



State and Regional Water-Supply Planning in Illinois

Ensuring adequate and reliable supplies of clean water at reasonable cost for all users

A coordinated, statewide approach to regional water-supply planning

The **need** for water-supply planning

Almost 16 billion gallons of water are used in Illinois each day in industries, agriculture, domestic consumption, commerce, and energy production, with over 2 billion gallons daily withdrawn and not returned to the source. Individuals consume an average of about 150 gallons of water each day from public water supplies.

Due to projected growth of the population and economy, Illinois could require 20 to 50 percent more water in coming decades. We also need to sustain healthy populations of fish and aquatic wildlife and wetlands, and to support recreation and navigation in rivers, streams, lakes, and reservoirs. Ensuring adequate and reliable supplies of clean water for all users at reasonable cost requires us to think ahead to the year 2050. As a state, we need to know how much water will be available, how much water we will need, what the options are for providing additional supplies, reducing demand and what the impacts and costs will be.

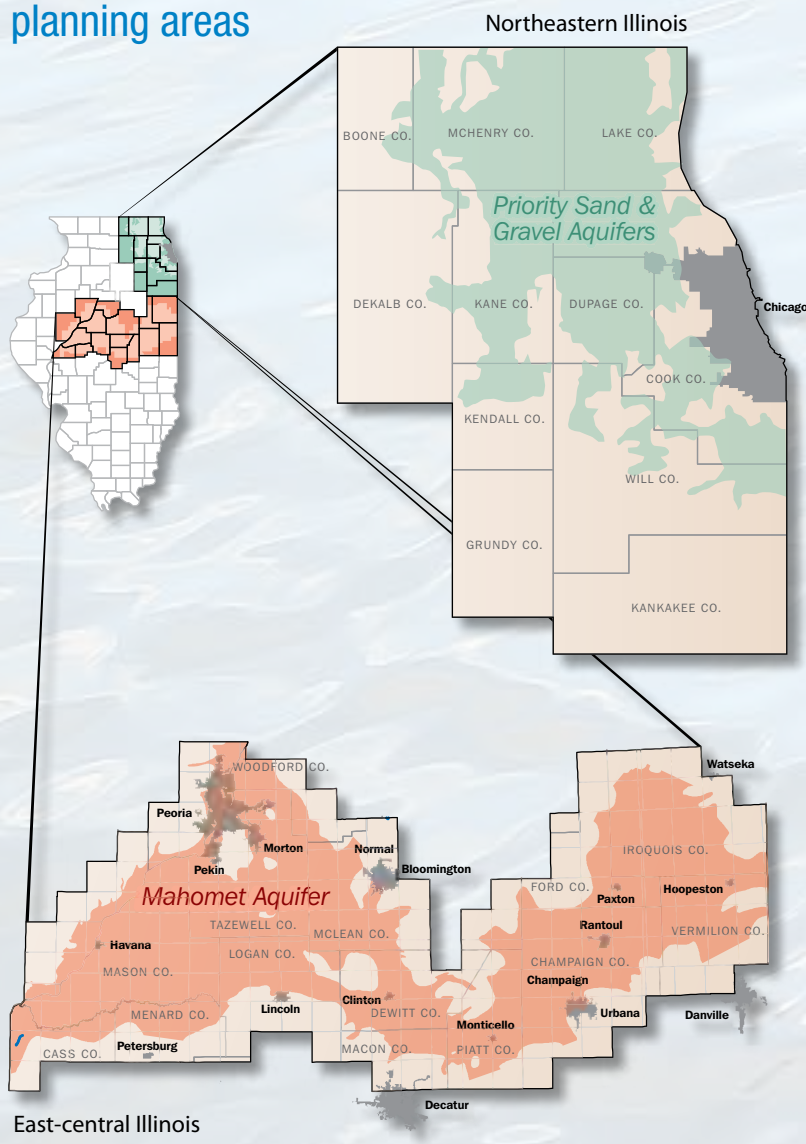
In January 2006, Governor Rod Blagojevich signed Executive Order 2006-01, requiring the Illinois Department of Natural Resources (IDNR) to lead the state and regional water-supply planning activities. Within IDNR, the Office of Water Resources (OWR) is to coordinate with the Illinois State Water Survey (ISWS) to define a comprehensive program for state and regional water-supply planning and management.

To begin that effort, the State has selected two areas for priority pilot studies. A northeastern Illinois regional water-supply planning group will focus on the deep bedrock aquifer that underlies all of northeastern Illinois and all the water resources within and beneath the Fox River basin, and surface waters in that region. Activities of these committees will be coordinated at the state level, with facilitation at the regional level by Chicago Metropolitan Agency for Planning (CMAP) in northeastern Illinois and the Mahomet Aquifer Consortium (MAC) in east-central Illinois. CMAP and MAC will form their respective regional planning groups, each of which will address groundwater, surface water, and climate variability and change.





Two priority water-supply planning areas



Water-supply planning in Illinois: present and future

Currently, water-supply plans are produced by municipalities and other water suppliers to serve local interests. With some exceptions, there is little regional coordination, and the planning horizon is usually limited to 20 or perhaps 25 years. Watersheds (for surface water supplies) and aquifers (for groundwater supplies) do not conform to political boundaries. To date, the lack of cooperation across counties or municipalities has represented a serious limitation of water-supply planning in Illinois.

The advent of regional water-supply planning will improve communication, coordination, and decision making. It will also instill a shared sense of responsibility for the long-term sustainability of water supplies. Lessons learned from the two pilot studies will lead to effective planning processes in other regions of Illinois. Eventually, each region should institute its own process that would be coordinated with others in a state-led effort to set common guidelines and ensure complete coverage. Ultimately, a statewide plan will be produced as a compendium of the regionally-led planning initiatives.

By June 2009, scientific information and mathematical computer models will be developed for these two priority areas, and management options will be evaluated on the basis of projected water-supply and demand. The information will be available via the Internet and in printed form. The regional groups — working with the Illinois State Water Survey, the Illinois State Geological Survey and Illinois Department of Natural Resources (Office of Water Resources) — will conduct extensive education and outreach activities regarding the benefits of regional water-supply planning and the progress being made.

Ensuring adequate, reliable supplies of clean water at reasonable cost for all users

Improved water-supply planning will reduce conflicts, increase preparedness for droughts and possible climate change, lead to joint considerations of surface waters and groundwater, increase awareness of water as a precious commodity, and increase cooperation among analysts and decision makers. Meeting the goal of providing adequate supplies of clean water at reasonable cost will enhance economic development, environmental protection, and public health. Water-supply planning provides a solid foundation for wise resource management and sustainable development.

For more information

Partners in the water-supply pilot studies include the Illinois Department of Natural Resources (Office of Water Resources), the Illinois State Water Survey, the Illinois State Geological Survey, the Chicago Metropolitan Agency for Planning, and the Mahomet Aquifer Consortium. For additional information, contact:

Derek Winstanley, Chief, Illinois State Water Survey
(217) 244-5459, email dwinstan@uiuc.edu, web www.sws.uiuc.edu

Don Keefer, Illinois State Geological Survey
(217) 244-2786, email dkeefer@geoserv.isgs.uiuc.edu, web www.isgs.uiuc.edu

Gary Clark, Director, Office of Water Resources, IDNR
(217) 785-3334, email gary.clark@illinois.gov

Melvin Pleines, Chairman, Mahomet Aquifer Consortium
(309) 392-2719, fax (309) 392-2520, P.O. Box 123, Minier, IL 61759
web www.mahometaquiferconsortium.org

Tim Loftus, Project Manager, Chicago Metropolitan Agency for Planning
(312) 386-8666, email tloftus@chicagoareaplanning.org
web www.chicagoareaplanning.org