



EXPLANATION

SURFICIAL DEPOSITS

- Qa, Qam, Qcm**
Alluvium on flood plains
Includes some colluvium in small stream valleys
Qa, alluvium undivided
Qam, main-stream deposit; designated only where necessary
Qcm, side-stream deposit; designated only where necessary
- Qat**
Terrace alluvium
Nonspecific terrace of larger streams
- Qm**
Moraine deposit
Cirque moraine and rock glaciers of the Neopleistocene
- Qls**
Landslide deposits

- Qoa, Qom**
Alluvium and colluvium
Mostly cyclic periglacial deposits of small streams. South of Cascade, source stream is partly dammed.
Qoa, Big Creek
Qom, Clear Creek
- Qob, Qobm, Qobc, Qobd**
Outwash
Qob, outwash undivided
Qobm, main-stream deposit; designated only where necessary
Qobc, side-stream deposit; designated only where necessary
Qobd, moraine and outwash in localized stream end valley floor; mostly stagnation moraine reworked by melt water
- Qot**
Moraine deposit
Qot, moraine deposit
Circular overlap on bedrock color where drift is thin and patchy or abnormally exposed bedrock

- Qoa, Qobm, Qobc, Qobd**
Alluvium and colluvium
Mostly cyclic periglacial deposits of small streams. South of Cascade, source stream is partly dammed.
Qoa, Big Creek
Qobm, Clear Creek
Qobc, Clear Creek
Qobd, Clear Creek
- Qotb**
Moraine deposit
Qotb, moraine deposit partly buried by younger outwash (Qob)
Circular overlap on bedrock color where drift is thin and patchy or abnormally exposed bedrock; less accurately mapped than comparable Pleistocene areas

- Q1, Q1a, Q1b**
Lag gravel
Resistant cobbles and pebbles residual from eroded pre-Bull Lake surficial deposits (Q1 and Q1a). Mostly associated with remnant erosion surfaces
- Q11**
Till
Deposits deeply weathered and truncated by erosion; probably of different ages. Source of deposit east of Cascade, whereas the source of the deposit southwest of Little Payette Lake probably was Lake Fork drainage

- Q12, Q12a, Q12b**
Fluvial and lacustrine deposits
Deposits of various origin probably including fault-throw fills, aggradational deposits, and glacial deposits. Many are faulted and moderately tilted. All are truncated by erosion and deeply weathered where relief is low; most contain small amounts of detrital pebbles. Large valley floor deposit east of Lake Fork (Q12) and Q12a, lacustrine deposits adjoining deposits of distinctly different ages and origin; unit 1 is younger than unit 2, but correlation outside local area is not implied

- Tb**
Columbia River Basalt
Contacts on West Mountain not accurately located
- T1**
Latah(?) Formation
Unconsolidated sediments interbedded with Columbia River Basalt flows but chiefly underlying lowest basalt flows
- Kc**
Cretaceous and older crystalline rocks
Schist, gneiss, and granite rock; associated with the Idaho batholith

- Contact**
Approximately located. Dashed where inferred; short dashed where hypothetical; dotted where concealed
- Fault**
Approximate location based on geology. Dashed where location is inferred from gravity and physiographic data; short dashed where location is based only on physiographic data. U, upstream side; D, downstream side

- Strike and dip of beds and flows**
Cirque headwall and glacially capped cliffs
Hochovers on cliff side; normal ridge where Hochovers on both sides
- Creoline of prominent moraine ridge**
Erosion surface
Well-dissected surfaces cutting crystalline bedrock and commonly cutting adjacent pre-Bull Lake surficial deposits (Q1 and Q1a); surface is shown as an erosion surface only where it cuts bedrock. In places surface coincides with base of pre-Bull Lake surficial deposits (Q1 and Q1a) and is a stepped surface formed by mass wasting of fluvial and lacustrine deposits (Q12). Surface is distinctly evident where mapped and is probably of various ages

- Location of Plates 1 and 2**
Map showing the location of the main map area within the larger regional context of Idaho.

Base from U.S. Forest Service, 1:31,680; McCall, 1953, and Fitch Peak, 1952; U.S. Geological Survey, 1:62,500; Cascade and Gold Fork, 1954; Smiths Ferry and Walling Springs, 1953

SCALE 1:62,500
CONTOUR INTERVAL, 80 FEET
DOTTED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D.C. 20508
Geology mapped by J. H. Martin and D. L. Schmitt, assisted by P. L. Williams and J. F. Kolar, 1952-53

SURFICIAL GEOLOGIC MAP OF LONG VALLEY, ADAMS, GEM, AND VALLEY COUNTIES, IDAHO