

MANAGEMENT TOOLS FOR MANAGING STAND STRUCTURES AND FIRE

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ABSTRACT

Foresters have many of the technical tools to manage forests so they will have relatively low susceptibility to fires. These tools include fire behavior models, stand growth models, geographic information systems, and stand inventories. The silviculture laboratory at the University of Washington is developing an open, modular, PC-based system which allows those tools to be integrated. Consequently, the tool, termed Landscape Management System (LMS), is allowing the projection of stands and landscapes through time, with different simulated silvicultural regimes applied to each stand. LMS can project changes in risk of ground and crown fires, changes in wildlife habitats, and changes in timber flows on a landscape of several hundred to several thousand acres. It can project the changes through stand and landscape visualization, and through graphs and data tables. The system is designed to allow future incorporation of new components—more data analysis, economic habitat analysis, and new fire models. Beta versions of the system are available and can be used on a DOS-based 486 personal computer with Windows.

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