

## 2013 ANNUAL PUBLIC LUNCHEON AND EMERGENCY PLAN DISCUSSION

Hosted by the Winnebago County Local Emergency Planning Committee

Friday September 27, 2013

Forest Hills Country Club

5135 Forest Hills Road, Loves Park, IL

## Doors Open at 11:00 a.m.

Registration for the Luncheon MUST be received at the LEPC offices by September 20, 2013.

Cost of the Luncheon is \$20.00 per person. Please include the name of those attending with the payment. Checks should be made payable to 'Winnebago County LEPC'

For more information, call 815-319-6215

## **Guest Speaker**

Dr. Richard C. Berg Chief Scientist, Office of the Director Illinois State Geological Survey

**Topic:** Glaciations and Glacial Deposits in Winnebago County, Illinois, and Implications for Land Use

## **Synopsis**

Repeated glaciations across Winnebago County Illinois from ~180,000 to 125,000 years ago, and effects from the last glaciation from ~25,000 to 15,000 years ago, have left a legacy of till, sand and gravel, and silt and clay sediments that have been deposited on top of the Ordovician bedrock in thicknesses ranging from <20 feet to >300 feet. The thin drift areas over fractured bedrock, coupled with the widespread distribution of sand and gravel at land surface and at shallow depths are primarily responsible for the high sensitivity of the county's aquifers to become potentially contaminated by various landuse activities. To best understand the problems and provide the county with tools to address their land- and water-use issues, ISGS geologists conducted a county-wide and comprehensive three-dimensional geological mapping program in Winnebago and Boone Counties. It was the first such program in Illinois (and in the U.S. for that matter). Detailed geological maps and numerous interpretive maps were produced, as well as an economic assessment of the value of the program. Although the initial work was conducted in the 1980s, conclusions and interpretations are still relevant. However, the county could benefit from modern computer mapping and database development similar to what the ISGS recently has done in Lake and McHenry Counties.