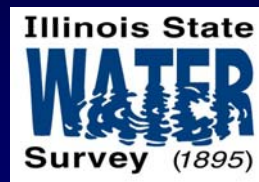


Mahomet Aquifer Modeling Update

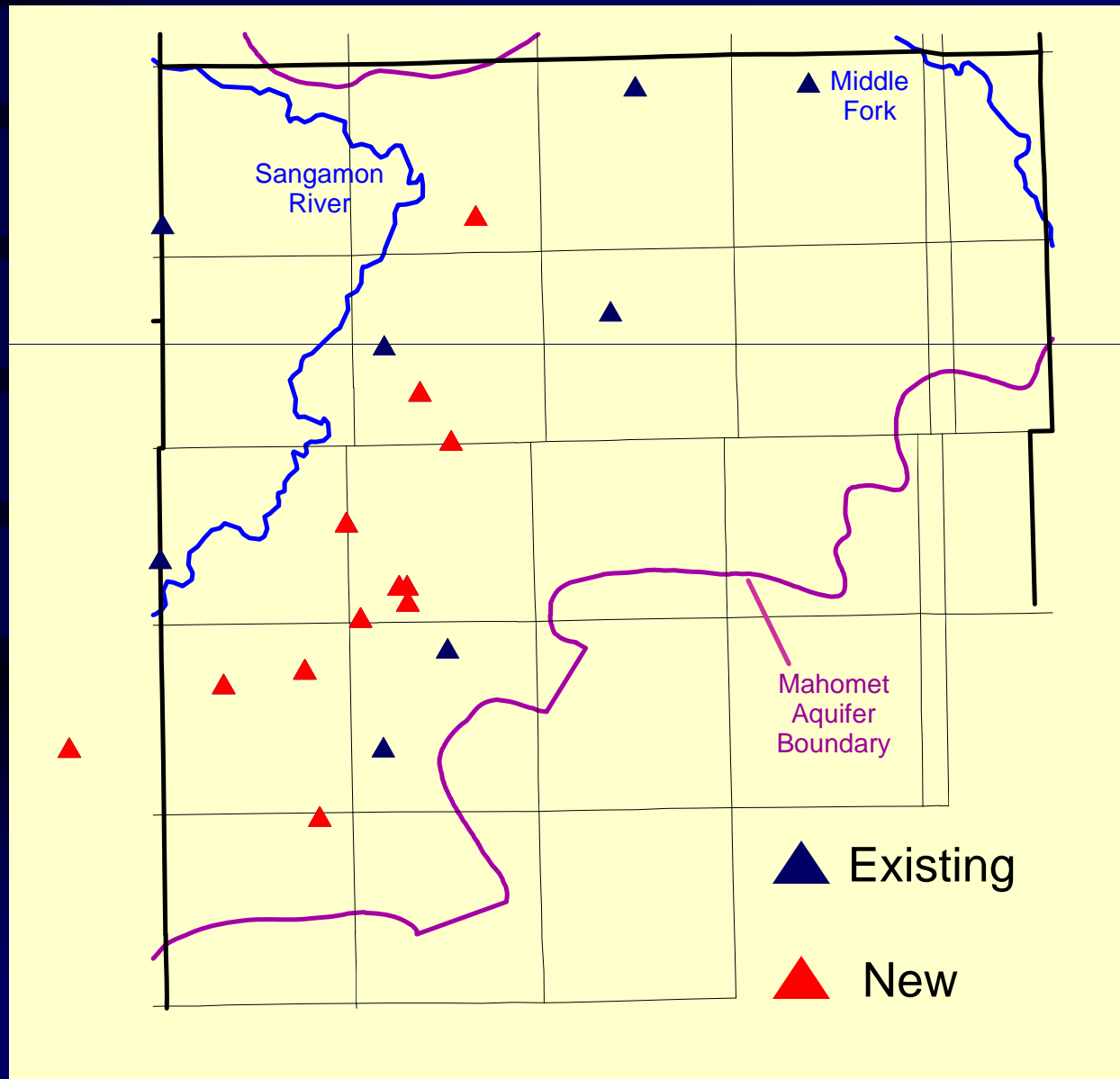
November 30, 2007

H. Allen Wehrmann
George S. Roadcap
Illinois State Water Survey

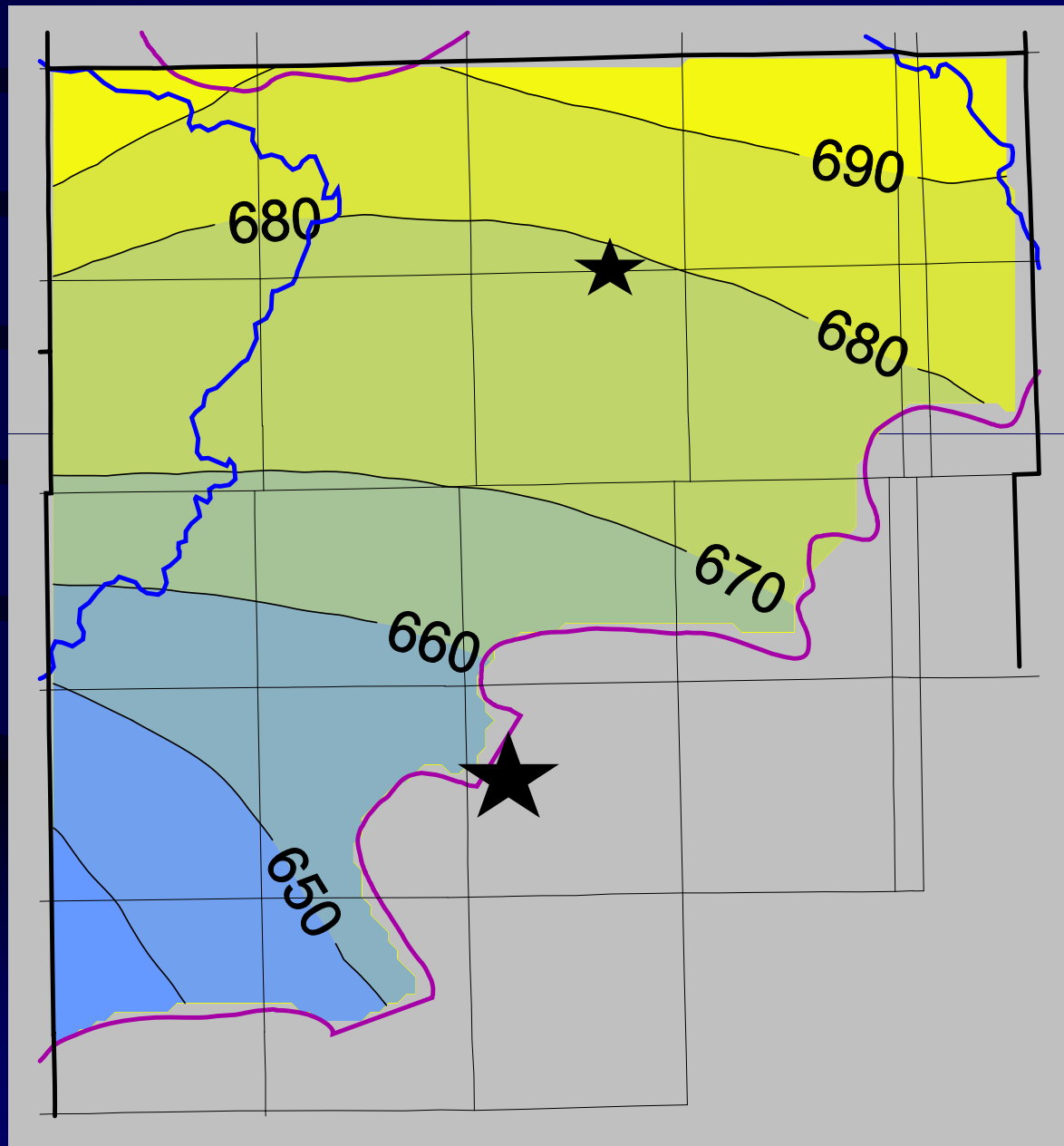
Bill Dey
Illinois State Geological Survey



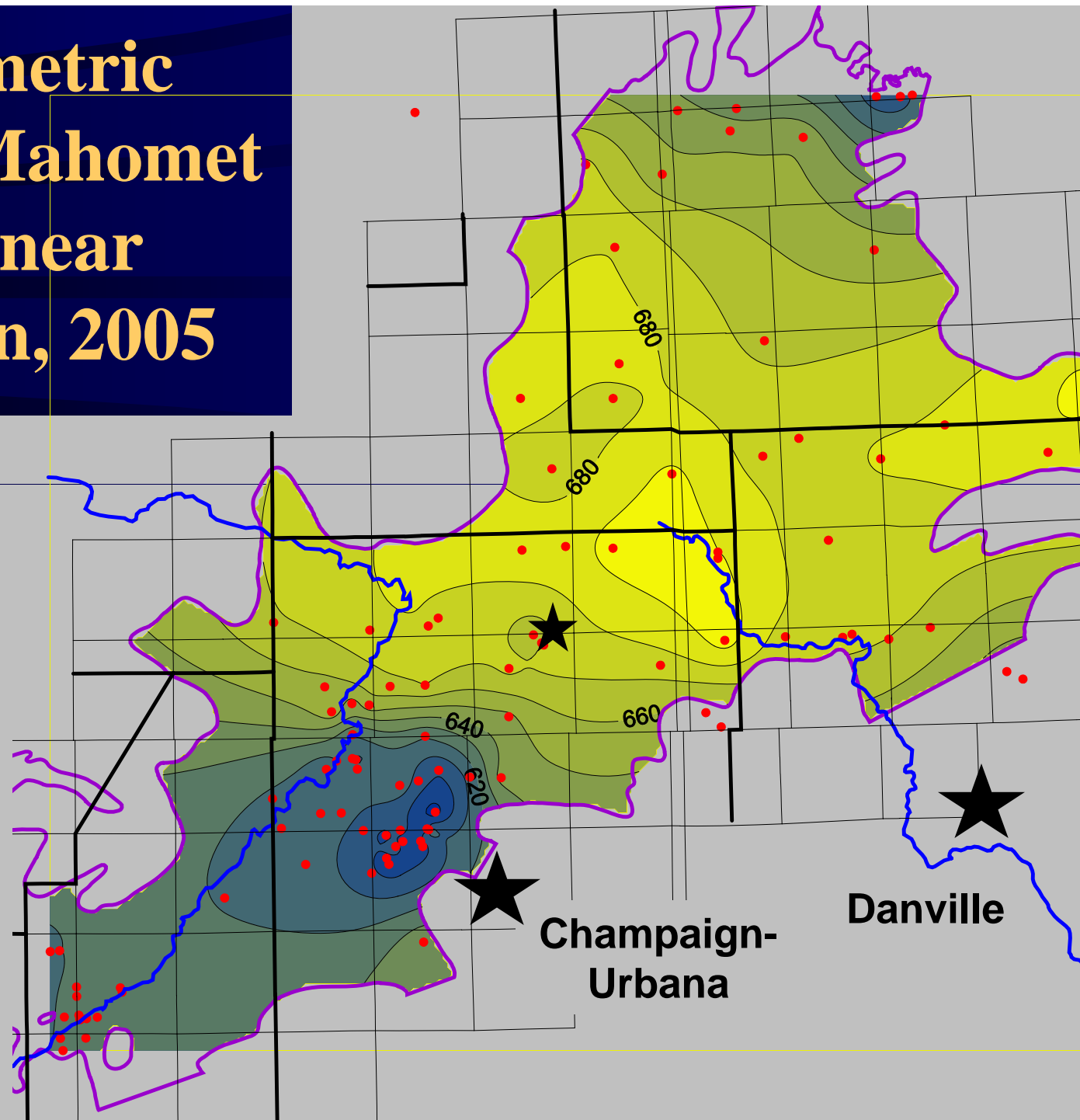
Observation Wells near Champaign



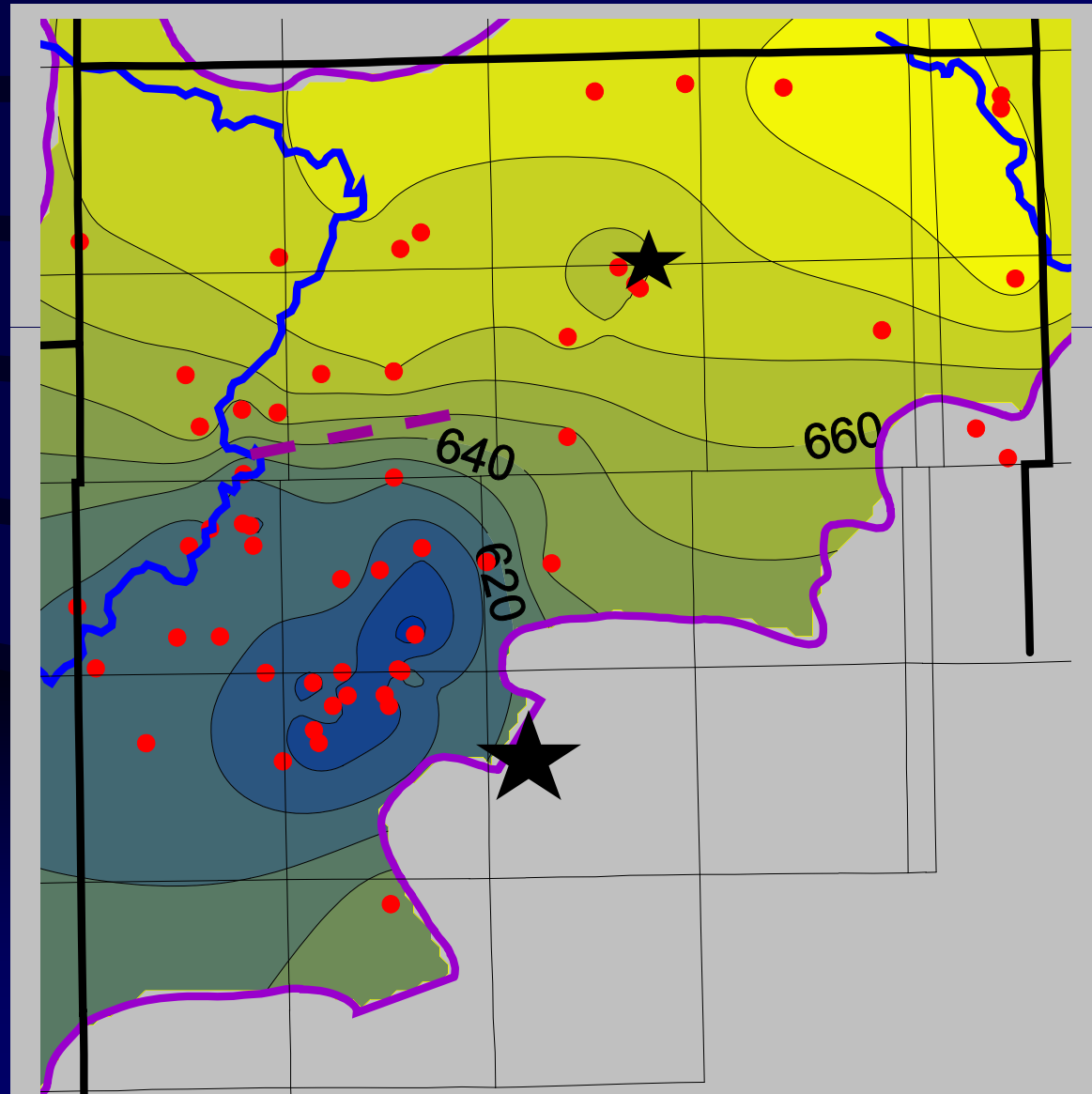
Mahomet Aquifer 1890-1940 (1920s)



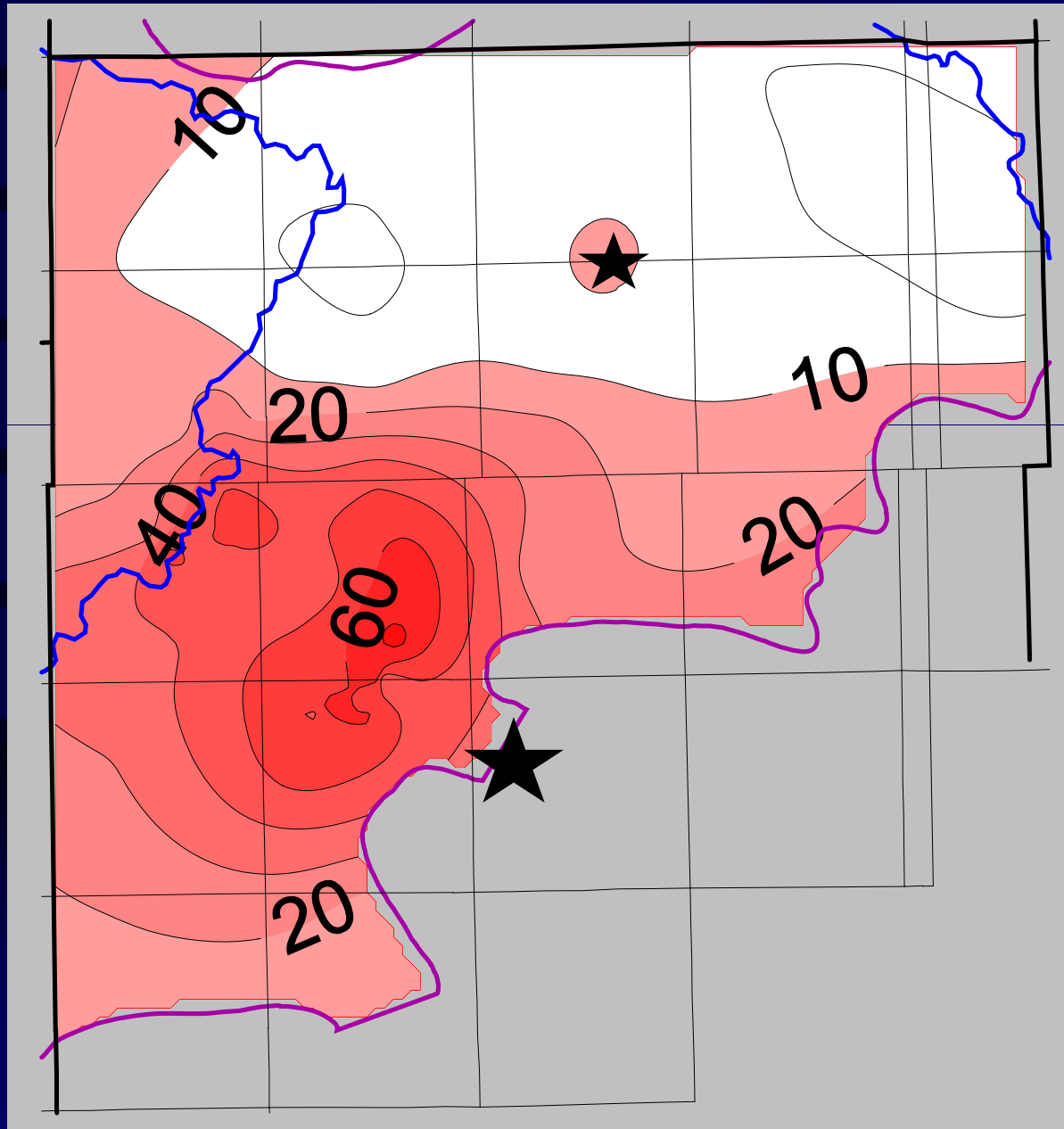
Potentiometric Surface of Mahomet Aquifer near Champaign, 2005



Potentiometric Surface of Mahomet Aquifer Near Champaign, 2005

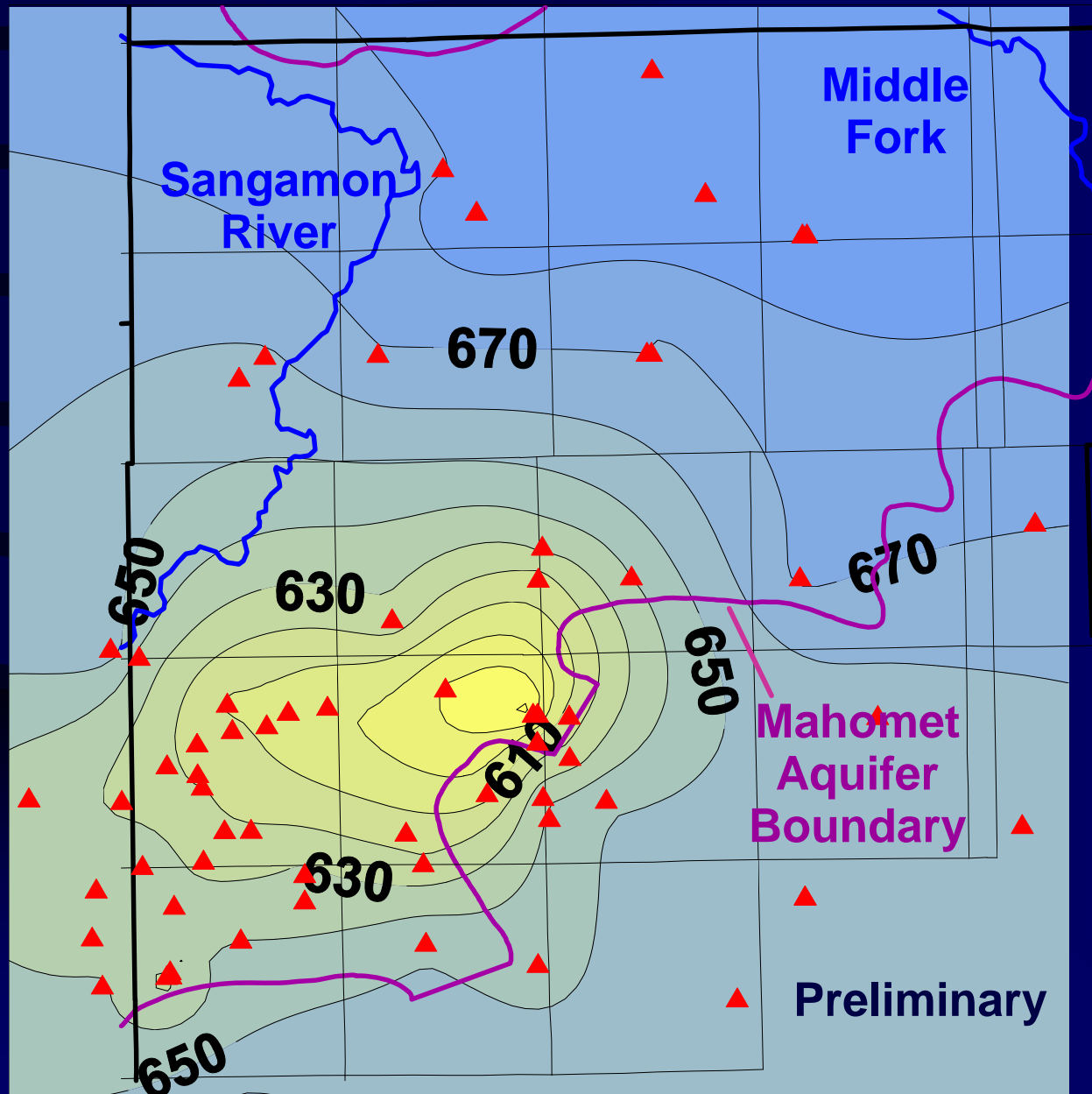


Drawdown near Champaign: 1920s - 2005

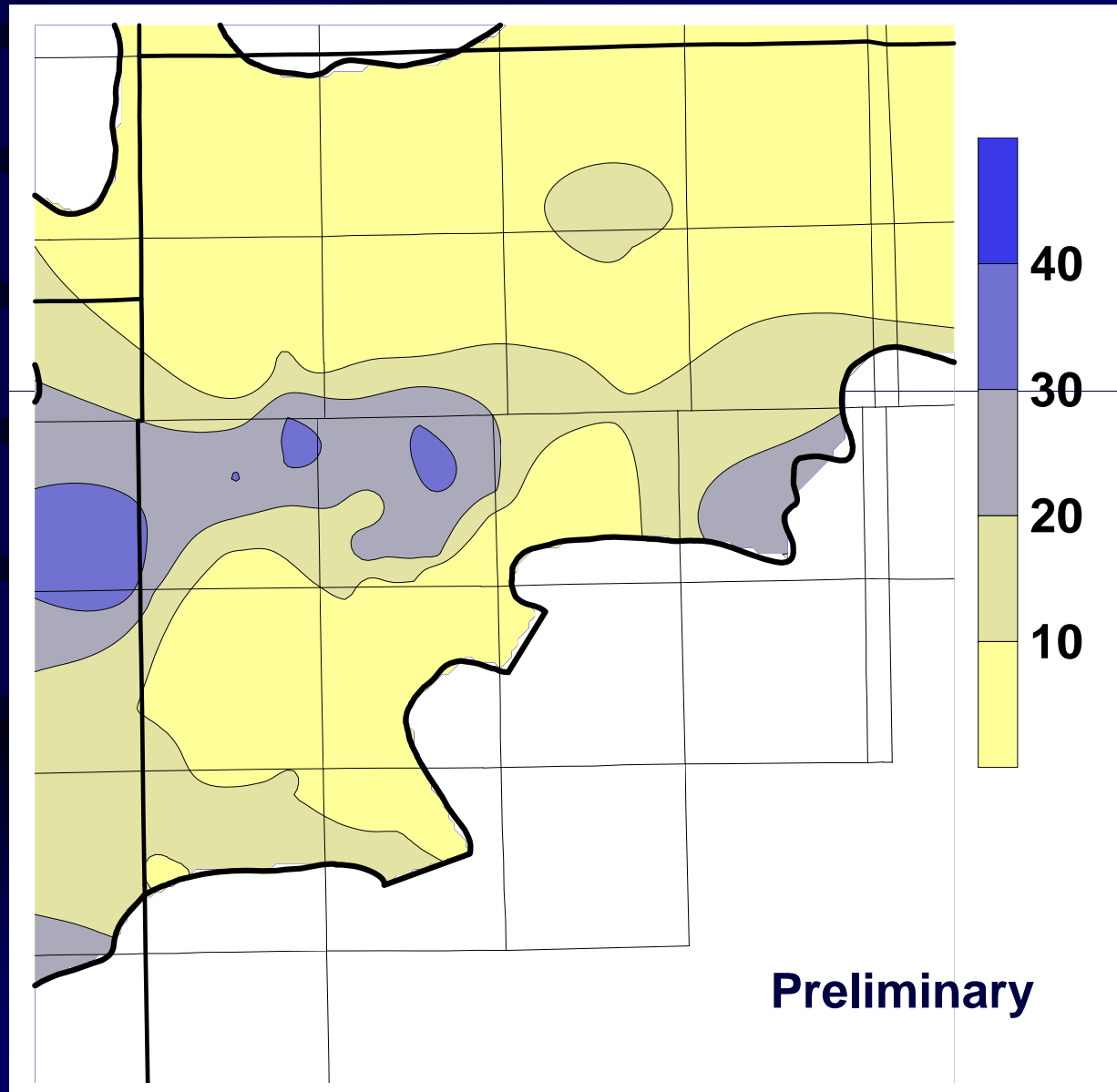


Potentiometric Surface of the Glasford Aquifer

2007



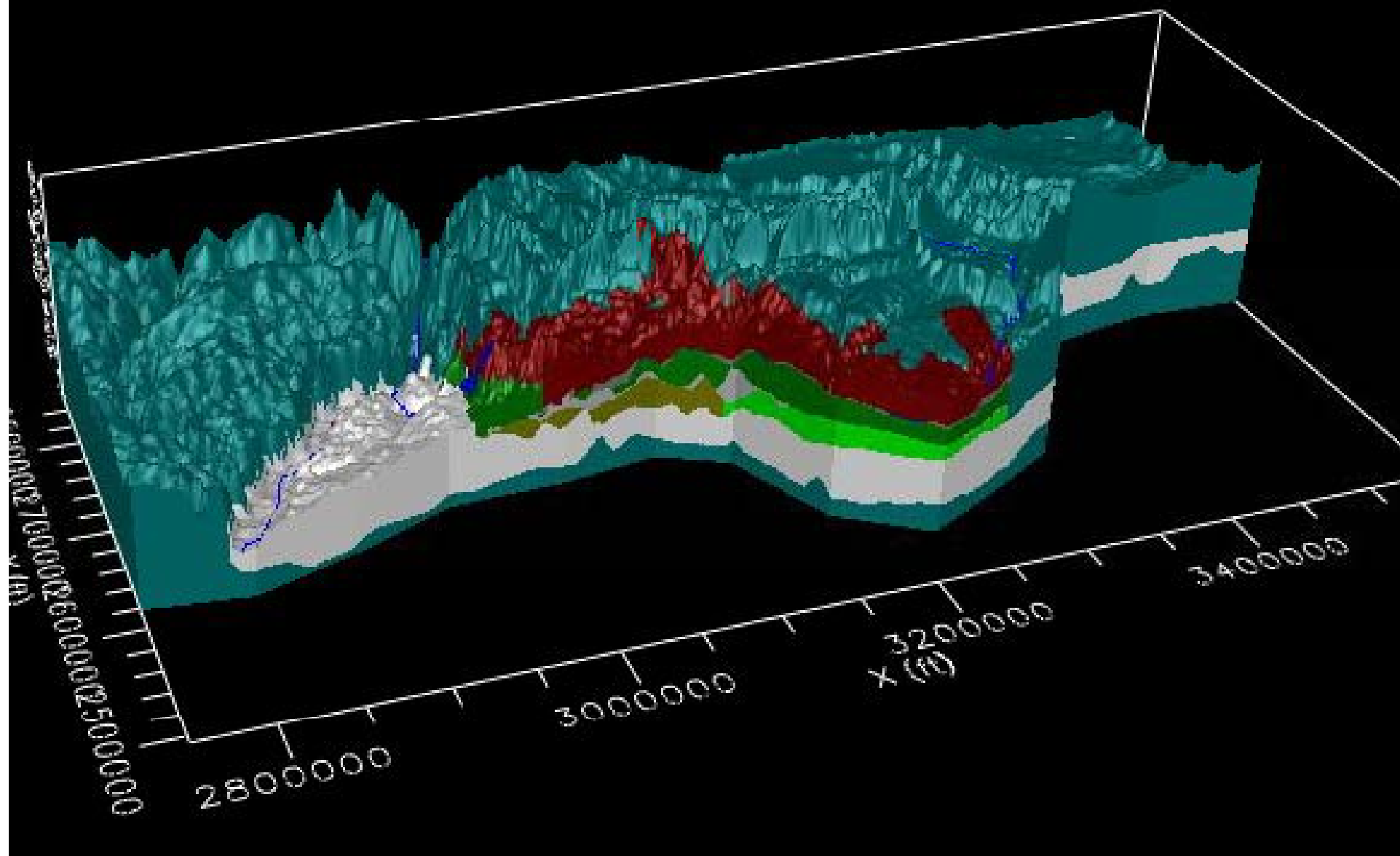
Glasford – Mahomet Head Difference





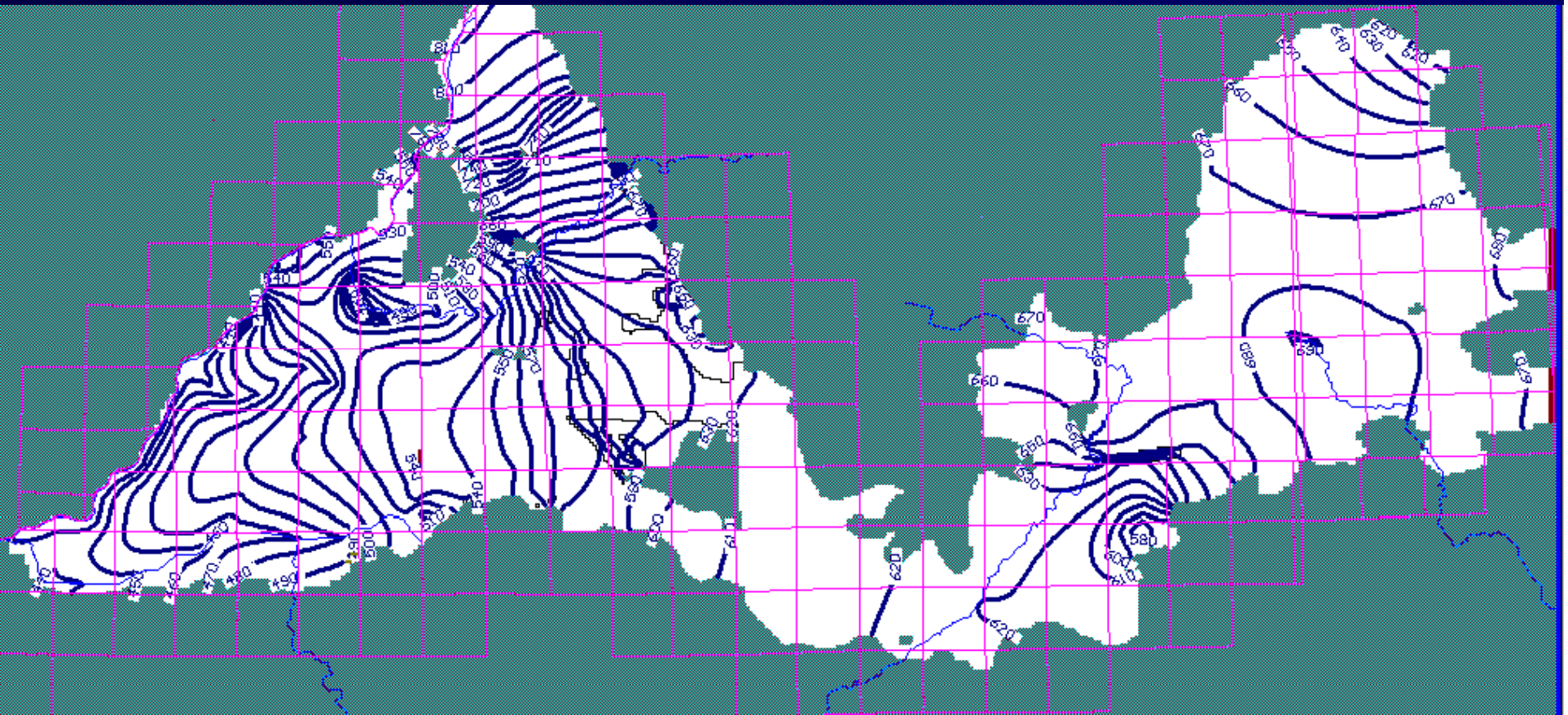
Model Vertical Slice along the Thalweg

(lacking 3D detail on eastern end)

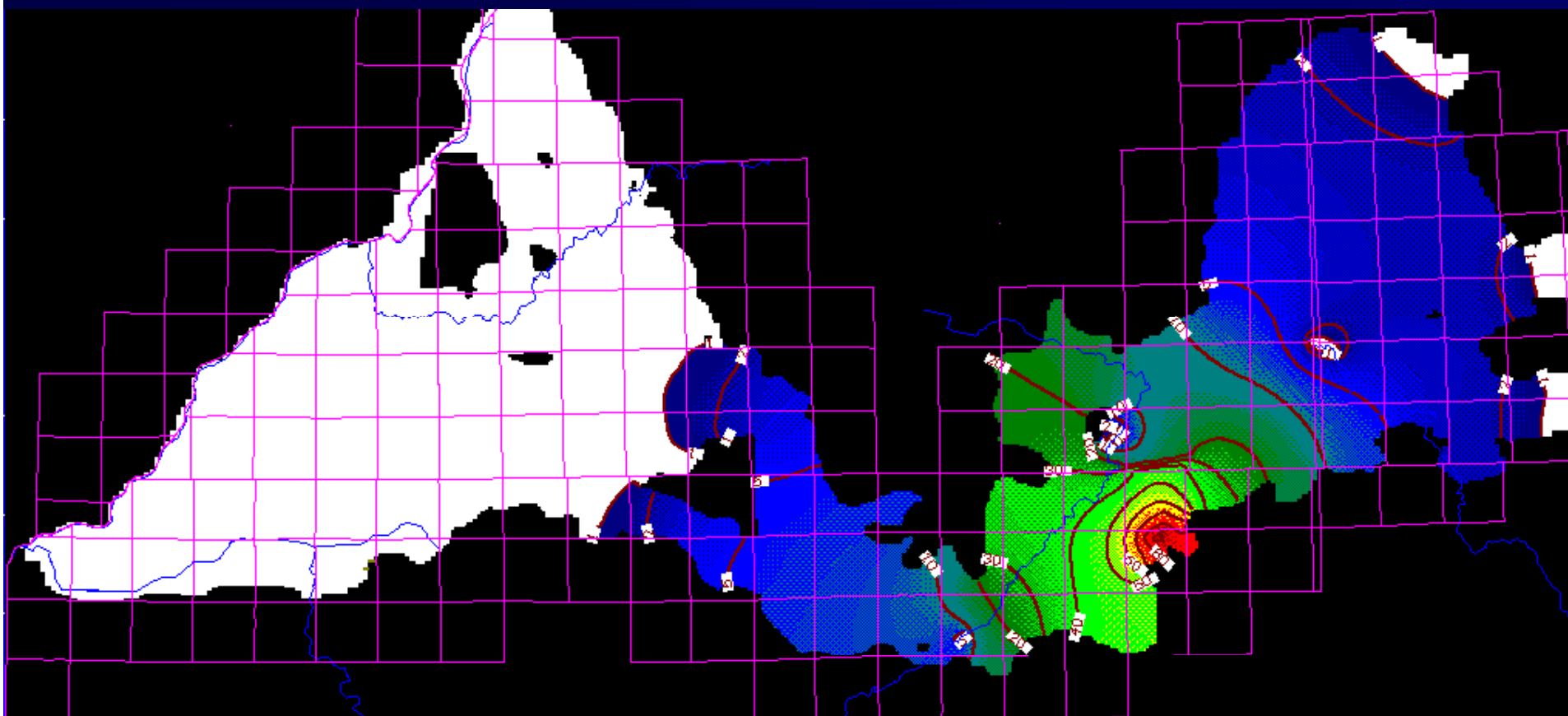


Predicted Heads from the Regional Groundwater Flow Model

(preliminary results)

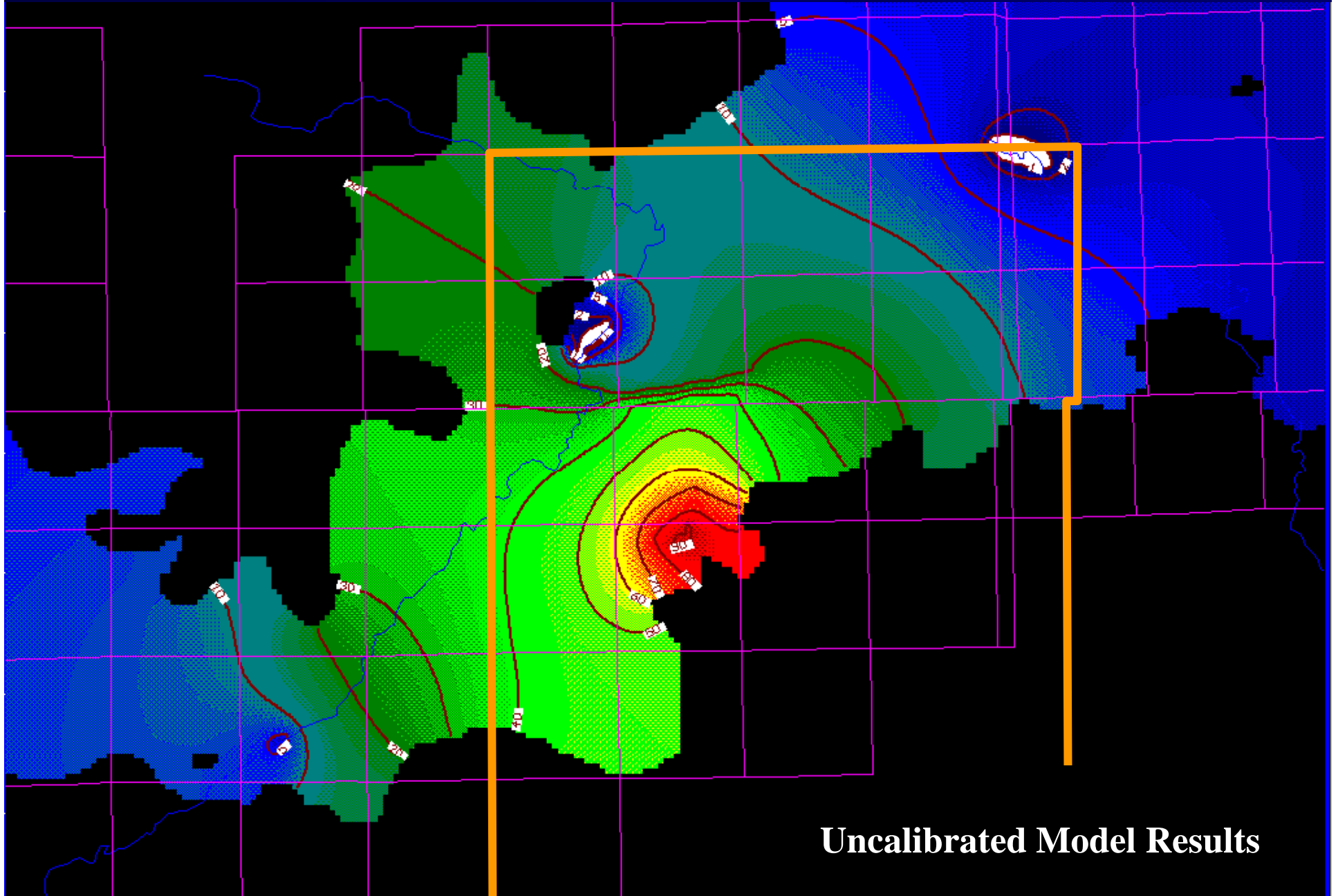


Predicted Drawdown from Illinois-American Wellfield, 2005

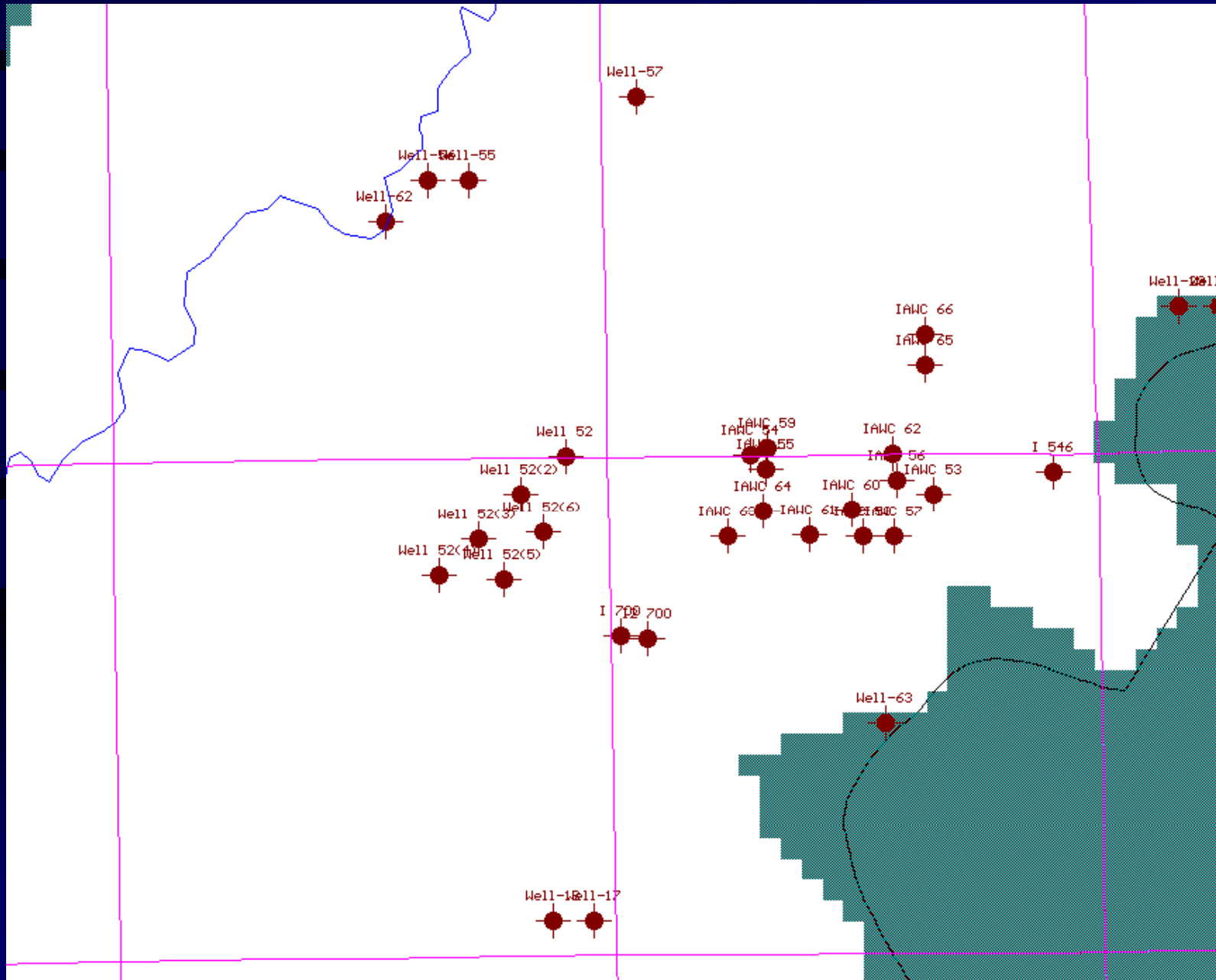


Uncalibrated Model Results

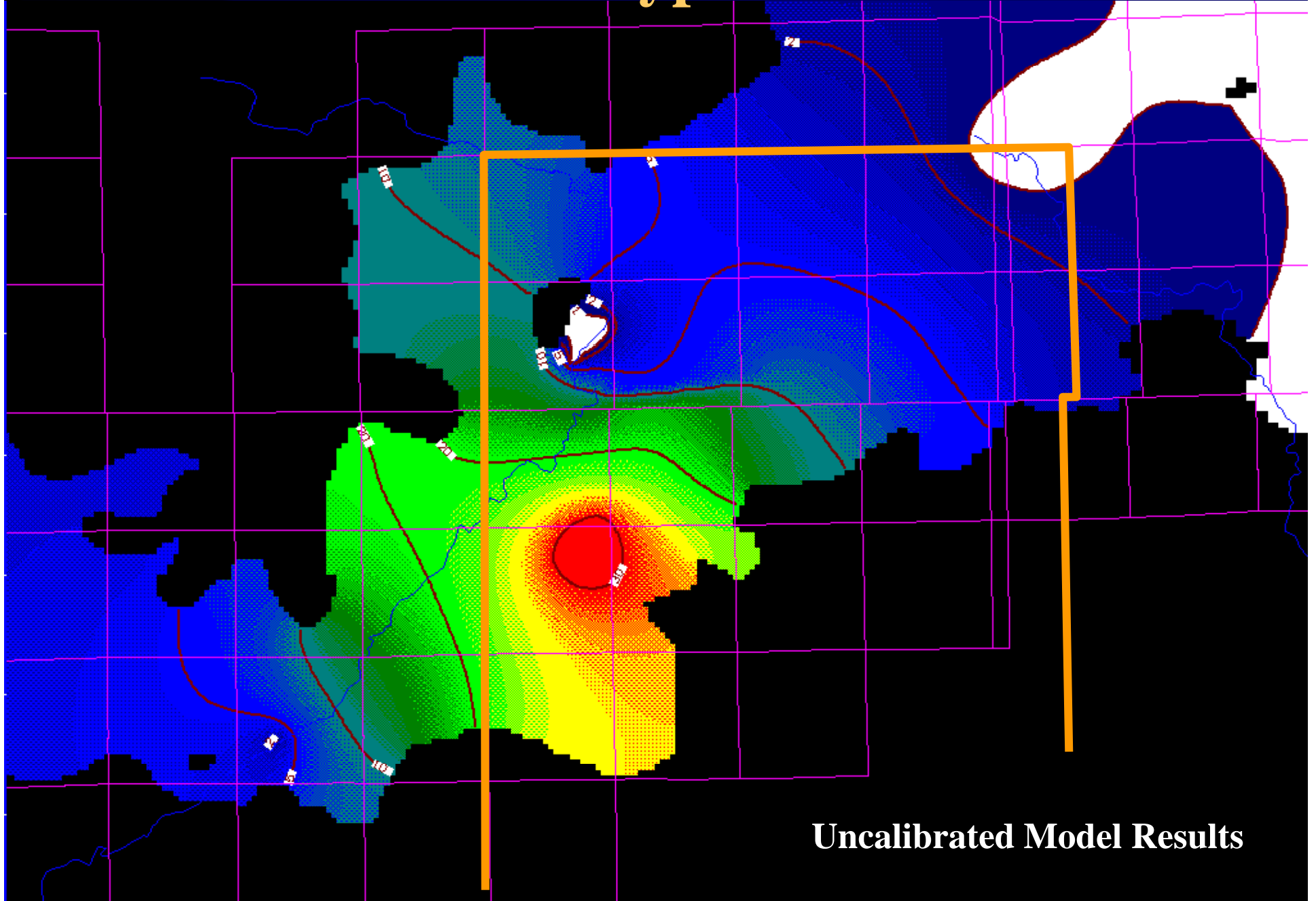
Predicted Drawdown from IL-AM Wellfield, 2005



Hypothetical Wellfield – 6 wells, 10 MGD

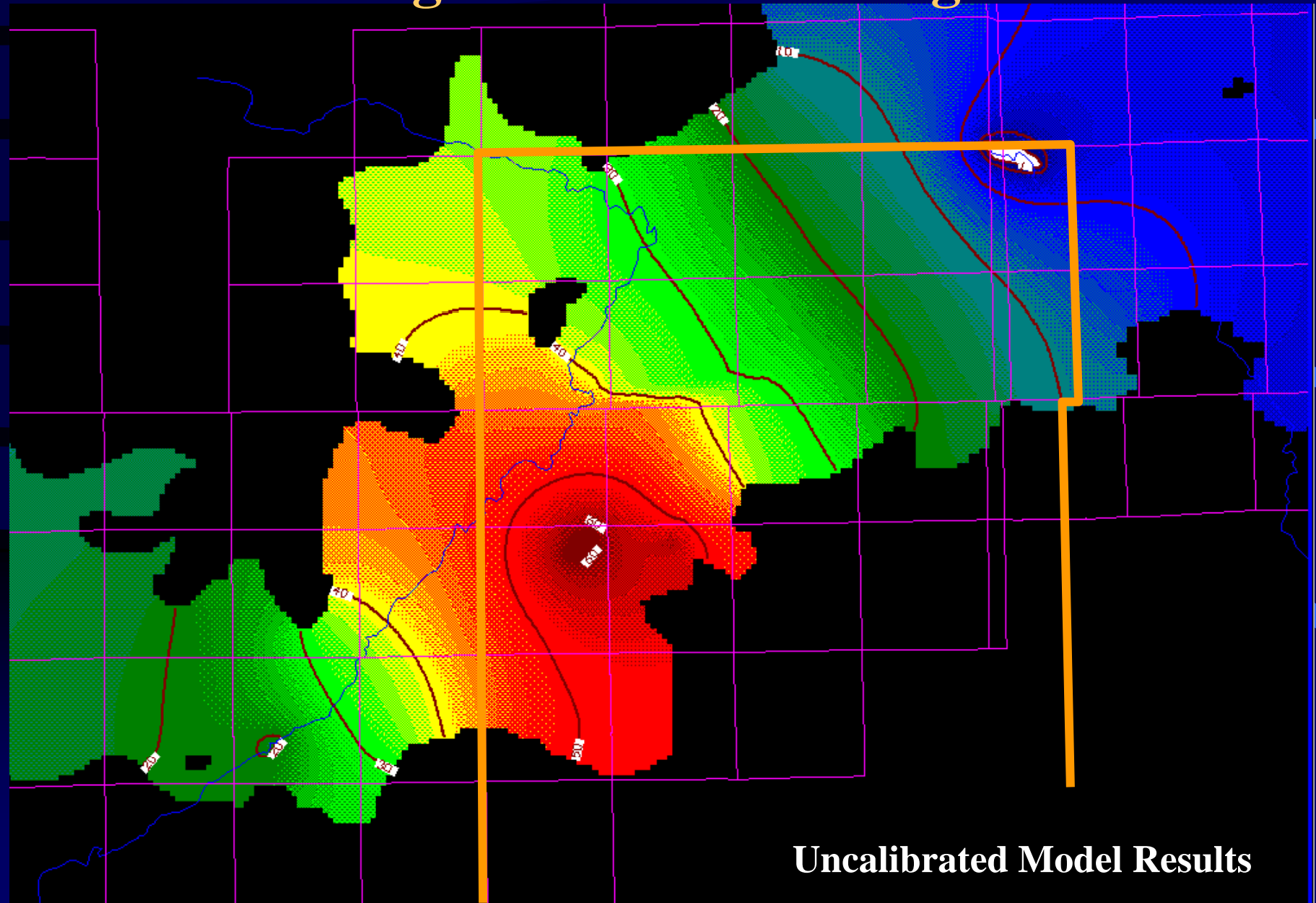


Drawdown from Hypothetical Wellfield



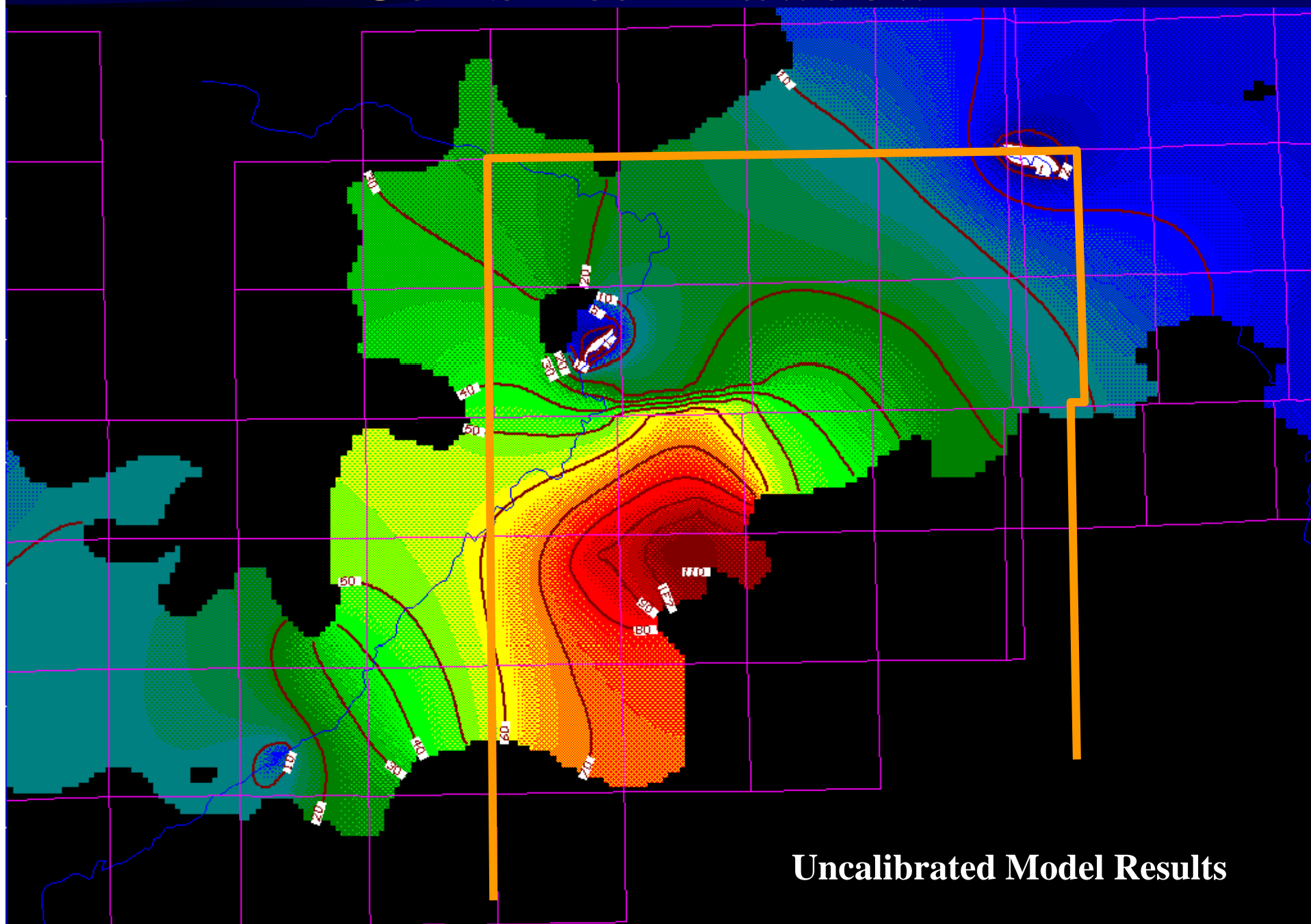
Uncalibrated Model Results

Hypothetical Wellfield Drawdown with Limited Sangamon River Leakage



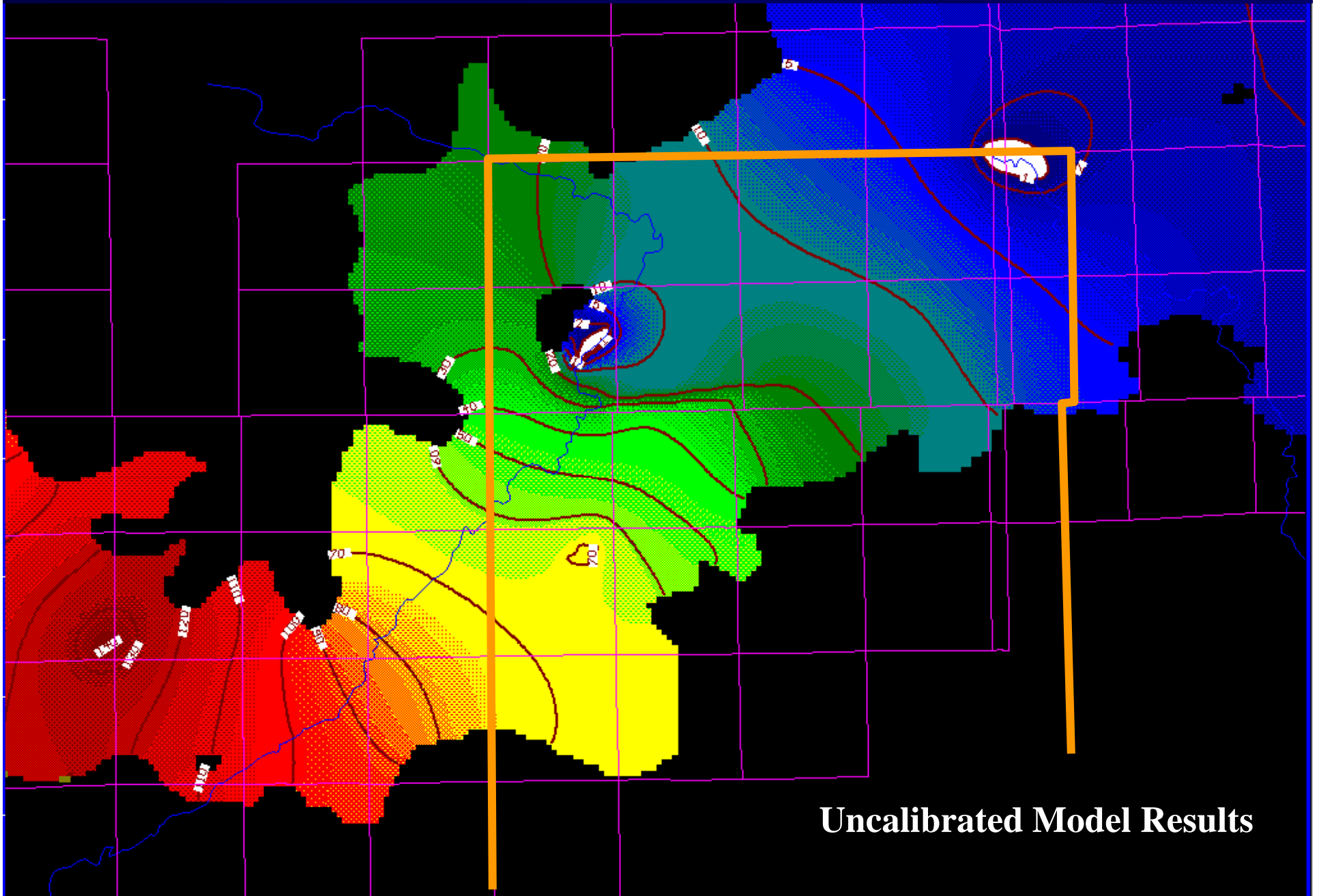
Uncalibrated Model Results

Combined Drawdown



Uncalibrated Model Results

Hypothetical Wellfield with 15 MGD at Decatur



Uncalibrated Model Results