

Forest Econometrics

Forest Resource Analysis System Software (FRASS) is a reliable and efficient lands management system for scheduling economically optimal forest management activities while also discovering the value of timberland properties – one timber stand at a time. FRASS assembles growth data for forestland parcels, combines it with detailed information about the property, and engages delivered log market price predictions to give financially optimal timber harvest rotation dates and values in current day terms.

The FRASS program combines advanced econometric tools with our client's specific data on parcel ownership, timber inventory data, timber stand data, riparian protection zones, road networks, and more, to generate the **Highest and Best Use** value for timber production of the parcel. These are incorporated into the FRASS program for fast, secure, and accurate valuation reports for targeted parcels.

Optimal timber stand harvest timing for the current rotation, the next rotation, and future rotations into perpetuity are projected in the FRASS program. These are made possible by combining tree growth projections, cost and revenue forecasts, Real Price Appreciation forces, and other factors into an optimization solution for the landowner.

High levels of online security are implemented to protect data and limit site access to only authorized personnel.

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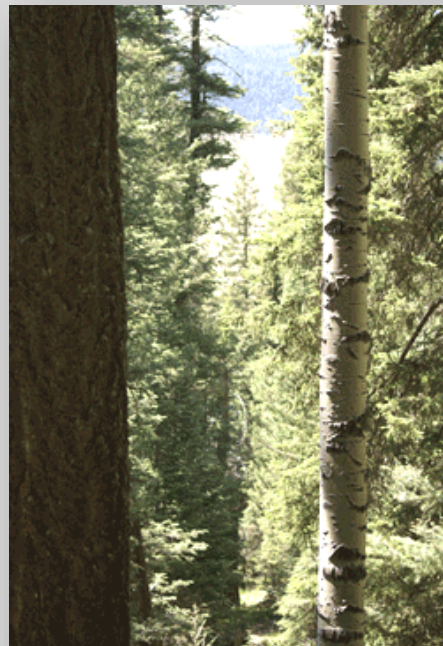
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D&D Larix, LLC

Creating Real World Solutions to Natural Resource Challenges

Maximizing Long-Term Financial Returns from Timberland Investments



<http://Forest-Econometrics.com>

FOREST RESOURCE ANALYSIS SYSTEM SOFTWARE

The Forest Resource Analysis System Software (FRASS) is a reliable and efficient lands management platform scheduling economically optimal forest management activities while also valuing discrete timberland properties.

FRASS is designed to integrate factors of timber species, size, growth, density, and response to management with data on soils productivity, riparian protection for riverine species, bird species, and zoning regulations. These physical site conditions are combined with monthly updated economic market data to provide users with predictions of value and

management activities consistent with optimal economic decision making tools. At the same time, it provides users a reliable method of predicting the sales price of parcels based on timber production as the **Highest and Best Use**.



Tree growth blended with econometric strategies for financial optimization.

FRASS views a forested parcel as its core unit with all physical characteristics playing out in its ultimate value determination. The parcel's value based on site factors is also influenced by the economic profile of the region and its international trading partners. FRASS enables users to view a parcel's value through the lens of a broad range of economic factors.



Timber growth is combined with site conditions and economic factors to generate optimal harvest date solutions for each timber stand through all rotations.

The Forest Resource Analysis System Software (FRASS) is an internet accessible Software-as-a-Service (SaaS) program identifying financially optimal timber harvest rotation timing and asset value. This **Highest and Best Use** solution gives the landowner and resource manager an Income Capitalization Approach asset value. FRASS details how to realize this value with harvest timing for each timber stand; now and into perpetuity.

FRASS results create a road-map to financial optimization.

Launching FRASS

The FRASS approach integrates critical economic variables to generate user specific market portfolios to determine optimal timber harvest dates into perpetuity. Forest inventory data processed through growth modeling software applications make these solutions possible.

As part of the optimal cost-flow structure, the data are continuously updated for optimal harvest rotation calculations.

FRASS findings rely on the veracity of your data allowing you to expand the range of your management opportunities.

Client data are sequestered within a secure online environment with only authorized users able to enter and access data. Unique econometric design involving sequential quadratic programming works in unison of its essential features to create the effect of a 3-D platform model providing its findings to various land management decision makers: financial officers, land appraisers, resource managers, and others.

Economics of FRASS

FRASS integrates established economic valuation procedures using innovative technologies and insightful techniques to create for users a recognizable and well balanced valuation portfolio.

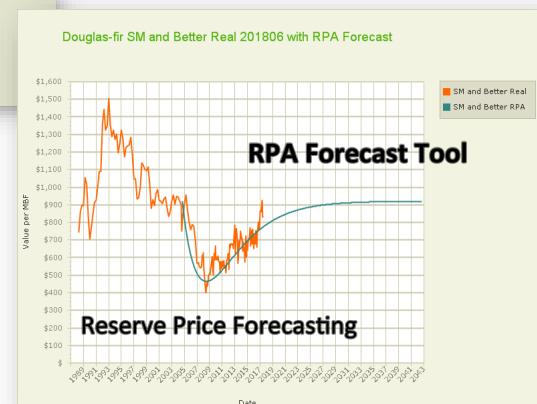
One of these techniques is the **Real Price Appreciation Forecast Tool**, developed exclusively for FRASS users, to forecast price trend performance consistent with a **Reserve Price Indicator**. This unique feature enables users to design economic portfolios within the program to apply to their properties

making time-sensitive projections of timber sort prices.

FRASS maintains monthly economic data reaching back in time over 100 years. These data are paired with monthly historic delivered log prices and logging costs in each log marketing area.



Timber growth is modeled over multiple rotations to generate Net Present Value solutions on each parcel.



FRASS Users

FRASS benefits forestland owners, timber industry landowners, federal and state agencies, Indian reservations and tribes, universities, conservation organizations, professional land appraisers, and forest consultants serving their clients. FRASS is designed for any size of landowner; large or small.

Once data are assembled within the platform and portfolios are created, the actionable results can be generated within minutes, not days or months.

With FRASS, you can discover how to realize financially optimal returns on your timberland investment.

Gain access to the FRASS Demonstration Site, established in the Puget Sound log market area, to discover how you will use these solutions on your lands.

FRASS is more than a parcel valuation tool. It is a land management apparatus.