

Department of Natural Resources

FY18-19 Biennial Budget Change Item

Change Item Title: Forest Inventory

Fiscal Impact (\$000s)	FY 2018	FY 2019	FY 2020	FY 2021
General Fund				
Expenditures	0	1,000	1,000	1,000
Revenues	0	0	0	0
Net Fiscal Impact = (Expenditures – Revenues)	0	1,000	1,000	1,000
FTEs	0	4	4	4

Request:

The Governor recommends \$1 million for improving the forest inventory on state lands. We currently complete approximately 120,000 acres of forest inventory updates on our lands each year: about 70,000 acres by staff and 50,000 acres via contracts. This proposal funds updating an additional 100,000 acres of DNR-owned land annually, significantly improving our forest inventory data resolution (e.g., recording individual survey plot and tree species measurements) and reducing our inventory cycle to 15 years (i.e., the time it takes update all 2.75 million acres of our commercially productive forest lands).

Rationale/Background:

On March 1, 2018, we delivered the final report from a rigorous 16-month analysis effort to determine the sustainable timber harvest level from DNR-managed forest lands. Our forest inventory was the primary dataset used in the analysis and played a critical role in projecting timber volumes and forest conditions over time. However, the analysis was limited by the age, accuracy, and resolution of the inventory data. All three of these factors significantly affect the ability to accurately and reliably reflect current forest conditions, model the full breadth of forest management options, and project resulting outcomes and forest conditions. The independent contractor that prepared the analysis, and subsequent discussions with industry and other stakeholders, identified an immediate need to improve forest inventory on our lands for ongoing management, and future planning and analysis efforts.

Our forest inventory is an ongoing assessment of forest characteristics (including tree species, age, and acreage) that is currently summarized primarily at a forest stand level (i.e., characteristics averaged across a number of individual survey plots). This proposal will strengthen the power and utility of the our forest inventory by capturing additional detailed information below the stand level (i.e., individual survey plot data, including tree species specific measurements of diameter, height, age, and trees per acre). This will result in more accurate estimates of current and future forest and stand characteristics, improved timber growth and yield projections, and ultimately more reliable projections and rigorous analyses of future forest conditions and sustainable timber harvest volumes. This proposal will also result in more standardized forest inventory data collection methods by staff and contractors through the consistent use of hand held data recorders and inventory accuracy standards (e.g., number of plots per forest stand). Ultimately this will provide better data with which to manage our forest lands to meet diverse goals for timber production, wildlife habitat, biodiversity, water quality and recreation.

Proposal:

This proposal is a change to an existing program to increase the rate, amount, and resolution of forest inventory data collection, resulting in a more up to date, accurate, and useful DNR forest inventory.

With an improved forest inventory, we will be able to more accurately assess current and ever-changing forest conditions, improve forest modeling of diverse management alternatives, and more reliably predict resulting outcomes (e.g., timber harvest volumes) and forest conditions over time. This is important in making and communicating well-informed forest management decisions.

Our current forest inventory budget is approximately \$1.1 million annually.

Increase Annual DNR Forest Inventory Capacity (\$950,000)

- This proposal supports 4 FTEs. Of the 4 FTEs, 3 FTEs are for Forestry field staff to increase inventory data collection by 45,000 acres per year. 1 FTE is for Forestry inventory coordination and quality control.
- Increase annual contracting inventory data collection by 55,000 acres per year.
- This proposal is an accelerated effort to reduce the state inventory cycle to 15 years within the next 12.5 years. After 12.5 years, the level of effort could then be reduced to maintain the 15 year cycle on state managed lands.

Data Resolution, Quality Control and Assessment (\$50,000)

- Purchase a total of 60 hand held data inventory collectors over the next 2-3 years, including IT support
- Maintain hand held devices and software
- Standardize collection methodology
- Train staff and contractors
- Enhance data resolution and quality control and assessment

IT Related Proposals:

This proposal will require some IT assistance in setting up new hand held devices with existing software. No new software development is anticipated.

Results:

<i>Type of Measure</i>	<i>Name of Measure</i>	<i>Current</i>	<i>Future</i>	<i>Dates</i>
Quantity	Annual DNR inventoried acres	120,000	220,000	FY19-FY21

Statutory Change(s):

N/A