LiDAR & Integration of Spatial Tools

Barry White$^{1,2,3}$

$^1$Forest Management Specialist
Alberta Sustainable Resource Development

$^2$Faculty of Forestry and Environmental Management, University of New Brunswick

$^3$Department of Renewable Resources, University of Alberta
‘Big data’ could help solve Canada’s productivity problem

“Deriving insight from data collected across the supply chain — including unstructured content from maintenance logs, websites, contracts, communications and emails — opens the doors for enterprises to gain a complete view of their operations, better deploy resources, manage assets, reduce downtime and optimize their inventory and supply chain management.” Les Rechan … Financial Post … August 13th 2012.
Why seek excellence in information?

- Industry
- Competitiveness
- Stewardship
- GOA
- Efficiency
- Innovation
LiDAR (light detection and ranging): a Transformation Technology
• Current GOA Inventory: 28 million hectares
• Investment: $15.56 million
• Site license restrictions in place
• Accuracy: 30cm horizontal, 45cm vertical (medium to high quality data)
• Primary innovation activity has been around moisture and water mapping and forest fibre inventories.
Comments: Thick sphagnum channel.
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The Qualifiers

LiDAR typically produces false DEMs for peat lands.

WAM was not designed to map wetlands.

WAM is sometimes wrong.

WAM does not replace boots on the ground.
Concluding thoughts

• LiDAR and LiDAR derived tools represent transformational technologies that may assist in understanding how peat lands are hydrologically connected to each other and to upland sites.

• WAM data for significant areas of the northern boreal will soon be available from AESRD’s Resource Information Management Branch.
Web Links

- http://www.youtube.com/watch?v=Vi7cgqMTovk
- http://www.youtube.com/watch?v=LR4S2dZiTT0&feature=related
- http://watershed.for.unb.ca/
- http://watershed.for.unb.ca/publications
- http://www.sfmn.ales.ualberta.ca/Events/NetworkWorkshops/AB-NewWetAreasMapInitiative.aspx
- http://www.youtube.com/watch?v=-VmAy6rxt-U&list=UUHKLKPB039ZjXKENx_f1TIQ&index=1&feature=plcp
Acknowledgements