Institute of Natural Resource Sustainablity

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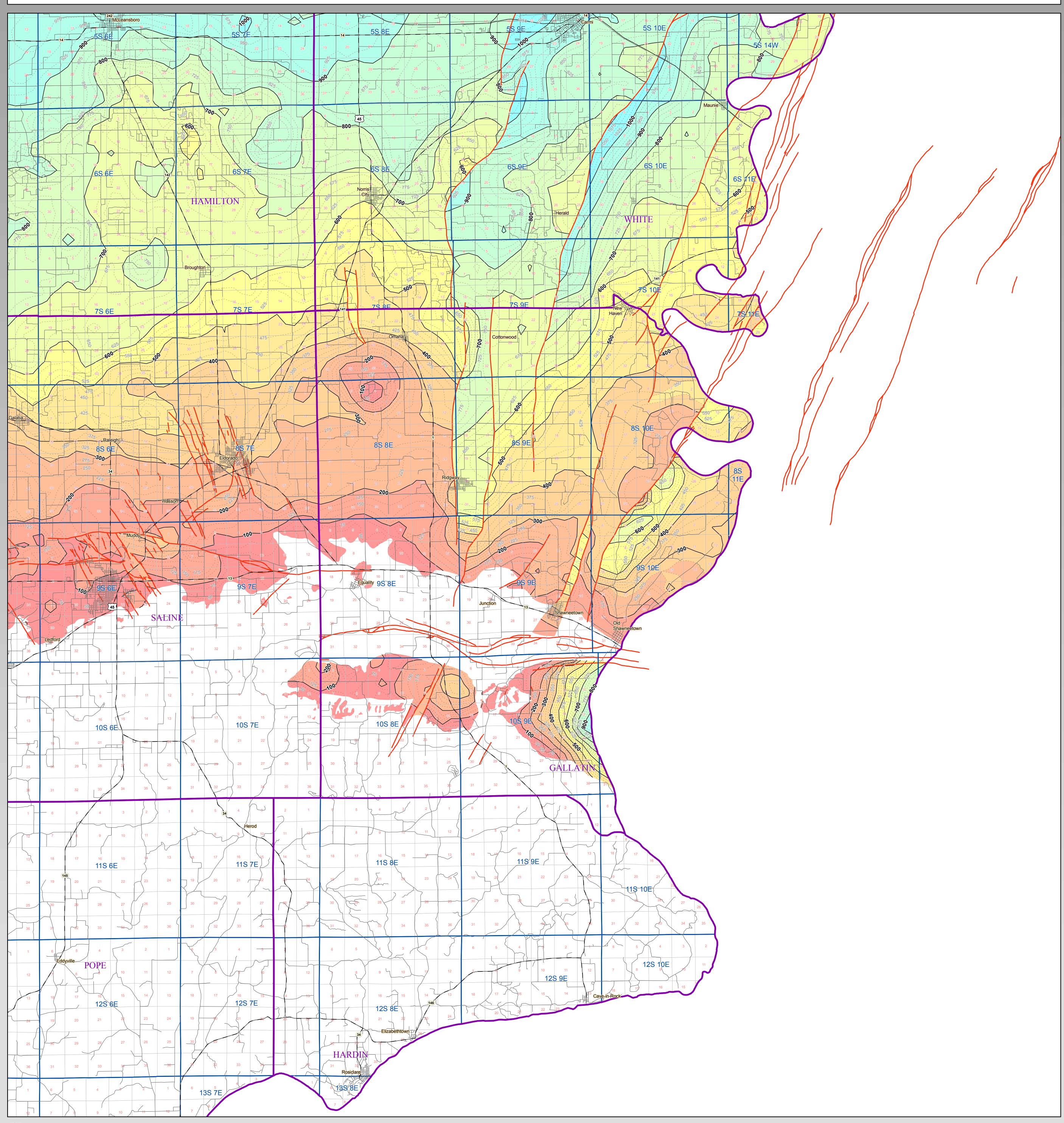
Herrin Coal Depth GALLATIN County

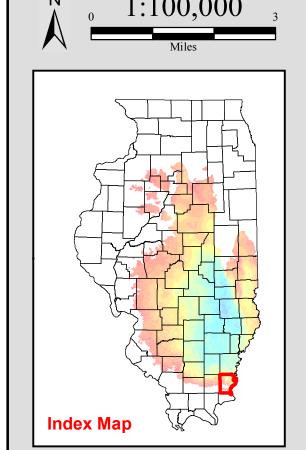
County Coal Map Series

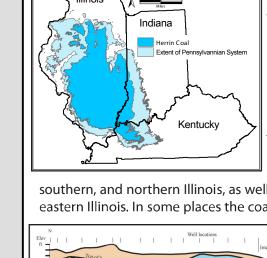
Andrew Louchios, Scott Elrick, Chris Korose, David Morse Map construction: October 26, 2009

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



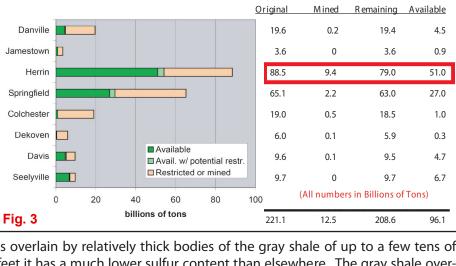




rth-south cross section of the Pennsylvanian System in Illinois

The Herrin Coal underlies about two thirds of Illinois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig 1. 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

peen 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 much as a mile wide and 60-



Sandstone Member. In parts is overlain by relatively thick bodies of the gray shale of up to a few tens of greater than 66 inchof Illinois, silty gray shale as feet it has a much lower sulfur content than elsewhere. The gray shale over- es. (Modified from much as 100 feet thick over- lies the coal principally in parts of Williamson, Franklin, Jefferson, Madison, ISGS Pub. IM 120, lies the Herrin Coal. Associ- St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Herrin Treworgy, et al) ated with this shale is a chan- Coal is overlain by either the Anna Shale Member (black fissile shale) or the nel sandstone commonly as Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.)

contemporaneous with the Herrin Coal resources, 51 billion tons, are considered available for mining. (See

tonnage, stability of bedrock overburden) are comparable 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

lated to mining of the

deposit (e.g. thick-

## Central and Southern Morthern and Western Eastern and Southern Members and Beds Members and Beds Danville Coal Danville Coal ness, depth, in-place nvil Rock Sandston Lawson Shale Brereton Limeston Anna Shale ereton Limeston Anna Shale Excello Shale

Pennsylvanian Stratigraphic Column

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 - 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 coal. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re-

## Coal Depth Detailed So. Illinois Faults < 100 ft 100 to 200 ft 200 to 300 ft 300 to 400 ft 400 to 500 ft 500 to 600 ft 600 to 700 ft 700 to 800 ft 800 to 900 ft 900 to 1000 ft 1000 to 1100 ft

1100 to 1200 ft

1200 to 1300 ft

1300 to 1400 ft

1400 to 1500 ft

1500 to 1600 ft

**Map Explanation** 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

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.

in these files is subject to the limitations of the data and varies from place to place.

## Disclaimer

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