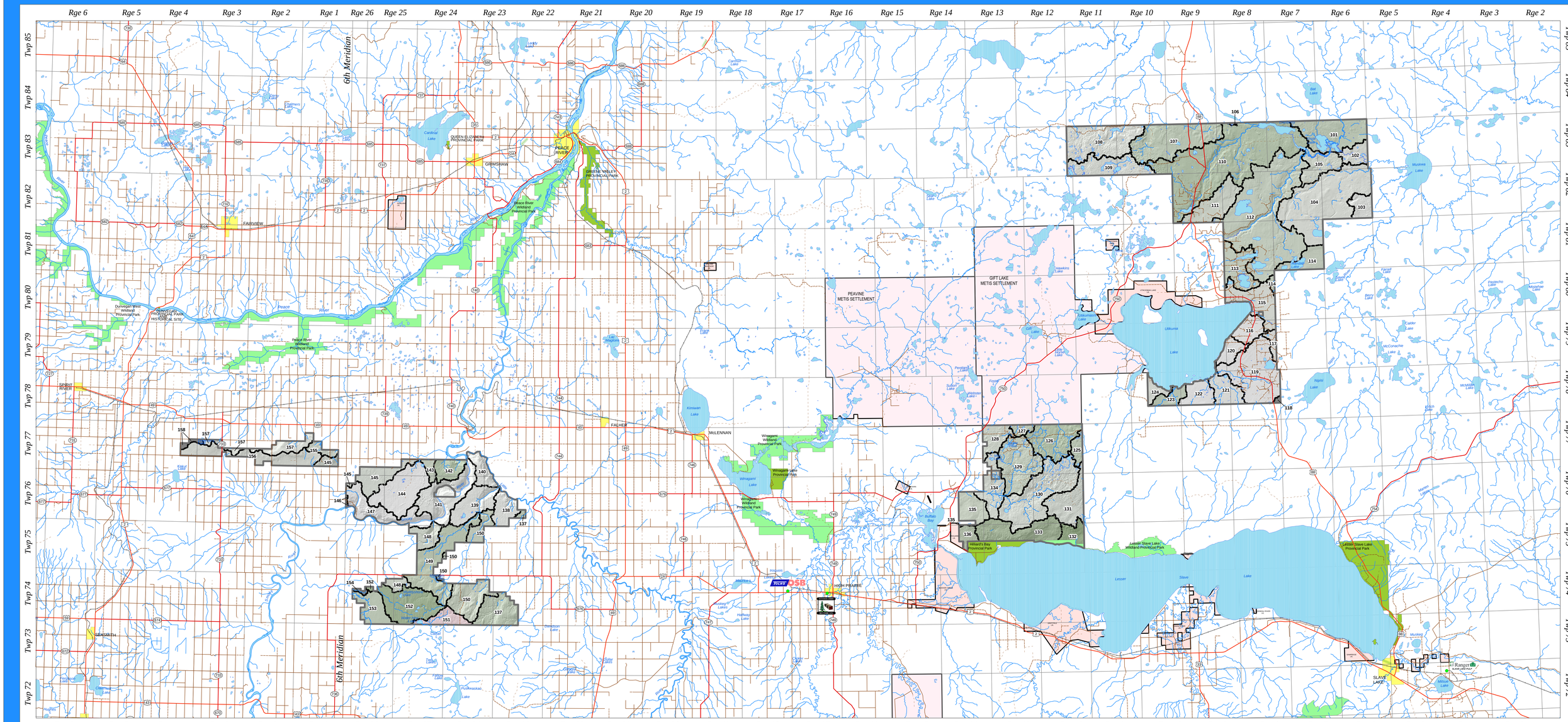
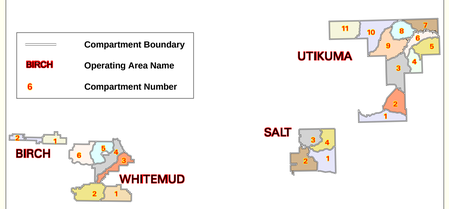
CUMULATIVE WATERSHED DISTURBANCE AND HYDROLOGIC RECOVERY ANALYSIS

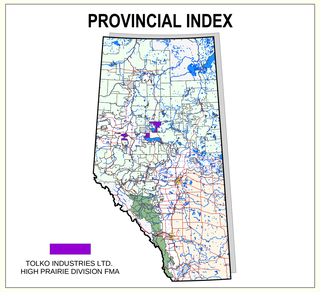
FMS 115 - 10 YEAR



OPERATING AREA



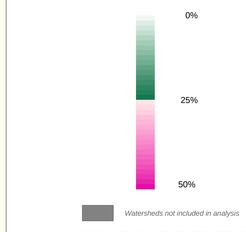
PROVINCIAL INDEX



PLANIMETRIC LEGEND

- PRIMARY HIGHWAY
- PAVED
- SECONDARY HIGHWAY
- PAVED
- 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

EQUIVALENT CLEARCUT AREA



* Watersheds having only small fractions within the FMA were not included in this analysis

This analysis was derived from the Cumulative Watershed Disturbance and Hydrologic Recovery Simulator (CCA - Alberta).
ECA stands for "equivalent clearcut area" which describes the "effective" area that a mature stand would use if it had been clearcut. It represents the amount of hydrologic recovery. For example, a 100ha stand harvested 20 years ago would use 75% of the water a mature stand would use. Therefore, this 20 year old clearcut would be equal to a 25ha recent clearcut.
Model accuracy depends primarily on accurate hydrological recovery information 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 age at which full hydrological recovery is obtained.
This analysis only represents the incremental effect of cumulative harvesting.
Accuracy of the model depends primarily on accurate information on hydrologic recovery of forest stands after disturbance and availability of 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 - primarily small portions of a watershed bordering the FMA boundary.
Watershed boundaries were derived using a digital elevation model (DEM) with a cell size of 25 meters. The accuracy of these boundaries depends on the quality of the DEM and is not intended to be used for accurate measurements.

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0 5 10 20 30
Kilometres

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