

**EXPLANATION**  
The distribution of outcrops may be inferred in general from the distribution of structure symbols on the map. Most natural outcrops occur along streams. Bedrock and other levels of main profile appears on the divide. Elevation was made of temporary exposures provided by highway construction, pipelines, and housing developments.

**BEDDED ROCKS**

**Qa**  
Alluvium  
Clay, silt, sand, and gravel, deposited in stream channels, flood plains, and other low-lying areas. It is composed of material derived from local sources.

**Qc**  
Tobacco Formation  
Clay, silt, sand, and gravel, deposited in stream channels, flood plains, and other low-lying areas. It is composed of material derived from local sources.

**Ug**  
Upland Gravels  
Pebbles in a matrix of sand and silt, deposited on upland areas. It is composed of material derived from local sources.

**Pg**  
Pocomoke Group  
White to pinkish sandstone, siltstone, and shale, deposited in a shallow sea. It is composed of material derived from local sources.

**Ps**  
Peach Bottom Slate  
Blackish to grayish slate, deposited in a shallow sea. It is composed of material derived from local sources.

**Ca**  
Cecil Metasediments  
Thinly bedded, silty sandstone, siltstone, and shale, deposited in a shallow sea. It is composed of material derived from local sources.

**W**  
Wishlick Formation  
Thinly bedded, silty sandstone, siltstone, and shale, deposited in a shallow sea. It is composed of material derived from local sources.

**Wu**  
Wishlick Formation, undivided  
Thinly bedded, silty sandstone, siltstone, and shale, deposited in a shallow sea. It is composed of material derived from local sources.

**Ar**  
James Run Gneiss  
Gneiss, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**Co**  
Cokeville Marble  
Crystalline marble, composed of calcite, deposited in a shallow sea. It is composed of material derived from local sources.

**S**  
Sedimentation  
Thinly bedded, silty sandstone, siltstone, and shale, deposited in a shallow sea. It is composed of material derived from local sources.

**B**  
Baltimore Gneiss  
Gneiss, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**INTRUSIVE ROCKS**

**D**  
Diorite  
Dark gray to black, crystalline igneous rock, composed of plagioclase, quartz, and hornblende.

**Pg**  
Pegmatite  
Crystalline igneous rock, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**M**  
Muscovite quartz monzonite gneiss  
Crystalline igneous rock, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**Pg**  
Part of the Baltimore Gneiss  
Gneiss, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**Q**  
Quartz gabbro and quartz diorite gneiss  
Crystalline igneous rock, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**B**  
Baltimore Gabbro of Chesebrough and Harbery (1886)  
Gabbro, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**U**  
Ultramafic and gabbroic rocks  
Crystalline igneous rock, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

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Ultramafic rocks  
Crystalline igneous rock, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**PLANAR FEATURES**

**F**  
Fault  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**S**  
Syncline  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**A**  
Anticline  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**LINEAR FEATURES**

**H**  
Horizontal  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**I**  
Inclined  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

**V**  
Vertical  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

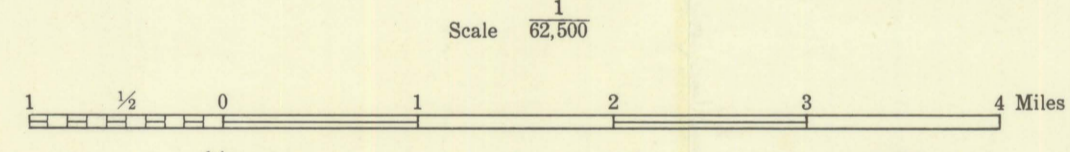
**STRIKESLIP**

**S**  
Strike-slip fault  
Linear features, composed of quartz, feldspar, and mica, deposited in a shallow sea. It is composed of material derived from local sources.

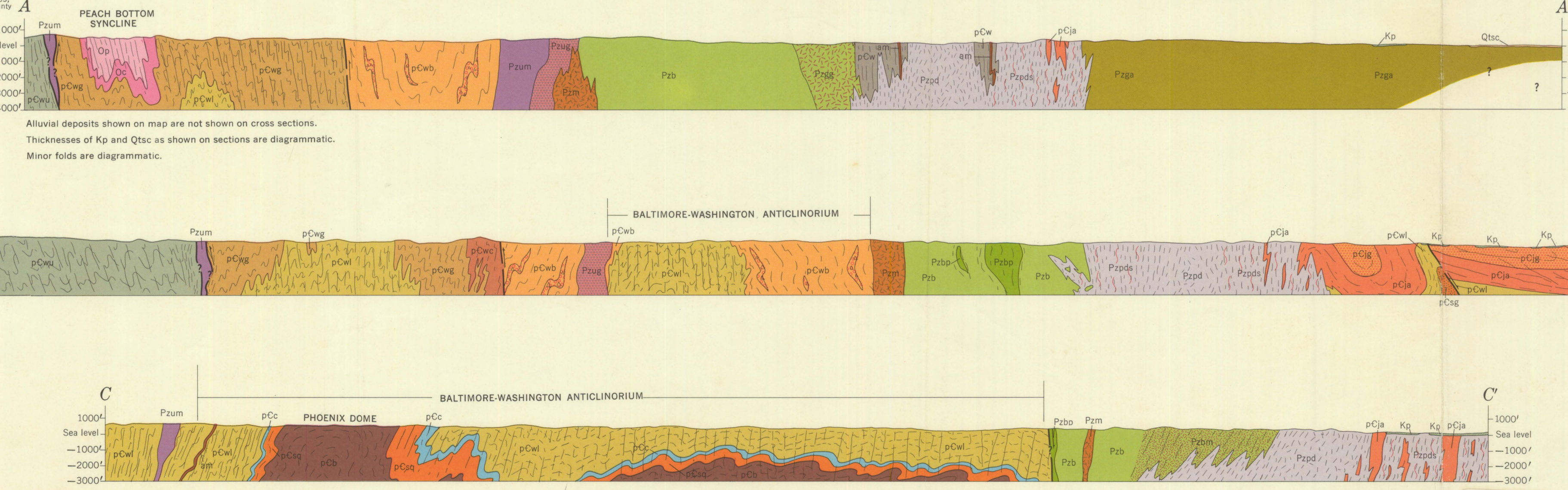
STATE OF MARYLAND  
MARYLAND GEOLOGICAL SURVEY  
KENNETH N. WEAVER, DIRECTOR

# GEOLOGIC MAP of HARFORD COUNTY

Geology of the crystalline rocks by  
David L. Southwick, U. S. Geological Survey  
Geology of the Coastal Plain by  
James P. Owens, U. S. Geological Survey



Contour interval: 20 feet  
Numbered ticks indicate the 100-foot Maryland State Grid  
The last three digits of the grid numbers are omitted  
Datum is mean sea level  
1968



**Contact**  
Unconformity: dashed line with short dashes  
Fault: solid line with short dashes  
Syncline: solid line with long dashes  
Anticline: solid line with long dashes

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3843  
1825  
1988