

**ECOLOGICAL CLASSIFICATION
LECLERC/HARVEY PROJECT AREA
WASHINGTON**

Prepared for:

**PLUM CREEK TIMBER
COLUMBIA FALLS, MONTANA**



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EXECUTIVE SUMMARY

An ecological classification was conducted for part of northeast Washington. The project area includes LeClerc Creek basin, Harvey Creek basin above Sullivan Creek and several minor subbasins draining directly to the Pend Oreille River. The LeClerc/Harvey project area is 98,242 acres with a stream network totaling about 237 linear miles. The ecological classification provides a framework and descriptive attributes from which interpretations regarding habitats and the effects of land uses can be interpreted.

The framework is an ecological classification that facilitates analysis from several perspectives. Hierarchical levels include ecoregion, geologic district, landtype association, landtype, valley-bottom type and valley-bottom landform. Descriptive attributes include elevation, slope, aspect, annual precipitation and ownership. Descriptive attributes can be summarized for any combination of the hierarchical layers.

The project area falls within a single ecoregion (Northern Rockies). Two (2) geologic districts were delineated (granitic and metamorphic). Each geologic district was divided into two (2) landtype associations (mountains and hills). General landtype classes were assigned to discrete soil polygons of the Washington Department of Natural Resources (WDNR) digital soil map layer. The eight (8) landtype classes are mountain, hill, glacial basin, fluvial basin, alluvial/fluvial, low terrace, high terrace and rockland. A total of 108 soil map units were identified on the WDNR soil map layer.

The valley-bottom landtype associated with streams comprised about 9.7 percent of the project area. The valley-bottom landtype was divided into nine (9) valley-bottom types (VBTs): cascade, glacial basin, V-erosional canyon, V-erosional canyon/ponded, V-erosional canyon/ravine, V-erosional canyon/marsh, V-depositional canyon, glacio-lacustrine/unconfined and glacio-lacustrine/confined. Major landforms in the valley-bottom landtype were delineated from 1:40,000 scale aerial photos. Seven (7) valley-bottom landforms were identified: floodplain, glacial terrace, alluvial, wet basin, canyon bottom, lake and dry lake.

A Geographical Information System (GIS) was used to compile hierarchical map layers, plot maps and to output map data summaries. Maps, descriptions and data summaries are provided for each hierarchical level. Digital GIS map layers have also been provided to Plum Creek Timber and to the Colville National Forest.