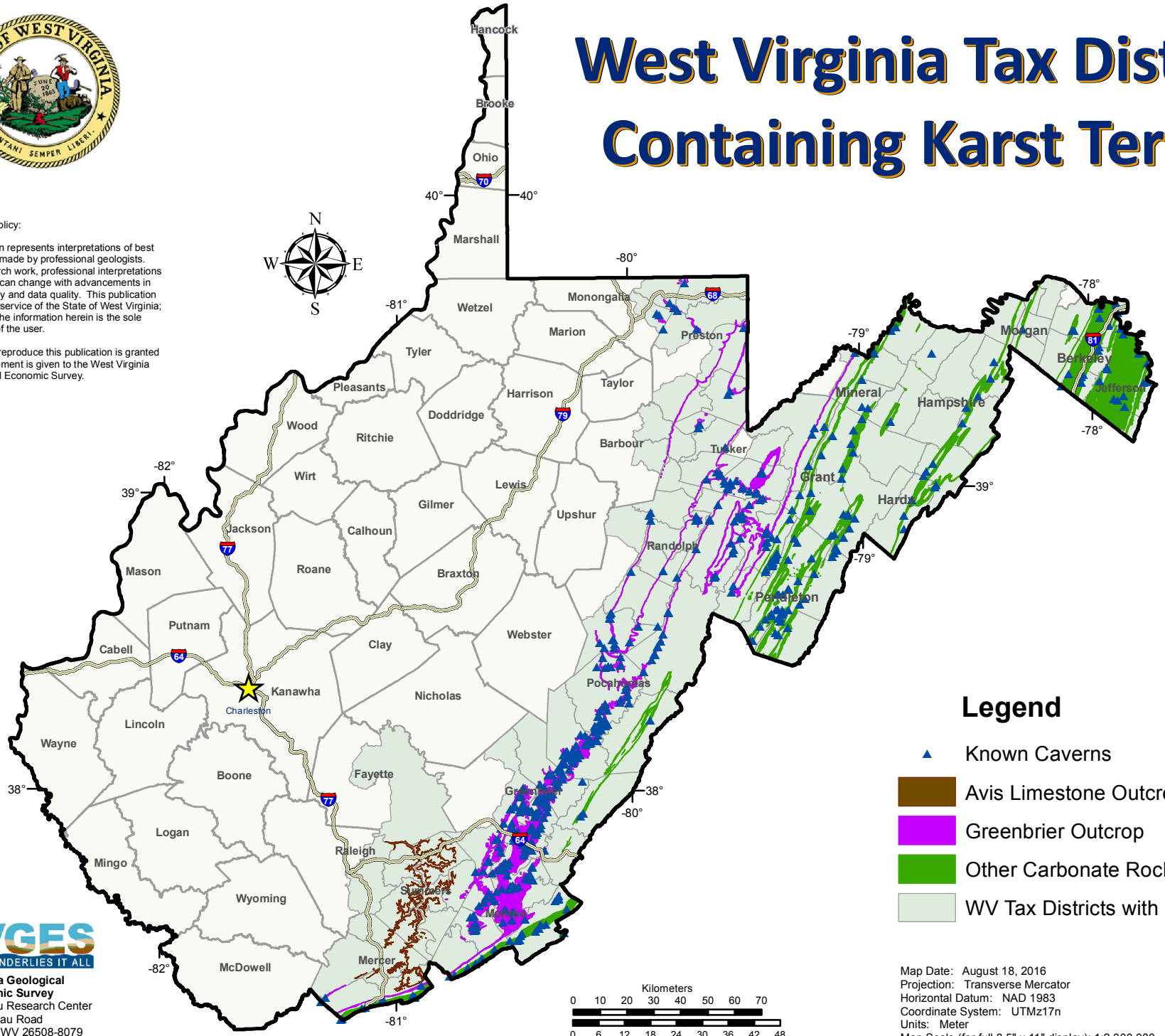
West Virginia Tax Districts Containing Karst Terrain



Legend

- Known Caverns
- Avis Limestone Outcrop
- Greenbrier Outcrop
- Other Carbonate Rocks Outcrop
- WV Tax Districts with Karst Terrain

Kilometers
0 10 20 30 40 50 60 70

0 6 12 18 24 30 36 42 48
Miles

Map Date: August 18, 2016
Projection: Transverse Mercator
Horizontal Datum: NAD 1983
Coordinate System: UTMz17n
Units: Meter
Map Scale (for full 8.5" x 11" display): 1:2,000,000

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West Virginia Tax Districts Containing Karst Terrain

"Karst terrain" means a terrain, generally underlain by limestone or dolomite, in which the topography is formed chiefly by the dissolving of rock and which may be characterized by sinkholes, sinking streams, closed depressions, subterranean drainage, and caves.

The principal karst-forming carbonate rocks in West Virginia are within the Mississippian Greenbrier Group; Devonian and Silurian Helderberg Group and Tonoloway Limestone; and Ordovician and Cambrian Black River Group, Saint Paul Group, Beekmantown Group, Conococheague Formation, Elbrook Formation, and Tomstown Dolomite. Based on recent geologic mapping in southern West Virginia, the Mississippian Avis Limestone, also known as the Little Stone Gap, can be added to this list.

This map shows the outcrop of these carbonate units and the tax districts in which the outcrops occur. It is based on publications of this agency as well as field observations by experienced Geological and Economic Survey geologists who have conducted detailed geologic mapping in the state.

The only publically-available source of cave locations in West Virginia is West Virginia Geological and Economic Survey Volume 19A by William E. Davies, titled "Caverns of West Virginia."[1] It was first published in 1949, revised and reprinted in 1958, and reprinted with supplement in 1965. The map shows locations of caves from Volume 19A observed within the carbonate outcrop area. Despite the fact that Davies' locations were somewhat generalized, they fall on the bands of carbonate outcrop.

Davies book also lists cave locations in other parts of the state, but they are for the most part isolated, very small, in some cases "shelter" caves, or formed in sandstone, and are not part of a karst terrain. Thin marine limestones occur in the coal measures, but where these units crop out in the northern part of the state, isolated caves are few in number and small in size. Similarly, an outcrop of the Greenbrier Limestone occurs in Webster County near Webster Springs, but it is very limited in areal extent and not included in the map.

Therefore, this map identifies those districts that contain outcrops of geological units exhibiting the characteristics of karst, including caves and sinkholes.

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[1] Davies, William E., *Caverns of West Virginia,* (Volume 19A)**:** http://www.wvgs.wvnet.edu/wvges2/publications/PubCat_Details.aspx?PubCatID=V-19A

For more detailed geologic mapping:

➡ Please see our "Geologic Mapping, including STATEMAP Projects" page:
http://www.wvgs.wvnet.edu/www/statemap/statemap.htm

➡ You can order geospatial files (mostly Open File (OF) reports) from those projects via our Publication Section:
http://www.wvgs.wvnet.edu/wvges2/publications/PubCat_FAQs.aspx

Rev. 8/18/2016, 2

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List of Involved Tax Districts by County

Barbour
- Cove
- Glade

Berkeley
- Arden
- Falling Waters
- Gerrardstown
- Hedgesville
- Mill Creek
- Opequon

Fayette
- New Haven

Grant
- Grant
- Milroy
- Union

Greenbrier
- Anthony Creek
- Blue Sulphur
- Falling Springs
- Fort Springs
- Frankford
- Irish Corner
- Lewisburg
- White Sulphur
- Williamsburg

Hampshire
- Bloomery
- Capon
- Gore
- Mill Creek
- Romney
- Sherman
- Springfield

Hardy
- Capon
- Lost River
- Moorefield
- South Fork

Jefferson
- Charles Town
- Harpers Ferry
- Kabletown
- Middleway
- Shepherdstown

Mercer
- Beaver Pond
- East River
- Jumping Branch
- Plymouth
- Rock

Mineral
- Cabin Run
- Frankfort
- New Creek
- Piedmont
- Welton

Monongalia
- Morgan
- Union

Monroe
- Red Sulphur
- Second Creek
- Springfield
- Sweet Springs
- Union
- Wolf Creek

Morgan
- Allen
- Bath
- Cacapon
- Rock Gap
- Timber Ridge

Pendleton
- Bethel
- Circleville
- Franklin
- Mill Run
- Sugar Grove
- Union

Pocahontas
- Edray
- Greenbank
- Huntersville
- Little Levels

Preston
- Grant
- Pleasant
- Portland
- Reno
- Union
- Valley

Raleigh
- Richmond
- Shady Spring

Randolph
- Beverly
- Dry Fork
- Huttonsville
- Leadsville
- Mingo
- New Interest
- Roaring Creek
- Valley Bend

Summers
- Forest Hill
- Green Sulphur
- Greenbrier
- Jumping Branch
- Pipestem
- Talcott

Tucker
- Blackfork
- Clover
- Davis
- Dry Fork
- Licking
- St. George

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