ILLINOIS STATE WATER PLAN

ESTIMATED COSTS OF IMPLEMENTATION

FISCAL YEARS 1986 THROUGH 1988

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INTRODUCTION

The need for an Illinois State Water Plan has been increasingly evident for several years. The most recent plan was published in 1967 and has become obsolete in a number of respects. Events on a state, national, and international scale have resulted in changing and competing demands upon the available water resources. On an institutional level a number of changes in water-related agencies had taken place, and at times the lack of adequate program integration was apparent.

The decision to proceed with a State Water Plan was triggered by action of the Executive Branch of the U.S. Government. Funding under Title III of P.L. 89-80 administered by the Water Resources Council was substantially increased. This provided a grant to Illinois and other states to increase planning and management of water and related land resources at the state level. Early in 1980 the Governor appointed a special Task Force to prepare a new State Water Plan. Membership on the State Water Plan Task Force consists of policy level individuals from the following fourteen agencies:

Department of Agriculture
Bureau of the Budget
Capital Development Board
Department of Commerce and Community Affairs
Department of Conservation
Emergency Services and Disaster Agency
Department of Energy and Natural Resources/State Water Survey
Environmental Protection Agency
Department of Mines and Minerals
Office of the Governor
Department of Public Health
Department of Transportation/Division of Water Resources
Water Resources Center, University of Illinois
Water Resources Commission, General Assembly (no longer active)

The Governor designated the Director of the Division of Water Resources in the Department of Transportation as Task Force Chairman. The chairman, in turn, retained an Executive Director and provided professional and supporting staff. The Task Force met first on May 6, 1980, and has met monthly up through the spring of 1984.. Its initial work on the Plan was concluded in early 1984.

The State Water Plan Task Force defined its mission as the development of an improved water management system that would be socially acceptable and operated within resource constraints. Consequently, the Task Force decided that the next generation State Water Plan would not be another one time effort, but would provide a contemporary framework for decision-making. The work of the Task Force has not directly focused on institutions or agencies in the context of reviewing organizational efficiency or reorganization options. It has however, by working with two state level and five regional advisory committees, concentrated on those topics which represented the pressing management issues facing state water resource agencies and the public at large in Illinois.

In order to characterize these management issues, the State Water Plan Task Force adopted a three tiered approach to issue definition: critical issues, cross-cutting topics and operating issues. Critical issues were identified as those statewide problems that were not being sufficiently addressed by current programs, or those which were emerging and could be anticipated to lead to future problems or conflicts. Cross-cutting topics were viewed as broad problems requiring actions

which relate to and involve other issues. Operating issues concerned those on-going, multi-agency programs which could be made more efficient through coordination and joint action. Ten critical issues, three cross-cutting topics and seven operating issues were identified and worked on during the State Water Plan process. The individual issues themselves were assigned to a lead agency for development. The following table lists, in order of importance for each category, all twenty issues and the responsible lead agency.

STATE WATER PLAN ISSUES AND RESPONSIBLE LEAD AGENCY

Critical Issues	Agencies
Erosion and Sediment Control	Department of Agriculture
Protection of Underground Water	Environmental Protection Agency
Water Conservation	Department of Commerce and Community Affairs
Flood Damage Mitigation	Division of Water Resources
Competition for Water	State Water Survey
Aquatic and Riparian Habitat	Department of Conservation
Water-Based Recreation	Department of Conservation
Atmospheric Changes and Management	State Water Survey
Drought and Emergency Loss of Water Supply	Division of Water Resources
Water Use Law	Division of Water Resources
Cross-Cutting Issues	
Integrated Water Management	Environmental Protection Agency
Conflict Resolution	Executive Director, State Water Plan
Public Participation	Executive Director, State Water Plan
Operating Issues	
Stream and Lake Use Management	Environmental Protection Agency
Stream Data Measurements	State Water Survey
Stream Indexing	Department of Conservation
Natural Resources Information System	State Water Survey
Water Resources Permit Coordination	Environmental Protection Agency
Water Resources Research and Education	State Water Survey/Water Resources Center
Reservoir and Lake Operations	Division of Water Resources

METHODOLOGY FOR COST ESTIMATES

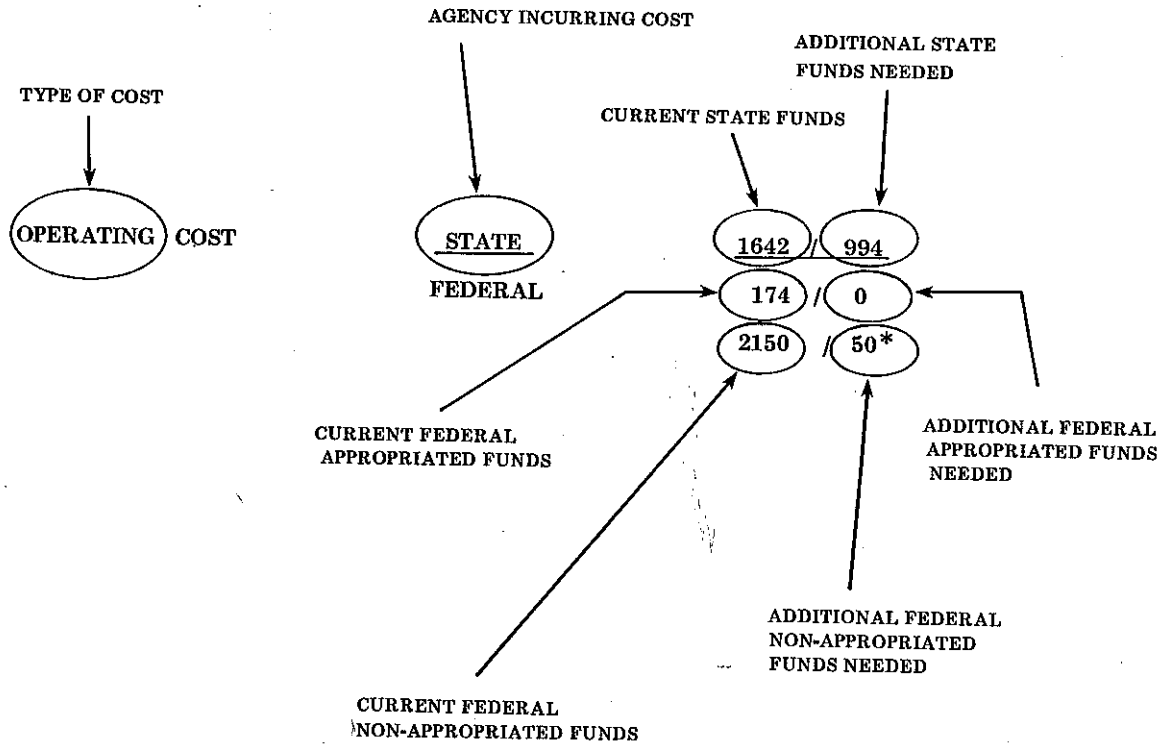
During 1983, as the major work of considering public testimony and making final recommendations was drawing to a close, the attention of the Task Force turned to the estimation of costs associated with implementing the State Water Plan. Contained within the ten critical issues, three cross-cutting topics and seven operating issues were over ninety major recommendations pertinent to water resource management in the State. Although some of the recommendations can be implemented with relatively few additional dollars, others cannot. In order to implement the recommendations of the State Water Plan, significant fiscal resources will have to be directed toward these ends. In some instances, these fiscal resources are needed to mitigate reductions in State and Federal support of existing program mandates. Beyond stabilizing existing program declines, the Task Force identified areas where new initiatives would be required to meet State Water Plan objectives.

In the following pages, costs estimates have been provided for the major recommendations and their component parts. These estimates are presented on an issue by issue basis and were prepared by each Agency which anticipated implementation costs for a given issue. These costs have been divided between operating and capital costs. Operating costs have been defined as those costs related to personnel and program operation. Capital costs have been defined as those costs associated with construction or purchase of equipment and provision of cost-share or other types of real property acquistion required to implement the recommendation.

The cost estimates have been further characterized as to source and availability. State Fiscal Year (SFY) 1986 was assumed to be the base

year for this report. A previous report was prepared for SFY84 through SFY86 and published in January 1984. SFY86 costs represent the current commitment to implementation of State Water Plan objectives. The projected costs for SFY87 and SFY88 are indicative of the near term implementation costs. They are annual totals rather than incremental costs above the SFY86 base year. Monies required to implement State Water Plan objectives have been identified as: State funds (current)/State funds (additional); federal appropriated funds (current)/federal appropriated funds (additional) and; federal non-appropriated funds (current)/federal non-appropriated funds (additional). State funding amounts follow directly across from each agency's cost. Federal appropriated funds are listed in the line immediately below State amounts. Federal non-appropriated funds are indicated by an asterisk. Federal appropriated funds are those funds which are received by the State from the federal government and which must be additionally appropriated by the Illinois General Assembly. Federal non-appropriated funds are those funds that are used by State agencies, or by agencies of the federal government in conjunction with State agency programs, which do not require appropriation by the Illinois General Assembly. The following page contains a graphic key to interpret the budget tables found in the remainder of this report.

STATE WATER PLAN BUDGET INTERPRETATION KEY



ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

ISSUE			FY86	FY87	FY88
Erosion and Sediment Control	Operating Costs	State	6781.7/760	7016.5/760	7053.5/767
		Federal	181/0	181/0	26/155
			2122/300*	2122/300*	2122/300*
	Capital Costs	State	50/50	50/100	50/2100
		Federal	0/0	0/0	0/0
Protection of Underground Water	Operating Costs	State	700.5/294	381.5/681	406.5/705
		Federal	18/177	18/177	18/177
			162/0*	50/0*	50/0*
Flood Damage Mitigation	Operating Costs	State	2409/315	2394/355	2394/390
		Federal	14/0	10/200*	10/200*
			6/106*		
	Capital Costs	State	8325/5000	10940/5205	12990/5275
		Federal	15627/0*	15600/5000*	15600/10000*
Water Conservation	Operating Costs	State	95.5/35	113.5/50.5	116.5/41
		Federal	0/50*	0/37.5	0/50*
				0/50	
Competition for Water	Operating Costs	State	377/50	127/407	127/407
		Federal	0/0	0/0	0/0
Aquatic and Riparian Habitat	Operating Costs	State	491.9/0	152.5/690	188.2/230
		Federal	110.6/0	11/0	11/0
			15/0*	20/0*	20/0*
Water Based Recreation	Operating Costs	State	35/0	18/0	16/0
		Federal	5/0	5/0	5/0
Atmospheric Changes and Management	Operating Costs	State	260/180	211/350	261/700
		Federal	710/0	625/0	1600/0
	Capital Costs	State	0/400	0/0	0/0
		Federal	0/0	0/0	0/0

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

ISSUE			FY86	FY87	FY88
Drought and Emergency Interruption of Supplies	Operating Costs	State	43/0	52/0	54/0
		Federal	3/0	3/0	3/0
Water Use Law	Operating Costs	State	18/0	38/0	38/0
		Federal	0/0	0/0	0/0
Integrated Water Management	Operating Costs	State	74/100	75/0	75/0
		Federal	115/0	115/0	115/0
Conflict Resolution	Operating Costs	State	75/0	75/0	75/0
		Federal	16/0	16/0	16/0
Public Participation	Operating Costs	State	9/2	9/2	9/2
		Federal	1.5/0	1.5/0	1.5/0
				0/3.5*	0/3.5*
Stream and Lake Use Management	Operating Costs	State	4.5/0	4.5/0	4.5/0
		Federal	18/0	18/0	18/0
Stream Data Measurements	Operating Costs	State	990.3/140	1013/423	1025/515
		Federal	300/80	300/80	300/80
			266.3/0*	403/60*	427/130*
Stream Indexing	Operating Costs	State	33.7/0	33.7/0	33.7/0
		Federal	3/0	3/0	3/0
Natural Resources Information Systems	Operating Costs	State	-	-	-
		Federal			
Water Resource Permit Coordination	Operating Costs	State	23.1/0	23.1/0	23.1/0
		Federal	18/0	18/0	18/0
Water Resources Research and Education	Operating Costs	State	128.1/0	158.1/0	235.1/0
		Federal	3.5/0	3.5/0	3.5/0
			115/0*	150/0*	150/0*
Reservoir and Lakes Operations	Operating Costs	State	103.8/0	103.8/355	103.8/315
		Federal	35/0	35/0	35/0
	Capital Costs	State	700/0	540/500	540/500
		Federal	700/0	500/500	500/500

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

ISSUE			FY86	FY87	FY88
TOTAL	Operating Costs	State	12653.1/1876	11999.2/4073.5	12238.9/4072
		Federal	1551.6/257	1353/294.5	2173/412
			2686.3/456*	2755/613.5*	2779/683.5*
	Capital Costs	State	9075/5450	11530/5805	13580/7875
		Federal	700/0	500/500	500/500
			15627/0*	15600/5000*	15600/10000*
	TOTAL COSTS		50332.0	60023.7	70413.4
	EXISTING STATE COSTS		21728.1	23529.2	25818.9
	ADDITIONAL STATE COSTS		7326.0	9878.5	11947.0

(a) Unappropriated local funds used as match for Clean Lakes projects.

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, EPA

ISSUE

Erosion and Sediment Control

	Recommendation		FY 1986	FY 1987	FY 1988
1.	Operating Costs	State	26.7/0	25.5/0	20.5/5
		Federal	114/0	114/0	47/110
			2/0*	2/0*	2/0*
2.	Operating Costs	State	6744/760	6944/760	6946/762
		Federal	45/0	45/0	0/45
			2120/300*	2120/300*	2120/300*
	Capital Costs	State	50/50	50/100	50/2100
		Federal	0	0	0
3.	Operating Costs	State	7/0	7/0	7/0
		Federal	22/0	22/0	22/0
4.	Operating Costs	State	4/0	40/0	80/0
		Federal	0	0	0
	Capital Costs	State	0	0	0
		Federal	0	0	0
TOTAL	Operating Costs	State	6781.7/760	7016.5/760	7053.5/767
		Federal	181/0	181/0	26/155
			2122/300*	2122/300*	2122/300*
	Capital Costs	State	50/50	50/100	50/2100
		Federal	0	0	0
	TOTAL COSTS		10244.7	10529.5	12573.5

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, EPA

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
1. Continue soil and water conservation program coordination.						
A. Maintain the Soil Erosion and Water Quality Advisory Committee (SEWQAC) and two subcommittees.	Operating Costs	DOWR	1/0	1/0	1/0	Part of normal program handled by in-house staff.
		Federal	0	0	0	
1. State Watershed Priority Committee	Operating Costs	DOC	2/0	1/0	1/0	Staff participation would be part of normal program.
		Federal	0	0	0	
2. Education Committee	Operating Costs	DENR	3/0	3/0	3/0	
		Federal	0	0	0	
	Operating Costs	DOA	10/0	10/0	10/0	Within normal program.
		Federal	270*	270*	270*	
	Operating Costs	EPA	0/0	0/0	0/0	Part of normal program handled by in-house staff.
		Federal	470	470	470	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, EPA

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
B. Complete a state soil erosion and water quality long-range plan.	Operating Costs	DOC / Federal	0.2/0 / 0	0 / 0	0 / 0	Staff participation would be part of normal program.
	Operating Costs	DENR / Federal	2/0 / 0	2/0 / 0	2/0 / 0	
1. Encourage all state and federal agencies to develop long-range and annual work plans consistent with the plan.	Operating Costs	DOA / Federal	-	-	-	Completed in FY 84.
	Operating Costs	EPA / Federal	5/0 / 110/0	5/0 / 110/0	0/5 / 0/110	Includes IEPA's role in maintaining the long range plan and support of AISWCD on this effort.
2. Provide a forum to discuss annual work plans.						
Total costs for Recommendation 1.	Operating Costs	State / Federal	26.7/0 / 114/0 2/0*	25.5/0 / 114/0 2/0*	20.5/5 / 4/110 2/0*	
	Total Costs		142.7	141.5	141.5	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOA, EPA, WRC/UI

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
2. Encourage all SWCD's to meet established soil erosion goals.						
A. Complete a modern soil survey in all counties by the year 1991, with additional federal, state and local resources as specified in the report "Water Plan Implementation Cost Estimates".	Operating Costs	DOA Federal	614/0 1400/0*	614/0 1400/0*	614/0 1400/0*	Funds will be required until 1993.
B. Add 58 more SWCD employees	Operating Costs	DOA Federal	1700/0 0	1900/0 0	1900/0 0	
C. Assure the efficient and effective use of financial and technical resources by targeting resources into areas with the greatest resource concerns and needs.	Operating Costs	DOA Federal	2/0 0	2/0 0	2/0 0	
D. Provide state cost-share assistance for the installation of conservation practices on land for which a valid complaint has been filed under the soil erosion and sediment	Operating Costs	DOA Federal	4000 0	4000 0	4000 0	
	Capital Costs	DOA Federal	50/0 0	50/50 0	50/50 0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOA, EPA, WRC/UI

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
E. Convert 900,000 acres of land currently in row crop production to a less intensive land use (pasture, trees, etc.) because it cannot meet "T" values with current soil and water conservation technology.	Operating Costs	DOA	0/35	0/35	0/35	Costs for statewide inventory
		Federal	0	0	0	
	Capital Costs	DOA	0/50	0/50	0/50	Total estimated cost to convert is 90 million.
		Federal	0	0	0	
1. Initiate a statewide inventory to specifically identify all such areas.						
F. Maintain and expand educational programs to increase the public awareness of soil and water conservation issues.	Operating Costs	DOA	200/500	200/500	200/500	State funds are provided to local SWCD's, federal funds to Cooperative Extension.
		Federal	700/300*	700/300*	700/300*	
1. Short range objective - educate adult decision makers.	Operating Costs	DOA	150/100	150/100	150/100	State funds provided to local SWCD's, federal funds to Cooperative Extension.
		Federal	0	0	0	
2. Intermediate range objective - target educational programs to high schools and colleges.	Operating Costs	DOA	50/100	50/100	50/100	State funds provided to local SWCD's, federal funding unavailable.
		Federal	0	0	0	
3. Long-range objective - develop educational programs for grade school and junior high students.						

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOA, EPA, WRC/UI

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
G. Develop new and refine existing incentives to encourage landowners to adopt soil conservation practices. 1. More effective use of existing incentive programs. 2. Development of new incentives.	Operating Costs	DOA Federal	0 0	0 0	0 0	
	Capital Costs	DOA Federal	0 0	0 0	0/2000 0	Estimated cost assistance level to meet established goals of approximately 11,000 acres per year; any shortfall will either extend time or require increased future budget resources.
H. Encourage and support expanded research in conservation economics and the development of new conservation practices.	Operating Costs	EPA Federal	2/0 45/0	2/0 45/0	0/2 0/45	
	Operating Costs	WRC/UI Federal	26/10 20/0*	26/10 20/0*	30/10 20/0*	
I. Establish an interagency program to use and apply conservation research.	Operating Costs	DOA Federal	0/15 0	0/15 0	0/15 0	Support of half-time staff position.
Total costs for Recommendation 2.	Operating Costs	State Federal	6744/760 45/0 2120/300*	6944/760 45/0 2120/300*	6946/762 0/45 2120/300*	
	Capital Costs	State Federal	50/50 0	50/100 0	50/2100 0	
	Total Costs		10069	10319	12323	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOA, EPA

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
3. Evaluate implementation of the Water Quality Management Plan.	Operating Costs	DOA Federal	7/0 0	7/0 0	7/0 0	
	Operating Costs	EPA Federal	0 22/0	0 22/0	0 22/0	
A. Utilize established IEPA evaluation criteria in the 1984 progress evaluation of the Water Quality Management Plan.						
B. Identify and correct program deficiencies.						
C. Support the statewide measurement programs for stream flow, water quality, and sedimentation as measures of the problem and progress.						
Total costs for Recommendation 3.	Operating Costs	State Federal	7/0 22/0	7/0 22/0	7/0 22/0	
	Total Costs		29	29	29	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOA
IMPLEMENTING AGENCY(IES): DOA

ISSUE: EROSION AND SEDIMENT CONTROL

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
4. Continue to coordinate existing watershed programs, and initiate a complimentary State program to direct resources into projects which will help protect important water resources and control erosion on agricultural land.	Operating Costs	DOA / Federal	4/0 / 0	40/0 / 0	80/0 / 0	
	Capital Costs	DOA / Federal	0 / 0	0 / 0	0 / 0	
Total costs for Recommendation 4.	Operating Costs	State / Federal	4/0 / 0	40/0 / 0	80/0 / 0	
	Capital Costs	State / Federal	0 / 0	0 / 0	0 / 0	
	Total Costs		4	40	80	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, EPA, WRC/UI

ISSUE

Protection of
Underground Water

	Recommendation		FY 1986	FY 1987	FY 1988
	1. Operating Costs	State	3/15	3/25	3/25
		Federal	8/0	8/0	8/0
	2. Operating Costs	State	-	-	-
		Federal			
	3. Operating Costs	State	658/110	290/465	315/485
		Federal	162/0*	50/0*	50/0*
	4. Operating Costs	State	0/26	0/26	0/26
		Federal	0/2	0/2	0/2
	5. Operating Costs	State	6/0	6/0	6/0
		Federal	10/0	10/0	10/0
	6. Operating Costs	State	30/118	80/140	80/144
		Federal	0/100	0/100	0/100
	7. Operating Costs	State	3.5/25	2.5/25	2.5/25
		Federal	0/75	0/75	0/75
TOTAL	Operating Costs	State	700.5/294	381.5/681	406.5/705
		Federal	18/177	18/177	18/177
			162/0*	50/0*	50/0*
	TOTAL COSTS		1351.5	1307.5	1356.5

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOC, DENR, EPA

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
1. Establishment of Levels of Protection Desired.	Operating Costs	DOC / Federal	0 / 0	0 / 0	0 / 0	
	Operating Costs	DENR / Federal	0/15 / 0	0/25 / 0	0/25 / 0	
	Operating Costs	EPA / Federal	3/0 / 8/0	3/0 / 8/0	3/0 / 8/0	
Total costs for Recommendation 1.	Operating Costs	State / Federal	3/15 / 8/0	3/25 / 8/0	3/25 / 8/0	
	Total Costs		26	36	36	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DENR

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
2. Determination of Users and Uses of Underground Water.	Operating Costs	DENR / Federal	-	-	-	Part of Water Use Monitoring Program. See Competition for Water issue.
Total costs for Recommendation 2.	Operating Costs	State / Federal	-	-	-	
	Total Costs		-	-	-	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOWR, DENR, EPA

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
3. Development of Resource Inventory.						
A. Quality	Operating Costs	DENR / Federal	18/110 / 0	40/100 / 0	45/110 / 0	
	Operating Costs	EPA / Federal	380/0 / 162/0*	0/255 / 50/0*	0/255 / 50/0*	
B. Quantity	Operating Costs	DOWR / Federal	20/0 / 0	0/110 / 0	0/120 / 0	New funds FY 87 and FY 88 are to initiate Mahomet Valley aquifer study, update deep aquifer model and initiate shallow G.W. area analysis in Chicago Metro. Area.
	Operating Costs	DENR / Federal	240/0 / 0	250/0 / 0	270/0 / 0	
Total costs for Recommendation 3.	Operating Costs	State / Federal	658/110 / 162/0*	290/465 / 50/0*	315/485 / 50/0*	
	Total Costs		930	805	850	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DENR, EPA

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
4. Analyze the Treatability and Interconnection of Underground Waters.	Operating Costs	DENR / Federal	0/25 / 0	0/25 / 0	0/25 / 0	
	Operating Costs	EPA / Federal	0/1 / 0/2	0/1 / 0/2	0/1 / 0/2	
Total costs for Recommendation 4.	Operating Costs	State / Federal	0/26 / 0/2	0/26 / 0/2	0/26 / 0/2	
	Total Costs		28	28	28	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOWR, DENR, DOA, EPA

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
5. Determination of Local, State and Federal Responsibilities for Protection of Underground Water.	Operating Costs	DOWR / Federal	2/0 / 0	2/0 / 0	2/0 / 0	Within normal program
	Operating Costs	DENR / Federal	0/0 / 0	0/0 / 0	0/0 / 0	Within normal program
	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	
	Operating Costs	EPA / Federal	3/0 / 10/0	3/0 / 10/0	3/0 / 10/0	
Total costs for Recommendation 5.	Operating Costs	State / Federal	6/0 / 10/0	6/0 / 10/0	6/0 / 10/0	
	Total Costs		16	16	16	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOWR, DENR, EPA,

ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
6. Identification of Degradation and Depletion of Underground Waters.	Operating Costs	DOWR / Federal	30/0 / 0	80/0 / 0	80/0 / 0	Funds needed to conduct G.W. shortage areas analysis.
	Operating Costs	DENR / Federal	0/18 / 0	0/40 / 0	0/44 / 0	Requires additional appropriations.
	Operating Costs	EPA / Federal	0/100 / 0/100	0/100 / 0/100	0/100 / 0/100	
Total costs for Recommendation 6.	Operating Costs	State / Federal	30/118 / 0/100	80/140 / 0/100	80/144 / 0/100	
	Total Costs		248	320	324	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): EPA
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, EPA ISSUE: PROTECTION OF UNDERGROUND WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
7. Develop and Implement Programs.	Operating Costs	DOWR / Federal	1/0 / 0	2/0 / 0	2/0 / 0	Part of normal program; handled by in-house staff.
	Operating Costs	DOC / Federal	2/0 / 0	0 / 0	0 / 0	Handled with existing staff; part of normal program.
	Operating Costs	DENR / Federal	-	-	-	
	Operating Costs	DOA / Federal	0.5/0 / 0	0.5/0 / 0	0.5/0 / 0	
	Operating Costs	EPA / Federal	0/25 / 0/75	0/25 / 0/75	0/25 / 0/75	In FY 86 and beyond three additional staff will be needed to implement an underground water program.
Total costs for Recommendation 7.	Operating Costs	State / Federal	3.5/25 / 0/75	2.5/25 / 0/75	2.5/25 / 0/75	
	Total Costs		103.5	102.5	102.5	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, WRC/UI

ISSUE

Flood Damage Mitigation

Recommendation			FY 1986	FY 1987	FY 1988
1. Operating Costs		State	2309/100	2314/100	2314/100
		Federal	670*	1070*	1070*
Capital Costs		State	8000/5000	10640/5205	12690/5275
		Federal	15000/0*	15000/5000*	15000/10000*
2. Operating Costs		State	22/0	22/0	22/0
		Federal	0	0	0
3. Operating Costs		State	75/215	55/215	55/215
		Federal	1470	0/200*	0/200*
			0/106*		
Capital Costs		State	325/0	300/0	300/0
		Federal	627/0*	600/0*	600/0*
4. Operating Costs		State	3/0	3/40	3/75
		Federal	0	0	0
TOTAL	Operating Costs	State	2409/315	2394/355	2394/390
		Federal	1470	1070/200*	1070/200*
			6/106*		
	Capital Costs	State	8325/5000	10940/5205	12990/5275
		Federal	15627/0*	15600/5000*	15600/10000*
	TOTAL COSTS		31802	39704	46859

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, WRC/UI

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
1. Urban flood damage mitigation planning in Illinois has proceeded to a level where there is now an emerging backlog of economical flood damage reduction projects. This backlog will require over 250 million dollars for implementation. Flood problem area planning is continuing, although the time required for planning is considered excessive and diminishes the level of local support. Therefore:						
A. Required State expenditures for flood damage reduction measures shown, at a minimum, be maintained at a level of $10 million annually in order to effectively reduce the backlog in planned projects.	Operating Costs	DOWR Federal	2295/0 0	2300/0 0	2300/0 0	Base level continuation of river basin studies..
	Capital Costs	DOWR Federal	8000/5000 15,000/0*	10,640/5205 15,000/5000*	12,690/5275 15,000/10,000*	New funds are from Build Illinois program. Operating costs also cover recommendations 1B through 1F.
	Operating Costs	DENR Federal	0/50 0	0/50 0	0/50 0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, WRC/UI ISSUE: FLOOD DAMAGE MITIGATION

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
B. Project planning procedures will be revised to shorten study duration and assure early termination of unacceptable project proposals.	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	Includes both rural and urban projects.
C. Policies for flood damage mitigation will stress local government participation and State-Federal cooperation.	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	
D. Hydraulic, hydrologic, and economic analysis models for flood prone watersheds will include foreseeable, future changes.	Operating Costs	WRC/UI / Federal	11/0 / 6/0*	11/0 / 10/0*	11/0 / 10/0*	
E. Technical planning procedures and regulatory flood analyses will incorporate rainfall frequency values based on current climatic records and trends, to be assessed by the State Water Survey.	Operating Costs	DOWR / Federal	-	-	-	This study was completed in FY 85.

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA, WRC/UI ISSUE: FLOOD DAMAGE MITIGATION

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
F. Federal planning policies should be revised to remove arbitrary distinctions between types of flood damage problems and appropriate mitigation measures.	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	
G. A flood warning system involving a weather radar and meteorologists should be implemented for a multi-year demonstration effort in northeastern Illinois by the State Water Survey.	Operating Costs	DENR / Federal	0/50 / 0	0/50 / 0	0/50 / 0	
Total costs for Recommendation 1.	Operating Costs	State / Federal	2309/100 / 6/0*	2314/100 / 10/0*	2314/100 / 10/0*	
	Capital Costs	State / Federal	8000/5000 / 15,000/0*	10,640/5205 / 15,000/5000*	12,690/5275 / 15,000/10,000*	
	Total Costs		30,415	38,269	45,389	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOA

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
2. Rural flood control project implementation has languished until recently in Illinois due to the lack of State agency leadership and coordination further complicated by ever-changing Federal priorities. Also, the cause of flooding problems in some rural areas is now being recognized as the cumulative increase on flood stages due to the construction of rural agricultural levees. Therefore:						
A. State leadership and programmatic responsibility for rural flood control project planning and implementation will be maintained through the staff of the Illinois Department of Agriculture.	Operating Costs	DOA Federal	-	-	-	Add full-time position in FY 85.
B. A detailed basin by basin analysis of agricultural levee placement will be conducted in order to improve planning and permitting decisions in rural areas.	Operating Costs	DOWR Federal	20/0 0	20/0 0	20/0 0	Requires $20K per year to complete one basin per year using in-house staff and computer time.

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOA

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
C. Land use planning for soil erosion and sediment control will be included as a component of rural flood control projects.	Operating Costs	DOA Federal	2/0 0	2/0 0	2/0 0	
Total costs for Recommendation 2.	Operating Costs	State Federal	22/0 0	22/0 0	22/0 0	
	Total Costs		22	22	22	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DENR

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
3. The State's flood damage mitigation program cannot exist successfully without a strong and broadly supported flood insurance and floodplain regulatory management program at the State and local level. Therefore:						
A. Statewide regulation of floodway construction will improve with an increased level of staffing.	Operating Costs	DOWR Federal	35/0 0	35/0 0	35/0 0	Add one civil engineer.
B. All known violations of the State's floodplain regulations should be brought into compliance with timely investigation and enforcement.	Operating Costs	DOWR Federal	0/125 0	0/125 0	0/125 0	Add three civil engineers plus legal fees.
C. Consideration for protecting natural conditions will become a part of the State's permit review process.	Operating Costs	DOWR Federal	-	-	-	Conducted in public waters with no increase in cost.

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DOC, DENR, DOA

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation (cont.)			FY 1986	FY 1987	FY 1988	Remarks
D. FEMA floodplain mapping should be completed for all flood-prone communities and updated for developing communities in order for local governments to have a sound technical basis for floodplain regulation. Federal flood insurance rate reductions should be allowed for non-structural flood proofing measures.	Operating Costs	DOWR Federal	0 0/106*	0 0/200*	0 0/200*	Additional federal appropriation required.
E. The State should continue to seek federal funding and develop State and local funding of programs to rebuild or relocate flood damaged buildings so they are protected from future flooding.	Capital Costs	DOWR Federal	325/0 627/0*	300/0 600/0*	300/0 600/0*	
F. The floodplain information repository will be maintained at the State Water Survey to (1) provide best available flood elevation data for floodplain managers (2) provide management support in the form of new flood-related reports and flood discharge values, and (3) assist local communities with amendments and revisions of insurance studies.	Operating Costs	DENR Federal	40/70 14	20/80 0	20/80 0	Additional appropriations required for floodplain repository and local assistance programs through SWS.
		DENR Federal	0/20 0	0/10 0	0/10 0	Support of Data Base Mgmt. System for flood insurance information - SWS.
Total costs for Recommendation 3.	Operating Costs	State Federal	75/215 14/0 0/106*	55/215 0/200*	55/215 0/200*	
	Capital Costs	State Federal	325/0 627/0*	300/0 600/0*	300/0 600/0*	
Total Costs			1362	1370	1370	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DOWR
IMPLEMENTING AGENCY(IES): DOWR, DENR

ISSUE: FLOOD DAMAGE MITIGATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
4. Inadequate stormwater management planning and regulation by local governments can often create localized flooding and drainage problems where none existed previously. Therefore:						
A. Local governments should address stormwater management with legislation, such as a model ordinance for stormwater management presented in the Division of Water Resources Local Assistance manuals on stormwater management.	Operating Costs	DOWR Federal	3/0 0	3/0 0	3/0 0	Local assistance and manuals supplied by in-house staff.
	Operating Costs	DENR Federal	0 0	0/40 0	0/75 0	Additional appropriations required for climatic and physical factors leading to increased flooding in urbanizing areas.
Total costs for Recommendation 4.	Operating Costs	State Federal	3/0 0	3/40 0	3/75 0	
	Total Costs		3	43	78	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DOWR, DENR, DOA, EPA, DCCA, WRC/UI

ISSUE

Water Conservation

	Recommendation		FY 1986	FY 1987	FY 1988
	1. Operating Costs	State	10/0	25/0	25/0
		Federal	0	0	0
	2. Operating Costs	State	0	0	0
		Federal	0/50*	0/50*	0/50*
	3. Operating Costs	State	0	0	0
		Federal	0	0	0
	4. Operating Costs	State	-	-	-
		Federal			
	5. Operating Costs	State	35.5/0	38.5/0	41.5/0
		Federal	0	0	0
	6. Operating Costs	State	50	50	50
		Federal	0	0	0
	7. Operating Costs	State	0	0/12.5	0
		Federal	0	0/37.5	0
	8. Operating Costs	State	0	0	0
		Federal	0	0	0
	9. Operating Costs	State	0/35	0/38	0/41
		Federal	0	0	0
TOTAL	Operating Costs	State	95.5/35	113.5/50.5	116.5/41
		Federal	0/50*	0/37.5 0/50*	0/50*
	TOTAL COSTS		180.5	251.5	207.5

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DOWR, EPA, DCCA

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
1. The Division of Water Resources working with the Illinois Environmental Protection Agency and the Department of Commerce and Community Affairs will identify communities of the state that face imminent water shortages, and DWR will coordinate and target state technical assistance resources at these communities to promote water conservation.	Operating Costs	DOWR / Federal	10/0 / 0	25/0 / 0	25/0 / 0	10K per year beyond FY 86 is required; on-going assessment is part of normal program handled by in-house staff. FY 87 and FY 88 funds for water supply system model for individual communities.
Total costs for Recommendation 1.	Operating Costs	State / Federal	10/0 / 0	25/0 / 0	25/0 / 0	
	Total Costs		10	25	25	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DCCA, WRC/UI

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
2. Under the leadership of the Department of Commerce and Community Affairs (DCCA), the State will develop educational materials on water conservation, as well as utilize materials from organizations such as the American Water Works Association. It will work with school officials and the media to educate the public and to promote water conservation.	Operating Costs	DCCA	0	0	0	No funds required at this time. In the event of an emergency drought declaration funds would be made available.
		Federal	0	0	0	
	Operating Costs	WRC/UI	0	0	0	WRC/UI would become heavily involved if funds were available.
		Federal	0/50*	0/50*	0/50*	
Total costs for Recommendation 2.	Operating Costs	State	0	0	0	
		Federal	0/50*	0/50*	0/50*	
	Total Costs		50	50	50	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DCCA

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
3. The DCCA will promote the marketing of water conservation devices by working with appropriate trade associations and retailers.	Operating Costs	DCCA	0	0	0	This program would be initiated during a drought event and/or emergency.
		Federal	0	0	0	
Total costs for Recommendation 3.	Operating Costs	State	0	0	0	
		Federal	0	0	0	
	Total Costs		0	0	0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DPH

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
4. The Department of Public Health will revise the State Plumbing Code to include water conservation fixtures. The adoption of the revised code will be recommended in water-deficient communities. The State will also adopt these codes for new State construction and building rehabilitation.			-	-	-	
Total costs for Recommendation 4.	Operating Costs	State	0	0	0	
		Federa	0	0	0	
	Total Costs		0	0	0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DENR, DOA, DCCA, WRC/UI

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
5. The State will promote industrial water conservation through workshops and other technology transfer programs, and will conduct and evaluate pilot projects at state institutions.	Operating Costs	DENR / Federal	25/0 / 0	28/0 / 0	31/0 / 0	Part of the Institutional Water Treatment Program.
	Operating Costs	DOA / Federal	0.5/0 / 0	0.5/0 / 0	0.5/0 / 0	Workk with irrigators.
	Operating Costs	DCCA / Federal	0 / 0	0 / 0	0 / 0	Program would be triggered during a drought emergency. See recommendation number 9.
	Operating Costs	WRC/UI / Federal	10/0 / 0	10/0 / 0	10/0 / 0	
Total costs for Recommendation 5.	Operating Costs	State / Federal	35.5/0 / 0	38.5/0 / 0	41.5/0 / 0	
	Total Costs		35.5	38.5	41.5	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DCCA, DWR

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
6. The State will work closely with local officials and utilities of communities facing water shortages to assist in guiding the development of water conservation plans that include viable financial structures that reflect actual water costs. Attention will be given both to demand management as well as adequate supply and distribution development by coordination with the Division of Water Resources.	Operating Costs	DCCA	50	50	50	Program to evaluate water rates in small communities was initiated in FY 85.
		Federal	0	0	0	
Total costs for Recommendation 6.	Operating Costs	State	50	50	50	
		Federal	0	0	0	
	Total Costs		50	50	50	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): EPA

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
7. The curriculum for water plant operators should be enlarged to encompass water conservation practices and financial planning to accomodate conservation practices.	Operating Costs	EPA Federal	0/0 0/0	0/12.5 0/37.5	0/0 0/0	This would be a one time cost for development of material to be incorporated into ongoing program.
Total costs for Recommendation 7.	Operating Costs	State Federal	0 0	0/12.5 0/37.5	0 0	
	Total Costs		0	50	0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DCCA

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
8. The Department of Commerce and Community Affairs will retrofit up to 17,000 low-income residences with water conservation devices under the federally funded Illinois Home Weatherization Assistance Program.	Operating Costs	DCCA	-	-	-	This program is no longer active.
		Federal				
Total costs for Recommendation 8.	Operating Costs	State	0	0	0	
		Federal	0	0	0	
	Total Costs		0	0	0	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DCCA
IMPLEMENTING AGENCY(IES): DENR

ISSUE: WATER CONSERVATION

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
9. The State will monitor and evaluate the effectiveness of water conservation programs through the water use inventory program.	Operating Costs	DENR / Federal	0/35 / 0	0/38 / 0	0/41 / 0	Expansion of Water Use Monitoring Program.
Total costs for Recommendation 9.	Operating Costs	State / Federal	0/35 / 0	0/38 / 0	0/41 / 0	
	Total Costs		35	38	41	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DENR-SWS
IMPLEMENTING AGENCY(IES): DOWR, DENR, DOA

ISSUE

Competition for Water

	Recommendation		FY 1986	FY 1987	FY 1988
	1. Operating Costs	State	100/0	0/160	0/160
		Federal	0	0	0
	2. Operating Costs	State	36/50	36/50	36/50
		Federal	0	0	0
	3. Operating Costs	State	241/0	91/197	91/197
		Federal	0	0	0
TOTAL	Operating Costs	State	377/50	127/407	127/407
		Federal	0	0	0
	TOTAL COSTS		427	534	534

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DENR-SWS
IMPLEMENTING AGENCY(IES): DENR

ISSUE: COMPETITION FOR WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
1. To identify future conflicts, the State (SWS) will continue to monitor water use on a statewide basis and periodically evaluate the balance of supplies and demands on a regional basis.	Operating Costs	DENR	100/0	0/160	0/160	Includes water use monitoring and balance of supply evaluation.
		Federal	0	0	0	
Total costs for Recommendation 1.	Operating Costs	State	100/0	0/160	0/160	
		Federal	0	0	0	
	Total Costs		100	160	160	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DENR-SWS
IMPLEMENTING AGENCY(IES): DOWR, DENR, DOA

ISSUE: COMPETITION FOR WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
2. Illinois water resources agencies will continue to monitor and participate in the planning and development of new consumptive water uses and direct all such developments to regions of the State with sufficient water supply sources.	Operating Costs	DOWR / Federal	10/0 / 0	10/0 / 0	10/0 / 0	Part of normal program; handled by in-house staff.
	Operating Costs	DENR / Federal	25/50 / 0	25/50 / 0	25/50 / 0	
	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	
Total costs for Recommendation 2.	Operating Costs	State / Federal	36/50 / 0	36/50 / 0	36/50 / 0	
	Total Costs		86	86	86	

ANNUAL WATER PLAN IMPLEMENTATION COST ESTIMATES
(costs in thousands)

LEAD AGENCY(IES): DENR-SWS
IMPLEMENTING AGENCY(IES): DOWR, DENR, DOA

ISSUE: COMPETITION FOR WATER

Recommendation			FY 1986	FY 1987	FY 1988	Remarks
3. The State will develop the necessary methods and procedures to assist new and expanding water users in evaluating impacts of proposed developments.	Operating Costs	DOWR / Federal	50/0 / 0	50/0 / 0	50/0 / 0	Funds fo developing basinwide water use assessment model. One watershed per year.
	Operating Costs	DENR / Federal	190/0 / 0	40/197 / 0	40/197 / 0	
	Operating Costs	DOA / Federal	1/0 / 0	1/0 / 0	1/0 / 0	
Total costs for Recommendation 3.	Operating Costs	State / Federal	241/0 / 0	91/197 / 0	91/197 / 0	
	Total Costs		241	288	288	