

20-Year Spatial Feasibility Analysis

Determination of a spatially feasible harvest schedule incorporating all integrated resource management considerations will be undertaken using CASH6 operating in spatial mode for the first 20 years of the planning horizon. Approved blocks from the current forest development plan (FDP) will be given the highest priority for harvest.

Analysis simulations in support of MP No. 4 on TFL 55 will be carried out using CASH6 (Critical Analysis of Schedules for Harvesting) version 6.21, a proprietary timber supply model developed by Timberline Forest Inventory Consultants Ltd. (Timberline, 2005). A variable degree of spatial resolution is available depending on inventory formulation and resource emphasis area definitions. Forest stands in refuges such as environmentally sensitive and inoperable areas that do not contribute to the periodic harvest are nonetheless counted for their contribution to forest structure at both the stand and landscape levels.

In their current implementation, forest cover objectives require a control area over which to operate. The control area for a constraint set should correspond to a realistic element in the landscape. For example, the requirements associated with caribou objectives are designed to operate on the landbase identified as caribou habitat. Pseudo-geography may be employed to translate spatial constraints on harvesting into forest cover and static access constraints. The objective is to identify the “natural” constituency for forest cover constraints. Numerous levels of land aggregation are used to define both geographically separate areas and areas of similar management regime. CASH6 functionality also includes the capability to model height-based green-up.

A twenty-year plan was completed with the MP 4 timber supply analysis. It is a strategic level plan that illustrates spatially one feasible harvest option based on the results of the timber supply analysis. The plan includes the BCTS operating areas within TFL 55.

The plan provides a link between the non-spatial assumptions used in the yield analysis for MP 4 and the forest management practices, forest cover constraints and planning guidelines of the Forest Practices Code and the MAC recommendations.

The twenty-year plan confirmed the results of the timber supply analysis for the current management option. The target volumes were successfully located while meeting adjacency and green-up rules. These volumes were achieved in addition to the volumes to be harvested from salvage blocks. The accompanying map illustrates by colour-code the spatial distribution of the proposed openings.

The harvested level illustrated is not constrained by the resource management factors addressed in the plan.

Table1: 20-year Plan Harvest Projection

Period	Landscape Unit		Total Volume (m³)
	R5 Goldstream	R17 Bigmouth/mica	
10 year			
1	649,928	390354	1,040,282
2	478584	537682	1,016,266
Total	1,128,513	928,036	2,056,549