

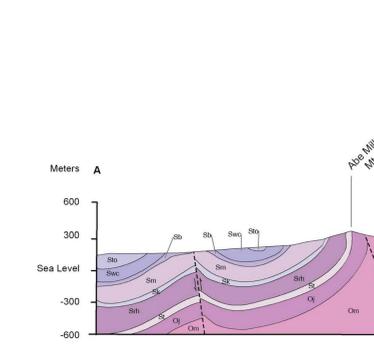
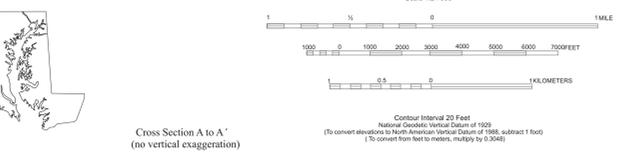
DESCRIPTION OF MAP UNITS

- Allevium: Clay, sand, silt, and gravel with variably thick covering of soil. Pale gray to brown, weathering to tan, yellow, or orange-brown.
Terrace deposits: Reddish brown to brown, sandy and clayey mixture of rounded pebbles to cobbles of sandstone, silt, quartz, and quartzite.
Colluvium: Unconsolidated and unsorted deposits of sand, cobbles, and boulders that accumulate on the slopes below outcrops of the sandstone and quartzite units.
Mahantango Formation: Massive, medium gray, olive-gray, to grayish brown, sandy siltstone, fine sandstone, and gray fossiliferous shale interbedded with thin-bedded siltstone and sandstone.
Needmore-Marcellus Shale (Undifferentiated): Medium to very dark gray shale, with thin argillaceous limestone and calcitic shale.
Oriskany Sandstone: Light gray to medium gray, fine to medium grained, medium- to thick-bedded, locally fossiliferous, calcareous sandstone.
Keyser-Helderberg Formations (Undifferentiated): The Helderberg Limestone consists of beds of chert and medium-gray calcareous sandstone that weather orange-brown to reddish brown.
Tonoloway Formation: Medium to light gray, laminated, medium-bedded, argillaceous limestone and tan dolomite.
Wills Creek Formation: Medium to light gray, reddish, greenish, calcareous shale and tan dolomite, with thin layers of gray, argillaceous limestone and sandy limestone.
Bloomersburg Formation: Reddish gray to reddish brown, locally pale green, massive sandstone and shale, argillaceous siltstone, and fine-grained sandstone.
McKenzie Formation: Medium grayish green to gray, calcareous shale, and interbedded argillaceous, gray limestone.
Keefe Sandstone: Light gray to yellowish gray, fine- to medium-grained sandstone.
Rose Hill Formation: Light olive to pale reddish gray, light gray, greenish gray, and deep purple shale, brownish red sandstone, and thin reddish siltstone.
Tuscarora Sandstone: Light gray to very light gray, locally white, pebbly, fine- to coarse-grained, thin- to medium-bedded, massive to cross-laminated sandstone.
Ultramafic Kimberlite Diatreme: Greenish-black, fine-grained matrix containing pyroxene and melilite phenocrysts.
Janata Formation: Reddish brown, to maroonish purple, fine- to medium-grained, thin- to thick-bedded, cross-bedded sandstone, siltstone, and massive mudstone.
Martinsburg Formation (undifferentiated): Interbedded, gray to greenish gray siltstone, tan sandstone, and gray to dark gray shale.
Upper member: Medium gray shale interbedded with thin (0.5 feet, 15cm) light gray to greenish gray, silty, graded sandstone.
Lower member: Predominantly medium to dark gray, fissile shale with thin (<0.5 inches, 1.0 cm) siltstone interbeds.
Chambersburg Formation: Medium to dark gray, nodular- to medium-bedded, fossiliferous limestone.
St. Paul Group (undivided): Massive, light gray, fine sandstone containing fenestral fabric (calcite-filled voids) at the base.
Pinesburg Station Dolomite: Medium to light gray, medium-bedded, highly fractured dolomite interbedded with light gray to tan laminated dolomite.
Rockdale Run Formation: Interbedded and cyclic limestone and dolomite, cherty in the lower 400 feet.
Stonewall Formation (previously Stonewall Limestone): Subdivided into three separate members. The Stonewall Member, is named, the other two are informal in the Clear Spring Quadrangle.
Conococheague Formation: Interbedded gray limestone and tan dolomite cycles. Subdivided and mapped as three members, two of which are informal.
Ehlers Formation: Upper part of the formation is very poorly exposed and contains interbedded tan, thin- to thick-bedded limestone and dolomite, which frequently weather shaly.

Geologic and Karst Features Map of the Maryland Portions of the Clear Spring and Hedgesville Quadrangles, Washington County, Maryland

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Current map projects: Maryland State Plane Coordinate System FIPS 1900 (Projection: Lambert Conformal Conic, 1980 geodetic reference system)
MD State Plane 2000-meter grid ties and coordinates shown in black
Geographic coordinates (latitude/longitude) shown near corners and 1.0° intervals (in black)



Explanation of Map Symbols: Includes symbols for contacts, faults, planar features, folds, karst features, and base map symbols like transportation, topography, and hydrography.