

Younger alluvium
Unconsolidated gravel, sand, silt, and clay; mainly the wet-land segments of the flood plains; commonly less than 100 feet thick; moderate to high permeability; yield to wells may be several hundred gallons a minute, depending on the saturated thickness; and includes principal areas of ground-water discharge and phreatophytes

Older alluvium
Unconsolidated to partly consolidated gravel, sand, silt, and clay; principally alluvial fan and related deposits; may be several hundred feet thick in Independence Valley; two wells in Independence Valley reportedly yield as much as 1,000 gallons a minute from this unit

Sedimentary rocks
Sandstone, shale, siltstone, conglomerate, marl, and chert with substantial amounts of tuffaceous sandstone, tuff, and agglomerate; includes possibly 5,000 feet of deposits in Bull Run Basin referred to Humboldt Formation by Decker (1962) and Humboldt Formation of Sharp (1939), in Salmon Falls Creek Valley south of Contact. Large volume of ground-water stored in zone of saturation, but yields to wells generally small due to low permeability

Volcanic rocks
Principally Miocene and Pliocene silicic volcanic rocks; commonly tuff, welded tuff and lava flows but includes Eocene Dead Horse Tuff, Miocene (?) Jarbidge Rhyolite, Pliocene Cougar Point Welded Tuff, and associated sedimentary rocks. Large volume of ground-water stored in zone of saturation of these rocks; yields to wells generally small due to low permeability; but moderate to high yields may be obtained locally where secondary fractures are open. These rocks supply many small mountain springs and some larger ones such as Shoshone Creek about 5 miles East of U.S. Highway 93

Intrusive rocks
Largely granitic rocks of varied composition. May range in age from Jurassic to Tertiary. Relatively impermeable but surficial jointing and weathering provides limited secondary permeability. Locally supplies small mountain springs

Carbonate and associated rocks
Limestone, sandstone, quartzite, shale and volcanic rocks; consolidated, indurated, cemented, locally metamorphosed; complexly faulted and folded, commonly close-spaced fractures; thickness, 25,000 feet or more. Secondary permeability in upper few hundred feet permits infiltration of precipitation which, in turn, sustains many small mountain springs and streams through the dry season. Favorable fracture or solution systems in carbonate rocks locally may transmit significant quantities of water, such as apparently sustains the large springs southwest of San Jacinto and north of Sugar Loaf Peak along Goose Creek. Wells 46/69-2cd1 and 46/69-15ab1 in Goose Creek Valley probably tap carbonate rocks

