

## Sustainable Forest Technologies meets timber supply targets and certification standards

### Managing mixed forestlands with the Remsoft Spatial Planning System

#### The Business

Forestry consultants Sustainable Forest Technologies (SFT) manage more than two million acres of forestlands throughout the US from Texas to Maine. Based in Augusta, Maine and Savannah, Georgia, SFT serves institutional investors and private landowners performing an array of forest management services, including due diligence, timber management, maximum timber value recovery, and marketing and sales. SFT uses cutting-edge technology for timber inventory and GIS mapping.

#### The Challenge

SFT also manages over one-million acres of forestland in Maine and New Hampshire recently acquired by GMO Renewable Resources, LLC, a Boston-based TIMO. The mixed natural forestlands – dominated by softwood forests in the east and hardwood forests in the more mountainous western regions – provide sawlogs to many customers from its two Maine log yards. Pulpwood is sold to two large coated paper mills, also in Maine, under a 50-year wood supply agreement attached to the lands.

SFT must also show that the timber management activities meet the certification criteria of the Sustainable Forestry Initiative (SFI) standards, comply with some of the most environmentally stringent state laws in the country, all while meeting the terms of the wood supply agreement.

SFT must also consider the impact of some land sales and conservation easement sales on the timber supply.

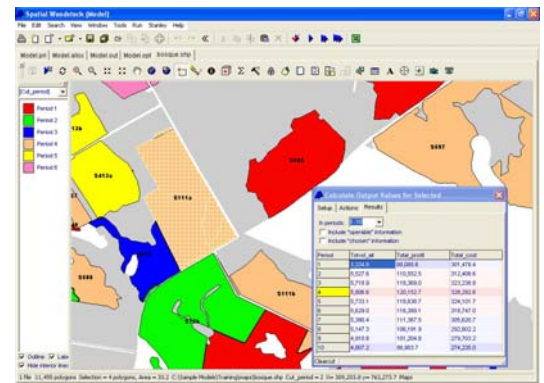
#### The Remsoft Solution

Sustainable Forest Technologies is using the Remsoft Spatial Planning System to conduct its initial harvest level analysis - including spatial analysis – providing the client with realistic harvest level projections that optimally fulfill all planning criteria while observing spatial constraints. The Stanley component of the RSPS was particularly important to addressing the diversity of small stands across the landscape by combining stands into harvest blocks where possible. Stanley also addressed complex spatial restrictions - limits imposed by State laws and internal standards for harvest opening size and the spacing between openings.

Using up-to-date inventory data and yield curves, SFT’s Business Support Manager Thomas Dodd has determine realistic harvest levels for a 50-year period and presented the findings to the client. These levels are the basis for annual operating plans and harvest schedules.

“This is a very complex planning problem. The forest we are dealing with is very fragmented plus we have numerous constraints to address while achieving business objectives,” explains Mr. Dodd, who presented the findings to the client after six-months of analysis. “I can’t even conceive of an alternative method to doing this analysis.”

The spatial capabilities of the system are particularly beneficial in helping the planners to see the locations of potential harvest and treatment activities on the ground and to convey this information to clients and foresters who need to turn the plans into actionable operating plans.



*I can not think of any alternative that could handle modeling such complex forests.  
Mr. Thomas Dodd*

“To be able to show graphically what is constraining the harvest has been a real asset for us,” says Mr. Dodd who estimates that as much as 15% of harvest levels can be lost to spatial constraints. “The mapping capabilities let us better communicate where we are coming from, to justify the decisions we’ve made and to explain why the numbers maybe aren’t at the same level as might be reflected in a purely non-spatial analysis.”

And because the Remsoft system is a linear programming-based model, SFT is able to analyze hundreds of alternatives to find the best possible solution to suit its planning needs.

“Because we can back up our decision with sound science and we can show that we have looked at virtually all the possible alternatives this means that we have real credibility with the client and with our foresters.”

It has also proven useful in dealing with SFI auditors who want a transparent process to verify yield tables and the flow of the analysis.

“Our approach passed easily,” Mr. Dodd confirms.

While Mr. Dodd and his team will be looking to conduct further analysis using the Remsoft Spatial Planning System on the Maine and New Hampshire lands, he also expects the technology will soon be used for analysis for other private land owners and investors in other states.

“The Northern forests we are dealing with here have presented a very complex planning problem because not only are they fragmented but some stands can have two or three age classes. I can not think of any alternative that could handle modeling such complex forests. So if it works here, it should work just about anywhere,” Mr. Dodd says.

For more information about Sustainable Forest Technologies

please visit [www.sustainableforesttechnologies.com](http://www.sustainableforesttechnologies.com)