**INTRODUCTION**

The surficial geology of the Lapwai quadrangle, Nez Perce County, Idaho, has been extensively studied. The study area includes the Clearwater River, Lapwai Creek, and the Palouse River valleys. The geology was intensively investigated during a one-year period. Natural resources agencies prepare surficial geologic maps for a variety of purposes, including land use planning, water resource development, urban development, and transportation planning. These maps are used by developers, planners, and engineers to locate potential resources such as sand and gravel deposits, water-bearing strata, andslope stability. The surficial geologic map of the Lapwai quadrangle identifies earth materials on the surface and in the shallow subsurface. The map includes information about lithology, landform, and slope aspect, which is useful for a variety of applications such as slope stability, construction design, sewage drainage, solid waste disposal, and ground-water use and recharge.

**DESCRIPTION OF MAP UNITS**

**SEDIMENTARY DEPOSITS**

- **Loess (Holocene and Pleistocene)**: Fine- to coarse-grained bedded calcareous wind-blown silt; sandy near Palouse Formation (Holocene and Pleistocene). Thinly bedded to laminated deposits of montane loess characterize the Palouse Formation.

- **Alluvium of mainstreams (Holocene)**: Mostly fine- to coarse-grained bedded sand, gravel, and silt. Older alluvium of mainstreams (Holocene) is characterized by well-rounded pebbles and cobbles.

- **Alluvium of stream channels**: Stream, slope-wash, and gravity deposits. Well-rounded pebbles and cobbles are characteristic of alluvium in the interior of the map area.

**Colluvium from basalt (Holocene and Pleistocene)**: Primarily poorly sorted coarse-grained sediment, usually on north-facing slopes. Colluvium from basalt is a thin deposit characterized by a mixture of basalt and sediment.

**Landslide deposits (Holocene and Pleistocene)**: Contains a variety of materials, including bedrock, colluvium, and alluvium. Landslide deposits are common in the study area, especially in areas of steep slope.

**REMAINS OF EARTH MATERIALS**

- **Lapwai Formation (Holocene and Pleistocene)**: In the Clearwater River and Lapwai Creek valleys. Buried soils mark the tops of Palouse hills.

- **Palouse Formation (Holocene and Pleistocene)**: Forms cap on youngest Lake Missoula Floods deposits and blankets the relatively flat Palouse formations. Forms cap on youngest Lake Missoula Floods deposits and blankets the relatively flat Palouse formations.

**SYMBOLS**

- **Flow direction**: Line defining the flow direction of Lake Missoula Floods backwater inundation.

- **Slope aspect**: Features shown in the map are shaded according to slope aspect, upper and lower slope position, basalt and sediment stratigraphy, and association with landslides. Colluvium... (see Symbols). Colluvium is thicker on north- and east-facing slopes, and is associated with landslides.

**REFERENCES**


- Smith, G.A. 1993. Missoula flood dynamics and magnitudes inferred from GLACIOLOGICAL DATA.