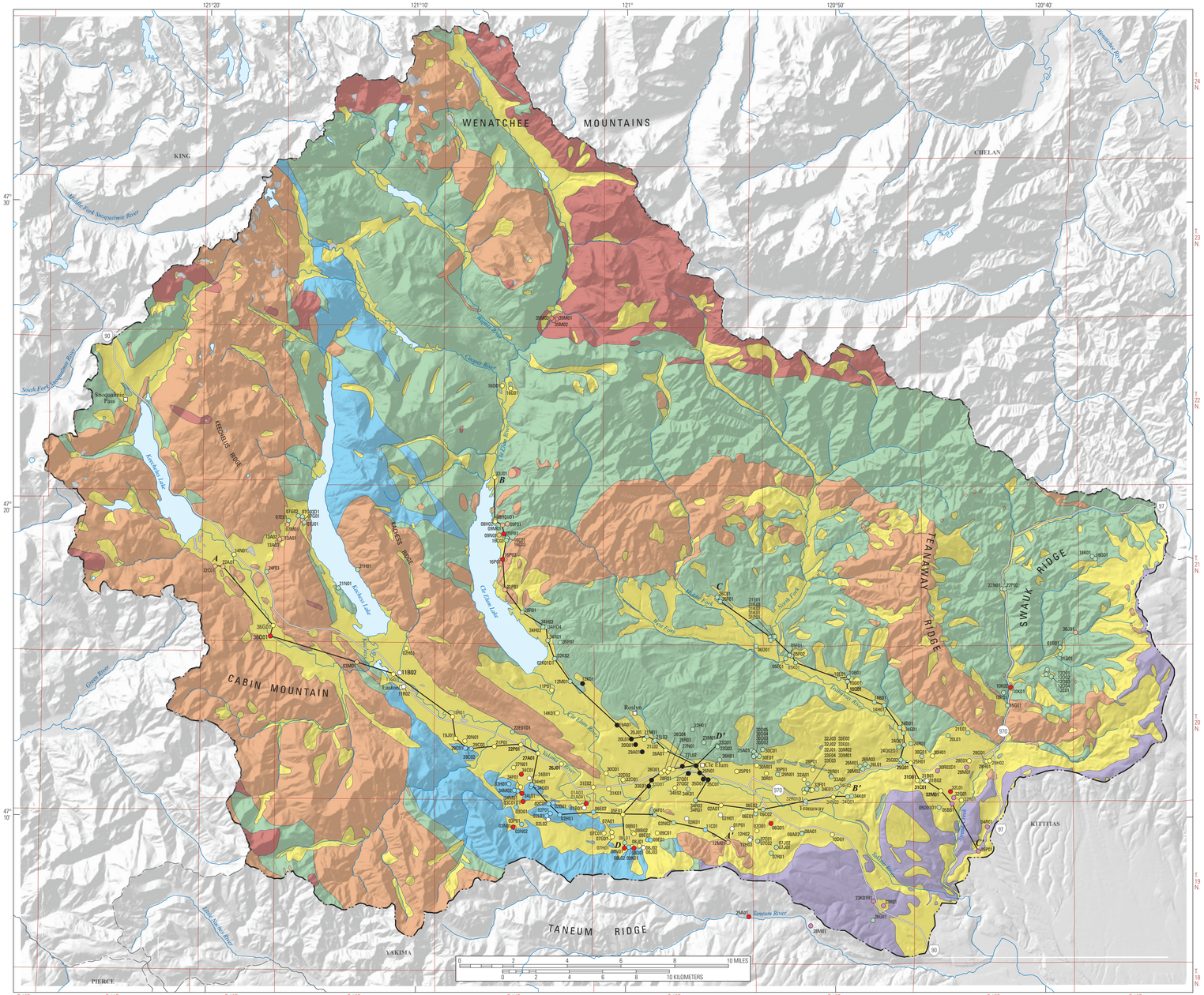
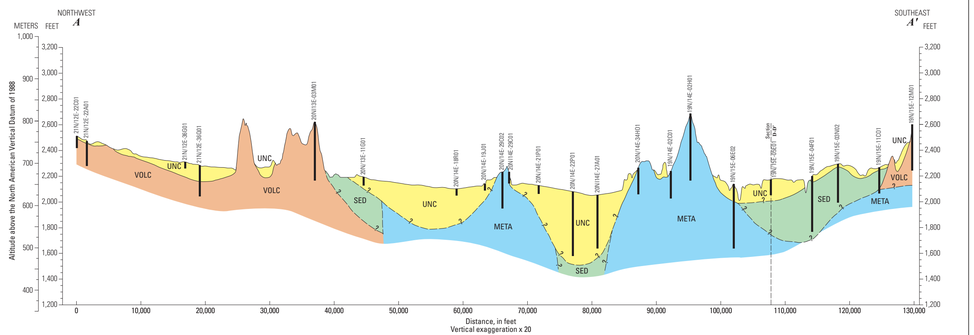
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

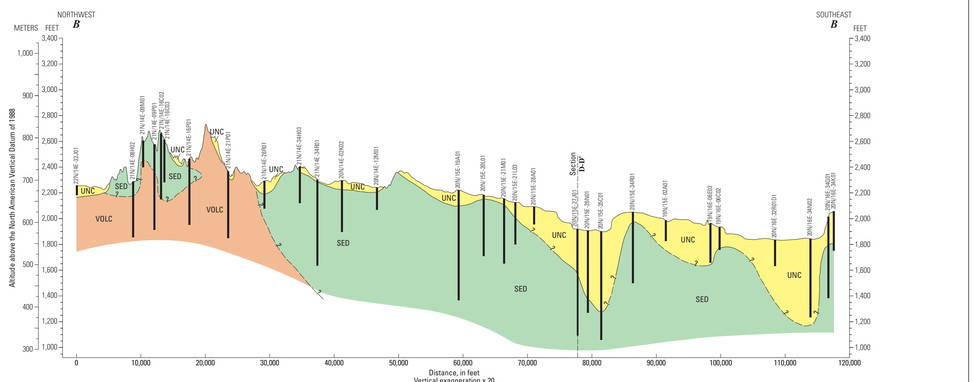
Prepared in cooperation with the
Washington State Department of Ecology and Kittitas County

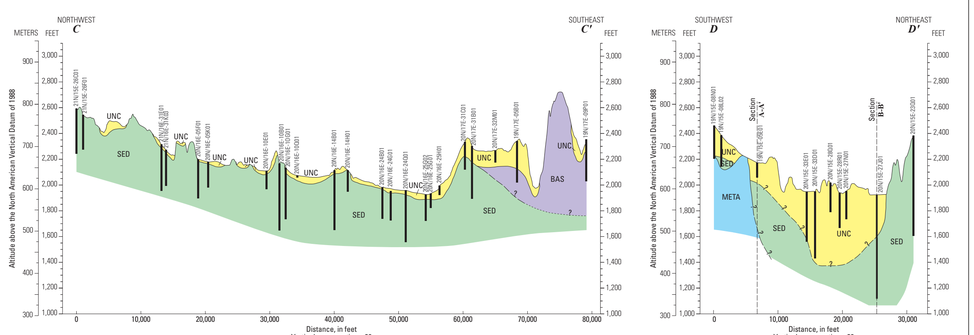
Scientific Investigations Report 2014–5119
Hydrogeologic map and sections—PLATE 2
Gendaszek, A.S., Ely, D.M., Hinkle, S.R., Kahle, S.C., and Welch, W.B., 2014, Hydrogeologic framework and groundwater/surface-water interactions of the upper Yakima River Basin, Kittitas County, central Washington: U.S. Geological Survey Scientific Investigations Report 2014–5119



Base map modified from U.S. Geological Survey and other digital sources, various scales. Projection: NSRS2007 UTM Zone 10N, Transverse Mercator, False Easting, 500,000, False Northing: 0, Central Meridian: -123, Scale Factor: 0.9996, Latitude Of Origin: 0, Horizontal Datum: NAD 1983 NSRS2007







EXPLANATION

MAP

Hydrogeologic unit

- UNC — **Unconsolidated sediment**—Unconsolidated glacial and non-glacial deposits; includes alluvium, talus, landslide deposits, alpine glacial deposits, recessional outwash, outburst flood deposits.
- BAS — Flood **Basalt** of the Grande Ronde and associated interbeds of the Ellensburg Formation.
- VOLC — **Volcanic unit**—basalt, andesite, some rhyolite, breccias, tuffs of the Fifes Peak episode (Tcaf) and Ohanapecosh episode (Tcao). As well as basalt and rhyolite flows, breccia, and tuff intermixed with some sandstone and conglomerate; Teanaway Fm; Tev. This unit also includes dacite and andesite flows and pyroclastic rocks locally interbedded in the Swauk Fm; Silver Pass Volcanic Member of Swauk Fm.
- SED — **Sedimentary unit**—sandstone and conglomerate with subordinate shale, coal; Roslyn Fm; Tes as well as stream-deposited sandstone and conglomerate; Swauk Fm; Tees.
- META — **Metamorphic unit**—black phyllite, typically with abundant quartz veinlets; Ked, Darrington Phyllite; fine grained greenschist and (or) blueschist derived mostly from ocean-floor basalt; Kes, Shuksan Greenschist.
- INT — **Intrusive unit**—peridotite and foliated and massive serpentinite; Ingalls terrane, Jis.

A A′ **Trace of section**

Study area boundary

Well, showing hydrogeologic unit of open interval

- Unconsolidated sediment
- Basalt
- Volcanic unit
- Sedimentary unit
- Metamorphic unit
- Intrusive unit
- M, open to multiple units
- NA, not applicable or not a water well
- Unknown

33E02 **Well identification No.**

CROSS SECTIONS

Contact, approximately located

Contact, inferred

Contact, concealed

Section trace intersection

Well

Hydrogeologic unit map and cross sections in the upper Yakima River Basin, Kittitas County, central Washington

By
Andrew S. Gendaszek, D. Matthew Ely, Stephen R. Hinkle, Sue C. Kahle, and Wendy B. Welch
2014