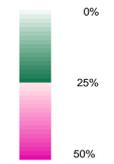


CUMULATIVE WATERSHED DISTURBANCE AND HYDROLOGIC RECOVERY ANALYSIS

FMS 92 - 20 YEAR

EQUIVALENT CLEARCUT AREA



PLANIMETRIC LEGEND

- PRIMARY HIGHWAY
- PAVED
- SECONDARY HIGHWAY
- GRAVEL
- IMPROVED
- UNIMPROVED
- TRUCK TRAIL
- RAIL LINE
- RUNWAY
- TOWNSHIP LINE
- FMA BOUNDARY
- STREAM
- LAKE/ RIVER
- CITY/ TOWN
- WILDLAND PROVINCIAL PARK
- PROVINCIAL PARK
- FIRST NATIONS RESERVE
- METIS SETTLEMENT
- MILL SITE

PROVINCIAL INDEX

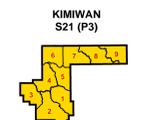
JOINT BUCHANAN LUMBER
TOLKO INDUSTRIES LTD. FMA



OPERATING AREA INDEX

OPERATING AREA FMU (OLD FMA)

- Compartment Number
- Operating Boundary
- Compartment Boundary



This analysis was derived from the Cumulative Watershed Disturbance and Hydrologic Recovery Simulation (CWA-HRS) model. The CWA-HRS model is a spatially explicit model that simulates the cumulative effects of forest harvesting and other land use changes on watershed hydrology and forest health. The model uses a 25m resolution digital elevation model (DEM) and a 25m resolution land use/cover map to simulate the effects of forest harvesting and other land use changes on watershed hydrology and forest health. The model assumes that maximum volume growth rate represents the rate at which full hydrological recovery is achieved. This analysis only represents the incremental effect of cumulative harvesting. Recovery of the model depends on accurate information on hydrologic recovery of forest stands after disturbance, as well as representative regional streamflow and precipitation data. Hydrological recovery of mixedwood stands is not simulated by this model. The model assumes that maximum volume growth rate represents the rate at which full hydrological recovery is achieved. This analysis only represents the incremental effect of cumulative harvesting. Recovery of the model depends on accurate information on hydrologic recovery of forest stands after disturbance, as well as representative regional streamflow and precipitation data. The values representing some watersheds may be inaccurate due to the entire watershed not being considered in the analysis. Primary forest portions of a watershed bordering the FMA boundary. Watershed boundaries were derived using a digital elevation model (DEM) with a cell size of 25 metres. The accuracy of these boundaries depends on the quality of the DEM and is not intended to be used for accurate measurements.

