

The following was presented at DMT'11
(May 22-25, 2011).

The contents are provisional and will be
superseded by a paper in the
DMT'11 Proceedings.

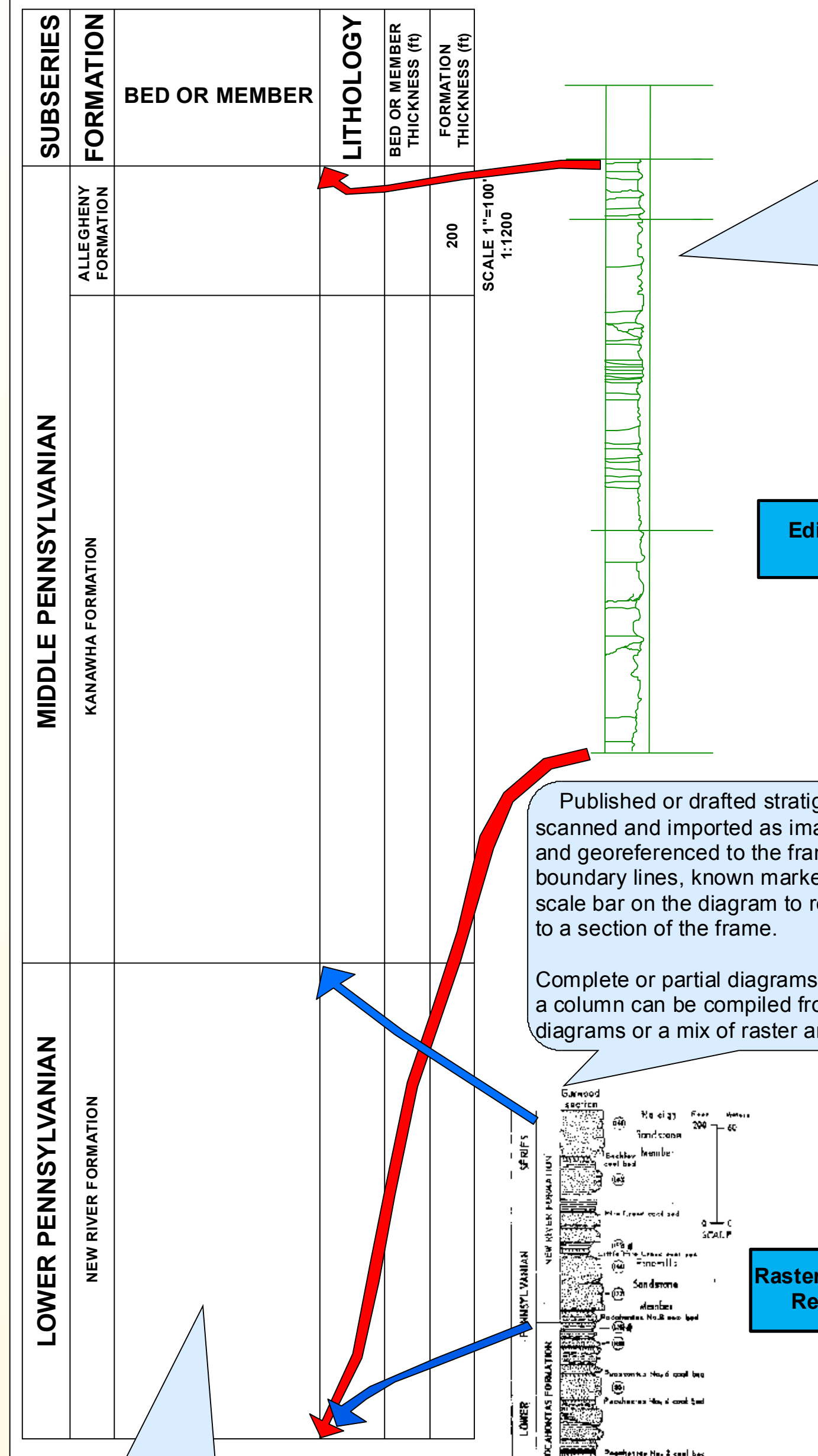
See also earlier Proceedings (1997-2010)
<http://ngmdb.usgs.gov/info/dmt/>

Things You Used to Hate About Map Layout in Arc Have Changed: Attractive and Complete Maps Are Possible in ArcGIS!

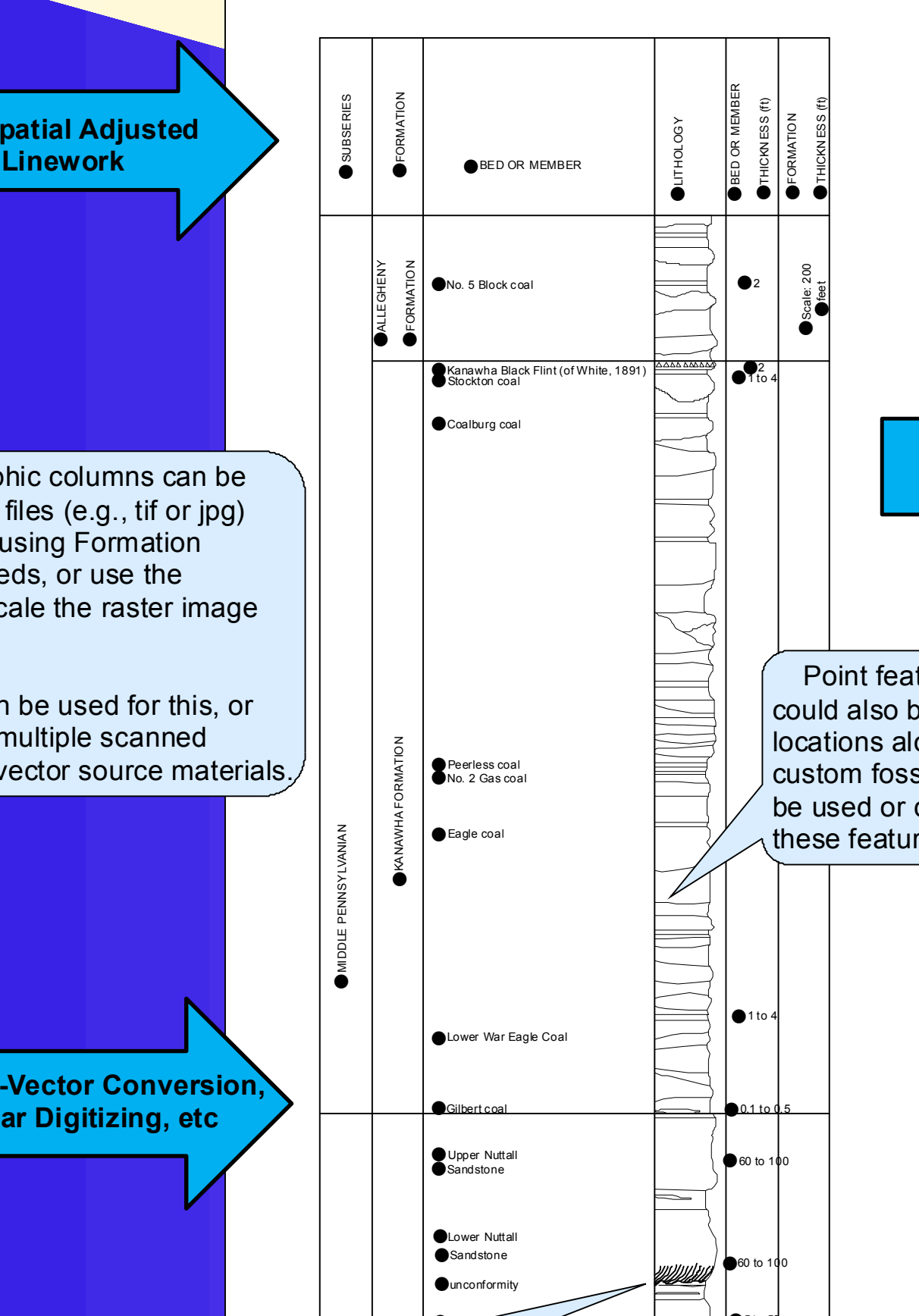
Sarah E. Gooding, Paula J. Hunt, and Philip A. Dinterman
West Virginia Geological and Economic Survey
Digital Mapping Techniques Workshop, May 22-25, 2011
gooding@geosrv.wvnet.edu, phunt@geosrv.wvnet.edu, pdinterman@geosrv.wvnet.edu



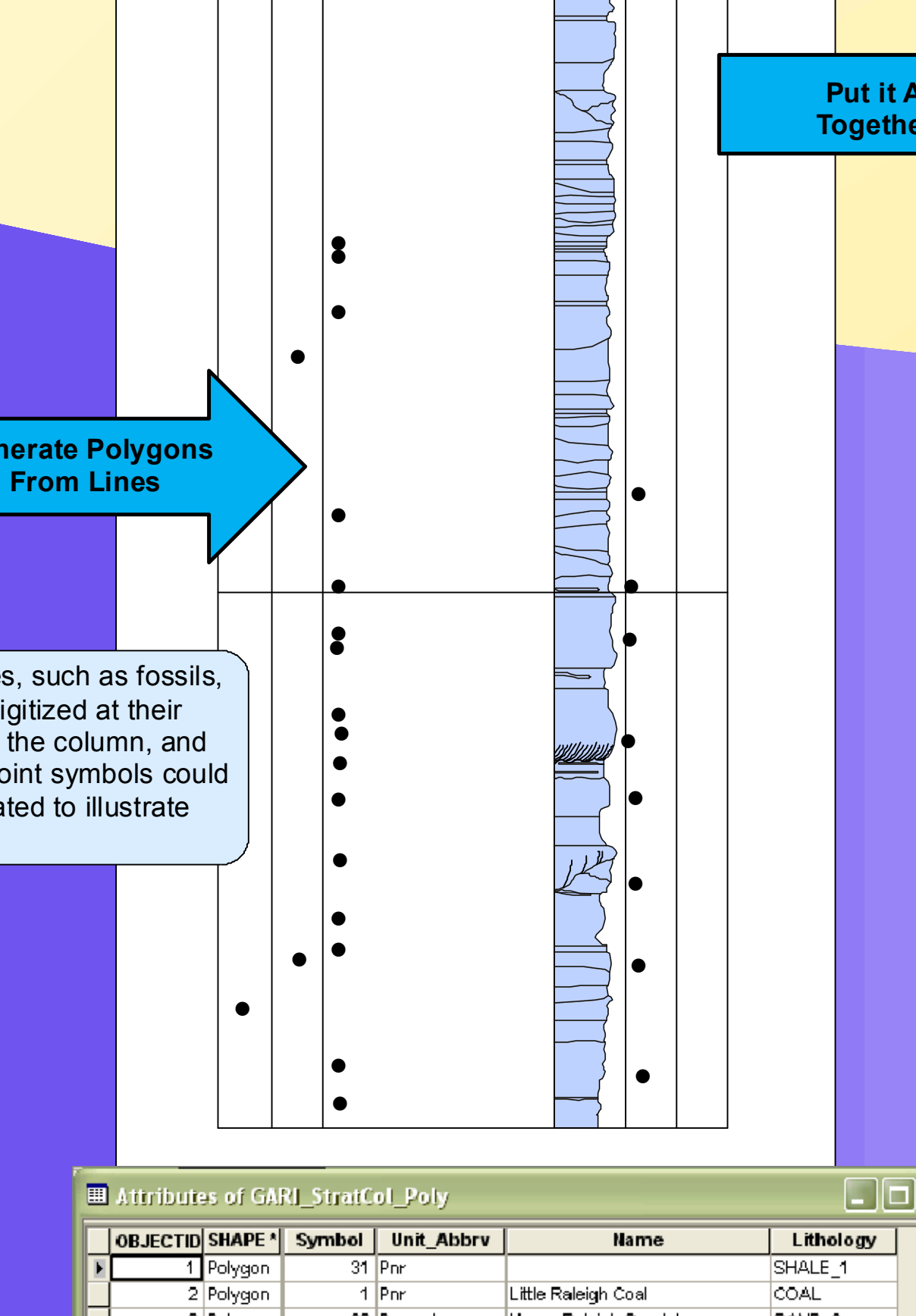
STEP 1: Build Frame, Georeference/Scale Source Material



STEP 2: Digital Linework and Points



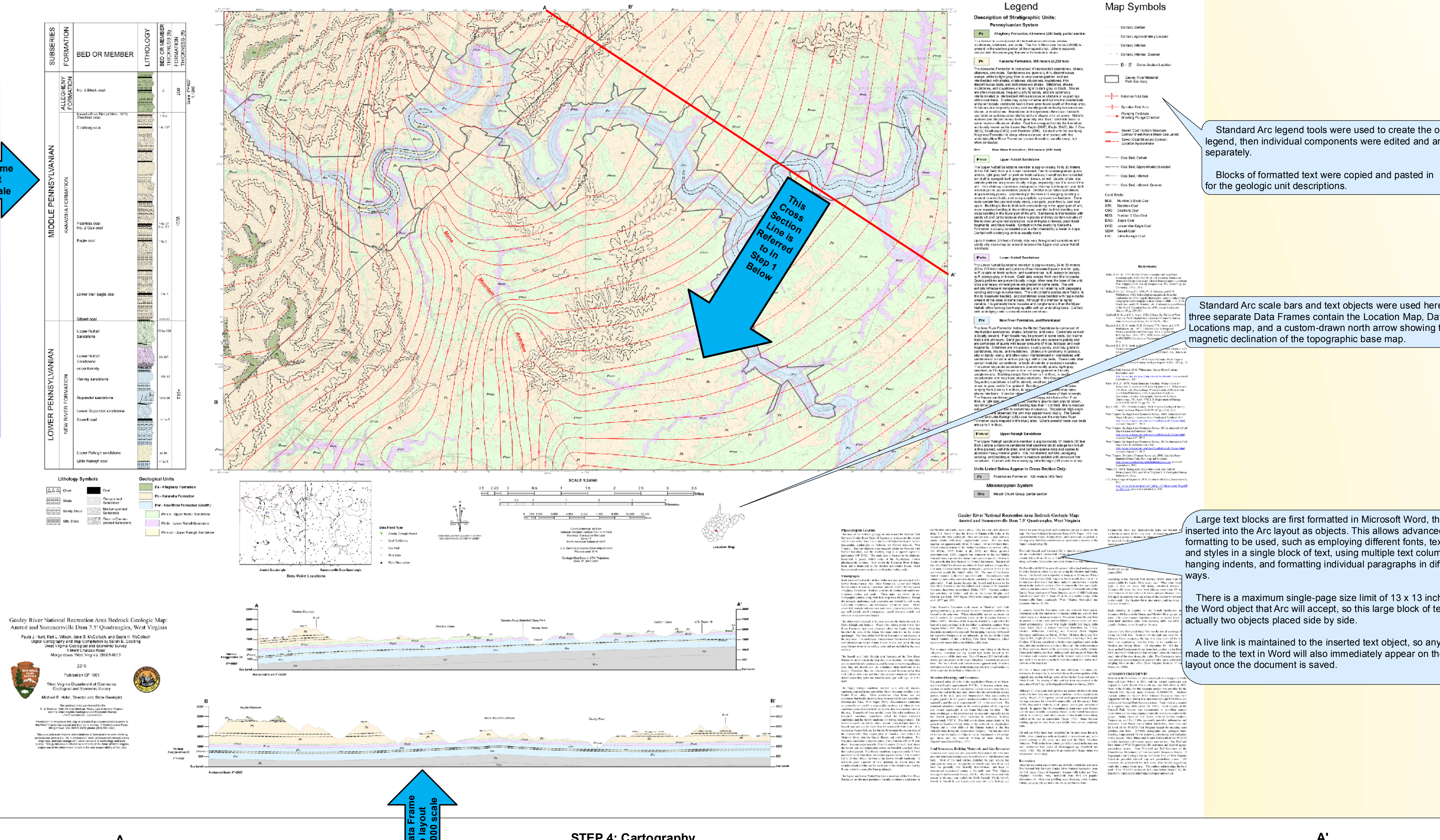
STEP 3: Polygons and Attributes



STEP 4: Cartography

SUBSERIES	FORMATION	BED OR MEMBER	LITHOLOGY	BED OR MEMBER THICKNESS (ft)	FORMATION THICKNESS (ft)
ALLEGHENY FORMATION		No. 5 Block coal		2	200
		Kanawha Black Flint (of White, 1891) Stockton coal		1 to 4	
		Coalburg coal		1 to 137	
MIDDLE PENNSYLVANIAN	NEW RIVER FORMATION	Peerless coal No. 2 Gas coal		1 to 57 to 127	1035
		Eagle coal		1 to 5	
		Lower War Eagle coal		1 to 4	
		Gilbert coal		0 to 100	
LOWER PENNSYLVANIAN	POCAHONTAS FORMATION	Upper Nuttall Sandstone		80 to 100	
		Lower Nuttall Sandstone		80 to 110	
		Harvey sandstone		5 to 20	
		Guyandot sandstone		10 to 80	735+
		Lower Guyandot sandstone		<1 to 3	
		Sewell coal		<1 to 3	
		Upper Raleigh sandstone		48 to 50	
		Little Raleigh coal		<1 to 3	

Gauley River National Recreation Area Bedrock Geologic Map: Ansted and Summersville Dam 7.5' Quadrangles, West Virginia



Stratigraphic Columns!

REFERENCES:

Englund, K.J., H.H. Arndt, S.P. Schweinfurth, and W.H. Gillespie, 1986, Pennsylvanian system stratotype sections, West Virginia, in Southeastern Section of the Geological Society of America, Centennial Field Guide No. 6, pp. 59-68, Neathery, T.L., ed., Geological Society of America, Boulder.

Gooding, S.E., ed., 2010 (revision), Digital Open-File Geological Maps of West Virginia National Park Service Mapping Project Handbook, Unpublished, West Virginia Geological and Economic Survey, 44p.

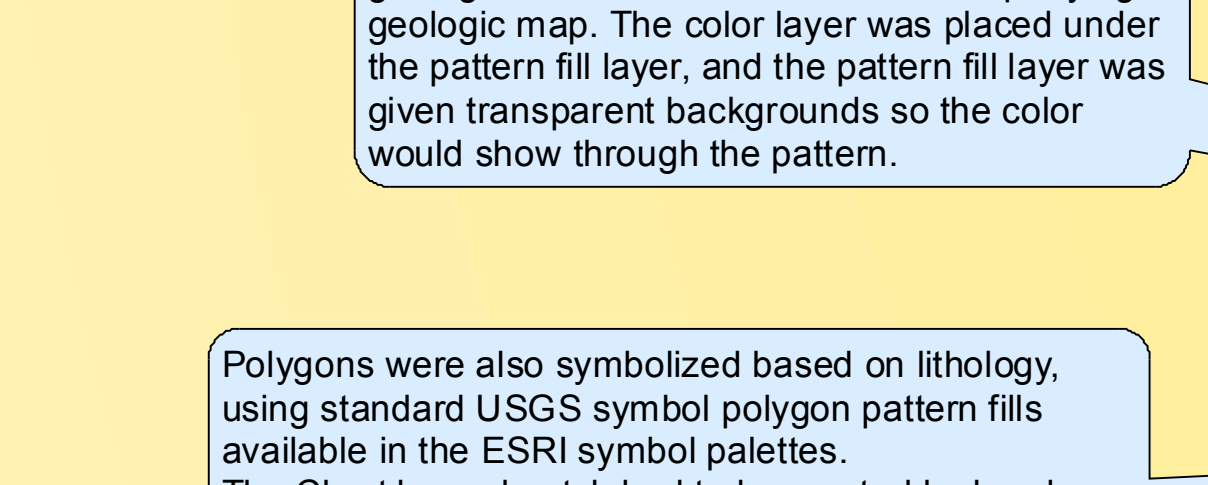
Hunt, P.J., K.L. Wilson, J.S. McColloch, and G.H. McColloch, 2010, Gauley River National Recreation Area Bedrock Geologic Map: Ansted and Summersville Dam 7.5' Quadrangles, West Virginia: West Virginia Geological and Economic Survey, Open File Publication OF-1001, 1:24,000 scale.

Thoms, Evan, 2005, Creating and Managing Digital Geologic Cross Sections within ArcGIS, in Soller, D.R., ed., Digital Mapping Techniques '05—Workshop Proceedings, Baton Rouge, Louisiana, April 24-27, 2005. U.S. Geological Survey Open-File Report 2005-1428, p. 247-251. (<http://pubs.usgs.gov/of/2005/1428/pdf/thoms.pdf>)

Then a miracle occurs,



Cross Sections!



**Complete, detailed instructions for making stratigraphic columns and cross sections in ArcMap will be made available in the DMT'11 Conference Proceedings!*

