

Water Supply Planning in Illinois: Current Status and Future Outlook

- Governor Blagojevich issued Executive Order 2006-01 on January 9, 2006 that initiated a program for comprehensive state and regional water supply planning and management.
- The vision for this initiative followed a program instituted in Texas that created locally-based water supply planning regions covering the whole state. To initiate the effort in Illinois, two regions were selected as pilot study areas, an 11-county area in northeastern Illinois (the greater Chicago metropolitan area) and a 15-county area in east-central Illinois (overlying the Mahomet aquifer and surface watersheds supplying Springfield and Decatur). Selection of the two areas was based on the potential for regional population and economic growth, the likely need for additional water, and the concomitant impact on water supply resources. Based on the outcomes from these two regions, additional water supply planning areas were envisaged, starting in FY2010.
- Each region created a stakeholder planning committee to represent the diverse views of local government, industry, agriculture, environment, and the public; each planning committee has been meeting monthly since early 2007.
- The initial charge to each committee was to produce an outlook report on regional water demand needs to the year 2050. Those reports have been completed; they outline possible water demand futures, based on plausible assumptions on a number of factors that affect water use, such as population growth, employment, income, water price, water conservation, and climate change. Those reports are available on-line at: <http://www.isws.illinois.edu/wsp/waterdemand.asp>
- The water demand reports provide details on three water demand scenarios (low resource intensive, current trends, and more resource intensive) for 5 major water-use sectors: public water supply, industrial/commercial, power generation, irrigation/agriculture, and self-supplied domestic.
- In northeast Illinois, for example, public water supply demand – the largest water using sector – could plausibly grow from 2.4% to 54% by 2050, from a current 1.2 billion gallons per day (bgd) to as much as 1.8 bgd. Similarly, for east-central Illinois, public supply demands could plausibly grow from 13% to 35%, from a current 137 million gallons per day (mgd) to as much as 185 mgd. Where will this additional water come from and what will be the impact of removing this additional amount of water from its natural environment?
- The Illinois State Geological Survey and the Illinois State Water Survey (the Surveys) were designated as scientific/technical advisors to the regional planning committees. The Surveys were tasked with assembling geologic and hydrologic data and models to be used to assess the impact of the future demand scenarios on available water resources.
- A 3-year budget, managed through the IDNR Office of Water Resources, was to provide \$1.5M to the regional committees and \$3.24M to the Surveys for geologic & hydrologic studies to support the committees. Funding started in July 2006.
- Local funding of the regional planning committees is being handled through the Chicago Metropolitan Agency for Planning (CMAP) for northeast Illinois and the Mahomet Aquifer Consortium (MAC) for east-central Illinois.

- Formed in 2005, CMAP integrates planning for land use and transportation in the seven counties of northeastern Illinois. The new organization combined the region's two previously separate transportation and land-use planning organizations -- Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC) -- into a single agency. More information on CMAP and the northeast Illinois Regional Water Supply Planning Group can be found at www.cmap.illinois.gov
- The MAC was formed in 1998 as a grass-roots organization “*to further study the Mahomet aquifer on a regional basis and to develop a plan for the management of this valuable resource.*” More information on the MAC and the east-central Illinois Regional Water Supply Planning Committee can be found at www.mahometaquiferconsortium.org
- Year 3 funding (July 2008 – July 2009) of the water supply planning initiative was cut from the state budget; \$530,000 for the regional planning committees and \$1.53M for the Surveys. Unfortunately, the budget cut occurred just at the time when the future water demand scenarios were to be melded with the Surveys’ models to examine future water demand impacts on water resources.
- However, both planning committees are continuing to meet and the Surveys are maintaining their support role (principally through expenditure of internal Survey funds and \$100,000 in stop-gap funding raised primarily through efforts of the northeast region).
- Due to the budget cuts, collection of new geologic and hydrologic data for this effort has been suspended. Most importantly, the continued collection of statewide water withdrawal data under the auspices of the ISWS Illinois Water Inventory Program (IWIP) has been jeopardized. Historical water withdrawal data, collected and maintained by IWIP, formed the basis for the two pilot regional water demand scenarios and would be the basis, if it remains a viable program, for formulating future water demands for any possible additional areas selected for water supply planning.
- A second, “final” report from each region is to be completed by July 2009. These reports are expected to summarize the findings of the demand/supply reports and provide recommendations for regional and statewide water supply planning and management to assist in securing adequate and sustainable supplies of fresh water for future generations.
- Education and outreach is needed to allow the public to become more aware of our water future. As already mentioned, expansion of planning areas to include more, and eventually all, of Illinois is needed.
- Continued funding of this water supply planning initiative is critical for implementation of recommendations and expansion of water supply planning regions. The answers to securing Illinois’ water supply future must be allowed to continue to evolve as we learn more about our natural resources, water needs, possible management alternatives, as well as a host of related social, economic, and environmental issues.

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