

Description of Map Units

Table with 3 columns: Unit Code, Unit Name, and Description. Includes units like Alluvium (Qal), Collium (Qc), Weathering residuum (Qr), Terrace deposits (Qt), Diabase dikes (D), Harpers Formation (Ch), Weverton Formation (Cw), Owens Creek Member (Coc), Maryland Heights Member (Cum), Buzzard Knob Member (Cub), Loudon Formation (Cz), Conglomerate (Czc), Phyllite (Czp), Catoclin Formation (Zm), and various metamorphic units (Zop, Zop1, Zop2, Zop3, Zop4, Zop5, Zop6, Zop7, Zop8, Zop9, Zop10).



Base layers derived from U.S. Geological Survey (USGS) 7.5-minute Series (Topographic) Middletown Quadrangle, 1953 (photorevised 1979) Digital line graphs for hydrography, topography, transportation and boundaries (1:24,000) (Topography by stereophotogrammetric methods from aerial photographs taken 1945) Culture revised by USGS 1953. Map edited in 1979 by USGS based on aerial photographs taken 1977 and other sources; this information on field-checked boundary line revisions compiled from latest information available from controlling authority.)

Current map projection: Maryland State Plane Coordinate System 1987 (Projection: Lambert Conformal Conic, 1987 geodetic reference system) (Horizontal Datum: North American Datum 1983) MD State Plane 2000-meter grid lines and coordinates shown in black. Geographic coordinates (latitude-longitude) shown near corners and 2.5' intervals (in black).

July 2005 magnetic north declination at center of quadrangle is estimated to be 10.5 degrees west. (To determine current magnetic declination see: http://www.ngdc.noaa.gov/seg/geomag/jsp/Declination.jsp)

Geologic Map of the Middletown Quadrangle, Frederick and Washington Counties, Maryland

By David K. Brezinski and John L. Fauth 2005

Scale 1:24,000

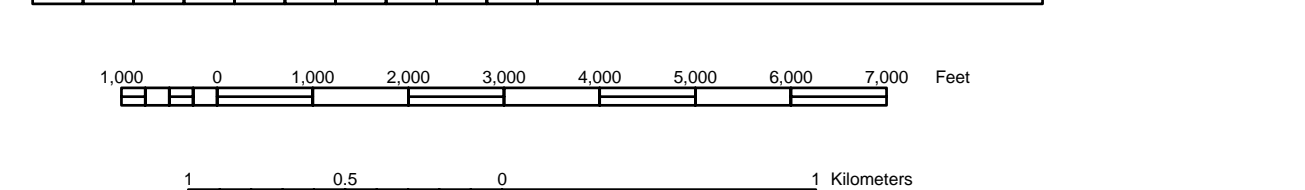
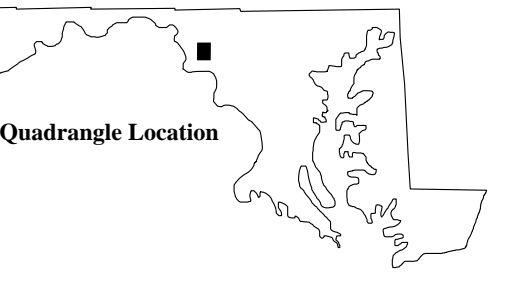


Table with 2 columns: Index number and Quadrangle Name. 1. Funkstown, 2. Myersville, 3. Catoclin Furnace, 4. Keokysville, 5. Frederick, 6. Harpers Ferry, 7. Point of Rocks, 8. Backscroon.



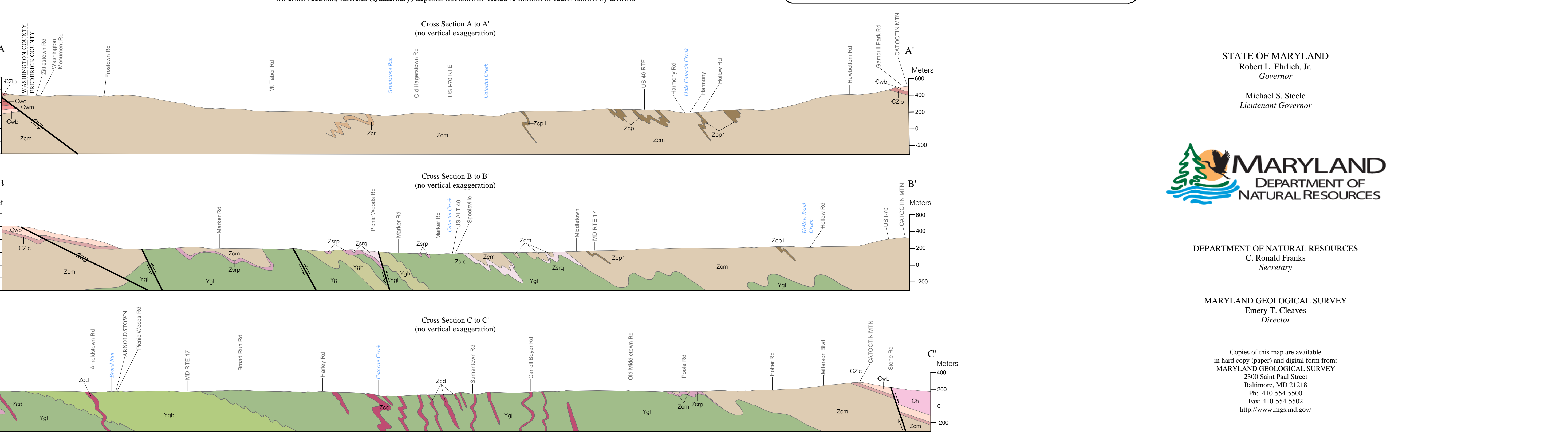
Contour Interval 20 Feet National Geodetic Vertical Datum of 1929 (To convert elevations to the North American Vertical Datum of 1988, subtract 1 foot) (To convert from feet to meters, multiply by 0.3048)

Explanation of Map Symbols

Table of map symbols for Contacts, Faults, Planar Features, Linesations, Culture, Topography, and Transportation. Includes symbols for geologic contact, faults, bedding, folds, linesations, city boundaries, topographic contours, and roads.

References

List of references including Brezinski, D. K., 1992. Lithostratigraphy of the western Blue Ridge cover rocks in Maryland; Maryland Geological Survey Report of Investigations 55, 69 p. and other geological publications.



On cross sections, surficial (Quaternary) deposits are not shown. Relative motion of faults shown by arrows.