ILLINOIS STATE WATER PLAN

STATUS OF IMPLEMENTATION

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Introduction

In the spring of 1980, Governor Thompson appointed a Task Force to develop a State Water Plan. The Illinois State Water Plan Task Force completed its initial planning activities and published a final report entitled "Illinois State Water Plan" in January of 1984.

Following the publication of the Illinois State Water Plan, the State Water Plan Task Force has continued to meet quarterly for the purpose of tracking the progress of implementation of the Water Plan as well as responding to new water resource issues which may require interagency review or response. In January of 1985, the State Water Plan Task Force published a report entitled "Estimated Cost of Implementation, Fiscal Years 1986 Through 1988." In May of 1986, the Water Plan Task Force published a report entitled "Status of Implementation, Illinois State Water Plan." This report is a revised version of the May 1986 progress report.

Organization of Report

The present report is organized to correspond with the order of the original Water Plan, which addressed 10 critical issues which were arranged according to importance. This is followed by consideration of three cross-cutting topics which had received inadequate attention and seven operating issues in which improvements were recommended to increase the effectiveness of ongoing Illinois water resources programs. In this progress report each of these 20 issues contains a statement of the problem and summary along with a section which summarizes the status of implementation of each numbered recommendation contained in the 1984 Water Plan Report. This progress report is intended to be concise yet freestanding so that it can be read without reference to earlier Water Plan Task Force Publications.

Summary of Report

Substantial progress has been made in the implementation of virtually all of the recommendations included in the 1984 Illinois State Water Plan. Major advances are especially notable in the areas of groundwater protection and management and in the areas of natural resource preservation including wetlands, natural areas and natural streams. Implementation of many of the Water Plan's recommendations has also helped state agencies

respond more appropriately to Illinois' most recent drought event.

Adequate funding has been obtained for implementation of many of the activities recommended under Water Plan. Substantial shortages although, have been noted in the necessary areas of long term natural resources data collection and full support for the implementation of expanded and new natural resource regulatory programs.

CRITICAL ISSUES

EROSION AND SEDIMENT CONTROL

Lead Agency: Department of Agriculture/Div. of Natural Resources

Problem and Summary

This issue has highest priority in the Illinois State Water Plan because soil erosion is a threat to the productive capacity of Illinois' farmland and is degrading water quality in streams and lakes, reducing lake storage capacity and adversely affecting fish and wildlife. Remarkable progress in controlling erosion has been made because of the cooperative efforts of many individuals and groups including local, state and federal agencies.

Implementation of Recommendations

1a. The Watershed Priority Committee prioritizes projects for ASCS, SCS and for state-funded Watershed Land Treatment Projects. The Soil and Water Conservation District's Advisory Committee is now performing coordination tasks previously assigned to the Soil and Water Erosion and Water Quality Advisory Committee.

1b. T by 2000, a long range state soil erosion and water quality plan, is being followed and results are being evaluated. A National Resource Inventory was taken in 1982 and again in 1987. When the 1987 results are available, progress will be fully determined. A brief review of applicable results is at the end of this section.

2a. & b. Soil and Water Conservation Districts (SWCDs) are being encouraged to follow their plans to meet the established soil conservation goals. Some SWCDs have set earlier goals to reach T by 2000. The cooperative soil survey program continues to progress and all state soil should be mapped by 1993.

2c. The Soil Conservation Service is using the hydrologic unit as a basic area and is targeting resources to those identified with the greatest need.

2d. The Erosion and Sediment Complaint Process continues to identify owners whose land has the most serious erosion problems that affect others. Cost sharing for conservation is being provided. FY '85--$50,000 - FY '90--$184,200.

2e. The Conservation Reserve Program of the 1985 Farm Bill has removed 633,466.2 acres from production, thus reducing the soil loss to below "T" on these acres. The majority of these acres were "highly erodible."

2f. The objective of informing landowners and operators of the importance and benefits of reducing erosion is constantly being pursued by Soil and Water Conservation Districts as well as various concerned agencies and organizations. The effort to develop activity in the high schools and colleges is proceeding, but will require much effort. There is considerable interest at the elementary and junior high level to participate in various conservation activities. More teacher interest is needed at all levels. Metropolitan areas continue to be of greatest concern. Teacher education programs are the best possibility for raising the level of teacher awareness.

Information is available to urban landowners through a 1988 revision of the 1981 publication "Procedures and Standards for Urban Soil Erosion and Sedimentation Control In Illinois", Commonly referred to as the "Greenbook."

2g. & h. The CRP and conservation planning portions of the 1985 Farm Bill have increased interest on the part of landowners and producers. The state cost-share funds and additional ACP funds have also encouraged the adoption of conservation practices. The adoption of conservation tillage has increased because of conservation interest and also because of the economics of reduced costs. The interest in sustainable agriculture should also help to provide an incentive.

2i. The Department of Conservation has established a watershed planning program which tests and demonstrates non-structural techniques for control of bank erosion. Materials have been developed to inform landowners of the advantages of these techniques. Cooperation with state and federal agencies continues to be a strong influence to use and apply the results of conservation research.

3a. b. & c. Water quality is of even greater concern than in the past. The application of the Water Quality Management Plan has aided in the improvement of water

quality. Documentation continues and is of great interest.

4. The Watershed Priority Committee has served as a forum for coordination of watershed projects as well as for the setting of priorities. With the coordination and increase of effort on the part of various agencies and the producers, it is expected that T by 2000 will be reached.

Average Soil Loss Rates for:	1982	1987	Change
Cropland	6.75t/a	5.18	-1.57
Pastureland	2.54	2.31	- .23
Forestland	2.86	2.26	- .60
Total Rural Land	6.07	4.58	-1.49

7,720,000 acres of cropland eroding over T in 1987, compared to 9,885,500 over T in 1982. A reduction of 2,165,500 acres.

PROTECTION OF UNDERGROUND WATER

Lead Agency: Illinois Environmental Protection Agency

Problem and Summary

In September 1987, Governor Thompson signed legislation for protection of Illinois groundwater from contamination. The Illinois Groundwater Protection Act (P.A. 85-863) responds to the pervasive need to manage groundwater quality by a prevention-oriented process. The Act is a comprehensive law which relies upon a state and local partnership. Although the Act is directed toward protection of groundwater as a natural and public resource, special provisions target drinking water wells. The following provides an overview of the implementation efforts since the adoption of the Act.

The Act responds to the need to protect groundwater quality and establishes a unified groundwater protection program using the following provisions:

- Sets a groundwater protection policy
- Enhances cooperation
- Establishes water well protection zones
- Provides for surveys, mapping and assessments
- Establishes recharge area protection
- Requires new groundwater quality standards

In March of 1988 the State Water Plan Task Force also formed a new committee to concentrate on groundwater quantity issues. The issues addressed by this committee were a direct result of the research conducted as recommended by the 1984 State Water Plan as well as Special Report No. 8 of the State Water Plan Task Force entitled "Strategy for the Protection of Underground Water in Illinois."

The Groundwater Quantity Committee of the State Water Plan Task Force produced two special reports as well as draft legislative initiatives which were introduced in 1989 spring session of the General Assembly.

Implementation of Recommendations - Quality

The groundwater policy sets the framework for management of this vital resource. The law focuses upon uses of the resource and establishes statewide protection measures directed toward potable water wells. In addition, local governments and citizens are provided an opportunity to perform an important role for groundwater protection in Illinois.

The IGPA created the Interagency Coordinating Committee on Groundwater (ICCG) to direct efforts of state agencies and facilitate implementation. Ten state agencies actively participate in the ICCG and work together on a regular basis. The Director of the Illinois Environmental Protection Agency (IEPA) serves as the chairman of the ICCG. The Governor-appointed Groundwater Advisory Council (GAC) has also been very active in directing the overall efforts.

An extensive groundwater education program is directed at those affected by the IGPA. Major initiatives include local and regional presentations and workshops, public participation projects, training programs and many other aspects developed in an annually revised workplan. The effort is coordinated by the Department of Natural Resources (DENR).

The DENR also has responsibility for coordinating data management efforts and development and administration of basic and applied research. This program includes long-term monitoring, statewide groundwater assessment, evaluation of pesticide impacts and other basic and applied research. Activity in these areas is in progress. An interim pesticide impact report has been completed. Preliminary monitoring network designs have been developed. A statewide map of appropriate recharge areas has been completed. The IEPA is operating an ambient groundwater monitoring network for public water supply wells.

The IEPA has conducted a synoptic analysis of the public water supply wells. The data indicate that the overall quality of the state's groundwater is generally good. In certain areas, naturally occurring levels of chemicals are causing limited use impairments. While quality statewide is not an issue, local conditions indicate that 4.6 percent of the tested public water wells had detectable levels of organic chemical contamination. Although the majority of affected water supplies do not exceed standards, their vulnerability to contamination supports a preventive approach.

The IGPA established a groundwater protection policy. A key part of this policy involves the wellhead protection program for both public and private water wells. The Act established minimum setback zones between water wells and potential sources or routes of contamination. It also provided that communities can expand the area to a maximum setback zone. Several communities have

already established maximum setback zones. The Agency is conducting well site surveys and preparing reports for community water supplies. Half of the wells in the state have been field surveyed. Many reports have been sent to local officials. The IEPA and DENR are developing procedures for conducting groundwater protection community needs assessments for communities.

The protection of regional groundwater quality is provided by the regional groundwater recharge planning process. To assist in this process, the DENR has developed a prioritized recharge area map. The IEPA has recently proposed an approach for designating regional planning areas and establishing related committees.

The IGPA requires that new groundwater quality standards be developed to protect groundwater. The IEPA's proposal was filed with the Pollution Control Board in September of 1989 as result of extensive public outreach efforts, interest group review, and considerable technical review. It is specific to groundwater, provides for classification, sets criteria for 56 chemicals or groups of chemicals and also establishes preventive management and non-degradation provisions. Hearings are underway on the proposal.

The IGPA also established authority to develop technology regulations, a minimum hazard certification program, and monitoring well code revisions. These are in various stages of development and implementation.

Implementation of Recommendations - Quantity

The legislative initiatives for groundwater quantity management were developed by a committee of the Illinois State Water Plan Task Force at the request of the Governor's Office. This committee initiated its efforts to study groundwater quantity issues in March of 1988. After eleven months of study the groundwater quantity committee prepared a 200 page report describing 23 significant groundwater quantity issues in Illinois. The committee also developed a report on groundwater supplies versus demands in Illinois as well as the legislative initiatives.

On February 23 and 24 the efforts of this committee were presented to the public at meetings in De Kalb and Springfield. Comments received from these public meetings were used to modify the draft legislative initiatives prior to their being introduced in the General Assembly.

The legislative initiatives did not move out of the House of Representatives and were assigned to an interim study committee on May 26, 1989. The Groundwater Quantity Committee met in early 1990 to review and revise its legislative initiatives and plans on having a revised legislative package ready for introduction by

the administration in the 1990 spring session of General Assembly.

FLOOD DAMAGE MITIGATION

Lead Agency: Illinois Division of Water Resources

Problem and Summary

Flooding resulting from unwise development of floodplains continues to occur in Illinois and results in significant damages to property. The necessary means to mitigate flood damages are available through a mix of planning, construction, and regulatory programs administered at the federal, state, and local levels.

The Water Plan included seventeen recommendations under this issue and adequate progress towards full implementation is underway or accomplished for most of the recommendations. All programmatic recommendations have been initiated and are under various levels of implementation. The major recommendations relating to funding have received significant attention due to the funding provided through the Build Illinois" program. Future cuts in federal funding, due to deficit reduction, could place severe limitations on the progress being made in implementing those recommendations requiring capital expenditures.

Implementation of Recommendations

1a. Adequate funding has been obtained to continue a capital construction program directed at reducing the backlog of planned flood control projects. The five-year projected need for this program is estimated at 20 million dollars per year. Potential shortages in capital dollars as well as cuts in federal programs could severely impede future progress in implementing this recommendation.

1b. The recommendation to revise project planning procedures to include evaluations of realistic non-structural alternatives, shorten study duration, and assure early termination of unacceptable project proposals has been fully implemented within DOWR.

1c. The recommendation to stress local government participation and state-federal cooperation has been fully implemented as an integral part of the revised planning procedures.

1d. Hydraulic, hydrologic, and economic models of flood prone watersheds now fully include an impact analysis which includes foreseeable future changes in watershed characteristics. New dynamic routing models are now being used in urban areas to more accurately analyze

the value and need for the preservation of floodway storage in state and local regulatory programs.

1e. Updated rainfall frequency values which are based on current climatic records and trends are now available for use through the publication of State Water Survey Technical Bulletin 70 entitled "Frequency Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois."

1f. Language to eliminate federal planning policies which create arbitrary distinctions between types of flood damage problems and appropriate mitigation measures was included in initial drafts of the 1986 omnibus bill. Final language of the bill did not include all necessary revisions. The Division of Water Resources continues to work through national organizations to correct these federal policies through legislation.

1g. The recommended demonstration project for a flood warning system involving a weather radar and meteorologists in Northeastern Illinois has been accomplished by the State Water Survey. Future upgrades to the National Weather Service radar will incorporate recommendations from this research.

2a. To improve rural flood control project implementation, state leadership and programmatic responsibility will be maintained through the staff of the Illinois Department of Agriculture.

2b. The recommendation to conduct detailed basin by basin analysis of agricultural levee placement in order to improve planning and permitting decisions in rural areas has not been accomplished to date due to a lack of manpower and funding.

2c. The recommendation to include land use planning for soil erosion and sediment control as a component of rural flood control projects was initiated by the Department of Agriculture through joint planning activities with the Corps of Engineers and the Soil Conservation Service.

3a. To strengthen statewide regulation of floodway construction, staffing in the Division of Water Resources regulatory section was again increased through personnel shifts over the last year. These shifts were required to reduce a backlog in the processing of permits. Additional staff is now required by the Division to accommodate the losses to other programs caused by these shifts.

3b. A program which includes investigation and enforcement has been developed to bring all known violations of the State's floodplain regulations into compliance. This program has not been implemented due to a lack of staffing and funding.

3c. The recommendation that consideration for protecting natural conditions become part of the state's permit review process has led to the consideration of legislative vehicles which are now under internal review.

3d. The Division of Water Resources continues to cooperate with FEMA to ensure that all flood prone communities use the most sound technical information available for floodplain regulation.

3e. A comprehensive program is underway to implement the recommendation that the state seek federal funding and develop the state and local funding of programs to rebuild or relocate flood-damaged buildings so they are protected from future flooding. Projects under this program has been successfully implemented for Grafton, Kampsville and the Rome area of unincorporated Peoria County. Additional efforts under this program will include further areas of unincorporated Peoria County and Peoria/Peoria Heights followed by the areas of Spring Bay and Chillicothe.

3f. The floodplain information repository has been maintained at the State Water Survey although shortages in funding have continued to be a constraint on the program's effectiveness.

4a. The Division of Water Resources has prepared two assistance manuals on stormwater management for use by local governments One manual describes the technical and legal issues or problems involving stormwater management of the lack of such management. The other manual presents a model stormwater management ordinance and more detailed information on regulation of new developments to ensure proper management of stormwater runoff. In 1988 Illinois enacted legislation PA89-905, which authorized regional stormwater management in northeastern Illinois counties. The counties of DuPage and Lake have now initiated the development of county stormwater management plans.

WATER CONSERVATION

Lead Agency: Department of Commerce and Community Affairs

Problem and Summary

The Water Plan recognized that water conservation measures can be important and necessary for the reduction of water use during times of shortages. The drought of 1988-1989 proved again that water conservation measures are not only valuable but necessary for the reduction of water use during periods of extreme droughts. Communities throughout Illinois readily accepted this fact and implemented water use restrictions mainly for the purpose of reducing demands during the high use summer months.

Implementation of Recommendations

1. Communities facing water shortages are generally known to the state. Letters have been sent to each community offering brochures informing the populace about methods that are available for promoting water conservation.

2. The Department of Commerce and Community Affairs has developed educational material on water conservation. The agency has distributed over 120,000 copies of these materials to various communities throughout the state.

   The Department of Energy and Natural Resources' Consumer Assistance Section, in cooperation with the State Water Survey, is conducting a pilot program to promote energy and water conservation in agricultural irrigation. The program will provide grants to subsidize energy and water conserving measures installed on existing irrigation systems. The project is a continuation of an ongoing program "Irrigation Water Use in Illinois: Strategies for Soil Water Management and Groundwater Conservation Study", conducted by the State Water Survey and the Cooperative Extension Service.

3. Promotion of water conservation devices has been initiated in some communities within the state. These plumbing devices have met with varying degrees of enthusiasm, and sometimes are not accepted because of their initial cost.

4. Revisions to the State plumbing code do not include all water conservation fixtures to date, but the code was updated in January, 1990, to allow water saving toilet

tanks to be used. It is expected that other water conserving fixtures will be incorporated into the plumbing code next year.

5. The recommendation to conduct and evaluate pilot projects at State institutions has occurred in at least one instance. The Springfield Energy Home, a project of the Department of Energy and Natural Resources, incorporates an efficient water conserving system including low flush toilets (1.5 gallon), water conserving fixtures, and reduced volume supply and waste lines.

6. The Department of Commerce and Community Affairs, Section of Local Government Management Services, has and does work with local officials by assisting them with reviewing and upgrading their water rate structures. The Agency has completed over 150 studies to date statewide. A uniform rate structure, which promotes water conservation, is always recommended as the preferred rate structure.

   Communities are interested in developing ordinances to encourage water conservation measures to be used or installed. Some ordinances being developed limit use of watering lawns, washing cars and other outside uses, while other ordinances may require water conservation measures in new construction.

7. Various methods of water conservation are now becoming accepted and a recognized part of the general curriculum for many of the training seminars and curriculums now being developed for water supply system managers and operators.

8. The recommended retrofitting of 17,000 low income residences with water conservation devices has not taken place.

9. The water use inventory program has continued, but not to the detail necessary to fully evaluate the effectiveness of water conservation programs as recommended.

COMPETITION FOR WATER

Lead Agency: Illinois State Water Survey

Problem and Summary

The Water Plan recognized that increasing or new demands for water may become a serious issue in regional competition for water. Conflicts are now present in Kankakee and Iroquois Counties (irrigation well owners vs. rural domestic well owners), and in McLean, Tazewell, DeWitte and Macon Counties (Normal and Decatur municipal groundwater supply expansions vs. rural domestic well owners and smaller public ground water supply systems). Funding for this issue is not adequate and there are concerns regarding the potential for adequate funding in the future.

Implementation of Recommendations

1. The recommendation that the Water Survey continue to monitor water use in the state is being partly funded by the U.S. Geological Survey, and the Water Survey has been redirecting other funds to support this program. There continue to be grave concerns that future funding will not be available to maintain the present program. In addition the present program should be expanded to include an irrigation point withdrawal file, periodic canvass of irrigation withdrawals, information on interbasin transfers and consumptive use.

   Water Survey studies, supported by funds from the Division of Water Resources and the Department of Energy and Natural Resources, which evaluate public surface water supplies and technical management needs for groundwater conflict areas are concluding this fiscal year.

2. The recommendation to monitor new consumptive uses in the state is ongoing with available staff but is subject to FY91 budget constraints.

3. This recommendation relates to the development of methods and procedures to assist users in evaluating the impacts of proposed development.

   Under the Water Use Act of 1983, the State Water and Geological Surveys are required to complete impact evaluations of new wells (not including 6-county northeastern Illinois area) that are projected to yield

70 gpm or more on any given day. Act amendments in 1987 added the responsibility of field investigation of complaints of domestic well water supply interruptions in Kankakee, Iroquois, McLean, and Tazewell Counties. For the Water Use Act, the suggested budget for the State Water and Geological Surveys is $450,000, but only about 15 percent of this amount has been provided.

A micro-computer Interactive Basin Model has been developed for the Sangamon, Kaskaskia, and Fox River Basins with funding support from the Department of Energy and Natural Resources and the Division of Water Resources. The model allows the users to determine the impact of existing or proposed stream withdrawals on downstream users. Additional funding will be needed to complete the model for the rest of the State.

AQUATIC AND RIPARIAN HABITAT

LEAD AGENCY: DEPARTMENT OF CONSERVATION

Problem and Summary

The need to preserve Habitat in Illinois is receiving some much needed attention. Programs such as IDOC's Wildlife Habitat Acquisition help to preserve habitat, while programs like the U.S. Department of Agriculture's Conservation Reserve and IDOC's Private Land Forestry Development Program enhance or create new habitat areas. More data on existing habitat is becoming available through such inventories as IDOC's Illinois Streams Information System and Illinois' portion of the National Wetlands Inventory. Coordination of efforts among state agencies towards setting priorities based on available data is now sorely needed, as well as new policies and legislation to reflect these priorities for habitat preservation and enhancement.

Implementation of Recommendations

1a. Development of IDOC's Illinois Streams Information System (ISIS) has continued. Data collection statewide will be completed and computerized by June 1, 1990. Relevant data have been supplied to IEPA for use in water quality standard setting and permit reviews.

1b. The Illinois portion of the National Wetlands Inventory has been completed in cooperation with the U. S. Fish and Wildlife Service. Maps of the inventory showing wetland locations and classifications are available through the distribution center at Northern Illinois University. The inventory digital data are stored on the Illinois Natural History Survey computer. The Department of Conservation worked with the Soil Conservation Service to develop wetland maps by county to be used in assessing compliance with the 1985 Farm Bill.

1c. Lake locations associated with the statewide access site survey, have been added into ISIS with tributary streams, outflow streams, and boat access sites as associated data. The Department of Conservation has also established a computerized lake database which contains pertinent physical and biological information on over 300 state and publicly owned water areas statewide.

1d. IDOC and IEPA have completed the development of the Biological Streams Characterization identifying streams of high biological quality, based on the type and condition of the fishery resource. A report "Biological Stream Characterization (BSC): a Biological Assessment of Illinois Stream Quality" has been published as Special Report #13 of the Illinois State Water Plan Task Force. A proposal to do a statewide streams assessment has been recommended by the Water Plan Task Force. IDOC and DENR are jointly seeking funding for this project to assess the environmental and recreational quality of streams in the state. Data are now available to do such an assessment. Refer to the draft rules recommendation (2a) below.

A study to identify streams eligible to be included in the Natural Areas Inventory has been initiated by the Nature Preserves Commission, the Department of Energy and Natural Resources, the Department of Conservation, and the Natural History Survey. Criteria will be based upon the existing Biological Stream Characterization, additional data on mussel species diversity, and the presence of endangered fishes, mussels, crayfishes and aquatic plants.

1e. In order to coordinate existing data, state agencies have been working to standardize reference data that everyone can use. There now exists standardized stream order data and river miles statewide. This extensive data development effort was conducted by the Illinois Environmental Protection Agency. IDOC and SWS are working to put these data in a form easily distributed and used by other agencies. IDOC and DENR are also working toward all water resource agencies having access to ISIS and the GIS. ISIS will be available after June 1, 1990. DENR is seeking funding to provide access to the GIS.

2a. DOWR has prepared rules for the Illinois Rivers, Lakes and Streams Act that include environmental considerations for permitted activities in the public waters of the State of Illinois. An Attorney General's opinion on the scope of the existing law was rendered. A legislative correction has been suggested as the only appropriate means for providing further environmental protection to the rivers, lakes and streams not covered under the Illinois Rivers, Lakes, and Streams Act.

2b. Implementation of rules is pending clarification or revision of state law.

3a. An interim instream flow planning standard has been developed and adopted by the Task Force.

3b. The interim instream flow standard has now been applied to numerous projects in Illinois and the experience agencies have gained in its application has been valuable. Many issues remain to be resolved in the setting of final protected low flows for projects impacting streams within Illinois. A legislatively mandated committee has been formed to study instream flow issues and make a recommendation to the legislature by April of 1991. Research by State agencies and universities is ongoing.

WATER BASED RECREATION

LEAD AGENCY: DEPARTMENT OF CONSERVATION

Problem and Summary

Water based recreation remains popular in Illinois. In order to meet this recreational demand, there is a need to provide clean water which is safe for recreational use as well as provide public access to the water, on both lakes and streams. The Department of Conservation provides grants to local communities for boat access through the Boat Access Area Construction Grant Program. The Department has developed the North Point Marina on Lake Michigan. Also, the Department is constructing additional state-owned boat and canoe access on rivers in various parts of the state. There remains the problem of where to provide public access. Where is the need greatest? Where is the best recreational quality? Where is there good water quality?

Implementation of Recommendations

1a. A state policy on urban waterfront renewal has not been developed. Under the Department of Energy and Natural Resources, studies have been completed on locally-based strategies for management of urban stream corridors.

1b. No further workshops have been conducted.

2a. Statewide recreational use data have been added to the Illinois Streams Information System (ISIS). Data have been provided to IEPA.

2b. No determination has been made of Illinois' most important recreational streams. The recreational use data have been used in permit reviews.

3a. Statewide boat access data have been added to the Illinois Streams Information System (ISIS) for both rivers and lakes. The "Illinois Recreational Boating Access Guide(1988)" was published from these data. The guide has been widely distributed and is still available.

3b. The data have not been used for locating new sites through the DOC Boat Access Area Construction Grant program. A survey of Southern Illinois boat access sites funded through Dingell-Johnson is in progress to assess the condition of existing sites.

4. The "Directory of Illinois Licensed Boat Charter and Livery Services(1983)" has been widely distributed. Limited copies are still available.

ATMOSPHERIC CHANGES AND MANAGEMENT

Lead Agency: Illinois State Water Survey

Problem and Summary

The Water Plan noted that the stable climate of 1956-1973 is becoming colder with greater precipitation extremes. Since that time, Illinois has experienced several extremes in climate that, collectively, demonstrate the value of climate information to making policy decisions. Recognizing the importance of climate change to the Illinois economy, the Water Plan report called for sustained efforts to monitor the current climate and investigate ways to detect and predict future changes and their impacts.

Significant progress is being made in implementing recommendations in most cases, although funding for the monitoring program is marginally adequate. Federally funded research may be impacted by Gramm-Rudman.

Implementation of Recommendations

1. The recommended State Water Survey climate monitoring network operations were initiated in 1983 by diverting research funds. New funding initiatives were submitted often since 1983, but these attempts to raise the level of support have not been successful, and as a result climate investigations continue to be impacted.

2. The Midwest Regional Climate Center (MRCC), a jointly funded program with the federal National Oceanic and Atmospheric Administration, is located in the State Water Survey. The MRCC is an outgrowth of the Survey's Illinois Climate Center that was previously established to meet the needs of the Water Plan. The MRCC serves all neighboring states as well as others in the Midwest, resulting in better interpretation of climate change influences in Illinois. Although many measures may be used to ascertain success, the numbers of individuals and groups requesting data and assistance in interpreting data for their economic needs continues to grow. The related element concerning long-range climate prediction falls into the category of high-risk, fundamental research. This type of research is ongoing at many institutions in the United States and overseas, as well as a small effort at the State Water Survey, largely supported by the federal government.

The progress of this research will be closely monitored for application to the needs of Illinois.

3. The recommendation to pursue research to determine how to increase precipitation in Illinois is being implemented mostly with support from the federal government. The State Water Survey continues to maintain interest in weather modification and research in the United States and abroad. Keeping aware of progress will allow the Survey to continue to advise Illinois citizens and to provide scientific assessments of weather modification projects undertaken within the state. Continued funding for a major federally funded weather modification study, "Precipitation Augmentation for Crops" has culminated in major experiments during the summers of 1987 and 1989. The findings from these experiments will not be available for some time, but will be used to guide future directions for this program.

4. No progress toward implementation of the recommendation to organize a Climate Detection and Assistance Team can be reported.

DROUGHT AND EMERGENCY INTERRUPTION OF SUPPLIES

Lead Agency: Illinois Division of Water Resources

Problem and Summary

The Water Plan pointed out that water supplies can be interrupted as a consequence of drought and from other causes with serious economic consequences.

State Water Plan agencies have remained aware of the seriousness of the problems that can exist within the state due to extended drought periods. The recent 1988-1989 drought has reminded all of Illinois as well as the Midwest that extended drought periods can become a reality. Fortunately many public water supply systems have responded to the drought appropriately with water conservation measures and the identification and use of alternative supplies. In addition the State Water Survey continues to do research and planning for improved drought prediction and management.

Implementation of Recommendations

1a. As recommended in the Plan, the State Water Survey continues to issue monthly water and climate summary reports. These reports continue to provide an extremely valuable service to public and private interests around the state. The Director of DOWR (co-chair) of the Drought Task Force reviews this report monthly to determine the need for state response. The Drought Task Force was activated in the Spring of 1988 due to the drought monitoring update provided by the SWS monthly reports. Over the past two years, the Department of Conservation has provided weekly information on the water levels in 160 Illinois lakes to the State Drought Task Force and the St. Louis office of the Corps of Engineers.

2a. State Water Plan Special Report No. 3 entitled "Drought Contingency Planning" summarizes the drought related activities of state agencies. The drought response framework described in this report was adopted by the state. The Drought Task Force has met at least annually since 1983 to review the status of drought and need for state response. In June of 1988 the Drought Task Force was activated to respond to the 1988-1989 drought and has continued to meet at least bimonthly into the spring of 1990.

Numerous research projects conducted mainly at the State Water Survey are strengthening the state's ability to understand, respond, and manage drought events at both the state and local level.

3a. The Drought Task Force has met annually since 1983 to review the need for state response to periods of deficit rainfall.

4a. The Plan recommends that the Illinois Commerce Commission consider rate adjustments for proprietary water systems during emergencies to promote conservation and compensate for lost revenue. The Commerce Commission is now more aware of the need for this type of response but rate adjustments were not required during the most recent drought.

ILLINOIS WATER USE LAW

Lead Agency: Illinois Division of Water Resources

Problem and Summary

Illinois water use law contains numerous uncertainties regarding the rights, responsibilities and liabilities for the development of water supplies within Illinois. The state's water use law does not provide a clear means to prevent shortages nor does it provide for the protection of most instream uses.

The State Water Plan Review of this issue has triggered a number of currently ongoing interagency activities to develop programs and plans which should eventually lead to modifications to water use law and other water management activities within Illinois. Adequate progress is being made on this issue with the present efforts of state agencies concentrating on groundwater use management and instream flow protection.

Implementation of Recommendations

1a. The state of Illinois through the Department of Transportation and the Attorney General's Office has carried out a comprehensive investigation to precisely define and identify the "public waters" of the state of Illinois. The result of this review are now being used to direct future efforts in the protection of prime habitats within Illinois.

1b. The Department has also developed appropriate administrative rules and a regulatory program to protect the public's rights and interests in the "public waters" of the state of Illinois.

2a. As recommended in the Water Plan, DOWR and SWS have undertaken a study to determine the potential location and technical management needs for area-specific groundwater management districts. This information was used by an interagency committee of the State Water Plan Task Force to develop legislation for groundwater management which was introduced in the General Assembly in the spring of 1989. The committee which developed this legislation was formed in March of 1988 and held numerous meetings with local interests to discuss the needs for improved groundwater management measures including the formation of local districts.

2b. To provide groundwater data to Soil and Water Conservation Districts, the SWS and SGS are now attempting to carry out their mandates under P.A. 83-700. The demands of this legislation have not been fully met due to lack of sufficient new funding.

3a. To develop a program and evaluate the need for legislation which will allow for the determination and protection of minimum instream flows and lake levels within Illinois, the DOWR, SWS, DOC, WRC, U.of I. and the NHS continue to support research and planning directed towards understanding instream flow needs. An interagency State Water Plan Committee has met annually since 1983 to review instream flow protection efforts. PA 86-191 (HB 1196) has now mandated that an interagency committee under the chairmanship of the Director of the Division of Water Resources develop a program and legislation for the protection of the instream flow resources of the state and prepare a plan and report back to the Governor and General Assembly by April 30, 1991.

4a. To anticipate future conflicts in water use the State Water Survey continues to monitor water use on a statewide basis and evaluate the balance of supplies and demands on a regional basis. A State Water Plan Special Report will be published in the spring of 1990 which will evaluate statewide supplies and demands for groundwater on a township by township level. Further studies are also now available from the State Water Survey, through a program funded by DOWR, which evaluates the potential demands of public surface water supply systems and other users such as irrigation in relation to the yields of the most likely available surface supply source.

4b. During the drought of 1988-1989, the Drought Task Force developed a state policy for emergency drought response entitled "State of Illinois Drought Task Force Policy on Mandating Water Conservation and Emergency Declarations."

INTEGRATED WATER MANAGEMENT

Problem and Summary

Various water management problems such as stream and lake regulatory programs, multi-purpose data collection programs, and groundwater management have never been carried out fully as an individual agency program. As has been recognized by the State Water Plan Task Force and documented in this report, substantial progress has been made through the interagency efforts to address critical water resource issues.

Implementation of Recommendations

1. As recommended, the Water Plan Task Force has been continued to meet quarterly. This body has provided a technical and policy forum for addressing water management concerns. Since the publication of the State Water Plan in 1984 the Task Force has addressed the additional management issues of wetlands, groundwater quantity, Illinois River and Peoria Lake, statewide streams assessments and lakes management.

2. Geographic areas including river basins and stream segments can be useful in coordinating multiagency activities which rely on an understanding of the severity of the problems, data availability, and agency priorities. As reported among the operating issues, this method has been particularly applicable in stream and lake use management.

3. The growth in the use of various geographically based data systems has helped to integrate the partial and incremental data bases which continue, by necessity, to exist among state and federal agencies.

4. Interagency agreements and policy statements are now routinely used to assure a unified and accountable interagency response to such issues as drought management and groundwater quantity programs.

CONFLICT RESOLUTION

Problem and Summary

Conflicts over the use and development of Illinois' water and related land resources continues to exist throughout the State. The Water Plan conclusion that adequate mechanisms exist for conflict resolution has generally been validated thus far. Conflicts over the protection of instream flows and concerns for regional groundwater protection from outside developments will require new legislation to assure a more appropriate state response to these issues.

Implementation of Recommendations

1. When appropriate, the policy followed by the State Water Plan Task Force has been to resolve conflicts at the lowest level of government. This policy was adhered to in the development of its groundwater protection strategy for both quality and quantity and in the development of the framework for drought response activities.

2. A clarification of the law in regards to the nature and extent of public waters is an issue that has not yet been resolved to the satisfaction of all agencies.

3. The recommendation to avoid the conflicts which arise during water shortages have been implemented by the Drought Task Force and through the development of improved supply/demand information by the State Water Survey.

4. Maximum support and encouragement has been given to the formation of local districts to appropriately manage regional water resources. County wide groundwater management districts have now been proposed by the Water Plan committee which drafted the proposed Illinois Groundwater Quantity Management Act.

5. The Water Plan Task Force has continued to meet quarterly. Through coordination efforts and by exchanging information, the problems which can result from the existence of closely related agency programs have been avoided.

6. Interstate agreements are now routinely used between Indiana and Illinois for the management of water resource issues. Both states are now working together on flooding issues concerning the Kankakee River and on long term solutions for the management of groundwater

problems in the shared aquifer which underlies portions of Kankakee and Iroquois counties.

7. Problems of Lake Michigan and the Great Lakes are being addressed by existing inter-state mechanisms as recommended, and through the signing of the Great Lakes Charter.

8. As recommended, the courts will be used only as a means of last resort. Whenever possible, they have been avoided in resolving water resource issues and conflicts.

PUBLIC PARTICIPATION

Problem and Summary

The Water Plan Task Force recognizes that water is a subject of interest and concern to the general public as well as numerous interest groups. Thus during the development of the Water Plan, provision was made for numerous contacts with the public for their input into the water planning process.

Since the Water Plan was published, public participation has continued to play a major role in the formulation of new policies and in planning for such issues, as the management of wetlands, groundwater, the Illinois River, and drought response.

Implementation of Recommendations

1. The recommended "awareness program" for the leadership of the General Assembly did not materialize during 1984 but the General Assembly has been selectively briefed on Water Plan issues on a case by case basis as the need arises.

2. The plan to publish articles in the Illinois Municipal Review and to appear at annual meetings of the Illinois Municipal League has not been directly pursued.

3. The plan to seek active involvement of the Illinois Association of County Board members was implemented in the development of the proposed initiatives for groundwater quantity legislation.

4. The advisory groups and the regional committees were continued through the time of public release of the final Water Plan report in 1984, and then terminated by appropriate letters of appreciation.

5. The agencies have continued to use the news media and public speaking opportunities to keep the public and other interest groups aware of the issues contained in the State Water Plan.

OPERATING ISSUES

STREAM AND LAKE USE MANAGEMENT

Lead Agency: Environmental Protection Agency

Problem and Summary

The Illinois State Water Plan recognized that many of the state's programs for managing water resources reflected concerns dealing with extreme events, such as periods of high or low flows. Although the Water Plan has made and implemented many recommendations to improve the state's response to periods of extremes such as floods or droughts, additional program needs were recognized to improve the state's management of the water resources during more normal or average conditions. Activities are now underway and substantially completed which will provide the state's first comprehensive inventory water-related habitat in Illinois, including lakes, streams and wetlands. These comprehensive inventories are already being used to modify the state's response to such issues as stream protection, instream flow decisions, public water supply development, wetlands protection, and lake management programs and assistance.

Implementation of Recommendations

The Stream and Lake Use Management Sub-work group (SLUMS) has continued periodic meetings to enhance communication between the agencies, thus avoiding potential conflict areas. This effort has been quite effective in accomplishing coordinated information management and assessment among participating agencies.

Special Report #13 entitled "Biological Stream Characterization (BSC): A Biological Assessment of Illinois Stream Quality" was published in September, 1989.

Implementation of the Illinois Stream Information System (ISIS) has progressed dramatically. ISIS now contains information on most river basins; IDOC is currently collecting and verifying data for the remaining basins. All stream order data has been verified and loaded into the ISIS data base. As a centralized location for stream related information, ISIS provides a practical, functional, and effective method to identify any gaps or conflicts of authority.

As a part of this effort, the IEPA and IDOC have coordinated field work schedules to facilitate cooperation and reduce duplication of effort on stream and river basin surveys.

Completion of the new Illinois Fish Hatchery in 1983 has greatly facilitated the intensified management of the fisheries of Illinois' state and publicly owned lakes.

A multi-agency effort has also been initiated on six Watershed Land Treatment Projects, with IEPA providing water quality and biological data to assess effects of watershed conservation practices on stream resources.

An ongoing multi-agency effort is the Lake Management Work Group. This group is currently developing a publication which will identify the various reports, brochures, and data available from all the state agencies involved in lake protection and management programs.

These continued efforts and cooperative working relationships provide early dialogue opportunities to resolve problems and coordinate ongoing and future initiatives.

The Illinois Lake Management Act (ILMA) was passed in the fall of the 1989 session. SWP agencies with IEPA lead are to prepare by the fall of 1990 a framework plan which identifies the appropriate program response and expansions to facilitate increased lake management education, technical assistance, monitoring and research, as well as a financial plan to accomplish this increased workload. The ILMA also requires the development of a state level Clean Lakes Project Assistance Grant Program.

STREAM DATA MEASUREMENTS

Lead Agency: Illinois State Water Survey

Problem and Summary

The Water Plan Report recognized that programs for the collection and dissemination of streamflow, water quality, and suspended sediment data are seriously underfunded. Recommended network studies carried out by the Work Group have been completed and reported to the Task Force. Costs of streamgage operation have continued to increase despite increased automation of the instrumentation. The use of satellite communications and telephone communications directly with streamgage installations has provided real time data at many locations.

Implementation of Recommendations

1. Two statewide streamgage network analyses has been completed. The SWS report defines three levels of network activity: desirable, acceptable under financial constraint, and minimum. Both user interest and statistical analysis have been used to identify gages which could be dropped and locations where additional gages are needed. The USGS report deals with the number of measurements needed at a gaging station to satisfactorily define the rating curve as well as the annual costs for various gaging stations. The study of a desirable minimum gaging network has been completed.

2. Implementation of the recommendation to identify and support funding for a desirable minimum network depends upon completion of the final report described in Recommendation 1.

3. Comments on the adequacy of the IEPA ambient water quality network have been incorporated into the network configuration. Special Report No. 10 by ISWS documents the current status and needs for suspended sediment measurements.

4. Results of a users survey are included in the two reports mentioned under Recommendation 1. These identify the user categories as well as information benefits to them from stream data measurements.

5. The recommendation that requests for stream measurement data be made known to the sponsoring agencies is being coordinated with the USGS.

STREAM INDEXING

Lead Agency: Department of Conservation

Problem and Summary

It is recognized that more uniform stream indexing (e.g. stream ID#'s, river miles, and stream order) would be beneficial to State Water Plan agencies. Each agency has its own system making data exchange difficult. Additionally, new data have become available but are not being used. Substantial progress has been made toward data uniformity and ease of exchange.

Implementation of Recommendations

1a. & b. As recommended, a draft cross-reference table among the various state systems has been prepared by the State Water Survey. The cross-reference table lists various agencies' stream codes. It is up to each agency to make use of this information.

2a. Major changes to River Mileages and Drainage Areas of Illinois Streams (RMDAIS) have been noted in DOC records from the Illinois Streams Information System and forwarded to the State Water Survey.

2b. The State Water Survey is planning to make the river mile changes in a computer file of RMDAIS. This would make it easier to provide the information to other agencies.

3a. Stream indexing progress has been discussed at several State Water Plan Task Force meetings. The work group is still active. Refer to Aquatic and Riparian Habitat recommendation (1e) for further information on activities.

NATURAL RESOURCE INFORMATION SYSTEM

Lead Agency: Illinois State Water Survey

Problem and Summary

Vast amounts of natural resources data and information exist in the scientific surveys and in other natural resource agencies. Access to this information is limited because of the many different methods of data management within the various agencies. Several attempts at providing a computerized information service have failed for lack of sustained funding. The demise of these systems has come because the systems have had to rely on user fees after an initial period of limited funding for development purposes. Until the state is willing to make a commitment to natural resources data management, no improvements can be expected.

Implementation of Recommendations

1. Although the Natural Resources Information System (INRIS) envisioned by this issue does not exist, the Illinois Geographic Information System (IGIS) at DENR includes an extensive statewide database of natural resources and related information. This system has the potential to be a multi-agency information system.

2. The Natural Resources Information work group is inactive.

3. The referral service was developed a part of the INRIS system at DENR, but INRIS is no longer available.

4. A legislative initiative has been submitted which would provide for an expansion of the existing database in the IGIS as well as funds for hardware, software, and training for the other natural resource agencies to access the system. This proposal would give all of the interested state agencies access to the system and insure compatibility of data sets.

WATER RESOURCE PERMIT COORDINATION

Lead Agency: Environmental Protection Agency

Problem and Summary

The permitting process is a widespread activity of state government and one which requires constant attention and coordination. The use of a joint permit application process which involves the Corps of Engineers, Division of Water Resources, Illinois Environmental Protection Agency and Illinois Department of Conservation has added greatly to the interagency coordination required in the permitting process. Delays in the processing of all permits are still problems confronting regulatory agencies of the state as well as the lack of adequate enforcement.

Implementation of Recommendations

The Work Group for this issue is no longer active. The Water Plan recommendations are now being implemented through other work groups and through the joint permit application and review process.

WATER RESOURCES RESEARCH AND EDUCATION

Lead Agency: Water Resources Center

Problem and Summary

To develop sound state water policies and to improve the management of the state's water resources, our decision makers require the latest information gained through research and education. For that reason, the Water Resources Center and other members of the Task Force support the development of programs in interdisciplinary water resources research. For the past two decades, the Department of Energy and Natural Resources and the Water Resources Center at the University of Illinois have granted state and federal funds to scientists at the Scientific Surveys and at colleges and universities throughout the state for both basic and applied research, much of which applies to issues critical to the State Water Plan. The educational role has been concerned largely with training future water resources professionals and researchers. That role, however, needs to expand to include the development of educational programs for elementary and grade schools, as well as continuing education programs for homeowners, planners, managers, health professionals, the media, and all others who are called upon to make decisions that affect their environment.

Funding levels are insufficient to support comprehensive research and educational programs. Without further support, these programs cannot provide the state and its citizens with the information they need to develop sound, farsighted plans for managing the state's water resources.

Implementation of Recommendations

1. Federal support for water resources research: the level of funding has dropped considerably since 1980, while its requirement for matching funds has risen from $1.50 for every federal dollar to $2.00. The number of students being trained in water resources has declined by one-third since the 1970s. The funding cuts have come at a time when both the public and decision makers are facing increasingly complex water management decisions, and need planners, engineers, hydrologists, and aquatic biologists with a water resources education that will help them develop far-reaching solutions. The WRC program has remained viable through a lobbying of Congress and through the Center's efforts to stretch its limited dollars by coordinating its research

program with that of other related water programs in the Midwest. One of the WRC's closest ties is with NOAA's Illinois-Indiana Sea Grant Program, which is primarily concerned with water quality and management of lower Lake Michigan. In 1987, the director of WRC was named as the research coordinator for the program. Despite these efforts, water resources research and education will continue to decline unless additional funding is made available. It is hoped that the state will recognize the importance to its continued welfare of supporting water resources research and education and will commit more funds to this program.

2. Researchers and state agency personnel frequently interact to solve many of the issues described in this report. There is every hope that this cooperative tradition will continue.

3. Projects supported for water resources research by DENR and the University of Illinois are clearly addressing the needs of the state water planning program. Within the past year alone, the University of Illinois and the State Scientific Surveys have studied such critical issues as agricultural contamination of groundwater, biodegradation of water contaminants, irrigation and water use, financing pollution abatement, and the enhancement of fisheries in agricultural drainage ditches.

4. Meetings and workshops are part of an effort to inform the public on critical water issues. For example, during the past three years, the University of Illinois along with state agencies, has sponsored conferences on managing the threatened Illinois River system, which is an important commercial and recreational asset for the state.

   The University and state agencies have also cooperated in developing groundwater materials for teachers, homeowners, public health officials, and water resources professionals. This spring, they are proposing new educational materials that could be applied throughout the Midwest.

RESERVOIR AND LAKE OPERATIONS

Lead Agency: Illinois Division of Water Resources

Problem and Summary

The Water Plan agencies as well as private interests have become increasingly aware of the issues, values and management needs of Illinois' lake and reservoir resources for water supply, recreation, flood control, and low flow maintenance. The majority of the recommendations under this operation have been fully implemented.

Implementation of Recommendations

1. The recommendation to develop an interim protected instream flow standard and procedures for the implementation of the interim standard for all new reservoir projects was implemented with the publication of Special Report Number 6.

2. The Illinois EPA as lead agency has developed and implemented a Reservoir and Lake Protection and Enhancement Program for Illinois which includes technical assistance regarding lake quality protection, management, and restoration with an integrated approach to lake use enhancement including watershed protection.

3. The recommendation that all state water resource agencies take an active role in the preproject planning and resolution of the multi-purpose operational procedures and policies for all newly proposed reservoir projects is now current operational procedure among state agencies, with DOWR as the designated lead agency for state-sponsored multi-purpose reservoirs.

4. The Water Plan recommendation that affected water resources agencies of Illinois and the Corps of Engineers meet annually during the second week of April to discuss operation and management issues and opportunities at all state-federal reservoirs has not been implemented.

5. In response to the recommendation that all water supply impoundments with controlling gates should balance reservoir inflows with outflows during floods so that damages to agricultural floodplain lands are not increased, a review of the operations of federal reservoirs was conducted to evaluate this problem.

6. The recommendation that all non-state reservoir developments be processed as a "multi-agency permit coordination review" issue has been implemented through the joint agency permit application process.

7. The recommendation for state water resources agencies to work with all water supply impoundment developers to insure that all projects optimize the available water supply storage and minimize environmental degradation is being addressed partially by a DOWR-funded State Water Survey study which is evaluating statewide water supply needs and availability.

8. The State Water Survey has continued to conduct lake sedimentation surveys and pursue research on methods for reducing reservoir sedimentation rates, and this recommendation has been implemented through the publication of Special Reports No. 9 and 10.

APPENDIX A

AGENCIES AND INDIVIDUALS CURRENTLY PARTICIPATING IN THE STATE WATER PLAN TASK FORCE

Department of Agriculture

James R. Brim

Department of Conservation

Jan Arbise
Gregg Tichacek

Department of Commerce and Community Affairs

Richard Burd

Environmental Protection Agency

Roger Selburg
Toby Frevert
Rick Mollahan

Department of Energy and Natural Resources

Linda Vogt
Richard G. Semonin

U of I Water Resources Center

Glenn Stout

Department of Mines and Minerals

Larry Bengal

Department of Public Health

Jim Mills

Governor's Office

Jill McClelland

Division of Water Resources

Donald R. Vonnahme
Gary R. Clark

APPENDIX B
(Revised June 1992)
STATE WATER PLAN TASK FORCE
LISTING OF SPECIAL PUBLICATIONS

PROGRESS REPORTS

Plan of Study, Illinois State Water Plan, March 1981.

1981 Progress Report, Illinois State Water Plan, January 18, 1982.

1982 Progress Report, Illinois State Water Plan: Emerging Issues, January 31, 1983.

Estimated Cost of Implementation, Fiscal Years 1984 Through 1986, Illinois State Water Plan Task Force, January, 1984.

Estimated Cost of Implementation, Fiscal Years 1986 Through 1988, Illinois State Water Plan Task Force, January, 1985.

Status of Implementation, Illinois State Water Plan, May 1986.

Status of Implementation, Illinois State Water Plan, January 1990.

INFORMATION PAPERS

Information Report No. 1, Hydropower, October 1982.

Information Report No. 2, Inland Waterway and Deep Draft Navigation, October 1982.

SPECIAL REPORTS

Special Report No. 1, **Illinois Water Resources and Uses,** by University Water Resources Center, January 18, 1982.

Special Report No. 2, **Atmospheric Changes and Management Issues,** by State Water Survey, August 1982.

Special Report No. 3, **Drought Contingency Planning,** by Division of Water Resources, June 1983.

Special Report No. 4, **Water Conservation,** by Department of Commerce and Community Affairs and University Water Resources Center, January 1984.

Special Report No. 5, **Illinois Water Research Needs and a Catalog of Water Research in Illinois,** by University Water Resources Center, March 1983.

Special Report No. 6, **Instream Flow Protection: A Planning Standard for Illinois Streams,** by the Division of Water Resources and the Department of Conservation, October 1983.

Special Report No. 7, **Urban Waterfront Renewal: The Illinois Experience,** by the Department of Conservation, (not available).

Special Report No. 8, **Strategy for the Protection of Underground Water in Illinois,** printed by the Illinois Environmental Protection Agency, October 1984.

Special Report No. 9, **Lake Sedimentation Surveys in Illinois,** by the State Water Survey, February 1985.

Special Report No. 10, **Stream Sediment Monitoring for Illinois,** by the State Water Survey, August 1985.

Special Report No. 11, **Illinois River Action Plan,** printed by the Division of Water Resources, October 1987.

Special Report No. 12, **Groundwater Quantity Issues,** printed by the Division of Water Resources, February 1989.

Special Report No. 13, **Biological Stream Classification (BSC): A Biological Assessment of Illinois Stream Quality,** by Illinois Environmental Protection Agency and the Department of Conservation, July 1989.

Special Report No. 14, **Groundwater Supply and Demand in Illinois,** by the State Water Survey, Report of Investigation 116, 1991.

Special Report No. 15, **An Inventory of State Agencies' Lake Publications,** printed by the Illinois Environmental Protection Agency, August 1990.

Special Report No. 16, **Illinois Streams Natural Resource Assessment (Operational Framework),** printed by the Illinois Department of Energy and Natural Resources, September, 1990.

Special Report No. 17, **The State of Illinois Response to the 1988-1989 Drought,** printed by the State Water Survey, January, 1991.

APPENDIX C
STATE WATER PLAN TASK FORCE
WORK GROUP LISTING AND STATUS - REVISED MAY 1992

Work Group	Chair Person	Status
Stream & Lake Use Mgmt.	IEPA/DOC	Inactive
Stream Data Measurements	Mike Terstriep	Inactive
Stream Indexing	Dick Westfall	Inactive
Natural Resource Information System	Mike Terstriep	Active through CTAP Study
Water Resources Permit Coordination	Thomas McSwiggin	Inactive
Water Research & Education	Glenn Stout	Inactive
Reservoir & Lake Operations	Gary Clark	Inactive-Replaced by Lake Mgmt. Work Group
Protection of Underground Water	IEPA	Replaced statutorily by the Interagency Coordinating Committee on Groundwater and the Groundwater Quantity Committee
Instream Flow	Gary Clark & Ed Hoffman	Statutorily replaced by HB 1196
Public Waters Identification	Bruce Barker	Inactive
Biotic Integrity	IEPA/IDOC	Inactive
Soil Erosion & Water Quality Advisory Committee	IDOA	Inactive
Watershed Priority Committee	IDOA	Active
Illinois River Action Plan	Gary Clark	Inactive
Groundwater Quantity Committee	Gary Clark	Semi-active
Wetlands	Marvin Hubbell	Inactive
Lake Management	IEPA/IDOC	Inactive