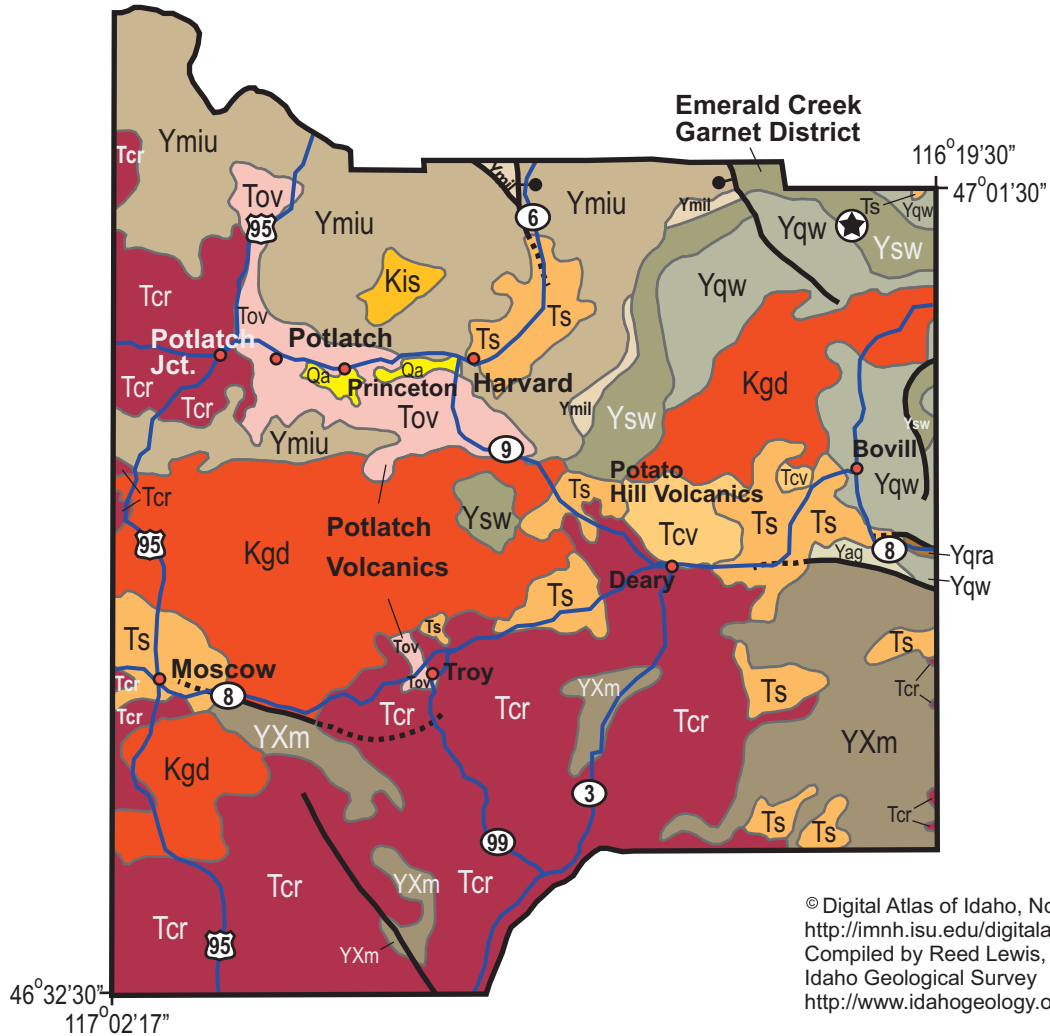


# Latah County, Idaho



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 Compiled by Reed Lewis,  
 Idaho Geological Survey  
<http://www.idahogeology.org>

## Symbols

- |  |  |  |   |
|--|--|--|---|
|  | Geologic unit contacts with unit designation.  |  | Overturned anticline: trace of axial plane.     |
|  | Normal fault: certain; dashed where approximately located; dotted where concealed.     |  | Overturned syncline: trace of axial plane.      |
|  | Thrust fault: certain; dashed where approximately located; dotted where concealed.     |  | Location of ISU Rockwalk rock from each county. |
|  | Detachment fault: certain; dashed where approximately located; dotted where concealed. |  | Cities  |
|  | Anticline: trace of axial plane: large arrow indicates direction of plunge.            |  | Feature location                                |
|  | Syncline: trace of axial plane: large arrow indicates direction of plunge.             |  | Roads   |
|  |  |  | Interstate Route                                |
|  |  |  | U.S. Route                                      |
|  |  |  | State route                                     |

## Latah County

The rolling Palouse of western Latah County is underlain by loess hills deposited above Miocene Columbia River basalt that flowed eastward from vents in Washington. Miocene and younger sediments were deposited upstream of the ends of these basalt flows and underlie much of the farming country between Moscow and Bovill.

The unique Oligocene Potlach volcanics are found in the northwestern part of the quadrangle. The Potato Hill volcanics are found west of Bovill.

The eastern part of the county is underlain by Mesoproterozoic Belt Supergroup, with the metamorphosed garnet-bearing Wallace Formation exposed in the northeastern part of the county, south of Fernwood and the Emerald Creek garnet district.

The central part of the county is underlain by Cretaceous granodiorite, one of the northern parts of the Idaho batholith, that extends westward into eastern Washington.

Written by P.K. Link, 9/02

### Description of Units for Latah County, Idaho

- Ts** Tertiary sedimentary rocks, undifferentiated. Includes Oligocene and Eocene sedimentary rocks in east-central Idaho (Paleogene basins of Janecke). In northern and western Idaho this unit contains Miocene lake and stream deposits formed adjacent to and above the Columbia River and Weiser basalts, which formed dams in stream canyons.
- Tcr** Miocene basalt (Columbia River Basalt Group); flood basalt, extensively exposed in western Idaho; fed by fissures, many of which are near the Idaho-Oregon border. Flowed eastward up valleys cut into the Idaho mountains.
- Tov** Oligocene volcanics; Potlach volcanics, basalt and trachytic pyroclastic rocks [alkali-rich basalts] and Salmon Falls Creek volcanics [andesites].
- Tcv** Eocene Challis Volcanic Group, volcanics and volcanoclastics; Older andesitic lavas, intermediate age dacite lava and tuff and younger rhyolite flows and tuffs; 51 to 44 Ma. (Includes Potato Hill and Kamiah volcanics of northern Idaho).
- Kgd** Cretaceous granitic rocks of the 2 mica suite. Idaho batholith and related plutons; granite and granodiorite that contains both muscovite and biotite. Sodium (Na) rich. Intruded between 80 and 65 Ma.
- Kis** Cretaceous syenitic rocks, northern Idaho; small stocks about 120 Ma.
- Yag** Mesoproterozoic augen gneiss and porphyritic granite; near Shoup on the Main Salmon River age is 1370 Ma.
- Ysw** Schist and phyllite of the upper part of the Wallace Formation (lower Missoula Group); garnet-bearing in Emerald Creek district, Benewah and Latah counties. Schist and phyllite of the upper part of the Wallace Formation (lower Missoula Group); garnet-bearing in Emerald Creek district, Benewah and Latah counties.
- Yqw** Quartzite and calc-silicate gneiss of the lower and middle parts of the Wallace Formation.
- Yqra** Quartzite and schist of the Ravalli Group.
- Ymiu** Upper Missoula Group. Includes Swauger Quartzite, Lawson Creek Formation in Lemhi Range, and Striped Peak and Libby formations in northern Idaho.
- Ymil** Lower Missoula Group. Includes Gunsight Formation in Lemhi Range and upper Wallace Formation (equivalent to Snowslip and Shepard formations) in northern Idaho.
- YXm** High-grade metamorphic rocks (schist, gneiss, quartzite, calc-silicate rocks); includes Elk City metamorphic sequence and related rocks, Syringa metamorphic sequence, and Priest River metamorphic complex.