2006 Water Resources Planning

Executive Order 1 (2006)

WHEREAS, the citizens of Illinois rely on surface water and groundwater for personal consumption, and industries of the State use a significant amount of that water for economic development; and

WHEREAS, the increasing demands on Illinois’ water resources and the impacts of drought may lead to conflicts between the multiple water supply users and may adversely affect the health of the State’s citizens as well as adversely impacting the environment and the economy; and

WHEREAS, the quantity of surface water and groundwater in Illinois must be properly assessed through a sound planning process as an essential part of any responsible, economically viable and secure water supply development for the citizens of the State; and

WHEREAS, the Illinois Interagency Coordinating Committee on Groundwater, the Illinois State Water Survey, and the Illinois State Water Plan Task Force have identified the Priority Water Quantity Planning Areas that are most at risk for water shortages and conflicts; and

WHEREAS, the Illinois Integrated Water Quantity Planning and Management Committee recommends the development of regional aquifer and watershed plans for managing water supplies;

THEREFORE, BE IT ORDERED that the following actions shall be executed:

Consistent with the authority granted to the Department of Natural Resources under the Rivers, Lakes, and Streams Act, 615 ILCS 5/5 et seq., and the Level of Lake Michigan Act, 615 ILCS 50/1 et seq., the authority of the Department of Natural Resources’ Office of Water Resources under 20 ILCS 801/5-5, the Office of Water Resources, in coordination with the State Water Survey, shall:

1. Define a comprehensive program for state and regional water supply planning and management and develop a strategic plan for its implementation consistent with existing laws, regulations and property rights,
2. Provide for public review of the draft strategic plan for a water supply planning and management program;
3. Establish a scientific basis and an administrative framework for implementing state and regional water supply planning and management;
4. Develop a package of financial and technical support for, and encouragement of, locally based regional water supply planning committees. These committees, whether existing or new entities, shall be organized for participation in the development and approval of regional plans in the Priority Water Quantity Planning Areas;
5. By December 31, 2006, ensure that Regional Water Quantity Plans are in process for at least two Priority Water Quantity Planning Areas.

EFFECTIVE DATE

This Executive Order shall be in full force and effect upon its filing with the Secretary of State.

Rod R. Blagojevich, Governor
Issued by Governor: January 9, 2006
Filed with Secretary of State: January 9, 2006

Two priority water-supply planning areas
Mahomet Aquifer Counties:

- Cass
- Champaign
- DeWitt
- Ford
- Iroquois
- Logan
- Macon
- Mason
- McLean
- Menard
- Piatt
- Sangamon
- Tazewell
- Vermilion
- Woodford
• RWPSC releases major reports
  • 2008: Water demand study
  • 2009: Water supply plan
  • 2015: 5-year update of both reports

Source: www.RWSPC.org
www.MahometAquiferConsortium.org
Bloomington, Decatur and Springfield urgently need additional sources of water and/or need to reduce water demand to be able to provide adequate supplies of water during a drought-of-record, which can recur at any time.
Lake Decatur

- Constructed in 1920-22, cost $2 million
- Spillway elevation set at 610 ft MSL, raised to 615 ft in 1956
- Watershed= 925 sq. miles or 593,400 acres
- Average annual flow at Monticello= 406 cfs or 260 million gallons per day or 26% of the average precipitation in the basin

Source: ISWS CR2008-04 & RI 107
Lake Decatur

- Subject to drought
Lake Decatur

- Concerned about sedimentation in 1920s
- 1936: lost 10% storage capacity
- 1983: lost 33% storage capacity
- Dredging began Oct 2014, cost= $91M, restore 30% of storage or 52 days

Source: Herald & Review archives & J. Stevens, City of Decatur
Water Emergency Preparedness

Champaign County RPC developed 2 model water emergency ordinances in 2013.

RWSPC provided copies to every municipality and water authority in the 15 county region.

No one has adopted them.
Water Law: Sole Source Aquifer
Mahomet Aquifer model

Estimate effects of withdrawals

bedrock

Sand & gravel

Bedrock + sand & gravel

Bedrock + sand & gravel + till
Groundwater Flow Modeling
Want more information?

www.RWSPC.org
www.MahometAquiferConsortium.org
www.isws.Illinois.edu
www.isgs.Illinois.edu