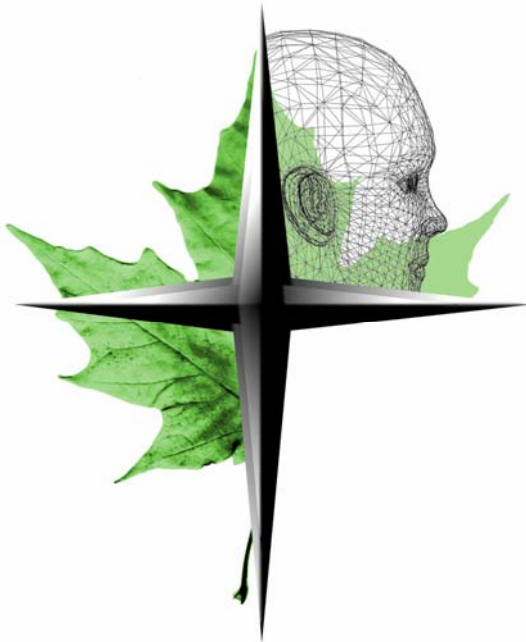


C A S E S T U D Y

F O R E S T P L A N N I N G W I T H R E M S O F T[®]



Australian State uses Remsoft Spatial Planning System for strategic and tactical forest management planning

State Forests of New South Wales (NSW) is the government enterprise responsible for sustainably managing 2.4-million hectares of public native forests and 215,000ha of pine plantations and 55,000ha of Eucalypt hardwood plantations in southern Australia.

State Forests' goal is to manage the forests under its care to provide the widest range of benefits to the present and future generations of people in NSW - including commercial, environmental and social benefits.

Like most agencies responsible for forest stewardship - particularly when that forest is a public resource - the organization is under increased pressure to show that the land is managed responsibly.

Aided by new technologies

Forest managers in NSW have begun using Woodstock and Spatial Woodstock for strategic and tactical-level forest planning. Specifically, the technology is applied for strategic wood supply forecasting, to determine the sustainable wood supply capacity of native Eucalyptus and White Cypress Pine forest and for creating tactical harvest schedules for the resource.

"The availability of this software is timely given recent reductions in available forest land and increasing harvesting constraints on land use," explains John Turland, State Forests Wood Supply Analyst.

From 1998 until 2002 SFNSW was using USDA Forest Service's SPECTRUM for strategic level modeling in some of the native forest, but over last two years the organization has been using Woodstock because of the ease of data handling, reporting and modeling flexibility, and performance.

Tactical level modeling is now being undertaken for the first time in native forests given the availability of Spatial Woodstock. The need for spatial planning has been accentuated by the recent reductions in available forest land and increasing harvesting constraints on land use - which are the outcome of the international agreements, intended to ensure the protection of some areas of forest while also ensuring an internationally competitive timber industry in Australia.



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"Using Woodstock for modeling forest characteristics, forest management issues, and for tracking the impact of a limitless number of management options and constraints will provide the forest manager with a greater insight into the resource dynamics, and help identify more productive and profitable ways of managing the estate," Mr. Turland says.

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"There is obvious value in the spatial modeling functionality of Spatial Woodstock as well, because strategic modeling provides estimates of how much wood is available and when, while the tactical scheduling establishes where its comes from."

Mr. Turland says spatial planning capabilities of the system are a quantum leap in planning because aside from establishing schedules it can build constraints into tactical plans, which previously could only have estimated.

Help transitioning from native forest to plantation coupes

In the coastal Eucalypt forests in the south east of the state, Woodstock and Spatial Woodstock are starting to be implemented and will help forest managers there address the complex issue of the transition of forest structure, from multi-aged native forests to even-aged re-growth forests - which yield quite different products. (Managing the forest transformation is compounded by the presence of large tracts of fire induced re-growth in the same age cohort.)

Strategic and tactical forest management plans are already in place in the South East Forest Management Zone but Woodstock-Spatial Woodstock models will help provide alternative and refined approaches to meet forest management objectives of maximizing sawlog production and value from the forest estate while simultaneously addressing considerations such as matching the changing forest composition with market opportunities and existing pulpwood contracts, maintaining forest species mixes and maintaining growing stock among other issues.

"Most harvest units have been identified but it will be useful and interesting now to use the blocking functionality to evaluate the aggregation and modification of these," explains Mr. Turland.

Future planning

Because wildfire is an issue throughout NSW's forests, further down the road foresters will be looking to apply stochastic modeling to their plans to see the potential impact of unplanned events on the overall strategic plans. In time, the software will be used for monitoring impacts of harvesting operations on fauna population (numbers, distribution and diversity) and various other ecological values.

Also, on the agenda is log allocation. State Forests is currently moving away from traditional stumpage selling to log merchandising, so technology - such as the Log Allocation Module Remsoft is launching autumn 2004 - to address this will be timely.

For more information about forest management planning in New South Wales, please visit <http://www.forest.nsw.gov.au/>.

