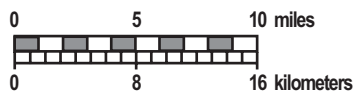
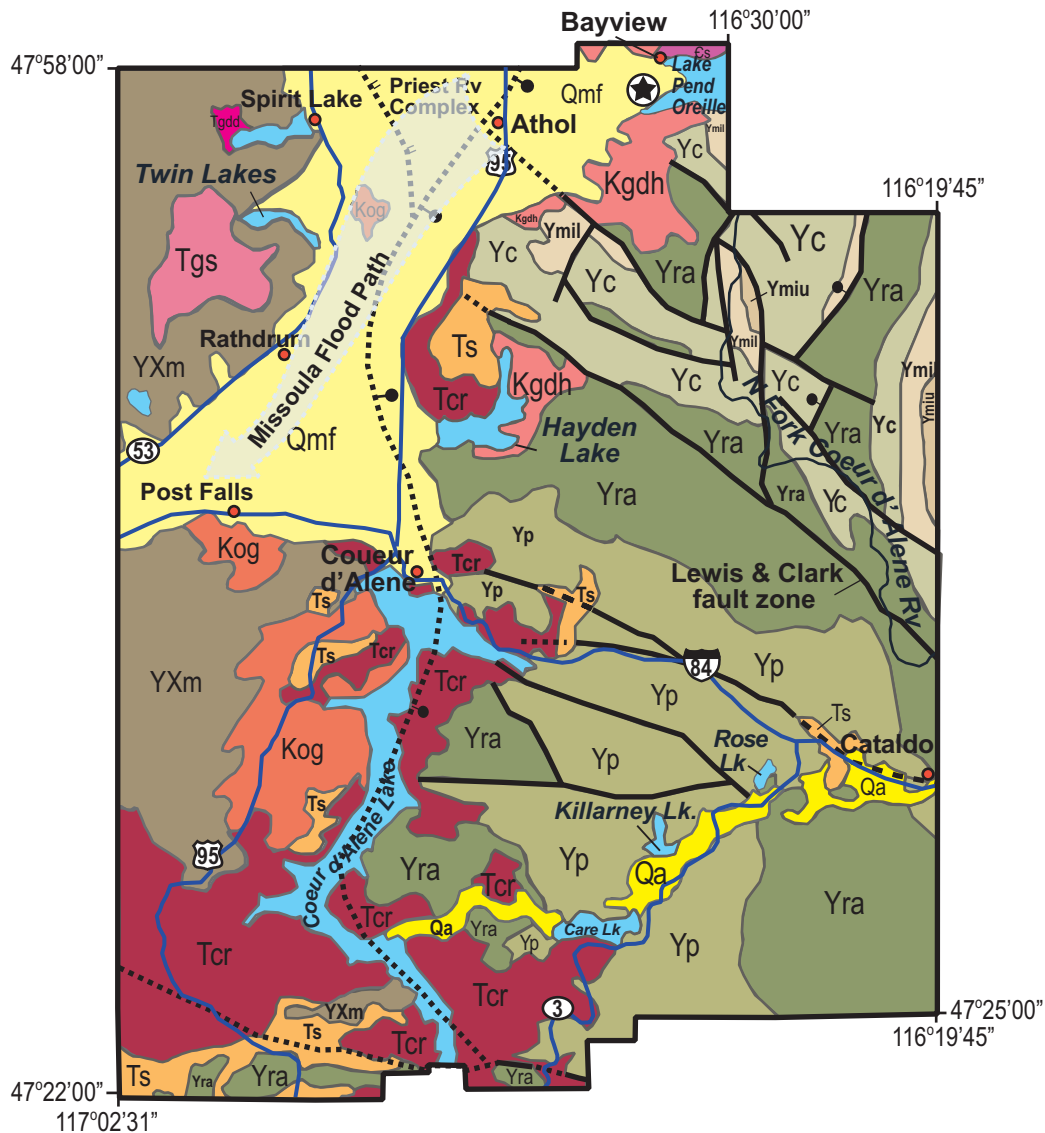
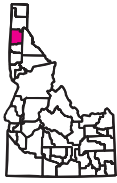


Kootenai County, Idaho



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Idaho Geological Survey
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Kootenai County

The bulk of Kootenai County south and east of Coeur d'Alene is underlain by Mesoproterozoic Belt Supergroup rocks continuing west from their extensively mineralized area along the Lewis and Clark fault zone, in the Silver Valley in Shoshone County.

The western part of the county, west of Coeur d'Alene Lake and the Rathdrum Prairie belongs to the lower plate of the Priest River core complex. The normal fault bounding the uplifted metamorphic rocks of the core complex dips eastward and follows the north-trending basin of Lake Coeur d'Alene.

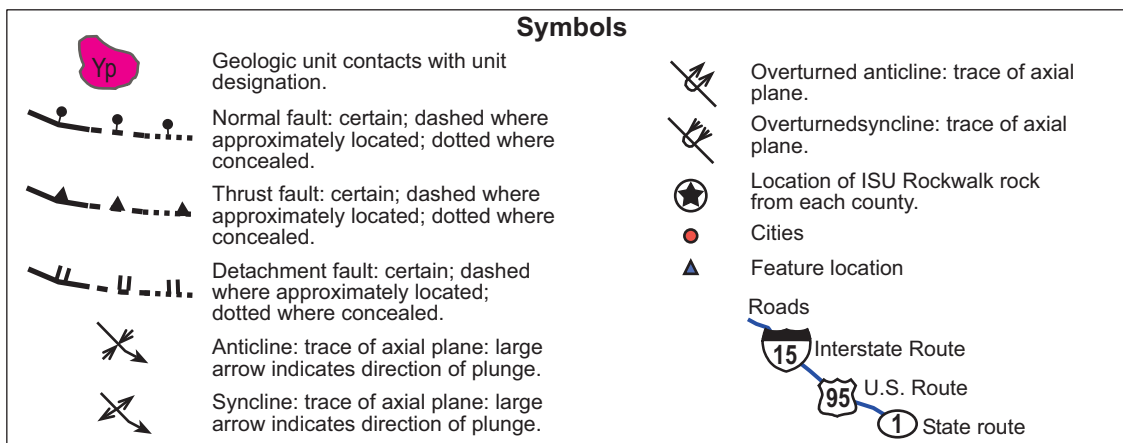
The south fork of the Coeur d'Alene River contains mining wastes from the Silver Valley. The area near Rose and Killarney Lakes as well as at Cataldo, contains a layer of zinc and lead-rich gravel or tailings, in the shallow subsurface. When the lake level changes these mine wastes are disturbed and metals may be released into solution. This is an ongoing scientific, political, and economic challenge.

The Lake Missoula Floods charged southwestward down the Rathdrum Prairie toward Post Falls, and into the Spokane River in eastern Washington.

Miocene Columbia River basalts cover the rolling Palouse country of the southwestern part of the County, north of the Coeur d'Alene Tribal Casino.

Cretaceous intrusive rocks are found in the core of the Priest River uplift south of Coeur d'Alene, and northeast of Hayden Lake. Eocene granitic rocks intrude the core complex west of Spirit Lake.

Written by P.K. Link, 9/02



Description of Units for Kootenai County, Idaho

- Qa** Quaternary alluvial deposits
- Qmf** Missoula Flood deposits; boulder bars and gravel along route of Missoula flood on Rathdrum Prairie south and west of Lake Pend Oreille.
- 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.
- Tgdd** Eocene granodiorite and dacite porphyry intrusive, also includes diorite and, in northern Idaho, minor granitic rock; intermediate phase of Challis magmatic event (50 to 46 Ma). Summit Creek stock.
- Tgs** Eocene granite, pink granite, syenite, rhyolite dikes, and rhyolitic shallow intrusive; last phase of the Challis magmatic event (46 to 44 Ma). Forms craggy scenic mountain landscape in central and northern Idaho.
- Kgdh** Cretaceous granitic rocks of the hornblende-biotite suite; granite, granodiorite and megacrystic granodiorite. Potassium (K) rich. Age about 80 to 90 Ma.
- Kog** Cretaceous orthogneiss, and foliated granodiorite and granite (includes mylonitic plutonic rocks in western Idaho suture zone); deformed early phases of the Idaho batholith.
- €s** Cambrian sedimentary rocks.
- Yag** Mesoproterozoic augen gneiss and porphyritic granite; near Shoup on the Main Salmon River age is 1370 Ma.
- 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.
- Yc** Piegan Group or Middle Belt carbonate, Apple Creek Formation [includes lower and middle Wallace Formation in northern Idaho and Apple Creek Formation and argillaceous quartzite (including rocks at Cobalt) near Salmon].
- Yra** Ravalli Group, sandstone (quartzite) and siltite, includes Big Creek Formation and lower part of Lemhi Group in Lemhi Range and Salmon River Mountains, and Burke, Revett and St. Regis formations in northern Idaho.
- Yp** Prichard Formation (Lower Belt), dark fine-grained siltstone and sandstone, calcareous intervals in Boehl's Butte area.
- 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.