Institute of Natural Resource Sustainablity

Illinois State Geological Survey

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Herrin Coal Chlorine **JEFFERSON** County

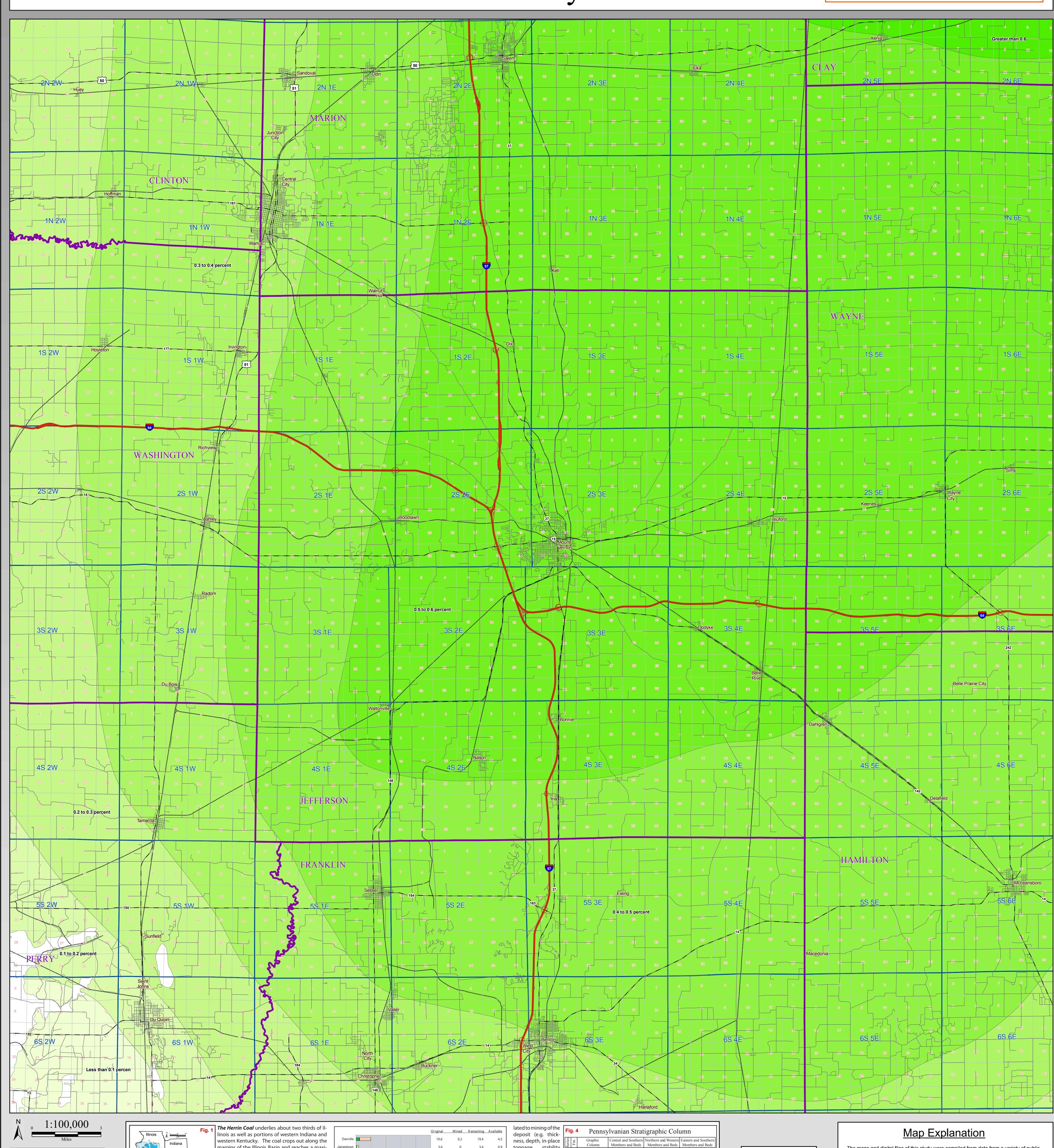
County Coal Map Series Andrew Louchios, Scott Elrick,

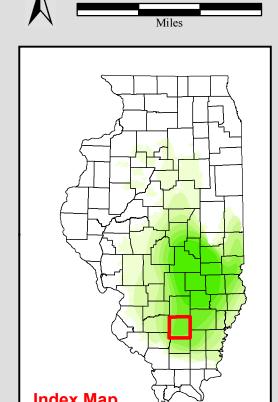
Map construction: October 29, 2009

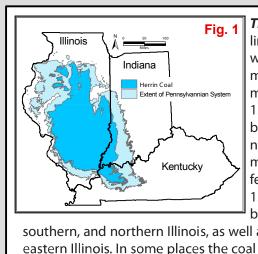
Chris Korose, David Morse

This product is under review and may not meet the standards of the Illinois State Geological Survey.

County coal maps and select quadrangle maps available as downloadable PDF files at: http://www.isgs.illinois.edu/maps-data-pub/coal-maps/county-index.shtml







orth-south cross section of the Pennsylvanian System in Illinois

linois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maxinum depth in Illinois of about 1,300 feet. (See Fig . and Fig 2.) The Herrin Coal is a normal brightbanded coal. Its lower portion contains a prominent claystone parting (the "blue band") that normally is 1-3 inches thick. It averages more than 6 feet thick in extensive areas and locally reaches 15 feet. It is thin in much of central Illinois but has been extensively mined in western, west-central,

southern, and northern Illinois, as well as in the southern part of the Danville region of eastern Illinois. In some places the coal is cut out by channels filled with the Anvil Rock Sandstone Member. In parts of Illinois, silty gray shale as much as 100 feet thick overlies the Herrin Coal. Associated with this shale is a channel sandstone commonly as much as a mile wide and 60-80 feet thick mapped as Anvil The original resource of Herrin Coal in the State of Illinois totals 88.5 billion References: Rock Sandstone and may be tons, of which 9.4 billion have been mined. Approximately 58% of the original

Danville Jamestown	19.6 3.6	0.2 0	R emaining 19.4	Available 4.5
Jamestown	3.6			4.5
-		0		
Herrin			3.6	0.9
	88.5	9.4	79.0	51.0
Springfield	65.1	2.2	63.0	27.0
Colchester	19.0	0.5	18.5	1.0
Dekoven	6.0	0.1	5.9	0.3
Davis ■ Available ■ Avail. w/ potential restr.	9.6	0.1	9.5	4.7
Seelyville Restricted or mined	9.7	0	9.7	6.7
0 20 40 60 80 100		(All numbers	s in Billions of	Tons)
Fig. 3 billions of tons	221.1	12.5	208.6	96.1

Fig. 3	billions of tons	221.1	12.5	208.6	96.1
feet it has a mu lies the coal pr St. Clair, easter Coal is overlair	elatively thick bodies of t uch lower sulfur content t incipally in parts of Willi n Macoupin, and S. Verm n by either the Anna Shal tone Member. (Hopkins, 1	han elsewh amson, Fra nilion. Gene e Member	nere. The nklin, Jef erally, how (black fis	gray shal ferson, M wever the sile shale)	e over- adison, Herrin

coal. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re- Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 120, 54 p.

to other coals currently being mined in the state. Of these resources, 21 billion tons occur in coal 42 to 66 inches thick and 30 billion tons occur in thicknesses greater than 66 inch- 비営 es. (Modified from ISGS Pub. IM 120, Treworgy, et al)

ness, depth, in-place tonnage, stability

of bedrock overbur-

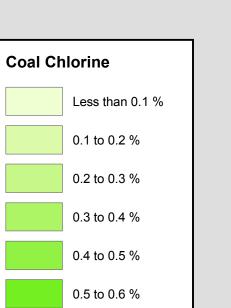
den) are comparable

lies the Herrin Coal. Associated with this shale is a channel sandstone commonly as much as a mile wide and 60-	St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Herrin Coal is overlain by either the Anna Shale Member (black fissile shale) or the Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.)	Treworgy, et al)	
80 feet thick mapped as Anvil Rock Sandstone and may be contemporaneous with the	The original resource of Herrin Coal in the State of Illinois totals 88.5 billion tons, of which 9.4 billion have been mined. Approximately 58% of the original Herrin Coal resources, 51 billion tons, are considered available for mining. (See	References: - Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p Treworgy, C.G., C.P. Korose, C.A. Chenoweth, and D.L. North, 1999a, Availability of the Herrin	

St. David Limestone Turner Mine Shale

Anvil Rock Sandston

Brereton Limesto Anna Shale



Greater than 0.6 %

The maps and digital files of this study were compiled from data from a variety of public and private sources and have varying degrees of completeness and accuracy. They present interpretations of the geology of the area and are based on available data. However, these interpretations are based on data that may vary with respect to accuracy of geographic location, type, quantity, and reliability, as they were supplied to the Illinois State Geological Survey. Consequently, the accuracy of the interpreted features shown in these files is subject to the limitations of the data and varies from place to place.

Contoured features less than 7 million square feet (about 1/2 mile square) in area may not be accurately portrayed or resolved. This data set provides a large-scale conceptual model of the geology of the area on which to base further work. These data are not intended for use in site-specific screening or decision-making.

Disclaimer

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