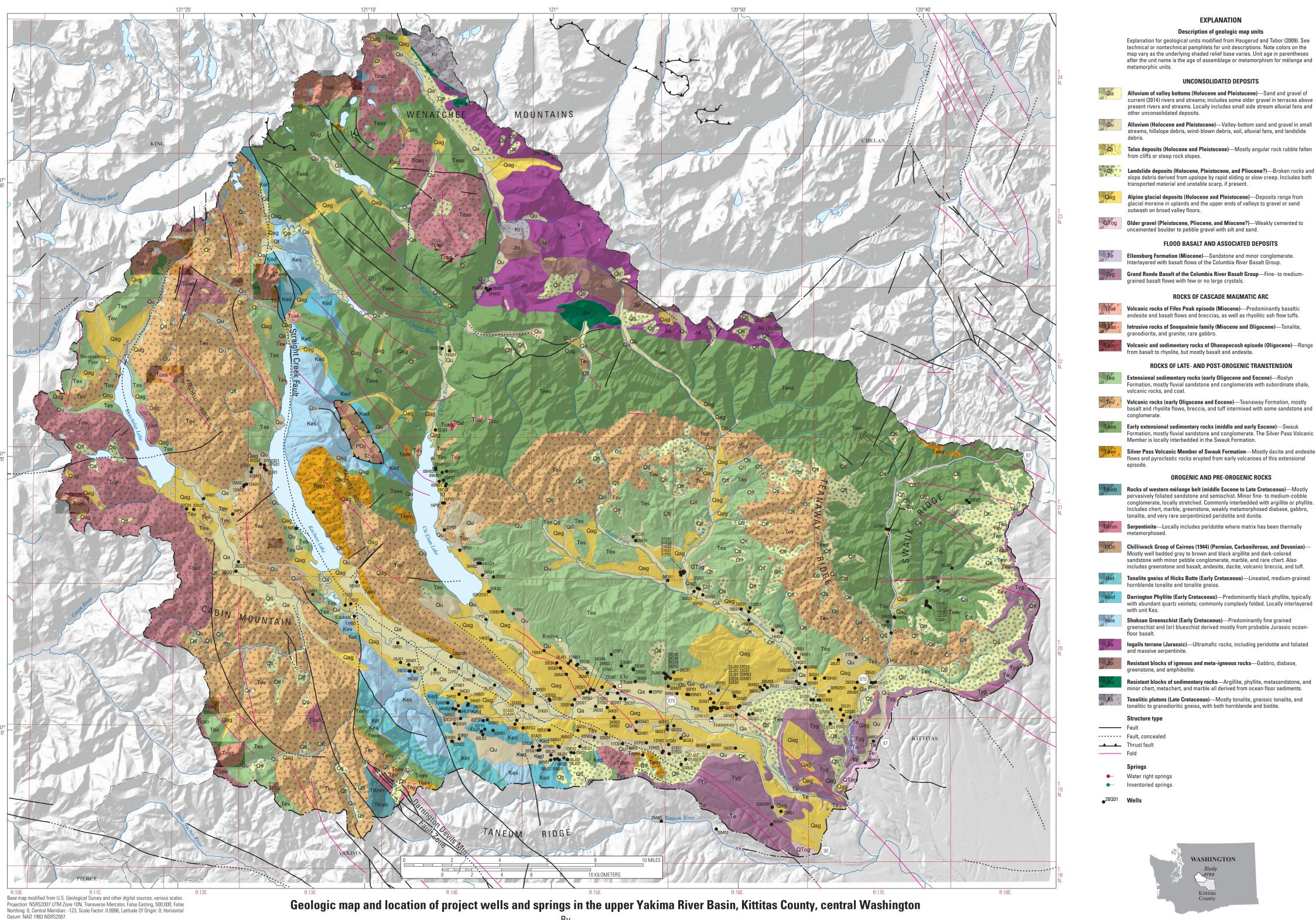
Gendaszek, A.S., Ely, D.M., Hinkle, S.R., Kahle, S.C., and Welch, W.B., 2014, Hydrogeologic, framework and groundwater/surface-water interactions of the upper Yakima River Basin, Kittitas County, central Washington: U.S. Geological Survey Scientific Investigations Report 2014–5119



Explanation for geological units modified from Haugerud and Tabor (2009). See technical or nontechnical pamphlets for unit descriptions. Note colors on the map vary as the underlying shaded relief base varies. Unit age in parentheses after the unit name is the age of assemblage or metamorphism for mélange and

UNCONSOLIDATED DEPOSITS

Alluvium of valley bottoms (Holocene and Pleistocene)—Sand and gravel of current (2014) rivers and streams; includes some older gravel in terraces above present rivers and streams. Locally includes small side stream alluvial fans and

Alluvium (Holocene and Pleistocene)—Valley-bottom sand and gravel in small streams, hillslope debris, wind-blown debris, soil, alluvial fans, and landslide

Talus deposits (Holocene and Pleistocene)—Mostly angular rock rubble fallen

Landslide deposits (Holocene, Pleistocene, and Pliocene?)—Broken rocks and slope debris derived from upslope by rapid sliding or slow creep. Includes both

Alpine glacial deposits (Holocene and Pleistocene)—Deposits range from glacial moraine in uplands and the upper ends of valleys to gravel or sand

Older gravel (Pleistocene, Pliocene, and Miocene?)—Weakly cemented to uncemented boulder to pebble gravel with silt and sand.

FLOOD BASALT AND ASSOCIATED DEPOSITS

Ellensburg Formation (Miocene)—Sandstone and minor conglomerate. Interlayered with basalt flows of the Columbia River Basalt Group.

grained basalt flows with few or no large crystals.

Volcanic rocks of Fifes Peak episode (Miocene)—Predominantly basaltic andesite and basalt flows and breccias, as well as rhyolitic ash flow tuffs.

Intrusive rocks of Snoqualmie family (Miocene and Oligocene)—Tonalite,

Volcanic and sedimentary rocks of Ohanapecosh episode (Oligocene)—Range from basalt to rhyolite, but mostly basalt and andesite.

ROCKS OF LATE- AND POST-OROGENIC TRANSTENSION

Formation, mostly fluvial sandstone and conglomerate with subordinate shale,

Volcanic rocks (early Oligocene and Eocene)—Teanaway Formation, mostly basalt and rhyolite flows, breccia, and tuff intermixed with some sandstone and

Tees Early extensional sedimentary rocks (middle and early Eocene)—Swauk

Silver Pass Volcanic Member of Swauk Formation—Mostly dacite and andesite

OROGENIC AND PRE-OROGENIC ROCKS

Rocks of western mélange belt (middle Eocene to Late Cretaceous)—Mostly pervasively foliated sandstone and semischist. Minor fine- to medium-cobble conglomerate, locally stretched. Commonly interbedded with argillite or phyllite. Includes chert, marble, greenstone, weakly metamorphosed diabase, gabbro,

Serpentinite—Locally includes peridotite where matrix has been thermally

Chilliwack Group of Cairnes (1944) (Permian, Carboniferous, and Devonian)— Mostly well bedded gray to brown and black argillite and dark-colored

Darrington Phyllite (Early Cretaceous)—Predominantly black phyllite, typically with abundant quartz veinlets; commonly complexly folded. Locally interlayered

Shuksan Greenschist (Early Cretaceous)—Predominantly fine grained greenschist and (or) blueschist derived mostly from probable Jurassic ocean-

Ingalls terrane (Jurassic)—Ultramafic rocks, including peridotite and foliated

Resistant blocks of igneous and meta-igneous rocks—Gabbro, diabase,

