

**REPORT OF THE INTERAGENCY COORDINATING COMMITTEE ON
GROUNDWATER: STATUS OF WATER QUANTITY PLANNING ACTIVITIES
January 2003**

Executive Order Number 5 (2002), signed on Earth Day 2002, was established because of the critical need to better understand Illinois water resources and plan for their use in a way that both supports balanced growth and protects the resource. The Order requires that the Interagency Coordinating Committee on Groundwater (ICCG) report to the Governor by January 1 of each year on the progress of the assessments and programs mandated by the Executive Order. This is the first such report under the Executive Order.

The ICCG, created by the Illinois Groundwater Protection Act (IGPA) and made up of state agencies with various responsibilities for water issues, is chaired by the Director, or designee, of the Illinois Environmental Protection Agency. The Executive Order requires the ICCG, in coordination with the Groundwater Advisory Council (GAC), a Governor-appointed committee representing planning, utility, industrial and environmental interests, to establish water-quantity planning procedures for the State of Illinois by implementing the following programs:

- 1) A coordinated groundwater and surface water resources program with information that is accessible and usable by governmental agencies and the public to support the State's water-resources quantity programs;
- 2) A statewide groundwater and surface-water resource program to serve as the basis for the formation of priority water-quantity planning areas; and
- 3) A statewide program for the identification and recommendation of the appropriate organizational structure for priority water-quantity planning areas.

The Executive Order calls for the ICCG to establish a subcommittee to develop an integrated groundwater and surface-water resources agenda and assessment report. The subcommittee report is required to analyze the burdens on Illinois finite water-resources, and to prioritize an agenda to plan for the protection of these water-resources. The Director of the Department of Natural Resources (DNR) or designee is required to chair the subcommittee. The subcommittee's agenda and assessment report shall be considered by the ICCG and the GAC in formulating the ICCG annual report.

Background

You have recognized the importance of high quality water resources to the health and well being of the citizens of the State of Illinois, and the necessity of providing an adequate quantity of water to support the economy, development and biodiversity of the State.

The Office of the Governor and key state agencies determined that the interaction between surface water and groundwater must be properly assessed as an essential part of water resource protection and management in the State. Scientific and technical findings during the last four decades have reinforced the fact that groundwater and surface water are inextricably connected as a common resource for water needs. Yet as various water resources programs in Illinois have developed, they have focused primarily on water quality initiatives related to statutory or regulatory requirements. Water quantity issues have not developed at the same pace or the same degree of statutory or regulatory emphasis or support. Proposals related to legislating and regulating water quantity issues, indeed, have not been well received or supported by various constituent groups. As a result, water quantity planning and program implementation has been slow to evolve during the last two to three decades.

As part of the your ongoing water resources initiatives, you requested that the Groundwater Advisory Council (GAC) develop an approach to establishing a statewide, integrated groundwater and surface water quantity planning program.

The GAC determined that any planning program would have to start from a sound scientific basis to support a realistic attainable plan. Further the GAC felt that, with the bifurcated water quality and quantity programs presently in existence, there was a necessity to establish a different approach in developing a statewide, integrated water planning program.

The GAC also felt that there were sufficient existing data and information available from existing federal and State data bases and reports to initiate the process, and identify gaps in existing programs that would be documented and filled.

The operating principle is simple: the necessary groundwork must be developed (including extensive stakeholder involvement) first, before moving into legislative and regulatory solutions. The ICCG and GAC believe that a new paradigm is essential to get concurrence from constituent groups, including both private and governmental special interest groups, and the public by creating consensus on a planning procedure based on assessment and agenda. Initiating discussion of proposed solutions driven by legislative and regulatory proposals to identify program parameters, without having a defined planning procedure, has proven, historically, to be an arduous task with unpredictable outcomes.

Report of the Subcommittee on Integrated Water Planning and Management to the ICCG

The report to the ICCG from the Integrated Water Planning and Management Subcommittee with recommendations pursuant to Executive Order Number 5 (2002) is attached. The Subcommittee Report concluded by making the following recommendations:

- The ICCG should develop a detailed Statewide Strategic Plan for Water Quantity Planning and Management over the next 12 months (a suggested outline is provided in Appendix IV of the Report);
- The plan should receive broad public review and input;
- The plan should have an initial focus on securing and making easily accessible the scientific data that will be needed to designate Priority Water Quantity Planning Areas, areas that can be identified as being at risk for water shortages based on existing data or as new data become available.
- As Priority Water Quantity Planning Areas are identified, the state should nurture the development of voluntary, cooperative regional water management consortia in those areas by providing technical and financial assistance for planning and management efforts.
- The legislature should address an immediate need to grant the Governor expanded emergency powers to deal with major region-wide droughts or water-related disasters. Under the Emergency Services and Disaster Agency Act of 1988, the Governor has broad emergency powers for 30 days to suspend statutes, regulations and even take real estate. A study of this law suggested that these emergency powers were not sufficiently focused to respond to a drought emergency. The Subcommittee believes seeking appropriate authority is the strategy most likely to avoid both prescriptive regulatory water allocation frameworks and future water quantity crises.
- The state should consider voids in current law like instream flow and well interference by initially developing guidelines identifying best management practices (BMPs) for voluntary adoption. Experience with voluntary implementation of such BMPs will clarify whether it is necessary to adopt them statutorily.

The ICCG concurs with these recommendations.

Significant Initial Progress

The ICCG notes that significant initial progress has been made in 2002 as a result of Executive Order Number 5 on Recommendation #3: pulling together information necessary to identify Priority Water Quantity Planning Areas. The first step is to assemble and evaluate the data that exist, and then determine what critical data gaps exist. With significant short-term funding from IEPA, the Illinois State Water Survey (ISWS) has already begun to make several groundwater-related databases more accessible to facilitate evaluation of critical data. These include a groundwater quality database, an aquifer hydraulic properties database and an inventory of water use accumulated over the last century. These databases contain critical information needed for both applied and theoretical groundwater research as well as basic groundwater information useful to the general public especially in northeast Illinois. Progress to date:

- The aquifer properties, Illinois Water Inventory Program, and water quality databases have been transferred to more modern systems. User interface

programs are being developed that will enable entering, editing, querying and verifying data. Staff resources have been added for coordination and evaluation of these data.

- The ISWS was able to digitize historic use/yield maps for the state and now those data are being used in new efforts to characterize potential water resources in areas where water supplies may become limited, notably in northeast Illinois.
- Significant progress has been made to inventory and measure the water level of 71 wells at 22 municipal water supplies in the DuPage County portion of the northeastern Illinois shallow dolomite. After all DuPage facilities are visited, activity will shift to western Cook, northern Will and eastern Kane Counties so that the natural hydraulic boundaries of the aquifer can be incorporated.
- Improved data entry and updates to the Private Well Database.

There are 28 Scientific Surveys projects listed in Appendix II of the Subcommittee Report, all of which contribute to the data needs for improved water planning and management in a variety of ways. Some projects pull together existing data and information and make them more useful and accessible. Other projects analyze historical data and establish baselines. Other projects gather new data to fill data gaps. Some projects develop models to synthesize and integrate existing data and make projections. And finally, two projects develop and implement new technologies for water treatment, reuse, and conservation. Results from these projects, together with the wealth of data and reports we have over the last 105 years, will be useful in designating priority planning areas, and determining how much water is available and can be safely withdrawn, and the quality of that water.

Apart from this work, IEPA has completed efforts to make consolidated source water information accessible through Arc Internet Map Servers and identify integrated boundaries of major watersheds and aquifers. Future improvements to this source water information system include making geological information, currently available as paper records residing at the Illinois Geological Survey, available to the public on-line.

These are critical steps to improving our understanding of our water resources and conducting planning on a watershed and aquifer basis. As stated in Appendix II of the Subcommittee Report, these activities are not currently part of a cohesive and coordinated water quantity program or water quantity planning process. Making sense out of them all is like trying to do a jigsaw puzzle when you have many of the pieces on the table, but you can't see the picture on the box! We need to paint the picture, provide glue to hold the pieces together, fill in the missing pieces, and provide mechanisms for mining all the information to answer specific questions related to regional water quantity planning and management.

ICCG Comments on the Subcommittee Draft Strategic Plan

In Appendix IV of the Subcommittee Report is a Draft Strategic Plan put forth to illustrate the Subcommittee's prime recommendation that a strategic plan be developed with full public participation.

Timeframe

The Draft Strategic Plan begins with establishing a process to develop a strategic plan. Although it is a little unclear in the Draft, and subject to consultation with the new Administration, the ICCG believes it would be difficult to complete a draft strategic plan by March 2003, run a comprehensive public process by April 2003 and begin implementation of the plan by July 2003. As such, drafted and proposed the ICCG has concluded that the Subcommittee intends that the process of developing a strategic plan should be proposed by March, evaluated by the public for 30 days and then implemented soon after. The goal would be to have a strategic plan finalized by January 2004.

At the other end of the spectrum, the ICCG does not believe it prudent to delay initial planning efforts until all data gaps have been filled, a process that IDNR estimates could take eight years. More discussion of this issue follows.

Goals

The ICCG concurs with most of the goals for a final plan as stated in the Draft Strategic Plan. The ICCG suggests that Goal #6 be amended to state that the plan would lay out how an institutional framework for state oversight should be explored and proposed rather than state that the plan would contain that solution. Additionally, the ICCG feels that an important goal of the strategic plan is to state the steps and timeframe for continuing to assemble, evaluate and make existing scientific and water use information available. Further, the group recommends that the strategic plan prioritize tasks that can be done with current funding versus those that will require new resources.

Strengthening the Scientific Basis for Planning

The ICCG concurs that water quantity planning must be based on the best scientific information available and agrees that the items presented in Step 3 of the Draft Plan represent a comprehensive listing of all the information desirable to completely characterize Illinois water resources and most accurately project yields and demands. However, as mentioned above, an important part of the strategic plan needs to be the process for evaluating existing information and identifying the most critical data gaps. Once it has become obvious to stakeholders what information weaknesses exist, the need for additional research will gain support and endorsement. This approach is illustrated by the experience in northeastern Illinois where NIPC has developed (and its constituent localities have approved) a strategic plan for water quantity planning that identifies data gaps and an action step to seek state funding to fill those gaps.

Funding

The Subcommittee points out in its report and the Draft Strategic Plan, notably under Step 6, the need for “full funding” of various efforts. The ICCG acknowledges that significant new efforts will require significant new funding. However, the reality is that new funding from the State is unlikely to be appropriated. The final strategic plan will need to prioritize these efforts and identify what tasks can be done with current funding, since that is all that will be available in the short term. The ICCG supports seeking funding from other sources, e.g., federal, in order to fill critical data gaps as they are identified and will certainly endorse the efforts of other entities to seek appropriation of state funding

Identifying Solutions

A guiding principle that the GAC has asked the ICCG to uphold is to keep the focus of our work on developing the information needed to demonstrate to diverse stakeholders how an assessment, planning and management process could work, rather than to come to them with the solutions in hand. The ICCG applies this test to the regulatory and legislative proposals suggested by the Subcommittee (the exceptions being emergency or security-related powers, which, by their nature, may need to follow a different path) and to the idea that the strategic plan would define the appropriate administrative framework for water quantity planning and management. The strategic plan needs to address how to initiate thoughtful consideration in determining the philosophy and policy behind the role that the State should play in the overall statewide water quantity resources program, and allow the public to participate in that process. The plan should describe how key stakeholders in each priority planning area will be identified and how dialogue will be initiated. Three diverse models of planning groups are already functioning in Illinois, i.e., the Mahomet Aquifer Consortium, McHenry County Planning Group and the Northeastern Illinois Planning Commission. These groups would certainly provide insight and experience in defining appropriate organizational structures.

Conclusion

Please accept this report and that of the Subcommittee, conveyed by the ICCG. We appreciate your commitment to protect Illinois’ water resources and we look forward to working with the new Administration and Illinois citizens to continue to establish an effective water quantity planning program in this State. Communities need to know not only if their water supply can support their growth plans but also how to grow in a way that minimizes the impact of urbanization and other uses on the resource. The future of Illinois communities rests on our success.