

Title

GIS BASED MANAGEMENT PLANNING

Model Forest

Western Newfoundland Model Forest

From

January 1994

To

June 1995

Keywords

GIS, DSS, Management Planning

Objective

To develop a GIS based management planning tool with both tactical and strategic planning capabilities.

Description

The development of a resource management plan is executed in a two phase, hierarchical manner. First a strategic, long term, forest-wide management intervention strategy is established. Second, the chosen strategy is operationally altered to produce a tactical, short-term, implemental management schedule. Currently, tactical planning is often an inefficient and ineffective decision-making process. While both levels of planning should share a common forest database, this is rare in practice. Geographic information system (GIS) forest databases and techniques are often used strategically, but not tactically.

This project focuses on how GIS technology and graphical user interface techniques can be used to implement a GIS-based approach to tactical planning, and implement a stronger decision-making linkage between the strategic and tactical levels of planning. This project has three specific objectives: (i) to develop an Arc/Info based tactical planning tool for editing strategic schedules; (ii) to develop a platform-independent version of a strategic planning tool (GISFORMAN+1); and (iii) the marriage of the two within a graphical user interface, to establish the beginnings of a complete management design DSS for integrated resource management planning.

Reports and Products

Tactical Forest Planning with Arc/Info. Prior, I. 1995. University of New Brunswick, Fredericton, New Brunswick. WNMF: 6-105-001, 102p.