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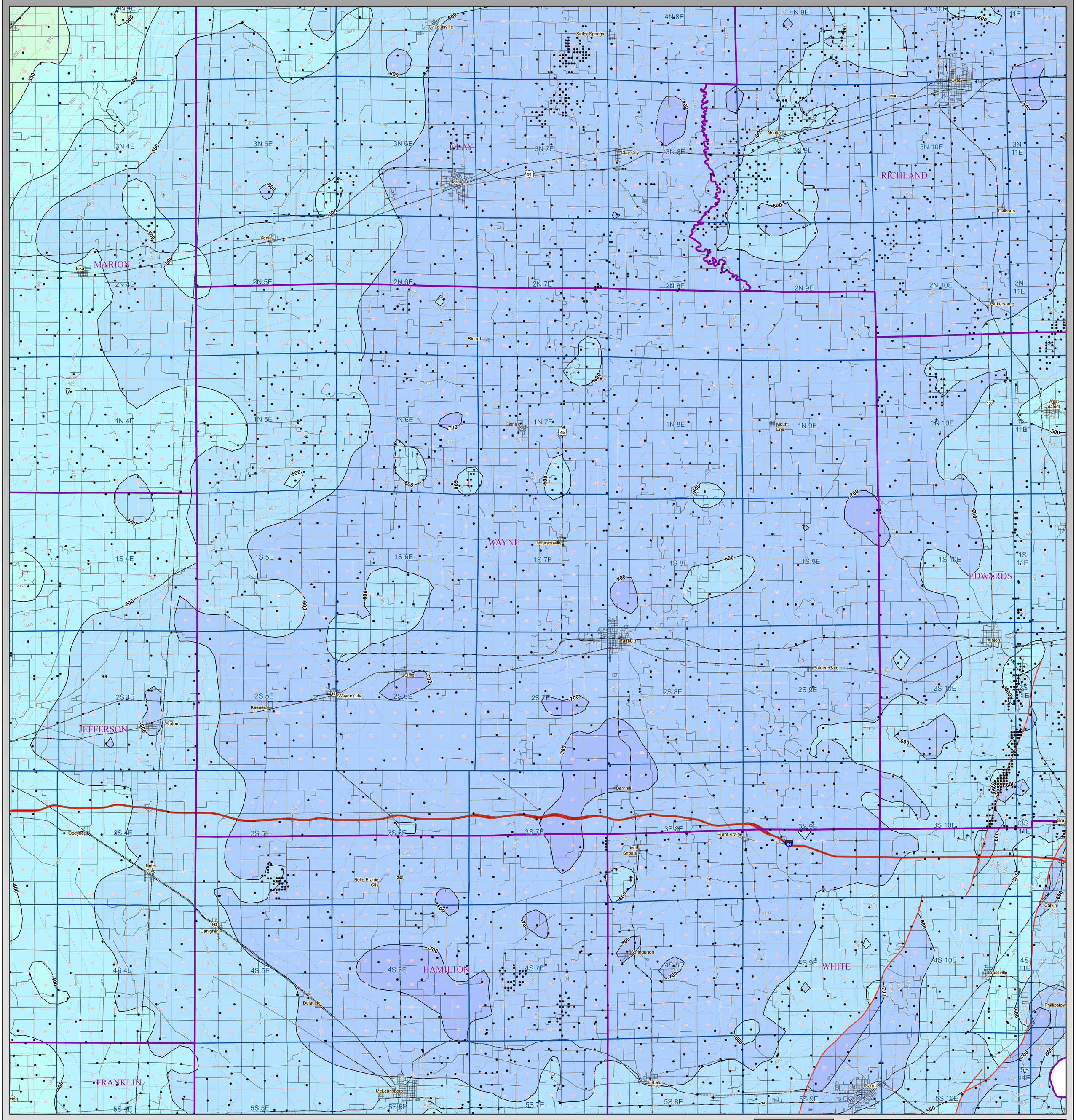
Springfield Coal Elevation
WAYNE
County

County Coal Map Series
ISGS Coal Section

Map construction: May, 2015

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



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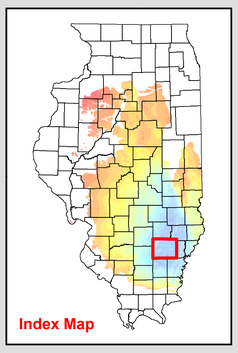
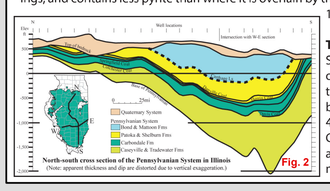


Fig. 1

The Springfield 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 Springfield Coal is in the Carbondale formation which is part of the Desmoninesian Series. (See Fig. 4) The Springfield Coal is normally overlain by a black fissile shale called the Turner Mine shale, but in southeastern Illinois, in a belt several miles wide that trends southwestward, the coal is thick and is overlain by the gray silty Dykersburg Shale. In that belt the coal is commonly split by shale partings, and contains less pyrite than where it is overlain by the black fissile shale (Hopkins, 1968 - B95). (See Fig 4.)



North-south cross section of the Pennsylvanian System in Illinois
(Note: apparent thickness and dip are distorted due to vertical exaggeration.)

The original resource of Springfield Coal in the State of Illinois totals 65.1 billion tons, of which 2.2 billion have been mined. Approximately 41% of the original Springfield Coal resources, 27 billion tons, are considered available for mining (See Fig 3.) . Available means that the surface land-use and geologic conditions related to mining of the deposit (e.g. thickness, depth, in-place tonnage, stability of bedrock overburden) are comparable to other coals currently being mined in the state. Of these resources, 23 billion tons occur in coal 42 to 66 inches thick and 4 billion tons occur in thicknesses greater than 66 inches thick.

Fig. 3

The Springfield Coal has been mined in Illinois for well over 100 years. The thickest resources of Springfield Coal in Illinois are found in the central part of the state around the city of Springfield and in the southeastern part of the state along the Galatia Channel. Recent and historical mining of the coal has been concentrated in these areas and in shallow surface minable deposits west of the Illinois River. The coal is thin or absent in the southwestern and extreme northern portions of the coal field. (Modified from ISGS Pub. IM 118, Treworgy, et al)

Fig. 4

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 Springfield Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 118, 43 p.*

Coal Elevation

- Detailed So. Illinois Fault
- 800 to 900 ft
- 700 to 800 ft
- 600 to 700 ft
- 500 to 600 ft
- 400 to 500 ft
- 300 to 400 ft
- 200 to 300 ft
- 100 to 200 ft
- 0 to 100 ft
- -100 to 0 ft
- -200 to -100 ft
- -300 to -200 ft
- -400 to -300 ft
- -500 to -400 ft
- -600 to -500 ft
- -700 to -600 ft
- -800 to -700 ft
- -900 to -800 ft
- < -900 ft

Coal elevation data point •

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 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. Data included in this map are suitable for use at a scale of 1:100,000.

Disclaimer

The Illinois State Geological Survey and the University of Illinois make no guarantee, expressed or implied, regarding the correctness of the interpretations presented in this data set and accept no liability for the consequences of decisions made by others on the basis of the information presented here.