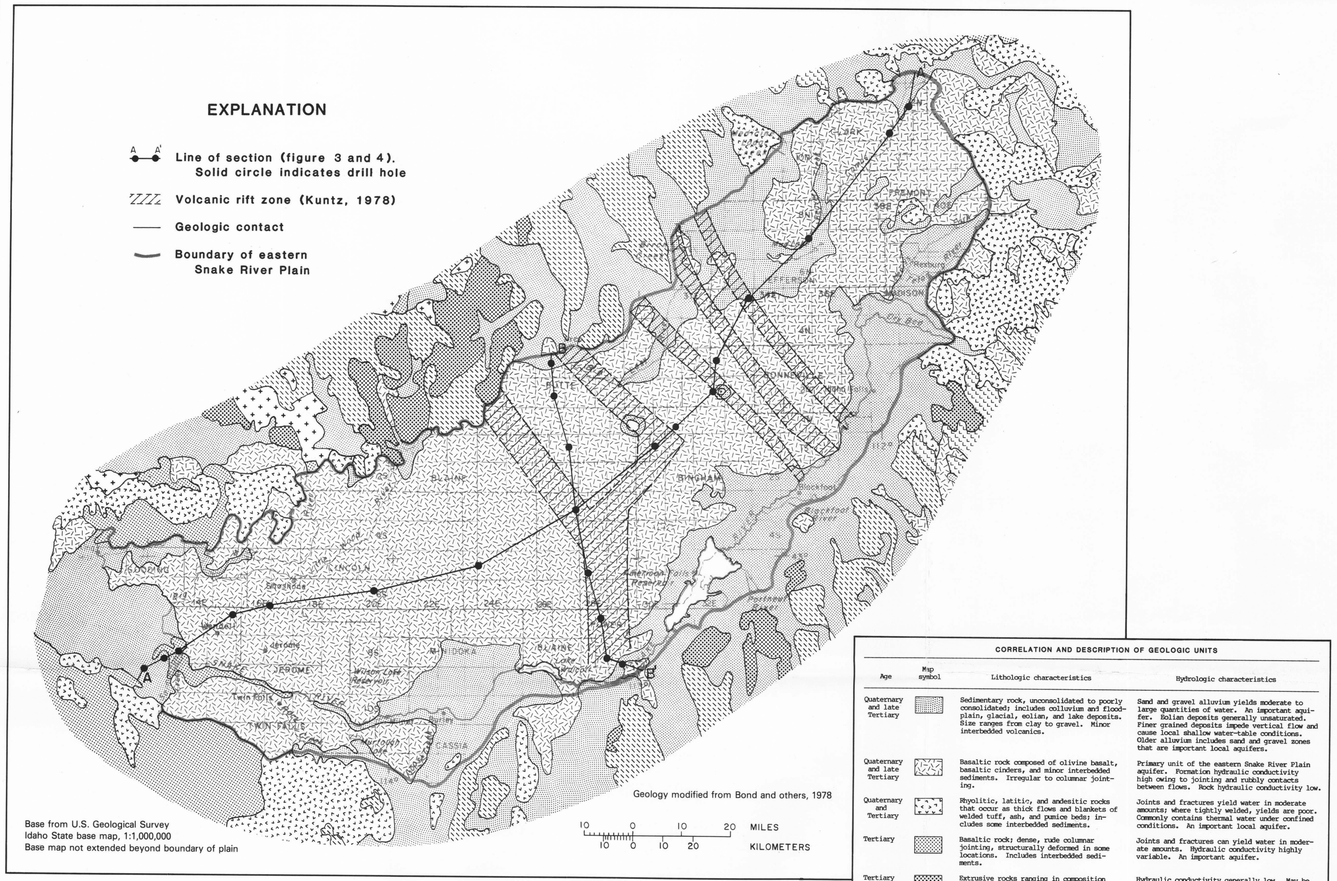
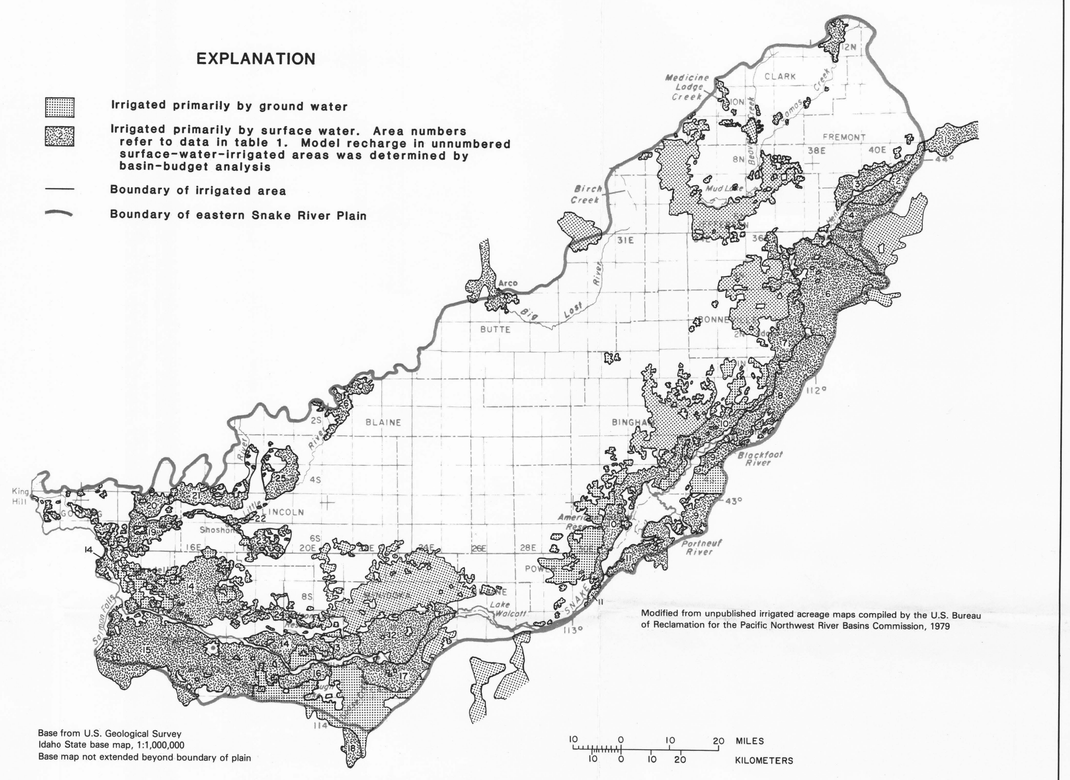


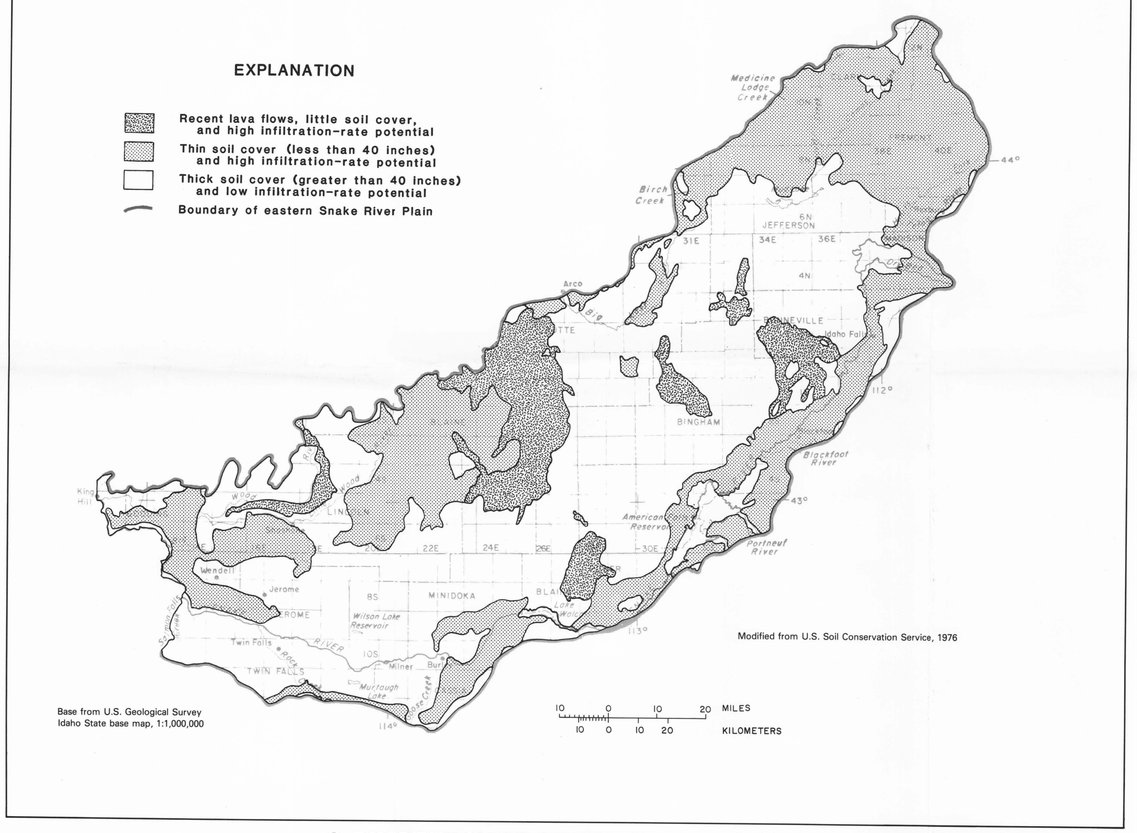
A. GENERALIZED GEOLOGY

CORRELATION AND DESCRIPTION OF GEOLOGIC UNITS

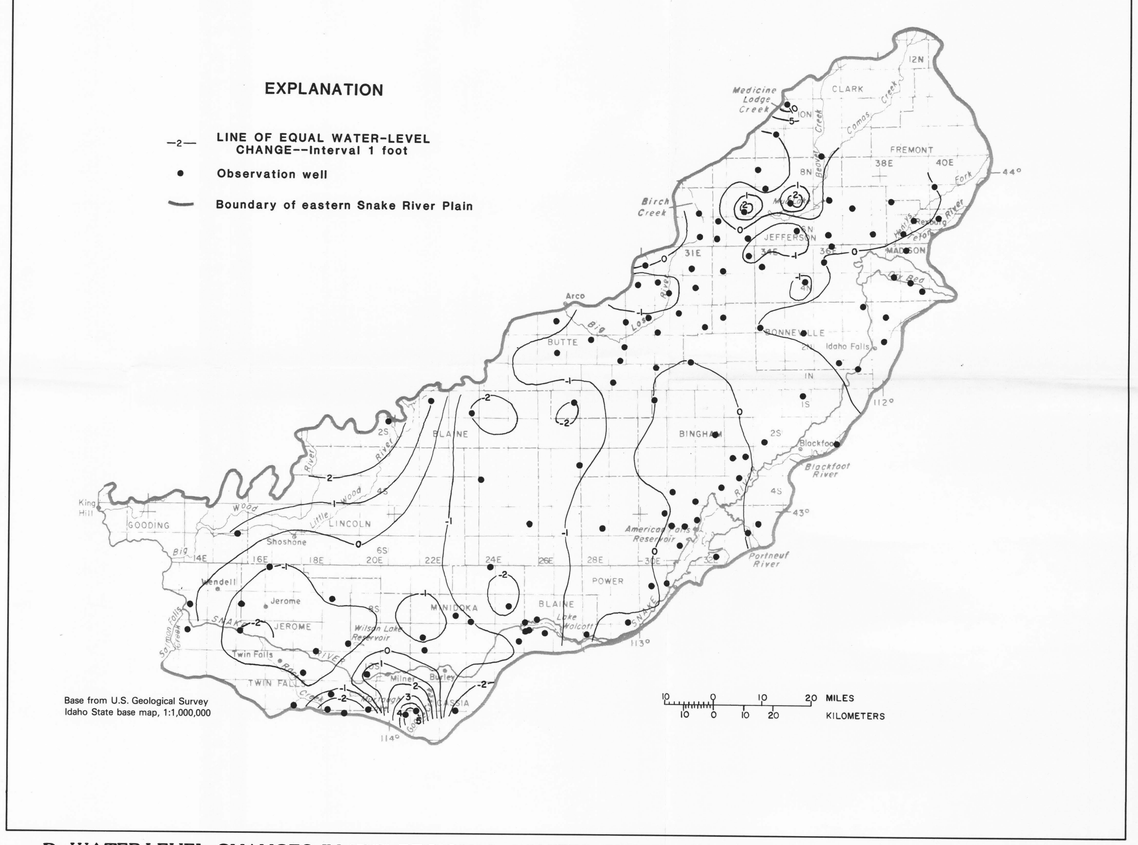
Age	Map symbol	Lithologic characteristics	Hydrologic characteristics
Quaternary and late Tertiary		Sedimentary rock, unconsolidated to poorly consolidated; includes colluvium and floodplain, glacial, eolian, and lake deposits. Size ranges from clay to gravel. Minor interbedded volcanics.	Sand and gravel alluvium yields moderate to large quantities of water. An important aquifer. Eolian deposits generally unsaturated. Finer grained deposits impede vertical flow and cause local shallow water-table conditions. Older alluvium includes sand and gravel zones that are important local aquifers.
Quaternary and late Tertiary		Basaltic rock composed of olivine basalt, basaltic cinders, and minor interbedded sediments. Irregular to columnar jointing.	Primary unit of the eastern Snake River Plain aquifer. Formation hydraulic conductivity high owing to jointing and rubbly contacts between flows. Rock hydraulic conductivity low.
Quaternary and Tertiary		Rhyolitic, latitic, and andesitic rocks that occur as thick flows and blankets of welded tuff, ash, and pumice beds; includes some interbedded sediments.	Joints and fractures yield water in moderate amounts; where tightly welded, yields are poor. Commonly contains thermal water under confined conditions. An important local aquifer.
Tertiary		Basaltic rock; dense, rude columnar jointing, structurally deformed in some locations. Includes interbedded sediments.	Joints and fractures can yield water in moderate amounts. Hydraulic conductivity highly variable. An important aquifer.
Tertiary		Extrusive rocks ranging in composition from rhyolite to basalt; includes welded tuff, pyroclastics, and tuffaceous sediments.	Hydraulic conductivity generally low. May be an important aquifer locally for domestic and stock use.
Tertiary and Cretaceous		Shale, siltstone, sandstone, and freshwater limestone, undifferentiated. Well indurated, structurally deformed in some locations.	Hydraulic conductivity generally low. Weathered zones may yield moderate quantities of water.
Tertiary and Cretaceous		Granitic rocks of the Idaho batholith.	Hydraulic conductivity generally low. Faults, fractures, and weathered zones may yield small quantities of water.
Pre-Cretaceous		Sedimentary and metamorphic rocks; well indurated and structurally deformed.	Hydraulic conductivity generally low. Faults, fractures, and weathered zones may yield small quantities of water.



B. IRRIGATED LANDS IN 1979



C. DISTRIBUTION OF GENERALIZED SOIL TYPES



D. WATER-LEVEL CHANGES IN THE REGIONAL AQUIFER SYSTEM FROM OCTOBER 1979 TO OCTOBER 1980

GENERALIZED GEOLOGY, IRRIGATED LANDS, SOIL TYPES, AND WATER-LEVEL CHANGES IN THE EASTERN SNAKE RIVER PLAIN, IDAHO