# **Drought Awareness & Preparedness**

## In a Nutshell

The St. Louis Bi-State region has a plentiful water supply; however, drought awareness and preparation should still be top priorities for people in the region. By managing your water use properly, you ensure more water for others in the region and consquently throughout the Midwest.

## The "How To"

Missouri and Illinois react to droughts in very different fashions. Missouri is a response oriented state, while Illinois is a mitigation based. Our region is in a prime location to work off the strengths of both systems.

From the Illinois side, the "Drought of 2012, A Report of the Governor's Drought Response Task Force" describes in great detail the causes and effects of a drought in 2012. It also offers recommendations on how to mitigate further damage from future droughts. Missouri's Drought Mitigation and Response Plan details the steps that need to be taken to respond to a drought. It gives information about what is needed from the local, state and national levels of government.

The <u>National Integrated Drought Information System (NIDIS)</u> also provides information on best practices and drought related policies.

## Planning & Zoning

The Missouri State Water Plan: Phase 1 includes a summary of Missouri Water Laws. The summary reads: "Legal restrictions on how we manage, use, and protect our water resources serve to balance individual rights with the needs of society. Water law is an integral part of the larger realm of water resources management, affecting public health, public safety, and the economic well-being of the state. Chapters in this report include History and Overview (from the Attorney General's Office), Water Rights, Protection from Water, Water Quality, Water Supply, Water Use, Boundaries and Interstate Waterways, and "other" water law topics. Useful appendices include a glossary of selected legal terms and acronyms and an extensive bibliography. The report deals with statutory law, case law (court decisions), and legal doctrines relative to water supply and use in Missouri."

The <u>Missouri Drought Mitigation and Response Plan</u> lays out how Missouri should handle drought conditions and water supply issues.

<u>The Report of the (Illinois) Governor's Drought Response Task Force</u> concerning the drought of 2012 thouroughly covers the effects that the drought had on Illinois. On page 16 the report covers the policy issues related to the drought and recommendations for policy changes to address future droughts.

The National Resources Defence Council page on drought offers valuable information on how drought affects

water and food security, as well as how various states are addressing the threat of drought through policy, map methods, streamflow and flood data.

In January 2006, Governor Rod Blagojevich signed Executive Order 2006-01, requiring the Illinois Department of Natural Resources (IDNR) to lead state and regional water-supply planning activities. To begin that effort, the State initially selected two areas for priority pilot planning: northeastern Illinois and east-central Illinois, and then added a third area: the Kaskaskia Region.

## **Dollars & Cents**

The <u>Missouri Department of Resources</u> provides resources on both drought information and water supply issues.

The <u>Missouri Drought Mitigation and Response Plan</u> lays out how Missouri should handle drought conditions and water supply issues. Appendix 9 on page 45 lists the various costs associated with a drought.

The <u>Central Midwest Water Science Center</u> from the United States Geological Survey provides information on the multiple negative impacts of drought including: damaged/diminished crop harvests, loss of electricity generation, poor surface water quality, recreational opportunities lost, and transportation problems.

The Report of the (Illinois) Governor's Drought Response Task Force concerning the drought of 2012 thoroughly covers the effects that the drought had on Illinois. On pages 14-15 the report covers the economic toll the drought took on the state and recommendations for how to handle future droughts. Recognizing the importance of adequate water supplies to a vibrant economic future, entities must establish a process for water supply planning. Water management districts may periodically evaluate whether adequate water supplies exist to meet the needs of their areas. If a district finds that the water supply will not be adequate, it could prepare a regional water supply plan, identifying alternative ways in which water supply needs can be met for the next 20 years. Local governments that fall within an area subject to a regional water supply plan could be required to amend their comprehensive plan to adopt a water supply plan covering at least a ten-year period. Safe and reliable water supply is important in driving sustainable economic growth. Likewise, careful analysis of new economic progress that is water-intensive is important in balancing a "water budget."

## **Measuring Success**

The National Weather Service Climate Prediction Center offers <u>drought information</u>. Updates are made as conditions change. This information can be used to persuade residents to start conserving more water.

## **Discover More**

The <u>Illinois EPA</u> offers many online tools to help entities become more educated about their water supplies and uses. The <u>Safe Drinking Water Information System</u> (SDWIS) Monitoring Schedules portal gives communities the ability to query those monitoring schedules specific to their water system. These schedules are used for the basis of monitoring requirements applicable to compliance-related activities.

## **Case Studies**

### **East Central Illinois Regional Water Supply Planning**

#### **Contact**

Robbie Berg Project Coordinator 217-352-1942 earthpartners@hotmail.org

#### **Description**

The primary objectives and activities of the <u>East Central Illinois Regional Water Supply Planning Committee</u> (RWSPC) are to: 1. Utilize water-resource research findings by the state agencies (i.e., Illinois State Water Survey, Illinois State Geological Survey), 2.Develop water demand scenarios to year 2050, 3. Evaluate water supply and demand management options as potential implementation of such options might benefit the citizens of east central Illinois, 4. Create a regional water-supply plan that reflects a newly developed understanding of water availability given research findings on supplies and demand scenarios and plans for growth, development and land-use change, and 5.Propose and support outreach and public education activities.

## Kaskaskia Region Water Supply Planning

#### Contact

Allie McCreary Environmental Programs Technician 618-566-4451 allie.mccreary@heartlandsconservancy.org

#### **Description**

The Comprehensive Evaluation and Plan for the Regional Water Supply of the <u>Kaskaskia River Basin</u> assesses water supply and water demands within the Kaskaskia Basin through the year 2050. The plan is a result of the Governor's Executive Order 2006-01 and is the third regional water supply plan in the State of Illinois. The Water Supply Plan provides allows communities, industry, state agencies, and others to mindfully plan for future water use in the Kaskaskia Basin. The report was produced by a committee composed of stakeholders representing a variety of backgrounds (i.e., agriculture, industry, environment, counties) & geographic portions of the Kaskaskia Basin. The committee began meeting in 2010, Committee members met monthly to discuss

various topics that influence water supply and demands in the Basin. Illinois Department of Natural Resources (IDNR) - Office of Water Resources, US Army Corps of Engineers, and Illinois State Water Survey provided technical assistance. Funding for the project was through the IDNR and Illinois Clean Coal Institute. Recommendations of the Final Plan include: continued regional, stakeholder-driven, communication on key water supply and demand issues, support of grassroots water conservation efforts, and awareness of -and proactive planning for- the potential for water shortages.

#### Cost

Grant funded through Department of Natural Resources and the Clean Coal Institute.

#### **Lessons Learned**

A multi-disciplinary committee was helpful in ensuring that all sectors of water users were represented during the planning process. However, committee participation was voluntary, and so commitment levels varied among members. Another key component, was having state representation at committee meetings and having state agencies weigh in on the the final recommendations of the water supply plan. Appropriate agencies at the watershed level would be Department of Natural Resources, Environmental Protection Agency, State Water Survey, state University professors/researchers, US Army Corps of Engineers, and others. Having a stakeholder group (the Kaskaskia Watershed Association) to take "ownership" of the water supply plan at the end of the process was also invaluable.

## Northeastern Illinois Water Supply Plan

#### **Contact**

Tim Loftus 312-386-8666

#### **Description**

Water 2050 is an outcome of an executive order as it was unanimously approved by the Regional Water Supply Planning Group (RWSPG) in January 2010 following three years of monthly meetings. Following approval of Water 2050, CMAP embarked on implementation of the various recommendations that called for specific actions from CMAP to promote additional conservation and efficiency in the Approved unanimously by the RWSPG for 11 counties of northeastern Illinois, the plan is intended to ensure the availability of clean water for household, commercial, and other users through mid-century. It was commissioned by the Illinois Department of Natural Resources to address population and economic growth that could lead to water shortages in the region.