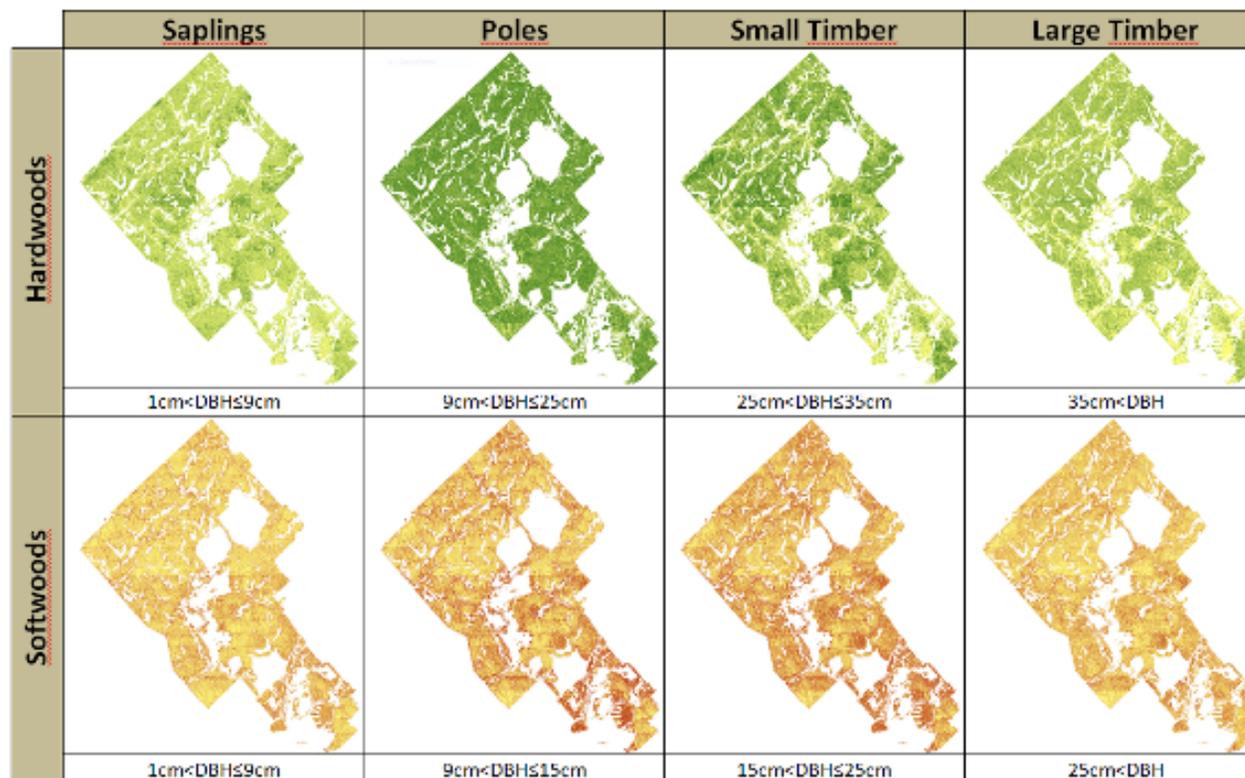


Improved forest inventory for hardwood stands April 25, 2012



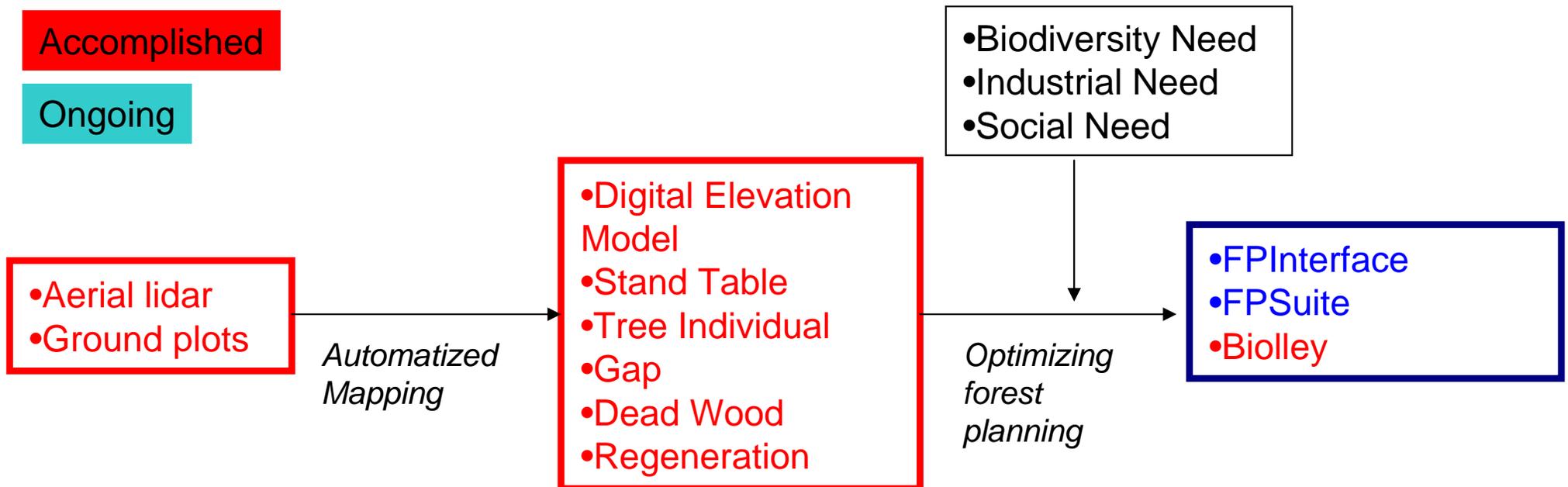
Stand table map based on aerial lidar linked to Biolley for
optimizing the allowable cut-J-M Lussier

Needs

1. Scarcity of information and cost effective methods to provide fibre attribute information and for planning forest operations in a timely fashion.
2. Need to know and locate the value of each potential product at the tree, stand, and landscape level.
3. Need for mapping of tree attributes to obtain in a timely fashion unbiased, more accurate, greater ease of use, and flexibility to link into existing decision making tools such as FPSuite and FPInterface in a cost effective manner.

Approach

1. Investigate and develop latest technologies from other science (LiDAR) for forestry operational applications (i.e. mapping of forest attributes).
2. Need to use this information along the entire forest value chain from the forest to the product including life cycles for present and future consumer values in an economic context.
3. Develop non-destructive methods to determine fibre attributes and their relationships to harvesting, potential products, and future stand dynamics for the mill level at the tree, stand, and landscape scales.





Tree individual map based on aerial LiDAR

Benefits

1. Reduces costs for example digital mapping which can produced on time, unbiased, has greater accuracy, easy of use, and greater flexibility to be integrated into existing management decision tools such as FPSuite and FPInterface.
2. Increase greater industrial competitiveness while promoting sustainable forest management.
3. Linking the wood processing need with silviculture need: optimizing tree, stand, and landscape level decisions to the consumer need.

Competition/alternatives

- Adapt to current frustrations with existing out-dated inventory methods and systems without direct and easy links along the forest value chain while not becoming extinct.