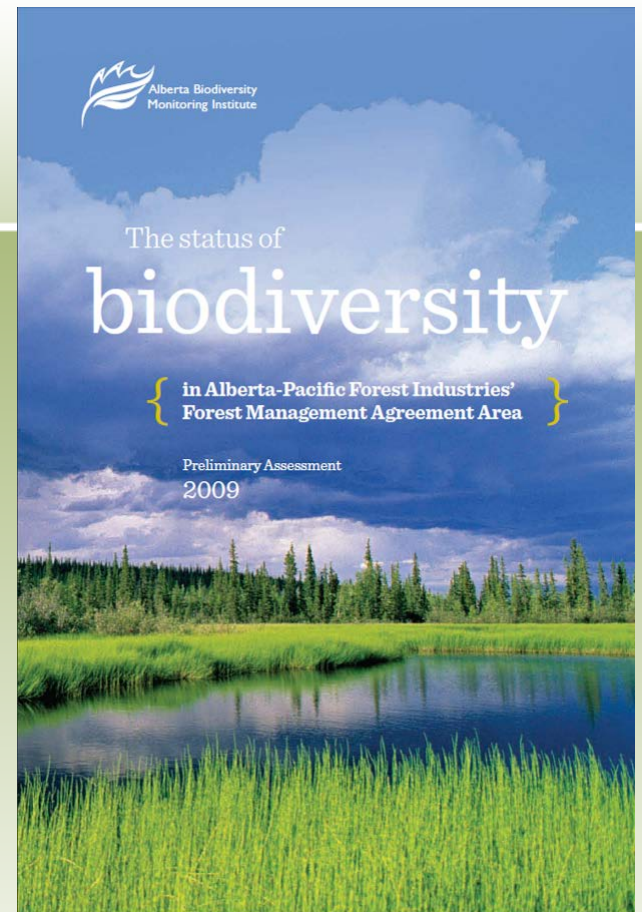
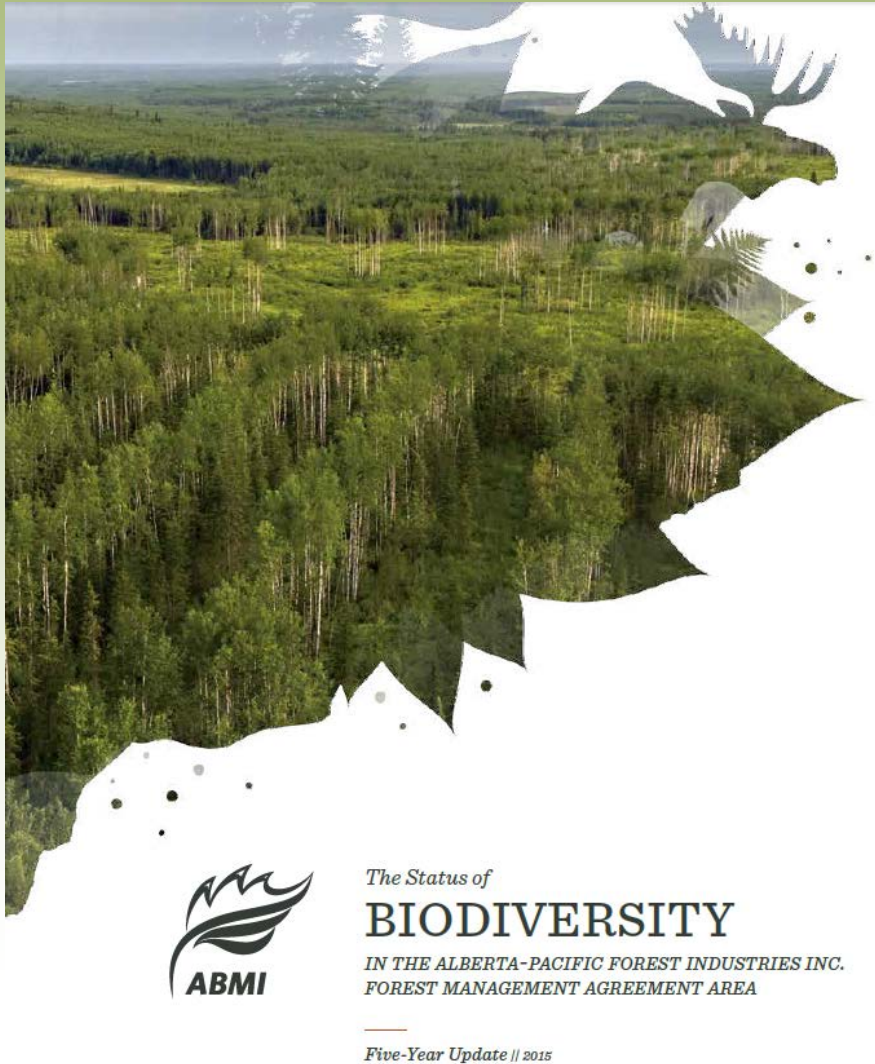


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Historical Perspectives



Regional Monitoring



Effectiveness Monitoring - AlPac

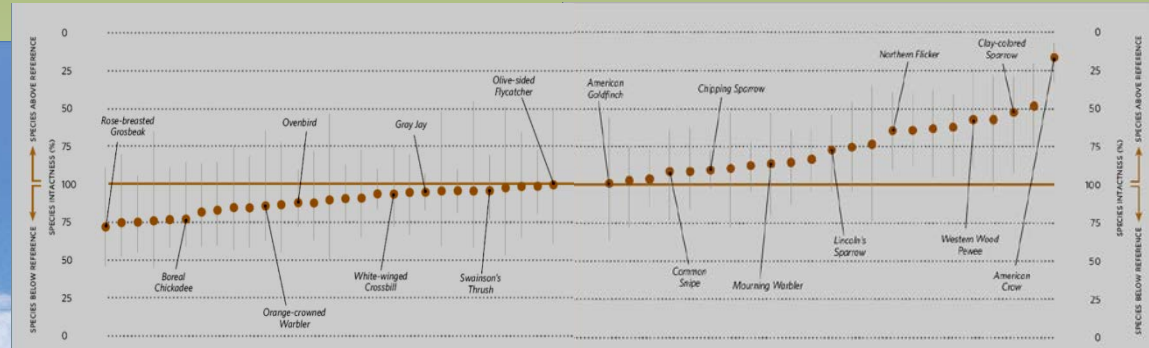
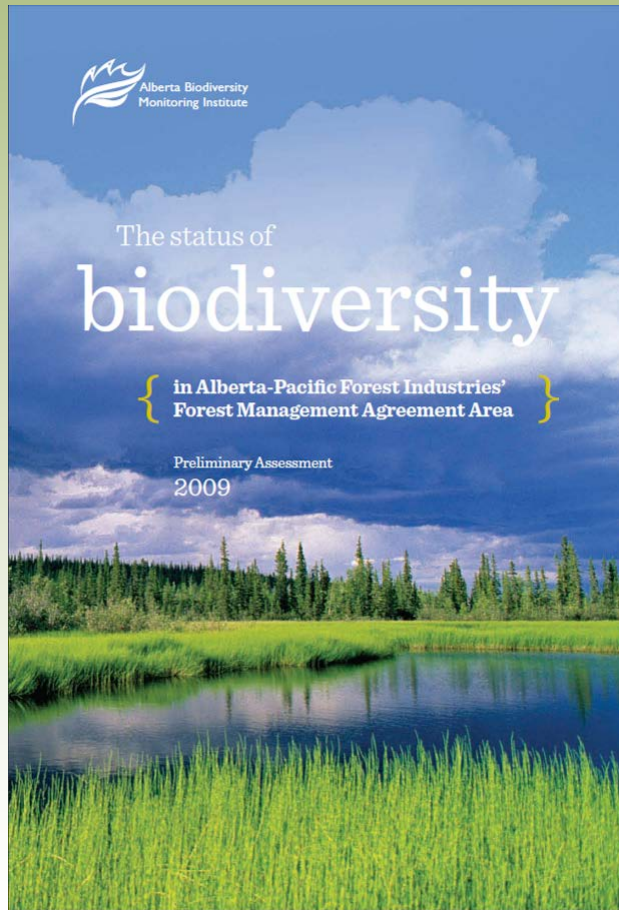


- During 2009 & 10 started developing the “math” to highlight ecological status at a site
- ABMI info ideally suited to do these analyses
 - community info for birds, plants, moss, lichens, inverts
- Al-Pac & ABMI recognized the potential to use site-level analyses to assess recovery of harvest areas

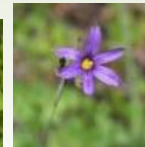
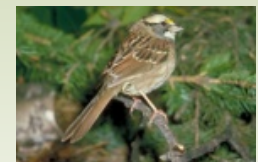


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Complements Regional Assessment



Birds



Plants



Habitats



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Effectiveness Monitoring & Collaboration

- compare diversity for fire vs harvest at varying ages
- birds, plants, habitat structure
- ABMI collaboration / protocols
- Huggard et al. 2014 Can J For Res

<u>Treatment</u>	<u># Sites</u>
0-10 yr fire	2
15 yr fire	8
15 yr harvest	31
20-40 yr fire	6
>40 yr fire	28



Convergence ??



Poor Match



Better Match



Good Match



Post-Fire



Post-Harvest



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Al-Pac's 1995-1997 aspen harvest areas after 15 years were similar to at least 15yr fires, and most similar to 20-40yr fires or older aspen stands.



Snags

Lichen Moss

Shrub

Birds

Plants Mites

Post-Fire

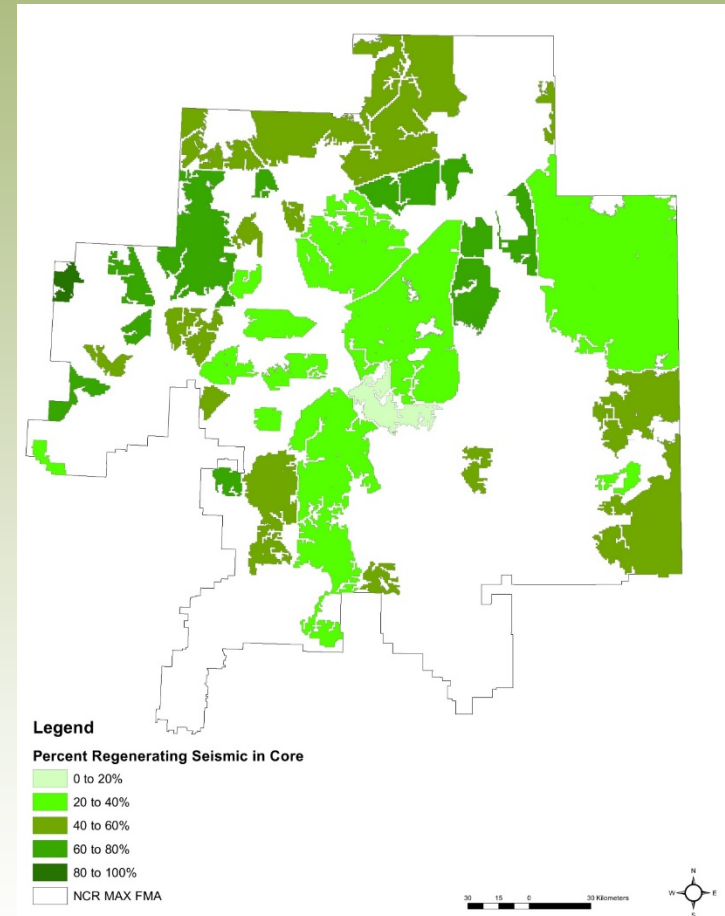
Post-Harvest



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Value-added

- FSC® Certification
 - HCV analysis / monitoring
 - Human footprint
 - Core area assessment
 - Regrowth on seismic
- Planning
 - ABMI species coefficients
- Conservation area analysis



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AI-Pac support for the ABMI

- Credible
- Independent third-party
- Consistent across the Province
 - Long term and wide-spread
- Leveraging of funds / Cost effective
- System efficiencies
- Will meet most (but likely not all) biodiversity monitoring requirements



Questions?

