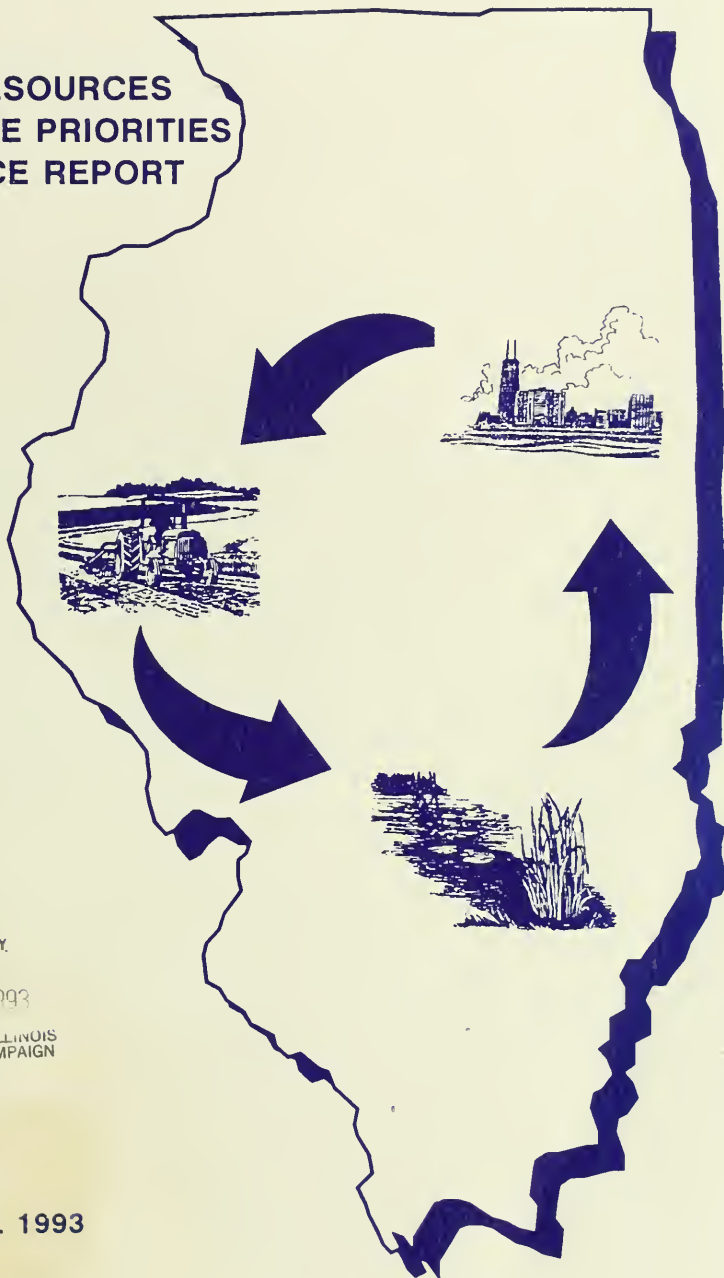


WATER RESOURCES AND LAND USE PRIORITIES TASK FORCE REPORT



DEPOSITORY

1993

UNIVERSITY OF ILLINOIS
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April 1993

The Honorable Jim Edgar
Governor
State House
Springfield, IL 62706

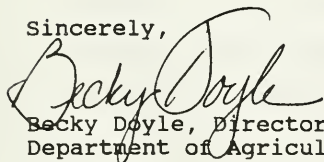
Dear Governor Edgar:

As Co-Chairs of the Water Resource Task Force, we are pleased to submit this Report. The Task Force has identified issues for action on a wide variety of water

Over the course of the last year, we have demonstrated that common ground can be found on many issues. In developing its recommendations, the Task Force has consulted technical experts, state agencies, and the public.

The Task Force firmly believes that the protection of our natural resources is vital to both the present and future of the people of Illinois. We are ready to work with you in implementing the state's natural and recreation resources to ensure that future generations can enjoy them.

Sincerely,


Becky Doyle, Director
Department of Agriculture

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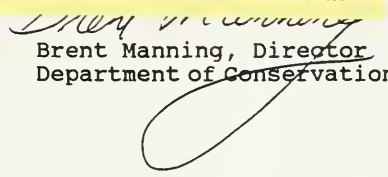
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Brent Manning, Director
Department of Conservation



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EXECUTIVE SUMMARY

In recognition of the growing conflicts about water and land use, Governor Edgar appointed a citizen task force to provide recommendations on ways to preserve and conserve natural resources without unduly hampering economic growth. The Water Resources and Land Use Priorities Task Force believes that conservation of natural resources and provision of recreational opportunities are vital to both the economic and social well-being of the people of Illinois. The recommendations adopted by the Task Force provide a sound framework for progress in protecting the important water and land resources of Illinois for future generations.

OVERALL THEMES

The conclusions and recommendations of the Task Force reflect a number of common themes:

- Conservation and responsible use of the state's resources are necessary. Resources are finite, and there are limits to the demands populations can put on natural resources.
- Protecting Illinois' water and land resources and providing outdoor recreational opportunities are important governmental responsibilities which are critical to maintaining an attractive business climate and a high quality of life for Illinois' citizens.
- Long-range planning and intergovernmental cooperation with extensive public involvement are essential for responsible natural resources management.
- Public and private entities must work together for long-lasting solutions to current problems.
- Because more than 90% of Illinois' land is privately owned, a responsibility rests upon private and corporate property owners to manage their land in ways which preserve the public benefits of, and the public's interest in, those lands. However, because urban populations will share in the benefits, they should also share in the costs and responsibilities of protecting those lands.
- Education and communication are key ingredients to the solutions to conflicts about water and land use.

"...conservation of natural resources and provision of recreational opportunities are vital to both the economic and social well-being of the people of Illinois."

"Stable funding is critical in order to implement the recommendations of the Task Force."

"...landowners should be encouraged to protect and create habitat on private lands through technical assistance, property tax relief, and other state supported mechanisms."

"The state should be part of the decision-making process when siting regional facilities of all types."

- Stable funding is critical in order to implement the recommendations of the Task Force. For example, funding is needed for protection of water quality, land acquisition, maintenance and operation of natural and recreational resources, soil conservation programs, technical assistance programs, incentives to landowners, research, and educational programs. New sources of funding need to be developed, and users should be required to help pay their fair share.

OVERVIEW AND SUMMARY OF RECOMMENDATIONS

The Task Force has demonstrated that common ground among diverse interests can be found on extremely complex issues. The complete report of the Task Force provides detailed recommendations related to water, land, recreation, crossover issues, and funding. Following is an overview of the key concerns and recommendations of the Task Force.

Resource Conservation

- The State of Illinois should establish a system of macrosites, meaning large ecological reserves or "sustainable ecosystems."
- The State of Illinois should aggressively pursue securing increased public acreage as well as less-than-fee interests in land such as easements and leases, for resource conservation purposes.
- Landowners should be encouraged to protect and create habitat on private lands through technical assistance, property tax relief, and other state supported mechanisms.
- Soil and water conservation programs should be strengthened in order to ensure the long-term productivity of Illinois farmland and to improve water quality.
- Legislation should be passed to provide property tax incentives on lands managed to provide habitat. Recapture, reimbursement, and compensation mechanisms should be included to ensure local governments are not adversely affected.
- Agricultural programs to encourage sound resource management, prudent use of pesticides, and development of alternative crops and sustainable agricultural practices should be strengthened.

Growth Management

- Legislation should be enacted to require planning as a prerequisite to local governments' authority to zone and otherwise regulate land use.
- The state should be part of the decision-making process when siting regional facilities of all types.
- The state should encourage remediation and reuse of previously contaminated property by providing incentives to potential new owners of the land to clean up and develop it without assuming historic liability. These incentives should in no way diminish the liability of historic owners/operators.
- Development rights transfer, land banking, density transfer, and cluster zoning all should be explored as potential innovative tools for growth management.

" Development rights transfer, land banking, density transfer, and cluster zoning should all be explored as potential innovative tools for growth management."

Government Regulation and Administration

- A comprehensive water resources law should be enacted to replace the present inadequate statutes scattered throughout Illinois law. A thorough examination should be made of the appropriate role of the various state agencies in administering the law.
- To protect ground and surface water quality, existing regulations should be more aggressively enforced, better land management practices should be developed, residual waste sludge should be disposed of properly, septic systems should be cleaned and inspected, and dumping of snow into waterways should be regulated.
- The State of Illinois should pursue a cooperative partnership with the local Soil and Water Conservation District offices for those offices to provide liaison functions locally between landowners and agencies on land use regulations and policies. This would provide an efficient delivery system for water and land resource programs through an existing local framework.
- A Coordinating Council for Natural Resources and the Environment should be created which would expand upon the existing natural resources subcommittee and provide a forum that would institutionalize a process to promote consistency, clarity, and coherence to present and future policies, programs, and strategies.

" A Coordinating Council for Natural Resources and the Environment should be created..."

"... a base level of financial support should be allocated by the state for recreational and natural resources."

"This base level of support must be supplemented by user fees that require the users of the state's natural resources to contribute to the acquisition, development, maintenance, and improvement of these resources. "

Recreation

- The Department of Conservation should be a catalyst to planning and implementing a statewide network of greenways by the year 2010.
- The Department of Conservation should give special consideration in the grant-making process to trails or greenways that are part of the statewide network or plan.
- The Governor should convene a meeting of corporate and business leaders to facilitate creating an external foundation to receive public and private funds for recreational purposes.
- The Department of Transportation should require proposals that use state or federal highway funds for road widening or new roads to consider plans for bicycle lanes.
- The Department of Conservation should have a key role in programming and spending transportation enhancement funds available through the Intermodal Surface Transportation Act.

Stable Funding

- Conservation and recreation must be recognized as priorities of the State of Illinois. Stable funding is critical for implementation of the Task Force's recommendations, and a base level of financial support should be allocated by the state for recreational and natural resources.
- This base level of support must be supplemented by user fees that require the users of the state's natural resources to contribute to the acquisition, development, maintenance, and improvement of these resources. For example:
 - Consideration should be given to imposing a state sales tax on outdoor recreational equipment, similar to the federal excise tax on fishing and hunting equipment, with the proceeds used for recreation and conservation purposes.
 - The state should charge user fees for access to state outdoor recreational resources and increase various permit and license fees imposed by the Department of Conservation. However, mechanisms should be provided to ensure that no one is denied access to recreational resources because of economic status.

- State laws should be amended to authorize stormwater utility or drainage system user fees and other funding arrangements to support state and local flood protection and watershed management programs.
- The Governor should develop and seek consensus for a major new initiative to provide substantial new revenues for protection of natural resources and for outdoor recreation. The Governor should thoroughly investigate placing an advisory referendum on the ballot to determine the level of support for the following options:
 - Dedicated portion of the sales tax, modeled after a program in Missouri, to be allocated for the broad purposes of natural resources protection and outdoor recreation.
 - "Penny for Conservation" -- a one year, 1 cent increase in the sales tax to establish a trust fund whereby the interest would be used for natural resource protection and outdoor recreational activities and programs at the state and local levels.

"The Task Force calls upon Governor Edgar to work with state, local, and federal agencies; members of the Illinois General Assembly; and others to address the critical needs outlined in this report. Members of the Task Force stand ready to assist in this process."

CONCLUSION

Action must be taken now if Illinois' important water and land resources are to be protected for future generations. Many of the Task Force's recommendations can be implemented through administrative action. Some will require statutory changes, and others will require funding reallocations or increases. The Task Force calls upon Governor Edgar to work with state, local, and federal agencies; members of the Illinois General Assembly; and others to address the critical needs outlined in this report. Members of the Task Force stand ready to assist in this process.

INTRODUCTION

BACKGROUND

In May of 1992, Governor Edgar appointed a Water Resources and Land Use Priorities Task Force comprised of 25 citizens with wide ranging expertise in agriculture, conservation, recreation, water resources, business, and land use. (A list of Task Force members is provided in Appendix A.) The purpose of the Task Force was to bring together diverse interests to air their differences, find common ground, reach agreement on certain principles, and make recommendations to the Governor on ways to address the growing conflicts over water and land use. The Directors of the Illinois Departments of Agriculture (DOA), Conservation (DOC), Energy and Natural Resources (ENR), the Illinois Environmental Protection Agency (EPA), and the Division of Water Resources of the Illinois Department of Transportation (DOT/DOWR) served as ex-officio members. Becky Doyle, Director of DOA, and Brent Manning, Director of DOC, Co-Chaired the Task Force.

The first meeting of the Task Force was held at the Executive Mansion on June 18, 1992. At that time the Task Force identified 49 issues to address. In order to examine those issues in detail, the Task Force was divided into four Work Groups: Water, Land, Recreation, and Crossover Issues. As part of their deliberations, each Work Group consulted technical experts and reviewed existing agency documents and reports pertaining to the identified issues. Issue papers with draft recommendations were prepared by each Work Group and distributed to more than 250 constituent groups and individuals for review and comment.

Nearly 100 individuals and organizations submitted comments on the draft reports of the Work Groups. Each Work Group reviewed the comments from the public and developed revised recommendations for consideration by the full Task Force. The full Task Force held its final meeting on two days in January 1993 to discuss the recommendations from each Work Group and to negotiate the final recommendations of the Task Force.

OVERVIEW OF RECOMMENDATIONS

The Task Force has made 184 recommendations. These recommendations vary from changes in state and local government policy to specific program recommendations. The Water, Land, Recreation, Crossover Issues, and Funding Reports which follow contain the complete recommendations which were adopted by the Task Force.

"The purpose of the Task Force was to bring together diverse interests to air their differences, find common ground, reach agreement on certain principles, and make recommendations to the Governor on ways to address the growing conflicts over water and land use."

"The Task Force has made 184 recommendations...from changes in state and local government policy to specific program recommendations."

The Water Report includes 58 recommendations pertaining to water law; flooding, drainage, and stormwater; siltation and sedimentation; and ground and surface water quality. The Water Work Group cited the lack of an adequate, single water resources act as the root cause of most of the water use conflicts during recent years.

The 38 recommendations in the Land Report were developed based upon the consensus that the three issues of habitat, farmland preservation, and growth management could be envisioned to occupy three sides of an equilateral triangle and that all three elements of the triangle are necessary for a healthy, balanced, and productive society.

A major thrust of the Recreation Work Group was to recommend that the Governor find and dedicate financial resources for outdoor recreation. The funding-related recommendations are discussed in the Funding Report. In addition, throughout the 21 recommendations in the Recreation Report is a call for proper planning for the use of these resources.

The Crossover Issues Work Group addressed several issues that did not fit exclusively into any of the other Work Groups and several issues which cut across one or more of the other Work Groups. These included: siting of regional facilities, cleanup of contaminated sites, chemical use, soil and water conservation, unique natural systems, sustainable agriculture, and mining/resource extraction and reclamation. Within these categories the Task Force adopted 54 recommendations.

The Task Force believes stable funding for natural resources and outdoor recreation is essential. New sources of funding need to be developed, and users should be required to help pay their fair share. Creation of a funding source that raises a substantial amount of money for the broad purposes of natural resources protection and recreation is a priority recommendation. The Task Force adopted 13 funding recommendations which are described in detail in the Funding Report.

"Creation of a funding source that raises a substantial amount of money for the broad purposes of natural resources protection and recreation is a priority recommendation."

WATER REPORT AND RECOMMENDATIONS

"...present water resources statutes need to be reviewed and revised into a new comprehensive water resources act."

"Outside of regulated surface water, there is no policy to manage surface water usage and only limited regulation and policy for groundwater."

Illinois water resources are a primary element in maintaining human health and the economy of the state. The population centers of the state evolved as a direct result of the availability of water for industry, transportation, and human use. Agriculture has flourished not only because of rich soils, but also because the annual precipitation, on average, is almost optimal for the crops that characterize Illinois agriculture.

The Water Work Group has identified four groups of issues which cover the current water-related problems that are a consequence of the demographic and economic evolution of Illinois. These four categories are: Water Law; Flooding, Drainage, and Stormwater; Siltation and Sedimentation; and Ground and Surface Water Quality.

There are several dominant needs which are fundamental to all of the other issues. First, present water resources statutes need to be reviewed and revised into a new comprehensive water resources act. Detailed discussion of this need is found in the Water Law section. Following the adoption of a new water resources act, serious attention should be given to evaluating the appropriate state agency structure and division of responsibilities in order to effectively implement the law.

Funding for water resources programs has been inadequate in the past and will be more inadequate in the future if the Task Force's recommendations are adopted. The Task Force endorses the concept of user fees to fund solutions to many of the critical water resources problems. Included in the Funding Report are recommendations for the establishment of water-related user fees.

WATER LAW

There are a variety of users of ground and surface waters with competing needs in several areas where demand exceeds supply. Outside of regulated surface water, there is no policy to manage surface water usage and only limited regulation and policy for groundwater. In fact, water rights in Illinois are poorly defined.

The law of "reasonable use" is the fundamental law governing the water resources of Illinois and applies to both ground and surface water. The rules were first described by the Illinois State Supreme Court in the 1842 case of *Evans v. Merriweather*. In its January 1984 report "Critical Issues, Cross-cutting Topics, Operating Issues," the Illinois Water Plan Task Force stated: "Water use law in Illinois is an uncodified collection of court

decisions and state statute. This body of law is incomplete, confusing, and uncertain in prescribing the rights, duties, and governmental responsibilities relating to the development, protection, use, and management of water supply sources within Illinois."

The lack of an adequate, single water resources act is the root cause of most of the water use conflicts during recent years. The piecemeal water resources laws in Illinois have been the result either of federal laws handed down to the states or have evolved from litigation and/or special interest legislation surrounding serious usage conflicts. Many of the conflicts have arisen as a result of degradation of water quality, inadequate water supplies in times of drought, flooding, or competing uses for the same finite resource.

Priority use must be well defined to avoid the conflicts of the past and minimize conflicts in the future. Consideration must be given to human needs, navigation needs, wildlife habitat needs, livestock needs, crop production needs, and so forth. In times of severe water resources stress, the limited available water must be used for the greatest common good. During the recent severe drought of 1988-1990, it was evident that Illinois was ill-prepared and did not possess the authority to adequately respond to regional conflicts about available water.

Wells, lakes, and drainage systems are interconnected to all other waters. When conflicts about groundwater use arise, it must be understood that the solution may not unilaterally lie in withdrawals of water from nearby surface sources, and vice versa. Pumping of a shallow aquifer will lower water tables in close proximity and may deprive a nearby stream of its base flow contribution from groundwater. Similarly, pumping from a stream may decrease the recharge of a nearby aquifer.

It is most important to realize that water, as a natural resource, does not recognize jurisdictional boundaries. Groundwater aquifers traverse water district, township, county, and even state boundaries, and the same can be said for surface waters. Therefore, water resources protection, development, and conservation laws must transcend politically defined areas for uniformity and consistency, and, thereby, achieve the greatest public good.

These arguments lead to the conclusion that the historical water law in Illinois is inadequate to meet present and future needs. Conflicts about water usage will continue to grow, and their resolution will be determined more easily with a new, comprehensive state water use act.

" In times of severe water resource stress, the limited available water must be used for the greatest common good. "

"...historical water law in Illinois is inadequate to meet present and future needs."

Water Recommendation #1

Prepare a comprehensive water resources act to replace the inadequate collection of statutes and court decisions scattered throughout Illinois law.

"The first need is to acknowledge the state's responsibility to provide adequate, good quality water for its citizens, commerce, industry, wildlife habitat, and agriculture by assuming its sovereignty over its ground and surface water resources."

- The law must consider such things as the definition of public versus private waters, the scope of authority delegated to local government, the scope of authority retained by the state, and should address both the quality and quantity of water resources. The law also should consider water conservation and provide authority to equitably allocate water in times of severe drought.
- The state must take the lead to establish its laws for the good of the state as a whole and not let the courts decide the law in favor of specific litigants. The first need is to acknowledge the state's responsibility to provide adequate, good quality water for its citizens, commerce, industry, wildlife habitat, and agriculture by assuming its sovereignty over its ground and surface water resources.
- The interconnectivity of ground and surface waters lead to the inevitable conclusion that Illinois has within its borders a single water resource. Water allocation determinations must be made with the full understanding that surface and groundwater are inextricably intertwined and do not function independently or in isolation.
- A comprehensive water resources act should require that monitoring and scientific research be the foundation for rational water quality and quantity enforcement mechanisms. These must be flexible enough to insure changes can readily be made in response to new knowledge from monitoring and research activities.
 - The first task is to collect all existing laws.
 - The second task is to identify and recommend needed legislation to complete and strengthen existing laws.
 - The third task is to draft a single water resources act with the aid of the Legislative Reference Bureau.
 - Finally, a plan for implementation should be developed which addresses any changes needed in the government water resources infrastructure necessary to ensure efficient permitting and regulation, and effective research and monitoring. For example, the appropriate role and location of

DOWR, various management programs, and water resources permitting authorities should be determined.

FLOODING, DRAINAGE, AND STORMWATER

The need to interact with and use water resources for habitation and economic development (urban and rural) can, but need not, exacerbate the impact of flooding on both natural and man-made environments. The objective should be to manage floodplains, drainage systems, and stormwater runoff through planning, engineering, and development efforts in a manner that would promote the efficient use of resources while protecting life, property, and natural ecosystems.

"Flooding," "drainage," and "stormwater" are terms that describe surface waters that exceed the capacity of normal conveyance systems such as rivers and ditches. In government parlance, the first refers to overflows of streams or lakes that drain more than one square mile. Excess surface flows that drain less than one square mile are considered drainage problems. Stormwater is typically used to describe surface water that has fallen from the sky but has not yet reached an identified conveyance system.

Defining these terms may appear immaterial but they are key to two points of contention. First, to the owner of property under water, the size of the drainage area does not matter. However, these definitions are used to identify the limits of various authorities and programs. State and federal flood hazard mapping and regulatory programs do not cover drainage problems, leaving affected property owners ignorant of a hazard and often beyond the reach of government assistance programs.

For example, a person affected by a neighbor's alteration of the drainage system can appeal through the state's regulatory program if the site is in a regulated floodplain. If it is not, the "local drainage" problem must be pursued at the plaintiff's expense through the courts. In order to restrict their limited resources to larger problems, some state and federal flood mitigation programs have little or no authority to deal with drainage problems.

The second problem is that drawing arbitrary lines of authority in the watershed leads to separate and disconnected programs. Floodplain mapping and regulatory programs have little concern with the increased flood hazard caused by development in the watershed outside the floodplain. Flood control projects can be rendered ineffective over the years if nothing is done to limit increased stormwater runoff and sedimentation from watershed development.

State agencies should take a holistic and multi-objective, watershed approach to surface water problems and adopt the following recommendations:

"State and federal flood hazard mapping and regulatory programs do not cover drainage problems, leaving affected property owners ignorant of a hazard and often beyond the reach of government assistance programs."

"...current maps are based on old data. Most of Illinois' regulatory maps are based on data over 15 years old. River gauge data for these maps may have been based on only 30 or 40 years of history..."

Water Recommendation #2

Information about flood hazards, environmentally sensitive areas, and ways to protect properties and prevent damage should be provided to everyone, regardless of the size of the watershed contributing the water.

Water Recommendation #3

Statutory limits to regulation of small drainage areas should be amended to encourage regulation of all known flood hazards and environmentally sensitive areas.

Water Recommendation #4

No flood damage mitigation project should be funded without assurances that future development will not increase flood flows or reduce stream carrying capacities.

Water Recommendation #5

Federal, state, and local flooding, drainage, and stormwater programs should focus not only on excess water quantity, but also take into account other floodplain concerns, including low flows, water quality, and habitat protection.

MAPPING THE HAZARDS

Flood hazard maps perform several functions. They inform property owners, particularly potential owners, of the hazard. They provide the basis for various regulations designed to protect existing development from flood damage. They are also used in flood mitigation programs, such as flood warning and flood control studies.

Current flood mapping programs have several shortcomings. First, they do not cover all known problem areas. Not only are smaller drainage areas not mapped, current techniques omit some hazards, such as ice jams and debris obstructions. Related regulatory concerns, such as the presence of wetlands, are also either inadequately identified or not mapped.

The second shortcoming is that current maps are based on old data. Most of Illinois' regulatory maps are based on data over 15 years old. River gauge data for these maps may have been based on only 30 or 40 years of history, which does not form the basis for dependable projections. Very little mapping has been based on the latest rainfall frequency values as defined by the State Water Survey's Technical Bulletin 70. Finally, most mapping

has been financed by the National Flood Insurance Program, which does not account for increases in runoff due to watershed development.

In most cases, maps based on old data understate the flood hazard. As a result, people are given a false sense of security if they rely on old maps or maps that do not cover all hazards. Some developments built based on the flood hazards identified on old maps have already been damaged by floods.

Updating maps to incorporate the latest data can be an expensive and time consuming process. Several different regulatory agencies must review and approve the changes. Often, the expense of printing prevents the maps from actually being changed. Instead, letters of map amendment or map revision are issued, although these letters are not usually distributed to everyone who still uses the old map.

Another shortcoming of current mapping practices is that many different water resources and land use programs use different mapping approaches and systems. Flood maps, wetland maps, geologic hazards maps, and soils maps all can be expected to be at different scales and show different man-made features. It is often difficult to relate scientific data, natural hazards information, and regulatory programs to a specific property.

If water resources and land use maps have been digitized, chances are that different software programs were used. After one agency takes all the trouble to digitize map data to make it easier to use, the data may be incompatible with other agencies' digitized maps. The Illinois Mapping Advisory Committee has called for improved coordination of mapping technology as well as improved standards to ensure that public data bases will provide needed map information in useful formats.

An important issue related to mapping is getting the hazard information out to those who need it. Many floodplain residents are not aware of the hazard they face. Federal laws requiring banks and other lending institutions to advise potential mortgagees and loan recipients of flood hazards have been poorly enforced. Even though the law has been in effect since 1974, only one out of four floodplain property owners has flood insurance.

Water Recommendation #6

One state agency or coordinating office should be given statutory authority for regulatory flood hazard mapping.

- That agency should set adequate mapping standards so other regulatory programs, particularly the National Flood Insurance Program, will have to produce maps that better show Illinois' flood hazards.

"Another shortcoming of current mapping practices is that many different water resources and land use programs use different mapping approaches and systems."

"The Illinois Mapping Advisory Committee has called for improved coordination of mapping technology as well as improved standards to ensure that public data bases will provide needed map information in useful formats."

"...traditional development practices aggravate surface water problems by increasing the amount and speed of stormwater runoff, contributing pollutants to surface water, diverting natural drainage patterns onto other properties, obstructing flood flows, and removing needed water storage areas."

- The one agency should be given adequate funding to review all regulatory maps and map changes and to settle disputes between developers and various government agencies. A one-stop map shop can greatly reduce the time and confusion that currently exists in updating maps.
- The agency should pursue geographic information systems and other state-of-the-art methods to facilitate producing, revising, and disseminating flood hazard data.
- An office or other administrative mechanism should be designated to coordinate the mapping and digitization standards of all of the water resources and land use mapping programs.

Water Recommendation #7

Appropriate state and federal agencies should ensure that there are enough stream gauging stations to provide the data needed to produce accurate flood hazard maps.

Water Recommendation #8

There should be better enforcement of current laws requiring lending institutions to inform potential mortgage recipients of the flood hazard.

PREVENTING DAMAGE DUE TO FUTURE DEVELOPMENT

Flooding is a natural phenomenon. Flooding is only a problem when human development is affected. Development has a two-fold impact on surface water. First, new buildings and infrastructure built in hazard areas are damaged by flood and stormwaters. Second, traditional development practices aggravate surface water problems by increasing the amount and speed of stormwater runoff, contributing pollutants to surface water, diverting natural drainage patterns onto other properties, obstructing flood flows, and removing needed water storage areas. Only recently and only in a few areas have development practices begun to account for these impacts. In some cases, new developments have helped to correct some of the mistakes of the past.

Since 1917, Illinois has regulated new development to minimize these impacts. State and local regulatory programs have expanded from maintaining river navigation, to protecting new buildings in the floodplain, to preserving natural areas, to controlling the quantity and quality of watershed runoff. With this expanded role has come an expansion in the number of regulatory agencies and programs.

Today, a single development project may need water-related approvals from as many as three federal agencies [U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, Federal Emergency Management Agency (for remapping)], three state agencies [DOT/DOWR, DOC, EPA] and three local agencies [city, county stormwater committee, sanitary district]. Several of them may request similar information, but they make their decisions based upon different analyses.

Many developers do not object to the requirements of regulatory programs that seek worthy objectives. For one thing, meeting the regulatory requirements protects them from later problems with the development's future owners and/or neighbors. However, they object to dealing with multiple and contradictory regulatory requirements. They are particularly concerned with the time it takes to receive an answer from a regulatory agency and with rules that change during permit processing.

Federal, state, and local surface water regulatory programs should be better coordinated and streamlined consistent with the following recommendations:

Water Recommendation #9

The state should implement quicker, simpler, and more consistent regulatory programs through consolidation, delegation, and administrative enforcement.

At a minimum, the following approaches should be investigated:

- Coordinating all state surface water regulatory programs under one agency or coordinating office,
- Implementing speedier enforcement procedures, such as granting permitting agencies administrative enforcement authority,
- Delegating federal programs to state agencies, and
- Focusing state regulatory resources on projects that affect more than one local jurisdiction. State efforts should provide technical assistance to local regulatory programs and insure that local programs meet minimal state and federal requirements. The state should not have duplicate permit requirements for projects covered by a local authority or local intergovernmental agreement.

"Many developers... object to dealing with multiple and contradictory regulatory requirements. They are particularly concerned with the time it takes to receive an answer from a regulatory agency and with rules that change during permit processing."

"Many of the key participants in the land development system are ignorant of the role floodplains, "swamps," and other water-related lands play in the environment or of the need to allow certain areas to flood".

Water Recommendation #10

Stormwater management authority, similar to the authority possessed by the Northeastern Illinois collar counties (Ill. Rev. Stat. ch. 34, par. 5-1062), should be granted to all Illinois counties or to multi-county watershed management agencies to implement a comprehensive stormwater management program.

Water Recommendation #11

Counties and municipalities should be encouraged to adopt regulatory criteria that address local needs and goals.

Water Recommendation #12

State and federal surface water regulatory authorities should be delegated to city or county agencies that have qualified staff and sufficient resources. Such delegation should not relieve the state or federal agencies from responsibility to oversee and monitor the delegated authorities.

Water Recommendation #13

A system should be developed that measures the natural and public values of wetlands and other sensitive or hazardous areas. Such a system would help set more accurate and fair property tax valuations, acquisition prices, and land dedication values.

PROTECTING NATURAL FUNCTIONS

Floodplains, wetlands, and other parts of the surface drainage system perform certain natural functions that are not duplicated elsewhere. They provide habitats and breeding grounds for plant and animal species that cannot live elsewhere. They provide natural flood and erosion control, water quality maintenance, and recharge of ground water supplies.

Urban and agricultural development in many sensitive areas has destroyed these valuable natural functions. Few truly natural wetlands and prairies now remain and these should be protected. What is left are some marginally sensitive lands, some of which modern development practices can enhance to return to their pre-development functions.

This problem has been aggravated by the lack of knowledge on the part of developers, state regulatory agencies, local decision makers, and the general public. Many of the key participants in the land development system are ignorant of the role floodplains, "swamps," and other

water-related lands play in the environment or of the need to allow certain areas to flood. They are also unaware of the impacts that a development decision can have on the natural functions of a property and adjacent lands.

State and local programs should include protection of the natural functions of floodplains, wetlands, and related areas as a high priority by implementing the following recommendations:

Water Recommendation #14

State and local regulatory programs should not be limited to protecting human development from excess surface water flows and pollutants. Statutes should clearly authorize protection of natural functions as part of the public's interest.

Water Recommendation #15

State agencies should conduct programs to educate state staff, local decision makers, and the general public about the need to protect natural functions and ways to do it.

Water Recommendation #16

Selected rivers, stream corridors, lakes, wetlands, and natural floodplains should be protected by acquisition, easement, cooperative agreement, or designation as a Nature Preserve.

Water Recommendation #17

The state should encourage and assist local governments in developing stream and wetland protection ordinances.

Water Recommendation #18

The state should provide increased support and technical assistance in the restoration of marginal quality or modified wetlands and stream channels to enhance flood control, habitat, and water quality.

"State law should require local comprehensive land use planning, including consideration of the natural functions of floodplains, wetlands, and related areas, as a prerequisite to enacting zoning ordinances and other regulations of floodplains and stormwater runoff."

"State flood mitigation efforts should be coordinated with other state and local water-related programs to promote local multi-objective programs."

Water Recommendation #19

State law should require local comprehensive land use planning, including consideration of the natural functions of floodplains, wetlands, and related areas, as a prerequisite to enacting zoning ordinances and other regulations of floodplains and stormwater runoff.

MITIGATING DAMAGE TO EXISTING DEVELOPMENT

Illinois averages approximately \$300 million in urban flood damage and \$50 million in agricultural damage each year. The traditional approach to protect existing development subject to damage by flooding and poor drainage has been to build a levee, retention basin, channel improvement, or other public works project. These projects are only funded if their benefits exceed their costs. In other words, there will be many areas where a flood control project cannot be justified. Further, construction projects will not fix every problem, and they are sometimes opposed by residents who do not want their local environment disrupted. At current state and federal funding levels, it has been estimated that it will take 20-25 years to build the projects that have been justified. Even those who would eventually be protected may have to wait many years before they are free from flood or drainage problems.

Implementation of the following recommendations would allow the state to expand and diversify its approach to reducing flood damage to existing development. The Funding Report also includes a recommendation related to establishing user fees and tax incentives for the purpose of reducing flood impacts.

Water Recommendation #20

The state should increase its information and technical assistance efforts to cover a wide variety of mitigation measures, including flood proofing, flood insurance, local flood warning and preparedness, stormwater management, and redevelopment of flood hazard areas, as well as public works projects.

- These efforts should also inform affected parties about the likelihood of a government-funded public works project being built and the time required to build one.

Water Recommendation #21

State flood mitigation efforts should be coordinated with other state and local water-related programs to promote local multi-objective programs.

- For example, a community that acquires flood-prone buildings for flood protection and redevelops the area for recreation and habitat improvement will accomplish more with less money.

Water Recommendation #22

State flood mitigation programs should encourage a variety of solutions and alternative funding approaches, including property owner cost sharing and self-help.

- Information and technical assistance programs will reach more people than funding only public works projects.

SILTATION AND SEDIMENTATION

It is commonly accepted that there are negative impacts on surface waters from siltation and sedimentation. There needs to be further investigation into the erosion and siltation/sedimentation relationship. Alternatives to reduce siltation and sedimentation need to be developed, evaluated, and implemented.

BANK AND SHORELINE EROSION

Streambank and shoreline erosion are major sources of sediments deposited in Illinois lakes and streams and a significant impairment to the overall water resource. The extent of streambank and shoreline erosion in Illinois is not well known and needs to be quantified. The state stream gauging network needs to be expanded and aerial photography utilized to delineate lengths of streams and shorelines contributing significant amounts of sediment to water bodies. In addition, a method to assess the sediment yield potential of smaller streams is needed. Current environmental policies, standards, and planning activities do not provide for protection of streambanks and shorelines from accelerated erosion due to construction activities.

Agencies and organizations should continue to work together to implement the following recommendations:

Water Recommendation #23

Water resources authorities should develop and demonstrate revegetation techniques for stabilizing streambanks and shorelines in Illinois.

"Streambank and shoreline erosion are major sources of sediments deposited in Illinois lakes and streams and a significant impairment to the overall water resource."

"Channelization of natural streams and waterways causes significant erosion, especially when natural vegetation is not quickly re-established and maintained. "

Water Recommendation #24

Water resources authorities should encourage streambank stabilization practices, such as using floodways as greenways, through financial incentive programs.

Water Recommendation #25

Water resources authorities should identify and delineate streambanks and shorelines that need protection and use existing enforcement authorities to discourage uses of streambanks and shorelines that threaten to accelerate erosion.

Water Recommendation #26

Water resources authorities should discourage the encroachment of construction activities on streambanks and shorelines.

Water Recommendation #27

State and local planning activities should be coordinated to maximize efforts to protect eroding streambanks and shorelines.

Water Recommendation #28

State and local entities with water resources responsibilities should cooperatively develop and implement a comprehensive statewide strategic plan for stormwater management that considers impacts of all stormwater discharges, including streambank erosion, throughout a watershed.

CHANNELIZATION FOR DRAINAGE, NAVIGATION, AND CROPPING PRACTICES

Channelization of natural streams and waterways causes significant erosion, especially when natural vegetation is not quickly re-established and maintained. Hydrologic/habitat modifications or upstream channelization for the sake of improved agricultural or urban drainage contribute to the deterioration of water resources. There is a need to evaluate and implement alternatives for the reduction of siltation and sediment from channelization and from drainage, navigation, and cropping activities.

Water Recommendation #29

Water resources authorities should be encouraged to evaluate "in channel" wetlands for sediment trapping potentials and wildlife value.

Water Recommendation #30

State agencies should develop a statewide comprehensive stream improvement program that allows low-impact maintenance of stream channel and drainage ditches.

Water Recommendation #31

Illinois should prevent channelization and relocation of streams and grant permits for such activities only after environmental impact and sediment control plans have been developed.

Water Recommendation #32

Illinois agencies should continue to study the basic ecological concepts associated with, and the effects of, sedimentation pollution on the use of major navigable waterways.

"Illinois should prevent channelization and relocation of streams and grant permits for such activities only after environmental impact and sediment control plans have been developed."

DREDGE SPOIL DISPOSAL

Because of its highly undesirable condition, spoil from dredging, or any operation where soil materials in a saturated condition are excavated, represents a real pollution threat to adjacent streams and lakes. In its Illinois Water Quality Management Plan, the EPA recommended that "the Army Corps of Engineers, in maintaining navigable waterways, should cooperate with state and local jurisdictions in the siting of suitable dredge disposal areas" In addition, when evaluating permits for the placement of dredged materials under Part 700 of Title 92 of the Administrative Code of the State of Illinois, DOT/DOWR should have guidelines for indexing the potential of spoil areas for habitat establishment. The DOT and DOC should work together to evaluate and standardize procedures for establishing dredge spoil areas as wildlife habitat with revegetation practices that provide erosion control benefits. Impacts on farmland resources should be avoided in the selection of areas for disposal of spoil from dredging.

"...a majority of woodland owners do not have professionally prepared forest management plans that include properly designed, constructed, and retired access roads, log landings, and skid trails."

Water Recommendation #33

DOT/DOWR should develop and implement expanded statewide erosion and sediment control guidelines for protecting spoil materials.

Water Recommendation #34

DOT/DOWR and DOC should develop, evaluate, and promote procedures for utilizing stream/lake side slopes of spoil disposal areas for wildlife habitat and integrate them into the statewide erosion and sediment control guidelines for spoil disposal areas.

Water Recommendation #35

Illinois water resources authorities should require erosion and sediment control plans be developed for all spoil disposal operations.

Water Recommendation #36

Illinois water resource authorities should jointly develop guidelines for selecting suitable sites for disposal of spoil materials. Illinois water resources authorities should develop standards that prevent spoil from being placed in floodplains, wetlands, and on prime farmlands.

FORESTLAND EROSION

Illinois has 3,429,000 acres of forestland eroding at an annual average soil loss of less than 2.5 tons/acre. However, 679,000 acres of this total currently are being grazed with a resulting soil loss of 13 tons/acre/year. This increased soil loss is the result of soil compaction, reduced protection due to the loss of the forest duff layer and reduced plant vigor resulting in a loss of the protective tree canopy layer. Additional emphasis is needed to exclude livestock from woodlands.

Soil loss on non-grazed woodland results from site disturbances during harvesting operations and/or site preparation activities for purposes of regenerating a stand of desirable tree species. Such losses occur because a majority of woodland owners do not have professionally prepared forest management plans that include properly designed, constructed, and retired access roads, log landings, and skid trails.

Water Recommendation #37

Require all forestry activities to have an approved plan for control of erosion and sedimentation.

Water Recommendation #38

The state should encourage full funding of the federal Stewardship Incentive Program (SIP) and continue to fully fund the state's Forestry Development Act.

Water Recommendation #39

Require SIP management plans, and plans written for other similar programs, to include provisions for controlling erosion and sediment during harvest operations, and regeneration or reforestation activities. These plans should also provide for streamside management zones along all perennial streams.

"...plans (should)...include provisions for controlling erosion and sediment during harvest operations, and regeneration or reforestation activities."

Water Recommendation #40

Guideline documents should be developed in cooperation with DOC and other agencies and distributed on a continuing basis to landowners, timber operators, and forestry professionals outlining Best Management Practices and their application including erosion and sediment control.

Water Recommendation #41

A series of educational workshops should be developed and presented throughout the state on a continuing basis to teach landowners, timber operators, and professionals Best Management Practices for controlling erosion and sedimentation.

Water Recommendation #42

Lobby Congress to continue funding the Farm Bill's Conservation Reserve Program (CRP) provision for new contracts and to lengthen existing contracts on lands planted to trees from 10 to 15 years.

- The federal Conservation Reserve Program pays farmers to remove classes of erodible and environmentally sensitive lands from production. Contracts are written for 10 year periods and many will begin to expire in the next few years. Ten-year

" Water as a resource does not recognize jurisdictional boundaries. To establish a successful water quality program one must understand the boundaries of the resource and demand the cooperation of all concerned or establish one authority that transcends all boundaries."

contracts do not allow trees to reach an age where they are likely to be maintained if contracts expire.

Water Recommendation #43

Fund and expand the Conservation Enhancement Act to provide a state cost-share program to maintain lands currently enrolled in the federal CRP program which are planted in trees.

GROUND AND SURFACE WATER QUALITY

As a leader in agriculture and manufacturing, Illinois should take the lead in improving the quality of its ground and surface water resources. Standards must be set that will meet present needs and guarantee future water requirements. Water as a resource does not recognize jurisdictional boundaries. To establish a successful water quality program one must understand the boundaries of the resource and demand the cooperation of all concerned or establish one authority that transcends all boundaries. Ground and surface water generally are considered as two separate resources but their interconnections establish them as one singular resource. Pollution from either point or non-point sources that affect either classification will have an impact on the total resource.

Illinois' waters continue to be negatively impacted from various sources including toxic chemicals, industrial waste, sewage, sediment, landfills, dumps, livestock, pesticides, and urban runoff. Illinois must insure that our waters remain or become safe for all users regardless of whether those users are human or other animals. All state waters should remain or become fishable and swimmable. There are many miles of streams in Illinois not meeting their full beneficial use and the overall objectives of the Clean Water Act. Important water-related benefits of the Conservation Reserve Program and the Conservation Enhancement Act in restoring and maintaining the chemical, physical, and biological integrity of Illinois' waters are not being fully accomplished. There is a definite need to fund and implement programs that address these shortcomings for both surface and groundwater and for both point and non-point source pollution.

POINT SOURCE

The regulation of point source pollution is well covered by numerous codes, rules, laws, and regulations which are enforced by a number of agencies. The number of agencies and various regulations tend to make enforcement cumbersome. There is a general belief that adequate regulations exist to control point source pollution but detection of violations and subsequent enforcement tends to be lax.

Water Recommendation #44

There needs to be more aggressive enforcement of existing water-related regulations. Policies need to be streamlined to simplify what dictates a violation and which agency has the authority for enforcement. The use of numerous warnings and permit extensions should be avoided.

Water Recommendation #45

Consideration should be given to establishment of a Riverkeeper Program in Illinois.

- The Riverkeeper Program is used successfully in other parts of the country. A program of this nature would aid in early detection of violations because the rivers and streams would be under constant surveillance. These programs consist of a watchdog assigned to an area for the purpose of early detection of problems or violations.

Water Recommendation #46

Ongoing water-related research is a necessity. Water-related research programs need to be expanded and better funded.

- Ongoing research is needed because the aquatic environment is so complex. As noted in the USEPA publication, Quality Criteria for Water 1976, quality criteria for water are a never ending process of definition that will continue far into the future because research related to water quality is a never ending evolutionary process.

"Illinois' waters continue to be negatively impacted from various sources including toxic chemicals, industrial waste, sewage, sediment, landfills, dumps, livestock, pesticides, and urban runoff."

"The Riverkeeper Program... would aid in early detection of violations because the rivers and streams would be under constant surveillance."

NON-POINT SOURCE POLLUTION

The control of non-point source pollution also is covered by numerous codes, rules, acts, laws, and regulations which are controlled and enforced by a number of agencies. Steps need to be taken to streamline these policies and controls as well as the detection of violations and enforcement of regulations. Non-point sources, however, are very diverse and cover a variety of activities.

Agriculture

Agriculture's contribution to non-point source pollution varies with the crops being grown and production systems being used. The largest problem created by agriculture is soil erosion, which is causing serious negative

"State programs should promote crop rotation, use of resistant crop varieties, minimal or reduced fertilization, revised tillage practices, early pest detection, proper disposal of livestock waste, and other practices that have an effect on water quality."

impacts by filling streams, rivers, lakes, and impoundments with sediment. The runoff from farm ground carries with it many fertilizers and pesticides attached to soil sediment. These materials can have serious deleterious effects upon aquatic ecosystems and pose a human health threat. Livestock waste is another source of pollution that in many cases enters the water resources unchecked.

Water Recommendation #47

The Department of Agriculture (DOA) should take the lead in developing education and voluntary compliance programs relating to farming practices and their contribution to non-point source pollution.

- Agricultural activities that make significant contributions to non-point source pollution will have to be changed. There are various methods to accomplish this task including education, voluntary compliance, leadership from farm organizations, input from state, local, and private organizations, and - most importantly - the involvement of DOA. There is a need for water quality to be adopted as part of the curriculum for schools, colleges, and universities. There is a need to expand the teaching modules presently available to the farming community.

Water Recommendation #48

Research concerning erosion, safer fertilizers and pesticides, improved farming practices, and other topics directly related to ground and surface water quality should be continued and expanded.

Water Recommendation #49

The state should redirect its research and education efforts toward management practices that promote the responsible use of all chemicals and farming practices that are more environmentally friendly.

- State programs should promote crop rotation, use of resistant crop varieties, minimal or reduced fertilization, revised tillage practices, early pest detection, proper disposal of livestock waste, and other practices that have an effect on water quality.

Non-agriculture

Education and voluntary involvement are the keys to pollution reduction on the non-agricultural scene. Development of educational programs that explain the hazards of lawn and garden chemicals is needed. DOA and EPA

should work together to expand programs for urban Illinois. These educational programs should be targeted at both small urban communities and large cities.

Water Recommendation #50

The state should utilize all educational methods available, including mass media, to develop a public awareness of non-point source pollution from both urban and agricultural sources.

Water Recommendation #51

State agencies, such as DOA and EPA, must work together and develop a water quality and soil erosion strategy. State and federal organizations must cooperate in compliance monitoring and modify rules and regulations where conflicts exist. They also need to assist and promote the merits of the various incentive programs available.

Mineral Extraction (Well Drilling)

The control of oil field brine is a localized problem in Illinois, yet it must be addressed due to local but significant contamination of surface and groundwater sources resulting from seepage from brine pits, injection operations, and abandoned wells.

Water Recommendation #52

The state should more closely monitor oil field brine disposal operations where the threat of contamination of water supplies exists. The state should work with states where this is a major problem to aid in the development of a progressive program to contain this type of pollution.

Mineral Extraction (Mining)

Pollution caused by coal mining is not a pervasive problem in the state, but there is evidence of local negative impacts on water resources.

Water Recommendation #53

Continue to monitor areas within the state where mining is or has occurred. Programs in other states should be reviewed as a potential model for adoption in Illinois.

"The state should utilize all educational methods available, including mass media, to develop a public awareness of non-point source pollution from both urban and agricultural sources."

"Disposal of domestic septage should be by land application in controlled areas when possible. "

Residual Waste (Sludge)

A major concern is the disposal of discharges created by industrial, municipal, and private concerns such as waste treatment plants, water treatment plants, wastepaper bedding production facilities, livestock yards, and septic tanks. Many of these waste products contain pathogens, heavy metals, toxic chemicals, or other hazardous elements that can have a serious impact on water quality. Most disposal methods for these materials are strictly regulated and must be permitted by the Illinois Environmental Protection Agency.

Water Recommendation #54

Residual waste sludge should be treated as a potentially harmful contaminant, but reuse as a potential resource should be encouraged where environmentally practical.

- The proper disposal of residual waste sludge is critical to both ground and surface water quality as well as to point source control. It is important that this sludge be considered as a potential resource and that promotion of recycling or reuse of residual materials be encouraged. Only suitable landfills should be used for municipal sludge material and industrial wastewater sludge that contains harmful contaminants. Disposal of domestic septage should be by land application in controlled areas when possible. During adverse weather and in areas where land application is not possible, septage should be disposed of in a wastewater treatment plant that has proper facilities. Septage that contains hazardous or toxic wastes should be deposited in suitable landfills. Refer to the "Illinois Water Quality Management Plan" for regional and subregional septage disposal plans.

On-Site Disposal (Home Septic Systems)

Design of septic systems have improved in recent years; however, older systems are prone to problems if not properly maintained or if located in improper soil conditions. Septic systems are not intended for disposal of any type of hazardous or toxic waste.

Water Recommendation #55

Local governments should be involved with design and installation of septic systems. Systems should be inspected upon resale. Local governments should pursue a program of required scheduled cleaning of septic systems based on pertinent variables.

STORMWATER RUNOFF

All discharges into Illinois' waters need to be regulated. Stormwater and snow removal carry a quantity of petroleum residues, salts, metals, and other undesirable materials from roadways and parking lots. They also contain several toxic materials from industrial emissions. Runoff from surfaced lands needs to be considered sewage and handled in a similar fashion.

Water Recommendation #56

Treatment plants need to expand their facilities where necessary to handle polluted stormwater. Retention areas could aid in the storage problem prior to treatment. Direct discharge into waters should be strictly regulated.

Water Recommendation #57

The dumping of snow from snow removal processes into waters should be prohibited except in emergency situations as permitted by EPA.

Water Recommendation #58

The state should research the development and use of alternative, benign snow and ice removal materials.

"All discharges into Illinois' waters need to be regulated. Stormwater and snow removal carry a quantity of petroleum residues, salts, metals, and other undesirable materials from roadways and parking lots."

LAND REPORT AND RECOMMENDATIONS

The Land Work Group developed its recommendations based upon the consensus agreement that the three issues of: Habitat; Farmland Protection; and Growth Management could be envisioned to occupy three sides of an equilateral triangle and that all three elements of the triangle are necessary for a healthy, balanced, and productive society.

HABITAT

Habitat supports animal and plant species and serves as a necessary biological buffer that supports human populations and adds to the intrinsic quality and economic potential of society. Habitat is composed of the physical and biological components necessary to meet the life cycle needs of specific animals and plants. There is a need to maintain, enhance, and create habitat sufficient to meet sustainable ecological, social, economic, and environmental needs.

A certain amount of habitat protection is required if viable populations of plants and animals are to be maintained. There are vast differences of opinion as to the quantity, quality, and specific types of habitat required. These differences result in competition among those interested in habitat. For example, managing diked backwater areas along the Mississippi River as waterfowl units detrimentally affects riverine fishes via their exclusion from overwintering, nesting, and rearing habitat. On the other hand, waterfowl habitat created in conjunction with the Shelbyville Reservoir produces a year class of riverine fishes that are allowed to grow to a size that can compete with the reservoir fishes. At that time these fishes are allowed to enter the reservoir.

Agricultural production and land development can severely threaten habitat. Habitat has little recognized direct economic benefit, and is not generally recognized for its value as a necessary environmental buffer for society and for its role in the infrastructure of the state.

"Habitat has little recognized direct economic benefit, and is not generally recognized for its value as a necessary environmental buffer for society and for its role in the infrastructure of the state. "

PUBLIC LANDS HABITAT ENHANCEMENT

Illinois should institute policies that both protect and increase terrestrial and aquatic game and non-game animal habitat throughout the state. Emphasis should be on policies that result in increasing Illinois' relatively low standing (48th) with respect to other states' public acreage per capita and increasing landowner-approved public access to private lands.

Land Recommendation #1

The state should establish a system of macrosites, meaning large ecological reserves or "sustainable ecosystems," via acquisition, easements, management agreements, or a combination thereof, including agricultural use consistent with the prime habitat function.

- Each macrosite should be of sufficient size to maintain ecological processes and self-sustaining populations of terrestrial and aquatic game and non-game animal and plant life, i.e., viable populations of representative species. The macrosites should be distributed across the state so that each of the established Natural Divisions of the state has such a reserve. Macrosites should include grasslands as well as forestland, in order to represent the full diversity of the Illinois landscape. The goal for each should be to assure natural diversity, ecological processes, natural communities, habitats for area-sensitive species, and long-term survival of native species. Macrosites are necessary to avoid the effects of fragmentation of habitat that already have been seen throughout much of the state.
- The areas should be large enough to provide for a variety of uses compatible with the resource. The prime management direction should always be natural resource management, although such a system could become a tool for economic development through tourism, thus enhancing the economy in some of the more remote parts of the state. When practical, macrosites should be connected by scenic roadways and trail systems which provide corridors for terrestrial and aquatic game and non-game animals and native plants.
- Macrosites would allow the Illinois Department of Conservation (DOC) to focus its natural resource management efforts on both public and private land contained within the macrosite, thereby increasing the efficiency and effectiveness of these efforts. Macrosite areas should also get special consideration for funding of infrastructure, such as that provided in Open Space Land Acquisition and Development (OSLAD) grants, sewage treatment facilities, and soil and water conservation funding, creating a "web" of revitalization for Illinois' economy.

"The areas should be large enough to provide for a variety of uses compatible with the resource."

"Macrosite areas should also get special consideration for funding of infrastructure, such as that provided in Open Space Land Acquisition and Development (OSLAD) grants, sewage treatment facilities, and soil and water conservation funding, creating a "web" of revitalization for Illinois' economy."

"DOC should use its position as a state natural resource agency to encourage federal management policies that recognize natural resource conservation as the first priority for the Shawnee National Forest."

- Protection of macrosites need not require large scale land acquisition. Conservation easements and other land protection mechanisms can be used.

Land Recommendation #2

Natural resource agencies should develop and promote programs which use conservation easements, purchase of development rights, and other mechanisms to supplement direct land acquisition for conservation purposes. DOC should institute an educational program to inform government agencies, citizens groups, corporations, and private landowners about alternatives for preservation of land. A first step would be to prepare a handbook for distribution to other agencies.

Land Recommendation #3

The Task Force endorses DOC's purchase of the tract currently known as Site M and recommends this site be used as a pilot project in managing the area as a "sustainable ecosystem."

- In managing Site M, the Task Force encourages the DOC to maintain some of the agricultural base in addition to the natural resource base, to allow natural resource related research, and to resist alternate uses unrelated to natural resource protection and natural resource based recreation, such as military use, or nuclear or solid waste disposal.

Land Recommendation #4

DOC should use its position as a state natural resource agency to encourage federal management policies that recognize natural resource conservation as the first priority for the Shawnee National Forest.

- The Shawnee National Forest is unique in Illinois in its role as habitat. The first priority should therefore be natural resource conservation--including eliminating fragmentation--though not to the exclusion of other uses.

Land Recommendation #5

The Natural Areas Preservation Act should be amended to require all entities of state government to consult with DOC when taking actions that might affect dedicated state nature preserves, natural areas, and registered natural areas.

- Currently only state agencies undertaking capital projects consult DOC regarding options which may affect natural areas. Both state and local governments are required to consult on actions which might affect endangered or threatened species. Therefore, no additional work would be required of local governments. By protecting intact natural communities now, listing many species in the future as threatened or endangered may be avoided.

Land Recommendation #6

DOC and other state-owned properties should maintain a consistent natural resources management philosophy, in recognition that all natural resources should be managed with protection of the native flora and fauna and provision of natural resources based outdoor recreation as priorities.

DEPARTMENT OF CONSERVATION LAND ACQUISITION EFFORTS

DOC should be more vigorous in its attempts to secure increased public acreage. The following concepts should guide future actions in this area.

Land Recommendation #7

DOC needs to accept that increased public land acquisition need not be coupled with related development, e.g., roadways, parking, and/or camping facilities, management staff requirements, etc., which is costly and often detrimental to terrestrial and aquatic game and non-game species' habitat.

Land Recommendation #8

The state should coordinate its land acquisition efforts with those of other state, federal, and local government entities to meet multiple open space needs such as flood control, wetland preservation, protection of groundwater recharge areas, floodplains, and flood retention reservoirs.

Land Recommendation #9

DOC needs to more vigorously advocate programs that facilitate donation of lands to the state for wildlife habitat or natural heritage designation.

"DOC and other state-owned properties should maintain a consistent natural resources management philosophy, in recognition that all natural resources should be managed with protection of the native flora and fauna and provision of natural resources based outdoor recreation as priorities."

"Most of the land in Illinois is privately owned. To positively impact wildlife habitat, substantial emphasis should be placed on encouraging private creation and nurturing of wildlife habitat."

Land Recommendation #10

DOC should be particularly receptive to accepting corporate land donations, especially when corporate lands are available as donations with corporate retention of the obligation and liability for reclamation and pollution.

- This recommendation is particularly important to Illinois now before remaining corporate lands are diverted to other uses.

Land Recommendation #11

Systems for streamlining disposition of tax delinquent lands should be developed giving priority to public natural resource agencies and providing such disposition for a conveyance fee or at cost.

Land Recommendation #12

The state's natural resource agencies should pursue legislation which removes barriers to land exchanges with private property owners based on fair market value -- the exchange being "developable land" for land with a high conservation value.

PRIVATE LANDS HABITAT ENHANCEMENT

Most of the land in Illinois is privately owned. To positively impact wildlife habitat, substantial emphasis should be placed on encouraging private creation and nurturing of wildlife habitat.

Land Recommendation #13

There should be a substantial increase in the number of DOC Private Lands Biologists, Natural Heritage Biologists, District Fisheries Biologists, and District Foresters assisting private landowners and local governments in the management of species and habitat on private property and local government lands.

- These biologists should be provided with the equipment and supplies necessary to efficiently serve the public. The technical capability of these programs should be better integrated and coordinated to provide consistent advice to landowners. The principal product of these programs is the enhancement and stewardship of habitat.

Land Recommendation #14

Administrative rules to implement the Register--a list of lands judged worthy of preservation and voluntarily enrolled by their owners--should be promulgated as authorized in the Natural Areas Preservation Act.

- There are categories of lands which have significant natural attributes but are not appropriate for dedication as Illinois Nature Preserves. A Register of Land and Water Reserves, authorized in the Natural Areas Preservation Act, should be implemented. Administrative rules to implement this register should be promulgated. The Register could be used to provide more flexible protection and Registered Areas could offer recreational opportunities not available in Nature Preserves.

" A Register of Land and Water Reserves...could be used to provide more flexible protection and Registered Areas could offer recreational opportunities not available in Nature Preserves."

Land Recommendation #15

State agencies with natural resource and public health responsibilities should be able to accept volunteer assistance on any state-owned land from private citizens and organizations and should encourage the same.

Land Recommendation #16

DOC's Division of Forestry should be strengthened to enhance the stewardship of private forest land.

- More than 90% of the forestland of Illinois is privately owned. These tracts provide forest products, income to landowners, and when properly managed, ecological and environmental benefits of value to the public.

Land Recommendation #17

Illinois should pass legislation to limit owner liability associated with public use of all private, including corporate, lands for conservation and recreational purposes.

- Recently enacted legislation limited the liability of landowners who allowed the public to use their property for recreational purposes without charge. Corporations remain concerned that this legislation does not explicitly cover them. By enacting legislation to clarify this concern, recreational opportunities on corporate lands may be enhanced. Such legislation could be particularly effective in expanding access to the large tracts of industrially owned coal mine (or former coal mine) land.

"Illinois should develop a state-mandated system of property tax relief...such tax relief mechanisms would be a major impetus in the maintenance of existing wildlife populations into the future. "

"... the state should institute companion mechanisms which reimburse local governments adversely affected by the mandated tax relief."

Land Recommendation #18

Via Illinois' Congressional Delegation, work to achieve continuation of the federal Conservation Reserve Program.

Land Recommendation #19

Legislation should be passed to provide property tax incentives on lands managed to provide habitat and recreational opportunities. Recapture, reimbursement, and compensation mechanisms should be included in the legislation to insure that local governments are not adversely affected.

- Illinois should develop a state-mandated system of property tax relief on lands that offer meaningful habitat for terrestrial and aquatic game and non-game species. Legislation which creates the tax incentive should define wildlife habitat that qualifies. The incentive may be a reduction of assessed value for as long as the land is managed for habitat. Should the property be withdrawn from the classification, taxes, which are equal to the taxes for an established period prior to the withdrawal, would be owed. Such tax relief mechanisms would be a major impetus in the maintenance of existing wildlife populations into the future.
- A related consideration, however, is that property tax relief measures may reduce the tax funds available to local governments. Accordingly, the state should institute companion mechanisms which reimburse local governments adversely affected by the mandated tax relief. For example, a portion of one of the proposed funding mechanisms described in the Funding Report could be used for the reimbursement of local governments. The state should also make the public aware of tax incentives available.

Land Recommendation #20

The Department of Revenue (DOR) should review classes of preferential assessment and be required to educate local assessors and private property owners on these assessment classes.

FARMLAND PRESERVATION

There is widespread lack of recognition that farmland is a finite natural resource vital to man's existence. This lack of recognition, coupled with the value of farmland as potential development property, results in its conversion from agricultural use. Farmland serves the multiple functions of providing food supply, preserving open space and habitat, contributing to a favorable balance of trade, and providing a significant employment base. It is, therefore, important that productive farmland be preserved and improved.

It is critical to maintain the income stream; owners must optimize their income if the family farm is to remain economically viable. It also must be acknowledged that environmental regulatory and habitat demands upon production agriculture may directly limit productivity. Consequently, environmental programs, e.g., wetland protection policies, must be consistent with reasonable farming practices, and regulation that severely reduces land values may require compensation.

Even the definition of "prime farmland" is not universally understood. Further refinement of the definition of prime farmland will be important to make progress in the area of farmland preservation.

Maintenance of the productive capacity of farmland, while achieving environmental and habitat objectives, can be accomplished on most lands by the use of sustainable agriculture, soil conservation, and conservation tillage. The application of such techniques may ultimately be critical to farmland preservation.

Preservation of prime farmland can disadvantage individual farmers who want to sell their land to developers for substantial profit; this contradiction can limit support for farmland preservation programs, even within the agricultural community.

"...environmental programs, e.g., wetland protection policies, must be consistent with reasonable farming practices, and regulation that severely reduces land values may require compensation."

"Illinois' highly productive farmland is an important part of the foundation for our state's economy."

Land Recommendation #21

Programs which emphasize a voluntary incentive-driven approach that uses education, technical assistance, and financial support must be aggressively implemented to maintain agricultural potential and reach soil conservation goals on farmland. If this approach fails, regulatory strategies should be used as back up measures.

- **Illinois' highly productive farmland is an important part of the foundation for our state's economy. To assure that farmland stays highly productive for generations to come, programs must be implemented aggressively. It will be an ongoing process to combat soil erosion in agriculture production, urban and industrial development, mineral extraction, and other sources.**

"To reduce the confusion and frustration on the part of the landowner, a system should be considered that establishes one local office as a point of contact, or liaison, between the landowner and federal and/or state resource protection agencies."

The process will require a change in cultural attitudes rather than a one-time program for specific problems. As detailed in the Crossover Issues recommendation on Soil and Water Conservation, a voluntary, incentive-driven approach that uses education, technical assistance, and financial support will be the most effective way to reach our goals. But if this approach fails, regulatory strategies should be used as back-up measures.

Land Recommendation #22

The Department of Agriculture (DOA) and DOR should investigate tying the current preferential assessment based on the productivity of farmland to farmland preservation agreements and/or soil conservation plans.

Land Recommendation #23

The state should strengthen and support existing state and local farmland preservation programs such as the Farmland Preservation Act and the Agricultural Areas Conservation and Protection Act. In addition, the state should provide assistance to county and local governments in the development of local zoning ordinances for farmland protection.

Land Recommendation #24

The State of Illinois should interface with the Association of Illinois Soil and Water Conservation Districts (SWCD) to enable the local SWCD offices to become the local point of contact to provide advice and technical guidance on federal, state, and local land use policies and regulatory programs.

- Land use regulations now in effect can, at times, appear to be confusing and redundant. Often landowners affected by these regulations have no real sense of which agency--federal, state, or local--has the authority on specific issues and land management practices. The landowners are forced to seek those regulatory agencies on their own, leading to confusion, redundancy, and frustration. Much of the time local involvement in the regulatory process is nonexistent. Landowners confused and frustrated by this process often give up or carry out projects without needed technical guidance and advice.
- To reduce the confusion and frustration on the part of the landowner, a system should be considered that establishes one local office as a point of contact, or liaison, between the landowner and federal and/or state resource protection agencies. The State of Illinois should pursue a cooperative partnership between its various appropriate agencies and the local SWCD

offices in which the SWCD offices serve as the local point of contact. Such a system would simplify the regulatory process as those liaison personnel would have the latest information on land use regulations and policies.

- The SWCD office, while serving as a single point of contact for landowners, also would help clarify land use regulations and authorities, eliminate redundancy, and increase local involvement. Landowners could satisfy the majority of their needs and concerns through this office, and the office would serve as the voice for local concerns regarding the impact of land use regulatory policies, thus enhancing landowner feedback and participation in the regulatory process.

Land Recommendation #25

A conversion fee should be considered as a possible tool to protect agricultural lands and terrestrial and aquatic game and non-game habitat from development and to encourage redevelopment of urban areas.

- Urban growth and development is a major contributor to the conversion of Illinois farmland. To help control sprawl, consideration should be given to the concept of assessing a fee when prime farmland or terrestrial or aquatic fish or wildlife habitat at the urban fringe is converted to another use. Ultimately, the goal of a conversion fee is to reduce development pressures on viable agricultural lands and habitat and to refocus redevelopment within existing urban areas by recycling conversion fees within the development community for use in these areas.
- Unplanned urban sprawl can result in premature farmland conversion, urban/rural conflicts, traffic congestion, poor air quality, and steadily rising taxes. The Northeastern Illinois Planning Commission's Strategic Plan for Land Resource Management promotes the concept that agricultural protection be balanced with the needs of builders and municipalities wishing to further expand the developed northeastern Illinois area.

NOTE: A minority of members of the Task Force could not support this recommendation due to sustained historical opposition to the concept by development and real estate interests. That opposition is based on the belief that conversion fees infringe on landowners' rights to put their property to its highest and best use. They argue that conversion fees are effectively property tax surcharges, and they do not believe such fees will be effective in slowing growth, only in increasing the cost of housing, including the provision of affordable housing.

"Unplanned urban sprawl can result in premature farmland conversion, urban/rural conflicts, traffic congestion, poor air quality, and steadily rising taxes."

"Legislation should be introduced to eliminate property tax on lands under long-term conservation easements or enrolled in wetland protection programs."

"...growth is an essential component of a viable, productive society, but society also depends upon productive farmland to maintain its food supply and diverse habitats to maintain the quality of life of its citizens. "

"Predicting and responding to the rate of development and managing the type and location of land development are necessary to balance growth with farmland and habitat protection and to allow the provision of adequate infrastructure to service that development. "

Land Recommendation #26

Legislation should be introduced to eliminate property tax on lands under long-term conservation easements or enrolled in wetland protection programs.

- The current property tax assessment in rural Illinois is based on the productivity of the soils present. All lands removed from production and placed under long-term conservation easements or maintained as wetlands should receive a productivity index of zero. The result would be property tax relief to owners who actively create or encourage the placement of conservation easements on their lands or practice the preservation of wetlands. Property tax relief for conservation easements and wetland preservation would help insure that soil and water conservation goals are met.
- Illinois landowners carry a disproportionate responsibility for conservation practices that collectively benefit the environment. Encouragement through property tax relief would focus specific attention on the overall importance of maintaining wetlands and native habitats, and also reduce expenses on land that would become non-income producing.

GROWTH MANAGEMENT

The Task Force agrees that growth is an essential component of a viable, productive society, but society also depends upon productive farmland to maintain its food supply and diverse habitats to maintain the quality of life of its citizens. The Task Force agreed the objective should be to maintain, enhance, and encourage land uses which sustain and enable growth and development, consistent with the objectives of habitat protection and enhancement and farmland preservation. Predicting and responding to the rate of development and managing the type and location of land development are necessary to balance growth with farmland and habitat protection and to allow the provision of adequate infrastructure to service that development.

Private and civic planners should be challenged to find creative ways to increase densities, where appropriate. However, attitude shifts in the population will be required to achieve private and political acceptance of higher densities.

Land Recommendation #27

State legislation should require planning as a prerequisite to local government's authority to zone and otherwise regulate land use. Legislation should mandate required elements of local plans e.g., infrastructure, environmental protection, and an implementation program.

- Local zoning ordinances often have been used as a tool to exclude "undesirable" development, a highly subjective, sometimes discriminatory, objective. The State of Illinois needs to pass legislation requiring all local governments to undertake and establish planning processes that justify all zoning requirements based on public safety and welfare criteria and legitimate natural and cultural resources protection criteria.

Land Recommendation #28

In order to more effectively balance growth with farmland and habitat protection, cooperation between and among units of local government must be strengthened. Plans and ordinances should be coordinated among local units of government.

Land Recommendation #29

For the purposes of farmland preservation and/or habitat protection, land use ordinances should provide more flexibility. Land banking, density transfer, and cluster zoning should be explored.

Land Recommendation #30

As an off-set to increased densities, legislation should be developed which will allow for improved economical mass transit design with a goal to reduce traffic impacts that might be generated by higher density developments.

Land Recommendation #31

State-level land use standards, which apply solely to highly specialized land uses that protect critical or vital interests of the State of Illinois, such as prime farmland preservation, should be considered.

- Concerns critical to the long-term economic welfare of the State of Illinois, such as the preservation of prime farmland, may justify the development of state-level land use standards. Such standards could balance competing interests, e.g., by defining

"The State of Illinois needs to pass legislation requiring all local governments to undertake and establish planning processes that justify all zoning requirements based on public safety and welfare criteria and legitimate natural and cultural resources protection criteria. "

locations where development interests supersede farmland protection requirements.

Land Recommendation #32

The concept of development rights transfer needs to be further explored.

The following issues should be considered:

- Should development rights be transferred only within an individual parcel of land or throughout a region? Should development rights bought from a landowner on one side of a county be transferred all the way to the other side of that same county?
- To be effective, density transfer must result in marketable land uses. For instance, the ability to transfer residential zoning rights that would increase inner city development densities beyond ten or twelve dwelling units per acre would result in housing products that cannot be sold in today's market. Thus, the concept of transferring rights must be flexible.
- A large percentage of communities in the state may have to be involved in the concept of density transfer to make it practical. It is possible that incentives could be created to encourage communities to identify zones into which density transfers can be received.
- A state law could be implemented which would require communities to designate or zone areas within their community that can receive density transfers.
- Incentives to encourage local government cooperation in this area might include:
 - State funded transportation dollars to improve local transportation systems.
 - State funding for school and open spaces.
 - State funding for improvement of infrastructure to include major stormwater management facilities, sewer plant expansions, and road construction.
- Although it would be possible to provide cooperating communities priority consideration for existing funding as incentives, it also may be necessary to look for vehicles to generate additional funding for incentives. It is possible that a

"The concept of development rights transfer needs to be further explored."

surcharge or fee could be built into the purchase of the density development rights from the landowner. Revenue from the surcharge could then be redistributed to communities where density transfers are received.

Land Recommendation #33

The downsizing of subdivision and other design standards should be considered as a means of reducing land consumption.

- Downsizing of standards based solely on tradition or based on out-dated assumptions could allow for the retention of more open space, along with reduced costs to the developer. Local regulations controlling subdivision design, infrastructure, development standards, etc., may be based on traditions and assumptions that are no longer valid. For example, groups such as the Urban Land Institute and the American Society of Civil Engineers have recommended a 50-foot right-of-way versus 66 feet and street cross sections that meet the size and weight requirements of modern automobiles today. Local building and engineering standards should be reviewed at the state level with an eye toward downsizing and reducing the consumption of land.

"Local building and engineering standards should be reviewed at the state level with an eye toward downsizing and reducing the consumption of land. "

Land Recommendation #34

The process for adjusting Wastewater Planning Areas needs to be depoliticized. Planning areas should be based on technical needs and requirements and should promote compact, contiguous development.

CROSS-CUTTING RECOMMENDATIONS

A number of land-related recommendations cut across the issues of habitat, farmland preservation, and growth management. In addition a critical cross-cutting recommendation is the need for more stable and reliable funding to implement the programs the Task Force is recommending. The Task Force has identified several options to provide substantial new resources for conservation purposes. These are described in more detail in the Funding Report.

Land Recommendation #35

The growth management recommendations can be applied not only to protect residential open space and farmland, but they could also be used to protect and promote the development of habitat, recreational opportunities, and high quality habitat (natural areas and habitat for endangered species and critical wildlife populations).

"Not only should appropriate state and local agencies be encouraged to do much more citizen education than they have traditionally done, but principles of ecology, agricultural production, and economic and land use planning also should be taught routinely to school children. "

"The State of Illinois should enhance the Illinois Geographic Information System (IGIS)..."

Land Recommendation #36

The state should pursue enlightened tax policies that provide incentives for landowners who contribute to the public welfare and environmental well-being of the State of Illinois through responsible stewardship of private lands. The counter-incentives to responsible land use created by reliance on the property tax should become a part of the debate on education funding and tax caps.

- Since landowners are required to pay property tax on their land, it is often not economically feasible to allow land to lay fallow and thereby provide habitat values. There is pressure to make land "pay for itself." Likewise, it is expensive to developers to "hold land" resulting in pressures toward aggressive development.
- Many of the goals of the Task Force can be partially or totally achieved by use of enlightened tax policies that provide incentives such as those employed in the Forestry Development Act. For example:
 - Reduced property taxes on agricultural lands that practice environmentally sound (DOA or Illinois Environmental Protection Agency-approved) farm practices.
 - Income tax credits for development or redevelopment of blighted urban areas thereby reducing urban sprawl.
- Programs and opportunities such as those listed above also should be part of a statewide re-evaluation of education funding, state-mandated property tax relief, and increased income taxes.

Land Recommendation #37

State and local conservation and agricultural agencies need to expand public education programs related to ecology, agricultural production, and economic and land use planning.

- With respect to habitat, farmland preservation, and growth management, understanding of the "basics" is woefully absent. Few citizens, even highly educated ones, understand ecology, farmland production processes, and economics or the principles of land use planning. Consequently, public education programs are critical. Not only should appropriate state and local agencies be encouraged to do much more citizen education than they have traditionally done, but principles of ecology, agricultural production, and economic and land use planning also should be taught routinely to school children.

Land Recommendation #38

The State of Illinois should enhance the Illinois Geographic Information System (IGIS), building upon the existing system managed by the Department of Energy and Natural Resource (ENR). A biologically defensible land classification system that retains the capacity to be responsive to federal and state programs should be developed, mapping standards should be enforced, and availability of data needs to be expanded.

- Illinois needs to develop its own land and water classification system. That system should be consistent with federal definitions (such as those being developed for wetlands) and national government policies and agreed to by agriculture, conservation, and development interests. Such an Illinois Land and Water Classification System must define land and water types, e.g., wetlands, prime farmland, and lakes and streams. The system should rely heavily upon information contained in the Illinois Geographic Information System and on work already done by entities such as the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.
- A grading system needs to be created within the Land and Water Classification System which will classify farmland on a sliding scale based on its potential for crop yield. To a certain extent such a system exists on the basis of prime agricultural soils; however, further investigation and an upgrading of these standards need to be done in light of the advances made with new varieties and breeds of hybrid crops which are allowing higher and higher yields.
- The ongoing Critical Trends Assessment Project should ensure that data necessary for the development of the Land and Water Classification System are included in the IGIS. These data could be expected to include relevant federal, state, and local government-generated information and available privately-held information. Coverages within the system should avoid duplication of effort and multi-party negotiations might be necessary to achieve collection of information at the necessary scale.
- Information in the Land and Water Classification System of the IGIS should be readily available to the agriculture, conservation, and development communities. In order to make the information available, data maintenance, ownership, security, veracity, and exchange issues will have to be addressed. Such a system would enable the efficient and consistent identification of prime farmland and critical natural habitats, such as wetlands, and make possible mitigation and development density transfer banking via the identification of donor and receptor sights.

"Information in the Land and Water Classification System of the IGIS should be readily available to the agriculture, conservation, and development communities."

"An enhanced Geographic Information System could expedite the protection of prime farmland and critical natural habitats and protect the interests of developers investing in land for future projects by effectively establishing a 'one-stop-shop' for ascertaining the likely availability of permits for future projects. "

- An enhanced Geographic Information System could expedite the protection of prime farmland and critical natural habitats and protect the interests of developers investing in land for future projects by effectively establishing a "one-stop-shop" for ascertaining the likely availability of permits for future projects.
- Such a system could expedite the development of mitigation and development density transfer banking which could prove to be flexible and powerful tools for the agriculture, conservation, and development communities, thus reducing conflict and enabling responsible use of Illinois' land and water resources.

RECREATION REPORT AND RECOMMENDATIONS

The Water Resources and Land Use Priorities Task Force established recreational uses of the state's land and water as an issue that was worthy of the attention of the Task Force. Consequently, the Task Force has limited its efforts to looking only at outdoor recreation. The Task Force assumed a definition that is all-encompassing and includes any and all outdoor recreational activities.

The Task Force strongly believes that outdoor recreation, open space, and natural areas preservation are as important as the more tangible services that state government provides. Funding must be provided to recognize recreation and conservation as priorities of state government. The Task Force recommends that an adequate base of General Revenue Funds be appropriated, that a new source of stable funding be created, and that these revenues be augmented by user fees. These funding recommendations are described in more detail in the Funding Report and are vital to being able to adequately address recreation and conservation issues in Illinois.

Throughout the following recommendations is a call for proper planning for the use of financial resources and the existing recreational infrastructure. Planning for outdoor recreation should not be just a state task. The State of Illinois should coordinate with existing local and regional governments, businesses, agricultural interests, and a host of other interested groups and individuals. Cooperation and planning will help meet the short-term and long-term recreational needs of the citizens of our state.

RECREATIONAL NEEDS (SUPPLY AND DEMAND)

Conflicting interests and diverse needs often can strain efforts to provide a workable balance between the rights of private landowners and the availability of recreational opportunities. This balance is critical. There are also increasing pressures upon public land which provides recreation opportunities. The future growth of Illinois' population and citizens' demands for recreational, agricultural, and economic opportunity must be considered in the development of recreational and land use policies.

The recommendations offered here increase recreational opportunities by focusing on both the supply of and demand on recreational resources. Demand can be met by analysis of need and coordinating delivery of available supply where recreational needs are greatest. The state should encourage private and public partnerships to expand recreational resources to increase the available supply.

"The Task Force strongly believes that outdoor recreation, open space, and natural areas preservation are as important as the more tangible services that state government provides."

"Throughout the following recommendations is a call for proper planning for the use of financial resources and the existing recreational infrastructure."

" State and local governing bodies, as well as business, agriculture, and community representatives need to be brought together for open communication and education about recreational needs. Without cooperative action, recreational opportunities here today may be gone tomorrow."

Open communication is a key to meeting recreational needs. State and local governing bodies, as well as business, agriculture, and community representatives need to be brought together for open communication and education about recreational needs. Without cooperative action, recreational opportunities here today may be gone tomorrow. The goal is to provide direction for positive action now in order to provide adequate recreational resources for the future.

Recreation Recommendation #1

The state's natural resource agencies should acquire recreational land throughout the state while balancing regional needs and cost effectiveness.

Recreation Recommendation #2

The state's natural resource agencies should regularly update inventories of significant natural and historical sites for possible acquisition, protection, and dedication.

Recreation Recommendation #3

The state should inventory the use made of all state recreational resources, and, based on that inventory, establish a program of priority use which will help alleviate conflicts inherent in multi-use recreational programs.

Recreation Recommendation #4

An inventory should be conducted of all state-owned lands to determine if those lands are adaptable to recreational uses.

Recreation Recommendation #5

The Governor should convene a meeting of corporate and business leaders for the purpose of facilitating the creation of an external foundation able to receive both public and private funds for recreational uses. The foundation's board of directors (consisting of members from the public and private sectors) would have responsibility for fund management and for matching donors and projects with other foundations, non-governmental organizations, and land holding entities.

Recreation Recommendation #6

DOC should expand its use of volunteers to enhance recreational areas and support existing staff. This expansion should be done by establishing an "Adopt-a-Park" or other local pride program for support of recreational resources at specific sites and by initiating "Volunteer Stewardship" programs based on The Nature Conservancy's model, which is in place for natural areas, for other categories of natural and recreational resources.

Recreation Recommendation #7

The Governor should convene a Conference on Parks, Recreation, and Conservation periodically (at least once every five years) to improve communication and coordination among governmental entities and the public and private sectors.

Recreation Recommendation #8

The state should recognize the key role of local governments in meeting conservation and recreational needs; local governments must have flexible and adequate tools to meet these needs.

Recreation Recommendation #9

Local officials should convene summits to prepare regional recreational resources management plans that protect natural resources, provide for the most efficient use of property tax dollars, and integrate the transportation and local housing needs with recreational needs.

Recreation Recommendation #10

Consistent with the Americans with Disabilities Act, DOC should survey recreational facilities and make reasonable accommodation for people with disabilities.

"The Governor should convene a Conference on Parks, Recreation, and Conservation periodically (at least once every five years) to improve communication and coordination among governmental entities and the public and private sectors."

CORRIDORS: GREENWAYS, TRAILS, BIKEWAYS

Over the years, Illinois has attempted to preserve its natural areas and to offer its residents a variety of outdoor recreational opportunities. These efforts have not kept pace with the state's growing population and increased urbanization. A renewed commitment is needed to meet the recreational needs of the state. Developing a statewide network of greenways and trails is a cost-effective strategy that adds value to existing public holdings and provides the setting for a wide assortment of activities.

"A greenway is a corridor of open land that connects natural areas, cultural and historic sites, and neighborhoods and communities.

Greenways are cost-effective because of their many benefits."

"DOC should be the lead agency to develop a plan for establishing by 2010 a network of greenways and trails across the state which link parks, forest preserves, and natural areas and that determines priorities for action."

A greenway is a corridor of open land that connects natural areas, cultural and historic sites, and neighborhoods and communities. Greenways are cost-effective because of their many benefits. They can provide much needed habitat for native plants and animals and can provide links between wildlife habitats so that animals can safely move from one place to another. They provide low-cost stormwater management and act as buffers that filter pollutants before they reach streams and wetlands. When combined with trails, greenways are used by bicyclists, hikers, snowmobile operators, cross-country skiers, and equestrians. Greenways that are stream corridors can be used for boating, canoeing, and fishing.

Conflicts have arisen in the past between natural resource agencies attempting to develop trails and nearby property owners. These conflicts can be minimized if the community is brought into the planning process early and if trails are designed sensitively.

Recreation Recommendation #11

DOC should be the lead agency to develop a plan for establishing by 2010 a network of greenways and trails across the state which link parks, forest preserves, and natural areas and that determines priorities for action.

- DOC should be the catalyst for planning and implementing a statewide network of greenways. DOC's role should be to identify important corridors; coordinate the efforts of park districts, municipalities, counties, forest preserve districts, conservation districts, and other state agencies and provide technical assistance.
- DOC should seek the advice and assistance of regional planning agencies in developing the statewide plan and should provide a forum for coordinating local efforts to implement the plan.
- To establish a statewide network by the year 2010, new sources of funding must be tapped. The Intermodal Surface Transportation Efficiency Act (ISTEA) promises to be an important new source of funding which could be used to supplement existing funding sources. User fees and a tax on the sale of bicycles and/or recreational equipment are potential funding sources which could provide funding for greenway development.

Recreation Recommendation #12

DOT should accommodate greenways and trail corridors that are included in regional or statewide plans when developing or constructing roadways.

Recreation Recommendation #13

In its grant-making process, DOC should give special consideration to trails and greenways that are part of a network or plan.

Recreation Recommendation #14

DOC should conduct workshops for park districts, forest preserve districts, municipalities, etc., to provide assistance in developing community participation processes and in designing trails and greenways that reduce property owners' concerns regarding liability, security, and privacy.

Recreation Recommendation #15

DOC should require applicants for state funding for trails and greenways to submit a public participation plan when they apply for state funding.

- Landowners affected by trail acquisition should be included early in the planning process.

Recreation Recommendation #16

DOC should identify, in consultation with other state agencies including DOA, Department of Energy and Natural Resources (ENR), and Department of Transportation/Division of Water Resources (DOT/DOWR), natural resources (i.e., streams, linkages between prairie remnants, and key wildlife corridors) that need to be protected as greenways.

Recreation Recommendation #17

DOC should have a key role in programming and spending transportation enhancement funds which are available through the Intermodal Surface Transportation Efficiency Act (ISTEA). This new source of money must be used to supplement existing funds dedicated to enhancement and alternative transportation.

Recreation Recommendation #18

DOT should require that proposals for road widening and/or new roads that use state or federal highway funds consider plans for bicycle lanes.

"DOC should identify, in consultation with other state agencies... natural resources (i.e., streams, linkages between prairie remnants, and key wildlife corridors) that need to be protected as greenways."

"The State of Illinois should adopt a policy which supports the use of abandoned rights-of-way for trails and greenways. "

Recreation Recommendation #19

The State of Illinois should adopt a policy which supports the use of abandoned rights-of-way for trails and greenways.

Recreation Recommendation #20

DOT should plant appropriate road rights-of-way in native vegetation and manage such plantings to enhance wildlife habitat.

Recreation Recommendation #21

DOC should provide interpretive signage, maps, and brochures to enhance the experiences of trail users on DOC lands.

CROSSOVER ISSUES REPORT AND RECOMMENDATIONS

There were several issues identified by the Task Force that either did not fit well in one of the other work group categories (Land, Water, or Recreation) or were related to more than one work group category. These issues were assigned to the Crossover Issues Work Group.

COORDINATING COUNCIL FOR NATURAL RESOURCES AND THE ENVIRONMENT

Implementation of the Task Force's recommendations will require coordination and cooperation among the Governor's Office and all the state natural resource agencies. A mechanism is needed to continue the forward momentum begun by the Task Force.

Crossover Recommendation #1

The Task Force recommends the Governor create by executive order a Coordinating Council for Natural Resources and the Environment.

- This Council would provide a forum which would institutionalize a process to promote consistency, clarity, and coherence to present and future policies, programs, and strategies affecting Illinois' water and land resources.
- The Council should be active in:
 - developing a natural resource and environmental philosophy that would take into consideration the entire landscape of Illinois.
 - developing criteria for planning and siting regional projects such as airports and nuclear waste sites.
 - developing protection programs for unique Illinois systems such as the Illinois River and Lake Michigan.
 - setting long-range goals, strategies, and programs that would balance the natural resources of Illinois and the state's economy.
 - re-energizing and promoting metropolitan planning organizations.

"Implementation of the Task Force's recommendations will require coordination and cooperation among the Governor's Office and all the state natural resource agencies. A mechanism is needed to continue the forward momentum begun by the Task Force."

"Expanding upon the Natural Resources Subcabinet, the Coordinating Council would be a more formal, public forum with specific charges and responsibilities."

- Expanding upon the Natural Resources Subcabinet, the Coordinating Council would be a more formal, public forum with specific charges and responsibilities. This proposed body would not be another layer of bureaucracy, but would involve meetings (quarterly or on an as-needed basis) of agency heads or their designees. Its meetings would be in addition to and would not replace or compromise the confidentiality of Natural Resource Subcabinet meetings or advisory meetings each Director has with the Governor. In addition, meetings could provide a continuing opportunity to demonstrate the administration's openness to public input, to educate the public, and to tap the vigorous network of Illinois' volunteer groups for talent on cooperative projects involving these important issues.
- Composition of the Coordinating Council for Natural Resources should consist of:
 - Governor's Office
 - Department of Agriculture (DOA)
 - Department of Conservation (DOC)
 - Environmental Protection Agency (EPA)
 - Department of Energy and Natural Resources (ENR)
 - Department of Transportation (DOT)
 - Department of Mines and Minerals (DMM)
 - Abandoned Mined Lands Reclamation Council (AMLRC)
 - Pollution Control Board (PCB)
 - Historic Preservation Agency (HPA)
 - Department of Public Health (DPH)
- Mission and duties should include:
 - Appoint lead agencies when there are multi-agency responsibilities, activities, and interests.
 - Eliminate costly and inefficient duplication of effort among agencies.

- Provide a clearinghouse for information on both federal and state regulations, permits, etc.
- Provide a centralized point for public input.
- Coordinate and draw on resources of private groups.
- Direct citizens to available technical assistance.
- Set priorities for research funding.
- Examples of specific activities of the Council:
 - It could be charged with developing a plan for the maintenance/preservation/restoration of a unique Illinois system such as the Illinois River.
 - It could also evaluate and possibly consolidate the current state agency Geographic Information System (GIS) projects with an eye to eliminating redundant efforts; coordinating the selection of cross-compatible hardware, software and databases; and projecting and prioritizing future GIS applications.
 - It could be charged with following through on the recommendations of the Water Resources and Land Use Priorities Task Force.

"... the Council...could be charged with developing a plan for the maintenance/preservation/restoration of a unique Illinois system such as the Illinois River."

SITING OF REGIONAL FACILITIES

Siting of new regional facilities such as landfills, incinerators, large shopping malls, airports, power plants, etc., can cause adverse resource and environmental impacts. Careful planning is essential to ensure there is a need for the facility and that the life of the facility is maximized.

Since the first public facility was built, the interests of the public have ruled over the interests of an individual. Although impacts upon directly affected individuals and communities usually receive consideration when locating a regional facility, protection of resources and rights beyond the host area often are neglected. Compounding the siting issue are the tradeoffs associated with resource allocation; who is to make the decision as to which resource is most valuable or receives higher priority?

Obviously, the larger the facility (i.e., airports), the more likely its impact will have far reaching effects. State involvement in the planning of major facilities is essential to ensure a broader-based and more objective determination. Regional facilities such as prisons, major highways, hazardous waste sites, and many others deserve a broader review than just

" State involvement in the planning of major facilities is essential to ensure a broader-based and more objective determination. "

"...develop a system to screen sites and minimize resource impacts as a result of site selection."

"...carefully analyze both short-term and long-term agricultural impacts because new regional facilities often require conversion of large tracts of farmland."

looking at impacts upon the host community. As the need for these facilities increases, siting becomes more important. Over-building, or, even worse, building a soon to be obsolete facility, would be a great waste of financial resources and would have long-term negative economic impacts.

The Task Force identified several needs surrounding the siting of regional facilities:

- To develop a system to screen sites and minimize resource impacts as a result of site selection.
- To develop a method of objectively evaluating the social and economic impacts on neighbors not wanting the facility located in their backyards.
- To analyze economic impacts such as property devaluation or inflation and erosion of the local tax base.
- To conduct an independent and objective evaluation of local and regional needs which may or may not be in harmony.
- To ensure the State of Illinois' participation in long-term planning so that optimal locations are identified within a broader perspective.
- To incorporate public information and education in order to objectively explain the need for regional facilities and help correct misperceptions.
- To develop a resource-based planning process throughout the State of Illinois.
- To develop a system for prioritizing the needs of the state with regard to regional facilities.
- To provide public hearings on siting possibilities so that citizen input can be evaluated.
- To carefully analyze both short-term and long-term agricultural impacts because new regional facilities often require conversion of large tracts of farmland.

Crossover Recommendation #2

The state should develop better coordination and cooperation among state agencies so that site identification and permitting can be examined from several perspectives concurrently rather than sequentially.

Crossover Recommendation #3

The state should be part of the decision-making process when siting regional facilities; the Coordinating Council for Natural Resources and the Environment should take the lead in defining the state's role.

- Although planning has traditionally been done by cities and/or counties, there is available at the state level considerable expertise and technical assistance which should be part of the decision-making process in the siting of regional facilities. The Coordinating Council for Natural Resources and the Environment, previously recommended, should be charged with investigating how the state can most effectively provide input in the siting of regional facilities.

Crossover Recommendation #4

The State of Illinois should develop a system to anticipate the need for, and prioritize the development of, regional facilities.

Crossover Recommendation #5

The state should ensure sufficient opportunities for the general public to comment on the siting of regional facilities. Public hearings, public informational meetings, etc., should establish a climate that encourages the general public to participate.

Crossover Recommendation #6

Legislation should require that all environmental and economic impacts on areas adjoining and/or neighboring a proposed regional facility be documented, presented, and discussed at a public permit or zoning hearing.

CONTAMINATED SITES CLEANUP AND REUSE

Contaminated waste sites in need of remediation should be converted into productive, appropriate uses while assuring environmental integrity.

Significant resources are being devoted to identifying and prioritizing sites that need remediation. Laws are reasonably comprehensive with regard to assigning responsibility, but methods to fund the cleanup and return the land to a useful function are still evolving.

"Although planning has traditionally been done by cities and/or counties, there is available at the state level considerable expertise and technical assistance which should be part of the decision-making process in the siting of regional facilities."

"Contaminated waste sites in need of remediation should be converted into productive, appropriate uses while assuring environmental integrity."

"There is generally social value to "brown field" development.

Brown field development is the re-use of existing industrial land where infrastructure, services, and an employment base currently exist for new development."

"The State of Illinois should encourage remediation and reuse of previously contaminated property by providing incentives to potential new owners of the land to clean up and develop it without assuming historic liability. "

Sites that need remediation are addressed on a priority basis with cleanup standards specified by contaminant and land use. Remediation is funded by current and historic owners and operators, the Potentially Responsible Parties (PRPs), where these are known, or the state or federal government. Low priority and orphan sites remain in a state of limbo.

There is generally social value to "brown field" development. Brown field development is the re-use of existing industrial land where infrastructure, services, and an employment base currently exist for new development. With the above scenario, potentially contaminated land becomes off-limits to new development because there is uncertain liability associated with the land. If future determinations indicate the land needs remediation, the new owner could become the PRP.

The alternative to brown field development is the more common "green field" development where non-industrial land is converted to industrial use, new infrastructure is built, and often people are relocated for employment. The cost of green field development often is higher than brown field development, but it is well defined to the developer and is thus the preferred choice.

Crossover Recommendation #7

The State of Illinois should encourage remediation and reuse of previously contaminated property by providing incentives to potential new owners of the land to clean up and develop it without assuming historic liability. Incentives could include tax incentives, caps on cleanup cost, etc. These incentives should in no way diminish the liability of historic owners/operators.

CHEMICAL USE

In Illinois a number of commercial interests, including public and private landowners use commercially available, legal chemical compounds in the production of aesthetically pleasing and affordable goods and services.

The use of chemicals is especially important to the economic viability of Illinois' primary industry, agriculture. The chemical control of weeds, insects, and diseases allows the state to annually maintain first or second place in the national production of corn and soybeans. The 81,000 family farms in Illinois produced taxable revenues of \$7 billion in 1987, including export earnings of \$3.2 billion. Illinois stands in the lead in the total U.S. agricultural economy, which from farm gate to retail shelf contributed more than 21 million jobs and nearly 16 percent of the Gross National Product in 1989.

The development and release of these legal, commercially available chemicals should be managed to prevent or minimize short-term negative impacts on non-target flora and fauna and long-term negative impacts on the natural resources of Illinois. Dozens of state and federal laws, regulations, and programs exist regarding production, testing, distribution, use, and post-use disposal of chemicals.

However, occasionally the release of these chemicals into their intended environments can have negative short term impacts on non-target flora and fauna and negative long-term impacts on the natural resources of Illinois. The potential for unintended negative impacts of commercial chemical compounds should be minimized or eliminated in order to enhance our natural resource base and maintain our economic health. The following recommendations of the Task Force are meant to apply to industrial, domestic, agricultural, and other commercial and private uses of chemicals.

RESEARCH AND DATA MANAGEMENT

Crossover Recommendation #8

State agencies with natural resource and public health responsibilities should encourage and support the development of alternate systems of pest control (crop rotations, baits and traps, biological controls, pest prevention) to reduce or eliminate the need for chemicals. Within agriculture this development would include concepts and practices currently identified as Integrated Pest Management, Sustainable Agriculture, Organic Farming, and Best Management Practices as well as other unnamed or undiscovered systems.

Crossover Recommendation #9

State agencies with natural resource and public health responsibilities should encourage and support the development of chemical compounds, or substitutes for chemical compounds, which pose less risk to non-target species through lower rates, reduced toxicity, and less persistence.

Crossover Recommendation #10

State agencies with natural resource and public health responsibilities should encourage and support the refinement of application rates, chemical carriers/inert ingredients, and equipment that reduces risk to non-target species.

"State agencies with natural resource and public health responsibilities should encourage and support the development of alternate systems of pest control (crop rotations, baits and traps, biological controls, pest prevention) to reduce or eliminate the need for chemicals. "

"State agencies with natural resource and public health responsibilities should transfer information about alternatives to chemical use to the end users of such products."

"State agencies with natural resource responsibilities should carry out laboratory and field demonstrations of practices which further promote the safe use of chemical compounds."

EDUCATION AND TECHNICAL ASSISTANCE

Crossover Recommendation #11

State agencies with natural resource and public health responsibilities should educate the public about the current high level of environmental responsibility already achieved by the entire spectrum of the chemical industry to date through voluntary and regulatory programs.

Crossover Recommendation #12

State agencies with natural resource and public health responsibilities should transfer information about alternatives to chemical use to the end users of such products.

Crossover Recommendation #13

State agencies with natural resource and public health responsibilities should educate the chemical-using public about the potential dangers of misuse of chemical compounds and to inform them of the importance of personal responsibility in the use and disposal of those products and their containers.

PROGRAMS AND ACTIVITIES

Crossover Recommendation #14

State agencies with natural resource responsibilities should carry out laboratory and field demonstrations of practices which further promote the safe use of chemical compounds.

Crossover Recommendation #15

State agencies with natural resource responsibilities should carry out laboratory and field demonstrations of practices which reduce and eliminate the need for chemical compounds.

Crossover Recommendation #16

The state should continue and enhance support programs that investigate the disposal of pesticide- and chemical-contaminated land and water by applying them at agronomic rates to productive cropland.

Crossover Recommendation #17

DOA and EPA should take the initiative in establishing a public (federal, state, and local government) and private (industry and citizens group) coalition to set up a permanent, continuous system for the safe disposal of both household and agricultural chemical containers, application equipment, and unwanted/out-of-registration chemicals.

SOIL AND WATER CONSERVATION

Since the first steel plow broke the heavy sod of the Illinois prairie, soil erosion and the degradation of water quality have been problems in this state. It is estimated that in just 150 years of cultivation, Illinois has lost approximately 1/2 of its topsoil. Although Illinois is a recognized national leader in the use of residue management systems to control soil erosion on cropland, these efforts have not been enough to meet erosion control and water quality standards set by state policy makers in the late 1970s.

When soil leaves a farm field it becomes a pollutant. Sedimentation of lakes, rivers and streams is a major problem. Most water bodies in Illinois have been degraded with sediments carried from fields in agricultural production. In addition, when soil particles are washed away, pesticides and fertilizers also are carried with them. Recent studies have shown that it is not uncommon for water courses flowing through agricultural areas to contain high concentrations of herbicides and insecticides during certain times of the year. Nutrients washed from farmland (nitrogen, phosphorus, and potassium) also can be found in high amounts and have a significant impact on surface and groundwater resources.

The conservation of soil and water resources has been the target of federal and state resources for much of this century. The USDA-Soil Conservation Service was formed in response to the environmental devastation of the Dust Bowl years. Soil Conservation Service technicians have worked cooperatively with local SWCD officials in most Illinois counties since the 1940s. This partnership has been a good one, producing a long list of benefits for the land and the people who farm it.

Since 1977, Illinois has had some of the most progressive erosion control standards in the country. The Illinois T by 2000 program has the goal of reducing soil loss on all land in row-crop production to 5 tons/acre/year (or less) by December 31, 1999. T is the acronym for tolerable soil loss. This standard is more strict than the federal compliance goal of 2T.

The protection of water quality became a concern of soil and water conservation programs only recently. In the past, emphasis was placed exclusively on erosion control, with little attention being given to the quality of ground and surface waters. Today, due to federal initiatives and public concern about the condition of public waters, an integrated planning

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"There is a need to better educate farmers and the general public, particularly urban residents, about why soil and water conservation is important for the continued social and economic well being of all Illinois citizens."

" A strong incentives program for farmers wishing to adopt soil and water conserving practices should be put in place."

process, which includes water quality protection as a major goal, is used by conservationists. Although there are some cost-share and special project dollars available from the federal government that can be used for water quality protection, a comprehensive water quality program (such as T by 2000) has never been implemented by the State of Illinois.

There is a need to better educate farmers and the general public, particularly urban residents, about why soil and water conservation is important for the continued social and economic well being of all Illinois citizens. There is a need for more diversity in the rural landscape. Conservation practices such as filter strips, greenways, tree plantings, and stream buffers should be encouraged. A strong incentives program for farmers wishing to adopt soil and water conserving practices should be put in place. Incentives (tax breaks, direct payments, cost-share) should be given to land owners who voluntarily protect or restore sensitive areas such as wetlands and riparian areas. Direct funding of cost share programs are discussed in the following recommendations. Related recommendations for tax incentives designed to encourage conservation practices are presented in the Land Report.

Crossover Recommendation #18

Soil and water conservation standards should be updated for more efficient implementation.

Crossover Recommendation #19

Recommit all state and federal agencies and provide the funding necessary to achieve the T by 2000 goal or revise the goal to meet more realistic expectations (T by 2010?).

- \$1 billion dollars was the total estimated need in 1982 to meet T by 2000. The current revised estimate is approximately \$830 million. The 1988 goal was to have total annual soil loss in Illinois down to 94 million tons. Conservation agencies fell somewhat short, achieving a reduction to 130 million tons. The next goal is set for January 1, 1994, with a total soil loss of 71 million tons/year as the target. Without the necessary funding, T by 2000 is not likely to be met.

Crossover Recommendation #20

The Governor should request that all farm plans developed as part of the 1985 Federal Food Security Act meet the stricter state standards for soil erosion.

- Currently USDA allows farmers participating in government programs to apply alternative conservation plans. Maximum allowable soil loss under an alternative conservation plan is 2T, or twice the Illinois standard.

Crossover Recommendation #21

All state resource agencies and federal agencies with an Illinois program component should be required to designate a T by 2000 coordinator from existing staff.

- Inter-agency coordination and oversight will be essential to reach T by 2000. Quarterly meetings of agency coordinators and required annual reports on programs associated with T by 2000 from each agency would help to ensure at least a minimum level of cooperation and coordination.

Crossover Recommendation #22

Increase funding for Soil and Water Conservation Districts.

- During the last 10 years, funding for SWCD staffing and operations has increased steadily from \$1.5 million in 1982 to \$3.5 million in 1992. This increase has helped to improve conservation services, but there is still inadequate funding for the work load placed on districts. With the recent cutback in Cooperative Extension services, SWCD's will become much more important to rural communities. A stable funding source dedicated for support of the SWCDs must be found.

Crossover Recommendation #23

Reinstate funding to existing state cost-share programs and fund and implement new programs, such as the Save Illinois Topsoil Program, which would supplement current efforts to reduce soil loss and improve water quality.

- During the years FY86-FY92, \$19.3 million was allocated by the Legislature for the cost-sharing of conservation practices through the Conservation Practices Program and Watershed Land Treatment Program. The \$2 million request for continuation of this program was not approved as part of the state's FY93 budget. These funds are a critical supplement to the \$24.6 million in federal cost-share (Agricultural Conservation Program) dollars allocated to Illinois during the same period. Cost sharing should be continued at increased levels.

" All state resource agencies and federal agencies with an Illinois program component should be required to designate a T by 2000 coordinator from existing staff.

Inter-agency coordination and oversight will be essential to reach T by 2000."

"Riparian areas in critical need of streambank and buffer strip protection need to be identified, and cost-share funding provided to complete the work. "

"Environmental/conservation education has been identified by the Task Force as a key to protecting Illinois' resources. "

- The Save Illinois Topsoil (SILT) Program created by the 1987 Illinois Conservation Enhancement Act should be implemented to protect fragile land resources and supplement the efforts of the USDA Conservation Reserve Program (CRP). Cost estimates for meeting Illinois T by 2000 goals were reduced by an estimated \$84.3 million between 1982 and 1987, due in part to the federal government's role in removing highly erodible land from production. The SILT Program could be used to protect land coming out of CRP, land adjacent to CRP sites, and other sites slated for special water quality or erosion control measures. The Conservation Enhancement Act also amended the General Obligation Bond Act to include up to \$10,000,000 for the acquisition and betterment of public lands and easements.
- The Illinois Rivers and Streams Protection Act, introduced in the 87th General Assembly in 1992, should be revised and implemented to complement the Illinois Conservation Enhancement Act. Riparian areas in critical need of streambank and buffer strip protection need to be identified, and cost-share funding provided to complete the work.

Crossover Recommendation #24

State and federal cost-share funding should be targeted at the areas of greatest need (i.e. those areas with the highest soil loss rates).

- The most serious erosion (25-42 tons/acre/year) occurs on approximately 1.5% of Illinois cropland. The most cost effective approach to achieving T by 2000 goals is to target these lands.

Crossover Recommendation #25

State natural resource agencies should provide technical assistance, materials, and training for Illinois SWCD field staff to improve state conservation education programs.

- Environmental/conservation education has been identified by the Task Force as a key to protecting Illinois' resources. Each county SWCD office has at least one staff person. These people are resource professionals with expertise on a wide variety of environmental issues. With a little training and better support materials, they could provide extremely effective conservation education programs, tailored to meet the needs of local school districts. Many districts already provide these services. Additional support would improve existing programs.

Crossover Recommendation #26

The state should mandate urban erosion control programs for developments within the jurisdiction of municipal and county governments. The state also should revise the current Erosion and Sediment Control Complaint Program to include monetary penalties for owners/operators of both rural and urban lands who fail to comply once a complaint has been verified.

- Sedimentation from urban construction sites is a major problem. Working with local SWCDs on a fee basis, all construction sites under county and municipal jurisdiction should be required to have approved erosion and sediment control plans prior to ground breaking. Compliance with these plans should be enforced by local officials.
- Mandatory civil penalties should be included for non-compliance with the Erosion and Sediment Control Complaint Program for both construction sites and land in agricultural production. Although the complaint program for agricultural lands has worked well in the past and compliance has been very high, urban lands should also be brought under the jurisdiction of the program and the law should be strengthened. However, cost-share funds should remain available to agricultural landowners impacted by this program. Remediation on construction sites should not be cost-shared.

"Mandatory civil penalties should be included for non-compliance with the Erosion and Sediment Control Complaint Program for both construction sites and land in agricultural production. "

Crossover Recommendation #27

The protection of groundwater recharge areas and aquifers should be a key part of all soil and water conservation programming.

Crossover Recommendation #28

As a parallel initiative to traditional erosion control and water quality programs, the state should actively promote the development and use of sustainable farming practices. Such practices could have a tremendous indirect effect on soil conservation and water quality.

SUSTAINABLE AGRICULTURE

The Task Force believes the State of Illinois should promote the development and use of farming practices that are practical, profitable, and environmentally sound.

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"...Illinois is recognized as a leader in the promotion of sustainable agriculture. Farmer organizations throughout the state have worked to promote the issue at the grass-roots level and provide peer support to their members."

Since 1988, sustainable agriculture has been a major issue for farmers, agribusiness representatives, university researchers, environmentalists, and government officials. Beginning as a concept embraced primarily by farmers with an interest in alternative methods of production, sustainable agriculture has now been institutionalized throughout much of the nation. USDA has a Sustainable Agriculture Research and Education Program (SARE). Many of the country's major land-grant colleges have designed programs around the issue and offer related degrees. A handful of midwestern states have well funded on-farm research and demonstration programs to help farmers experiment with the component practices most often associated with sustainable agriculture.

Despite the limited amount of financial support from state government, Illinois is recognized as a leader in the promotion of sustainable agriculture. Farmer organizations throughout the state have worked to promote the issue at the grass-roots level and provide peer support to their members. The University of Illinois' Agro-Ecology Program has made some great strides in challenging conventional academic wisdom and creating change within the research community. A small grants program, supported by ENR, has provided farmers with the opportunity to do on-farm research and teach each others about the use of alternative farming practices. DOA also has a full-time staff person who works with farmers on sustainable agriculture issues.

In January 1990, the Illinois Sustainable Agriculture Act became law. The Act called for the formation of a committee to study the issue and make recommendations on how the state could promote the use and development of sustainable farming systems. As a result, the Illinois Sustainable Agriculture Committee (SA Committee) was formed in July of that year with a charge to compile a report with recommendations for the Governor and the Illinois General Assembly.

Throughout 1991, the Illinois SA Committee solicited input from a large number of state organizations on sustainable agriculture and the needs of farmers. This information was compiled and carefully reviewed during the process of developing recommendations for comprehensive sustainable agriculture programming in Illinois. The Final Report and Summary of Recommendations were printed in June of 1992.

The work of the Illinois SA Committee was comprehensive and exemplary. It is the belief of the Task Force that their recommendations, with some minor modifications, should be used as a blueprint for the promotion of sustainable agriculture in Illinois. The following is a summary of the SA Committee's recommendations supported by the Task Force:

Crossover Recommendation #29

The Task Force supports the Illinois SA Committee's primary recommendation, which is for the Illinois General Assembly to appropriate funds for the immediate implementation of the Sustainable Agriculture Act (P.A. 86-1022).

- The Act calls for the establishment of a Sustainable Agriculture Program within DOA. Other initiatives identified in the Act are:
 - To identify agricultural practices that maintain productivity and minimize environmental degradation.
 - To relate overland runoff, sediment transport, stream flow quantity and quality, and ground water (recharge) and quality to specific agricultural systems.
 - To integrate and coordinate experiment station and on-farm research and educational efforts of cooperating individuals, agencies, and institutions.
 - To test and refine alternative approaches to organizing and conducting on-farm research.
 - To test the usefulness of the existing knowledge base regarding conservation tillage, and to make decisions regarding selection of tillage systems and decisions regarding implementation and management of those systems.
 - To identify the most critical needs for research and educational programs related to sustainable agriculture.
 - To test the organizational approach of joint farmer/specialist development of a computerized decision support system (expert system) as an approach to fostering sustainable agriculture.
 - To develop an expert system embodying the expertise of experienced farmers and agency, institutional, and agribusiness specialists to help answer the question of what tillage and crop management systems should be used in a particular field in a particular year.
- The Task Force supports all of these initiatives, but gives very low priority to the last two, which deal with the development of expert systems to aid in the use of sustainable farming practices. There are many efforts to develop expert systems now occurring throughout the country. Some have produced good results. Most have yet to show any practical application for farmers. Illinois

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"The Task Force supports the Sustainable Agriculture Committee recommendation to establish a farmer-to-farmer mentoring program to facilitate exchange of information and ideas among new and experienced farmers wanting to try new products and practices. "

should probably not enter into the expert systems race at this late date. Funding can be better spent on more traditional outreach and education methods.

- DOA should fully coordinate its activities with other state agencies to ensure that the Sustainable Agriculture Program makes best use of all available expertise and public resources.
- The SA Committee also made general recommendations which the Task Force supports to achieve the purposes of the Sustainable Agriculture Act:

Crossover Recommendation #30

The Task Force supports the SA Committee recommendation to establish a research and education grant program to encourage public institutions, private agencies, and non-profit organizations to initiate exploratory and/or adaptive research and educational programs on the long-term sustainability of Illinois agriculture.

- The success of similar programs have been proven in states throughout the Midwest. The implementation of an Illinois program at this time would be an excellent way to continue the momentum started by ENR Sustainable Agriculture Grant Programs of 1990, 1991, and 1992.

Crossover Recommendation #31

The Task Force supports the SA Committee recommendation to establish a farmer-to-farmer mentoring program to facilitate exchange of information and ideas among new and experienced farmers wanting to try new products and practices.

- Funding for this purpose should be directed through DOA to the network of farmer organizations now active in the state. Groups such as the Illinois Sustainable Agriculture Network exist primarily for the purpose of facilitating information exchange among farmers through special events and educational activities. They could continue in this role with the proper funding support.

Crossover Recommendation #32

The Task Force recommends the implementation of an Outreach and Education Grants Program to accompany the Research and Education Grants Program recommended by the SA Committee.

- Implementation of this grants program would allow organizations such as the Illinois Sustainable Agriculture Network to carry out the mentoring and educational activities recommended by the Sustainable Agriculture Committee at the grass roots level.

Crossover Recommendation #33

The Task Force supports the SA Committee recommendation to establish an in-service education program for professional agricultural field staff from the University of Illinois Cooperative Extension Service, the Association of Illinois SWCD, the USDA Soil Conservation Service, DOA, DOC, professional crop consultants, farm managers, fertilizer dealers, and representatives of the agrichemical industry.

- This education program would complement programs mandated in the 1990 Farm Bill for the training of federal employees regarding sustainable agriculture. It is critical that state agency, university, and agribusiness personnel also be fully trained in the use of alternative farming systems.

Crossover Recommendation #34

The Task Force supports the SA Committee recommendation that long-term cropping system/rotation/tillage studies be initiated by appropriate research institutions.

- Funding for long-term farming systems studies should be a high priority.

The SA Committee made specific recommendations concerning on-going initiatives which are supported by the Task Force:

Crossover Recommendation #35

The Task Force supports the SA Committee recommendation that all public agencies associated with agriculture in Illinois support and cooperate with state and regional farmer-managed sustainable agriculture organizations to achieve common goals and objectives.

- Sustainable agriculture is a farmer-driven issue, and agencies should follow examples from farmers as they develop policies and programs. In addition, the Task Force believes that all Illinois agencies with an interest in participating in the promotion and support of sustainable agriculture should be encouraged to do so. By its nature, sustainable agriculture

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"Funding for long-term farming systems studies should be a high priority. "

embraces a multi-disciplinary approach to problem solving. DOA should continue its partnership with ENR, an agency which has promoted sustainable agriculture and provided funding support for the issue since 1989. The Sustainable Agriculture Program, Illinois farmers, and the general public would benefit greatly from a well-coordinated, cooperative approach that uses the full talents and resources of both agencies.

Crossover Recommendation #36

The Task Force supports the SA Committee recommendation that the current DOA Fertilizer Research and Education Program be funded at the full level provided by its original legislation, with some conditions.

- The following conditions were set down by the SA Committee and are supported by the Task Force: 1) managers of the program should continue to select projects for funding with respect to how well they serve the objectives of both the short-term profitability and long-term sustainability of Illinois agriculture; 2) program managers should support proposals that conform to the guidelines described in the SA Committee's "Principles of Agricultural Sustainability"; and 3) one representative from a farmer-managed sustainable agriculture organization should serve on the grant review committee.

Crossover Recommendation #37

The Task Force supports the SA Committee recommendation that the Illinois General Assembly appropriate funds to support Public Act 86-253, which would support the Illinois Research Farm System, if sustainable agriculture research is a major program component of that system.

MINING/MINERAL RESOURCE EXTRACTION AND RECLAMATION

Continued development and use of Illinois' mineral resources is economically desirable; however, the extraction, processing, and use of Illinois' mineral resources should be managed to prevent or minimize long-term environmental impacts.

Illinois has one of the most abundant reserves of potentially recoverable bituminous coal in North America, as well as extensive deposits of aggregate resources, and limited oil and gas reserves. Extraction and utilization of Illinois' mineral resources to meet current and future energy

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needs require planning and implementation of resource recovery and reclamation practices to ensure the protection of natural resources.

Illinois has been a leader in the development and implementation of environmentally sound coal mining reclamation regulations. Current federal reclamation (coal mining) regulations administered by DMM provide comprehensive requirements for restoration of pre-mining productivity for agricultural, forestry, and other land uses. Abandoned mined lands (coal and some non-coal lands affected by mining prior to August 3, 1977) are being reclaimed under a state managed program that is supported by fees paid by the active coal industry. These reclamation programs for active and inactive coal mines generally have improved and maintained soil and water quality in Illinois.

Less comprehensive state and/or federal regulations exist for non-coal mineral resources. The aggregate oil and gas industries are regulated by the DMM. National (USEPA) programs for oil injection wells are administered by the Oil and Gas Division of DMM. A national program for regulation of non-coal mineral industries has been proposed as part of the federal Resource Conservation and Recovery Act (RCRA) Strawman II 1990 draft regulatory program. Environmental benefits from a more extensive federal program may not be warranted in view of Illinois' existing non-coal regulatory programs, although some counties (e.g., McHenry) desire stricter and more comprehensive regulations for the aggregate industry.

Mining and marketing of high-sulfur Illinois coal has been affected by the Clean Air Act. Sulfur removal from coal through enhanced cleaning processes, advanced combustion technologies, and market development has been promoted and funded by state, federal, and industry research, development, and demonstration programs. Coal combustion residues and sulfur removal by-products require economically feasible and environmentally acceptable disposal technologies in order to maintain marketability of Illinois coal.

The Task Force believes mining of coal and extraction of mineral resources can continue to meet current and future energy and resource needs. Prevention and/or mitigation of environmental impacts of coal and other mineral extraction and use can be further ensured through the review and enforcement of current regulations, and the support of research and demonstration programs to develop and promote environmentally acceptable technologies for continued marketability, utilization, and disposal of coal combustion residue products.

" Current federal reclamation (coal mining) regulations administered by DMM provide comprehensive requirements for restoration of pre-mining productivity for agricultural, forestry, and other land uses."

" Coal combustion residues and sulfur removal by-products require economically feasible and environmentally acceptable disposal technologies in order to maintain marketability of Illinois coal."

"To maintain mineral extraction industries in Illinois as viable economic enterprises, the state should support research to identify and expand programs to promote environmentally safe mineral extraction, development, and utilization, as well as reclamation of wastes and affected areas. "

"The state should ensure that adequate funding is available for reclamation of abandoned mined lands and ensure that long-term abatement techniques for acid mine drainage are developed and implemented. "

Crossover Recommendation #38

Current state policy, regulations, and programs should be reviewed to identify and address environmental concerns without precluding minerals development in Illinois. That review should cover all mining and oil drilling and address regulatory deficiencies and/or excesses, regulatory and/or interagency conflicts, and needed program initiatives.

Crossover Recommendation #39

To maintain mineral extraction industries in Illinois as viable economic enterprises, the state should support research to identify and expand programs to promote environmentally safe mineral extraction, development, and utilization, as well as reclamation of wastes and affected areas.

Crossover Recommendation #40

The state should continue funding agriculture reclamation research/demonstration programs to ensure that long-term studies are available to validate reclamation success.

Crossover Recommendation #41

The state should develop ecologically sound and technologically feasible guidelines for successful wetland reclamation and encourage wetland establishment as a post-mining land use.

Crossover Recommendation #42

The state should ensure that adequate funding is available for reclamation of abandoned mined lands and ensure that long-term abatement techniques for acid mine drainage are developed and implemented.

Crossover Recommendation #43

The state should evaluate the need for more stringent/comprehensive regulations for aggregate mining and reclamation.

Crossover Recommendation #44

The state should encourage and continue to support research and demonstration programs for precombustion and postcombustion sulfur reduction from Illinois coal.

Crossover Recommendation #45

The state should research, evaluate, and support environmentally acceptable methods for disposal or use of coal combustion by-products.

Crossover Recommendation #46

The state should continue support of mine subsidence research in the areas of prediction, prevention, and remediation measures.

Crossover Recommendation #47

The state should implement a remediation/reclamation program for soils adversely affected by oil well runoff and oil brine salinization.

UNIQUE NATURAL SYSTEMS

Preservation in Illinois has focused on high quality communities, endangered and threatened species habitats, and affordable natural features rather than the systems in which they function, thereby preserving detached fragments whose sustainability is not insured and whose system benefits are lost to the state. The complexities of multiple ownership and administrative responsibilities, combined with the lack of understanding regarding the value of systems, continue to hamper preservation and management initiatives that would benefit the state. Lack of a dedicated funding source removes the incentive for long-range planning for protecting large scale systems.

The natural systems of Illinois have been altered to a very large extent by human activity and natural processes. Many of these natural systems are significant not only to the State of Illinois, but also are segments of multi-state systems of national significance. Lake Michigan and the Mississippi, Ohio, and Wabash rivers form Illinois' borders and are shared resources. Illinois' stewardship of its portion of natural resource systems has national and international implications. The geese that winter in southern Illinois breed in Canada during the summer, and any negative impacts to the wintering habitat would put a complex bi-national system under stress. Illinois' natural areas, those remaining high quality woodland, wetland, and prairie remnants, comprise just 0.07 percent of the state's original landscape. These natural areas serve as habitat for many diverse and endangered species and are sought by increasing numbers of residents and visitors who are involved in the active stewardship and passive appreciation of these lands. The promise of these lands is that they may serve as templates for the restoration of large scale systems (see the Land Report, "Macrosite" Recommendation - Land Recommendation #1).

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"...(Illinois) natural areas serve as habitat for many diverse and endangered species and are sought by increasing numbers of residents and visitors who are involved in the active stewardship and passive appreciation of these lands."

"Demand is growing for broader public access to areas, for high quality standards for habitat, and for uses unhindered by impaired environmental quality."

"The state should re-energize and promote metropolitan-type planning organizations which would provide a regional clearinghouse and undertake planning efforts authorized by the Local Land and Resource Management Planning Act."

Research and experiences of the last 20 years have shown that restoration and rehabilitation of some natural features are feasible, but it also has shown the need for detailed management that takes into consideration how much of a natural system has been preserved. There is a "critical mass" that is usually needed to have a sustainable system. To secure sustainable status for many of the currently preserved features, they must be linked into a system by expansion and/or use of conservation easements.

Demand is growing for broader public access to areas, for high quality standards for habitat, and for uses unhindered by impaired environmental quality. The public wants not only diverse fish species in the streams, but also fishes that can be consumed without concern about the level of toxic contaminants. At the same time, there is resistance to regulation, lack of understanding about natural systems, their functions and values, and concern about responsible use of limited financial resources.

The objective should be to develop a model of a macro, science-based identification system, develop a management framework that uses public-private partnerships, and develop a dedicated source of funding in order to preserve the important natural resource systems of the state through acquiring easements or fee title.

Crossover Recommendation #48

The state should review current state programs and policies to determine possible road blocks and need for additional statutory or regulatory authorities for ecosystem protection across political boundaries.

Crossover Recommendation #49

The state should re-energize and promote metropolitan-type planning organizations which would provide a regional clearinghouse and undertake planning efforts authorized by the Local Land and Resource Management Planning Act.

Crossover Recommendation #50

Planning relating to the protection and enhancement of Illinois' unique natural systems should provide and promote public dialogue and opportunities for public comment and participation.

Crossover Recommendation #51

DOC should investigate forming a statewide nature bank system to allow mitigation and restoration in exchange for the loss of natural features of lesser significance. DOC should identify the appropriate steps and elements necessary to create a system incorporating the requisite safeguards necessary to ensure that the bank does not contribute to the net loss of, or loss of high quality, natural habitats or systems.

Crossover Recommendation #52

DOC should use the U.S. EPA's Lakewide Management Plan process as a pilot for a natural resource systems-based management approach.

Crossover Recommendation #53

DOC should expand Illinois' Biological Conservation Database to allow for the identification of Areas of Critical Concern, landscape-scale systems possessing significant natural resources and serving critical ecological functions.

Crossover Recommendation #54

The state should identify "Areas of Critical Concern" and assist and cooperate with local units of governments and landowners in the preparation of plans and regulations for the responsible use of the areas.

"DOC should investigate forming a statewide nature bank system to allow mitigation and restoration in exchange for the loss of natural features of lesser significance..."

"Protecting natural resources and providing quality outdoor recreational opportunities are important responsibilities of state government. It is critical that a base-line of support be provided by the State of Illinois, that new sources of funding be developed, and that users pay their fair share."

"...outdoor recreational opportunities, open space, and protection of natural resources are critical ingredients to a high quality of life for Illinois' citizens and to an attractive business climate."

FUNDING REPORT AND RECOMMENDATIONS

Protecting natural resources and providing quality outdoor recreational opportunities are important responsibilities of state government. It is critical that a base-line of support be provided by the State of Illinois, that new sources of funding be developed, and that users pay their fair share. This is essential in order to implement the recommendations of the Task Force.

STABLE FUNDING FOR CONSERVATION AND RECREATION

The State of Illinois allocates barely 1/2 of 1 percent of the annual state budget for all aspects of conservation and outdoor recreation. Yet, outdoor recreational opportunities, open space, and protection of natural resources are critical ingredients to a high quality of life for Illinois' citizens and to an attractive business climate. Illinois is one of the largest states in the Union but has less open space per capita than all other states except Connecticut and Rhode Island. Less than 3 percent of Illinois' land is dedicated to recreational uses.

Admittedly, the welfare and quality of life of Illinois' citizens depend upon the better known services that state government provides. Education, protection of children, transportation, prisons, and public aid all are necessary to the proper functioning of our society, and the state allocates more than 60 percent of the budget to these governmental functions. However, the lesser known services, such as outdoor recreation, open space and natural areas preservation are equally as important as food for the spirit of the residents of an increasingly urban Illinois. The recent closure of some of the already limited state recreational resources raised a concern over the priority the state gives to these resources. These closures cannot continue. The State of Illinois must find and dedicate the financial, land, and human resources for outdoor recreation.

The necessity of establishing a stabilized funding base is illustrated by recent history of the legislative support of the Illinois Department of Conservation (DOC). In 1991, just under \$50,000,000 was appropriated by the Legislature to DOC from General Revenue Funds (GRF). Without even considering the inadequacy of that amount to carry out DOC functions, this appropriation was reduced in fiscal year 1993 to \$35,000,000. Other state natural resources agencies also have seen significant budget reductions.

The demands of this era on Illinois' natural resource agencies must be met by maintenance of General Revenue Funds at historic levels and increased funding from reliable sources. This is necessary to address environmental concerns, and it is necessary to expand outdoor recreational opportunities. If the State of Illinois wishes to compete as an area that continues to grow economically and to attract new business, the conservation needs of the 1990's must be met. More and more, conservation and recreation are considered part of the overall quality of life when the State is being evaluated as a residential and business locale.

Funding Recommendation #1

The State of Illinois should appropriate adequate GRF and capital funds to support the acquisition, development, maintenance, and operation of conservation and recreational resources.

- There is a base level of financial support that the state must allocate for its recreational and natural resources. These resources include, but are not limited to, state parks, memorials, natural areas, and historic sites. The recent budget cuts, which forced state park closures, are evidence that current state funding is not adequate for the development, maintenance, and operation of Illinois' recreational resources.
- State funds also are inadequate for the acquisition of additional land that is needed to meet the state's increasing demand for recreational resources and habitat preservation. New sources of revenue are needed to upgrade and protect the state's investment in these resources. In addition, the four Work Groups identified research and education as important needs related to conservation and outdoor recreation. Funding for ongoing research and education programs should be provided.

Funding Recommendation #2

A major new initiative to provide substantial new revenues for natural resources protection and outdoor recreation should be undertaken. The alternatives described below should be thoroughly investigated, including determining which are the most viable, which have the most opportunity for building constituent support, and which are most likely to yield the ability to meet the needs identified by the Task Force. The Task Force recognizes that a consensus must be built for any funding initiative to be implemented. The Governor and General Assembly should consider legislation to place an advisory referendum on the ballot as part of the statewide general election to determine the level of support for the following options.

"If the State of Illinois wishes to compete as an area that continues to grow economically and to attract new business, the conservation needs of the 1990's must be met. "

"A major new initiative to provide substantial new revenues for natural resources protection and outdoor recreation should be undertaken."

"Fees that require users of the state's resources to contribute to resource acquisition, development, maintenance, and improvement are fair means of generating new revenues...User fees should supplement and not supplant existing state funding."

" There is no such thing as "non-consumptive" use of the state's recreational resources, and all users of the resource should pay their fair share as well."

Dedicated portion of the sales tax

Modeled after a program in Missouri, an annual percentage of the state's sales tax, i.e., 1/8 or 1/10 of 1%, could be dedicated for broad conservation purposes. This pool of money, estimated to generate approximately \$80 million per year, would be used to implement recommendations of the Task Force, covering programs ranging from soil conservation and sustainable farming to natural area acquisition and stewardship. This initiative should be accomplished concurrently with an expansion of the sales tax base, avoiding regressive applications of the sales tax, to prevent General Revenue Fund reductions in other elements of Illinois' governmental infrastructure.

Penny for Conservation

Under this option, a one-year, 1 cent increase in the sales tax would be imposed to establish a trust fund with the interest, estimated at \$40 million per year, used for natural resource protection and outdoor recreational activities and programs at the state and local levels.

USER FEES

Fees that require users of the state's resources to contribute to resource acquisition, development, maintenance, and improvement are fair means of generating new revenues. User fees cannot hope to replace the General Revenue Funds allocated to recreational resources. User fees should supplement and not supplant existing state funding.

Illinois hunters long have maintained that they pay more than their fair share for support of the state's wildlife resources. Because there is no such thing as "non-consumptive" users of the state's recreational resources, all users of the resource should pay their fair share. Hiking, camping, bird watching, photographing wildlife, picnicking, and other outdoor activities have impacts on the habitat and survival of wildlife in intensively used areas. Correspondingly, a permit for access to state property for those "non-consumptive" uses should be instituted.

User fees also are needed to implement the water use-related recommendations of the Task Force.

Funding Recommendation #3

A 5-10% sales tax on outdoor recreational equipment, similar to the federal excise tax on fishing and hunting equipment through the PR/DJ (Pittman-Robertson, Dingell-Johnson) program, should be considered. This tax would be on outdoor recreational equipment of every type that is

not taxed under the provisions of the PR/DJ program. Such a tax would in effect be a user fee as the proceeds would be used exclusively to fund state and local outdoor recreational opportunities.

Funding Recommendation #4

There should be a fee for access to state conservation and recreational lands, such as conservation areas and state parks, excluding small areas or areas with low visitation where fee collection is not cost effective. Some of the entitlements currently provided to special segments of the public should be eliminated. However, free days, established by administrative rule, should be provided to ensure that no one is denied access to recreational resources because of economic status.

- It is estimated that this recommendation would generate several million dollars that could be used to reopen state sites currently closed due to fiscal constraints.
- The state should structure fees to reflect a resource's need for support and the level of demand for that resource, and may consider special cases for the reduction or elimination of fees.

Funding Recommendation #5

DOC should sell a "Conservation Passport" which entitles the bearer entry to recreational resources and to discounts on camping fees, publications, and purchases of merchandise from DOC.

Funding Recommendation #6

DOC should increase the cost of the following licenses and fees: resident and non-resident recreational hunting and fishing licenses; commercial fishing licenses; commercial mussel licenses; boat registration; deer and turkey permits; and camping and other fees.

- License fees for commercial interests as well as other registration and license fees should be increased. These are fees for the use of state resources and should supplement the development, maintenance, and operations costs associated with those resources. These increases are intended to generate additional revenue for program enhancement, and not simply be used as a mechanism to supplant GRF currently appropriated to DOC.

"There should be a fee for access to state conservation and recreational lands, such as conservation areas and state parks, excluding small areas or areas with low visitation where fee collection is not cost effective."

"License fees for commercial interests as well as other registration and license fees should be increased. These increases are intended to generate additional revenue for program enhancement, and not simply be used as a mechanism to supplant GRF currently appropriated to DOC."

"Federal reimbursement of excise taxes on fishing and hunting equipment is based on the number of licenses sold by the states. Illinois annually loses millions of dollars by not charging at least minimal fees for current entitlement holders. "

"The state natural resource agencies should charge a fair consulting fee to all commercial businesses receiving technical advice."

Funding Recommendation #7

DOC should eliminate non-landowner entitlements, but may consider reduced fees for existing entitlement holders.

- Federal reimbursement of excise taxes on fishing and hunting equipment is based on the number of licenses sold by the states. Illinois annually loses millions of dollars by not charging at least minimal fees for current entitlement holders. Current exemptions, such as those for senior citizens, are not necessarily based on the ability to pay.

Funding Recommendation #8

DOC should gradually increase the Habitat Stamp fee to \$10.00 to match the Duck Stamp fee.

- The Habitat Stamp presently costs \$5.00 and, along with a regular license, is required for trapping and for hunting other than waterfowl. Funds generated by the sale of the Habitat Stamp will be used to protect, develop, and manage habitat for wildlife other than waterfowl and to support research. The Illinois Duck Stamp generates funds for similar purposes for waterfowl but it costs \$10.00. It is logical that these two fees be equalized through time.

Funding Recommendation #9

The state natural resource agencies should charge a fair consulting fee to all commercial businesses receiving technical advice.

- The State Natural History Survey, State Geological Survey, State Water Survey, Hazardous Waste Research and Information Center, DOC, and others have traditionally provided consulting services to Illinois citizens and businesses without charge. This practice frequently has resulted in private contractors coming to state agencies for free information needed to complete a contract for hire. Thus, from a few hours to several days may be required for state personnel to provide the information in order for the contractor to make what in some cases is a considerable profit. With recent cuts in state budgets, many agencies no longer have the personnel to collect the data and provide all services that were previously available. Even if such personnel still were available, such activities are difficult to justify. The cost-recovery rate for these services currently is low. Charges for services provided to commercial endeavors should be increased

so that more costs in this area are recovered. Commercial services are defined as activities which are profit oriented.

Funding Recommendation #10

DOC should modify the state put-and-take pheasant programs to allow gradual privatization. The state-owned areas now used for put-and-take hunting may be managed for natural production of wildlife, for public hunting and viewing of wildlife, or may be leased to private operators for put-and-take hunting opportunities. The state might consider production of pheasant chicks at the Lincoln Hatchery for sale to private operators.

- The DOC operates "put-and-take" pheasant hunting on several state-owned areas. Although a daily fee is charged hunters (in addition to the requirement for a hunting license and pheasant stamp), the fees collected do not pay for the overhead, maintenance, and operating costs for the program. This type of hunting is popular with many Illinois hunters and should be continued. Put-and-take shooting should be provided by the private sector and would provide several landowners with a supplemental source of income. A timed, phase-out schedule by DOC would allow the private sector to provide such opportunities for Illinois hunters at a considerable cost savings to the public.

Funding Recommendation #11

DOC should seek legislation to allow, through the use of administrative proceedings, recovery of the value of illegally taken fish and wildlife.

Funding Recommendation #12

The state should establish water connection fees to public water supplies and for other permitted surface and groundwater users.

- Funding for water resources programs have been inadequate in the past and will be more inadequate in the future if the water-related recommendations of the Task Force are adopted. A water use fee is an appropriate means of funding solutions to many of the critical water resources problems described in detail in the Water Report.

"DOC should seek legislation to allow, through the use of administrative proceedings, the recovery of the value of illegally taken fish and wildlife. "

"A water use fee is an appropriate means of funding solutions to Illinois' critical water resources problems. "

Funding Recommendation #13

State laws should be amended to authorize stormwater utility or drainage system user fees and other funding arrangements to support state and local flood protection and watershed management programs.

"State laws should be amended to authorize stormwater utility or drainage system user fees and other funding arrangements to support state and local flood protection and watershed management programs. "

- In order to address the flood protection needs delineated in the Water Report, the following mechanisms should be explored:
 - Stormwater utility or drainage system user fees to finance watershed planning, management, maintenance, and capital improvements to prevent and reduce flood damage and protect water quality.
 - Tax incentives for protection of wetlands and other sensitive floodplain areas.
 - Allowing cost-sharing directly with property owners to help finance projects built or installed on private property which have overall public benefit.
 - Fees for state permits so developers and users of the state's water resources help pay for the expense of permit review and enforcement.

APPENDIX A

Task Force Membership List

CO-CHAIRS

Becky Doyle

- Director, Department of Agriculture

Brent Manning

- Director, Department of Conservation

MEMBERS

Dale Aupperle (Decatur)

- Senior Vice President of Magna Trust Company and immediate past National President of the American Society of Farm Managers and Rural Appraisers

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- Senior Vice President of R.A. Faganel Builders; Second Vice President and Chairman of the Legislative and Governmental Affairs Committee of the Northern Illinois Home Builders Association; Chairman of the State Legislative Communications Subcommittee for the Homebuilders Association of Illinois

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Brian Petrucci (DeKalb)

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Donna Prevedell (Eagarville)

- President of Prevedell and Associates; President of Illinois Agriculture Leadership Associates

Rudy Rice (DuQuoin)

- Immediate Past President of the Association of Illinois Soil and Water Conservation Districts; Member of National Association of Conservation Districts

Glen Sanderson (Champaign)

- Principal Scientist Emeritus with the Illinois Natural History Survey and former head of the Center for Wildlife Ecology

Richard Semonin (Champaign)

- Chief Emeritus of the State Water Survey

Randy Sprague (Hull)

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Don Swensson (Moline)

- President of the Quad City Conservation Alliance, Inc.

Kurt Wandery (Oak Brook)

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Stan Yonkauski

- Department of Energy and Natural Resources

APPENDIX B

Listing of Recommendations

WATER RECOMMENDATIONS

1. Prepare a comprehensive water resources act to replace the inadequate collection of statutes and court decisions scattered throughout Illinois law.....05

2. Information about flood hazards, environmentally sensitive areas, and ways to protect properties and prevent damage should be provided to everyone, regardless of the size of the watershed contributing the water07

3. Statutory limits to regulation of small drainage areas should be amended to encourage regulation of all known flood hazards and environmentally sensitive areas.....07

4. No flood damage mitigation project should be funded without assurances that future development will not increase flood flows or reduce stream carrying capacities07

5. Federal, state, and local flooding, drainage, and stormwater programs should focus not only on excess water quantity, but also take into account other floodplain concerns, including low flows, water quality, and habitat protection07

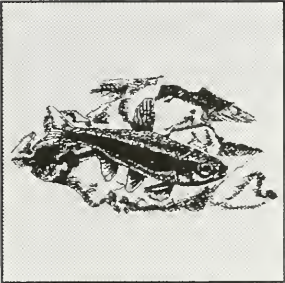
6. One state agency or coordinating office should be given statutory authority for regulatory flood hazard mapping08

7. Appropriate state and federal agencies should ensure that there are enough stream gauging stations to provide the data needed to produce accurate flood hazard maps09

8. There should be better enforcement of current laws requiring lending institutions to inform potential mortgage recipients of flood hazards09

9. The state should implement quicker, simpler, and more consistent regulatory programs through consolidation, delegation, and administrative enforcement..... 10

10. Stormwater management authority, similar to the authority possessed by the Northeastern Illinois collar counties (Ill. Rev. Stat. ch. 34, par. 5-1062), should be granted to all Illinois counties or to multi-county

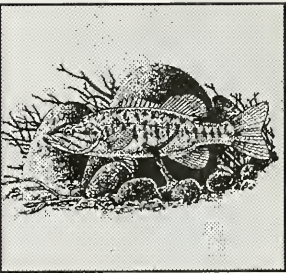




watershed management agencies to implement a comprehensive stormwater management program	11
11. Counties and municipalities should be encouraged to adopt regulatory criteria that address local needs and goals	11
12. State and federal surface water regulatory authorities should be delegated to city or county agencies that have qualified staff and sufficient resources. Such delegation should not relieve the state or federal agencies from responsibility to oversee and monitor the delegated authorities	11
13. A system should be developed that measures the natural and public values of wetlands and other sensitive or hazardous areas. Such a system would help set more accurate and fair property tax valuations, acquisition prices, and land dedication values	11
14. State and local regulatory programs should not be limited to protecting human development from excess surface water flows and pollutants. Statutes should clearly authorize protection of natural functions as part of the public's interest	12
15. State agencies should conduct programs to educate state staff, local decision makers, and the general public about the need to protect natural functions and ways to do it.....	12
16. Selected rivers, stream corridors, lakes, wetlands, and natural floodplains should be protected by acquisition, easement, cooperative agreement, or designation as a Nature Preserve	12
17. The state should encourage and assist local governments in developing stream and wetland protection ordinances.....	12
18. The state should provide increased support and technical assistance in the restoration of marginal quality or modified wetlands and stream channels to enhance flood control, habitat, and water quality	12
19. State law should require local comprehensive land use planning, including consideration of the natural functions of floodplains, wetlands, and related areas, as a prerequisite to enacting zoning ordinances and other regulations of floodplains and stormwater runoff.....	13
20. The state should increase its information and technical assistance efforts to cover a wide variety of mitigation measures, including flood proofing, flood insurance, local flood warning and preparedness, stormwater management, and redevelopment of flood hazard areas, as well as public works projects.....	13

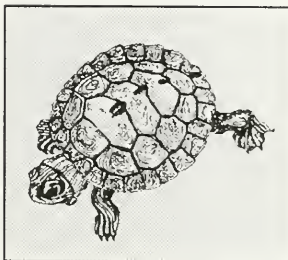
21. State flood mitigation efforts should be coordinated with other state and local water-related programs to promote local multi-objective programs	13
22. State flood mitigation programs should encourage a variety of solutions and alternative funding approaches, including property owner cost sharing and self-help	14
23. Water resources authorities should develop and demonstrate revegetation techniques for stabilizing streambanks and shorelines in Illinois	14
24. Water resources authorities should encourage streambank stabilization practices, such as using floodways as greenways, through financial incentive programs	15
25. Water resources authorities should identify and delineate streambanks and shorelines that need protection and use existing enforcement authorities to discourage uses of streambanks and shorelines that threaten to accelerate erosion.....	15
26. Water resources authorities should discourage the encroachment of construction activities on streambanks and shorelines	15
27. State and local planning activities should be coordinated to maximize efforts to protect eroding streambanks and shorelines.....	15
28. State and local entities with water resources responsibilities should cooperatively develop and implement a comprehensive statewide strategic plan for stormwater management that considers impacts of all stormwater discharges, including streambank erosion, throughout a watershed.....	15
29. Water resources authorities should be encouraged to evaluate "in channel" wetlands for sediment trapping potentials and wildlife value	16
30. State agencies should develop a statewide comprehensive stream improvement program that allows low-impact maintenance of stream channel and drainage ditches.....	16
31. Illinois should prevent channelization and relocation of streams and grant permits for such activities only after environmental impact and sediment control plans have been developed.....	16
32. Illinois agencies should continue to study the basic ecological concepts associated with, and the effects of, sedimentation pollution on the use of major navigable waterways.....	16





33. DOT/DOWR should develop and implement expanded statewide erosion and sediment control guidelines for protecting spoil materials.....	17
34. DOT/DOWR and DOC should develop, evaluate, and promote procedures for utilizing stream/lake side slopes of spoil disposal areas for wildlife habitat and integrate them into the statewide erosion and sediment control guidelines for spoil disposal areas	17
35. Illinois water resources authorities should require erosion and sediment control plans be developed for all spoil disposal operations	17
36. Illinois water resources authorities should jointly develop guidelines for selecting suitable sites for disposal of spoil materials. Illinois water resources authorities should develop standards that prevent spoil from being placed in floodplains, wetlands, and on prime farmlands	17
37. Require all forestry activities to have an approved plan for control of erosion and sedimentation	18
38. The state should encourage full funding of the federal Stewardship Incentive Program (SIP) and continue to fully fund the state's Forestry Development Act	18
39. Require SIP management plans, and plans written for other similar programs, to include provisions for controlling erosion and sediment during harvest operations, and regeneration or reforestation activities. These plans should also provide for streamside management zones along all perennial streams.....	18
40. Guideline documents should be developed in cooperation with DOC and other agencies and distributed on a continuing basis to landowners, timber operators, and forestry professionals outlining Best Management Practices and their application including erosion and sediment control	18
41. A series of educational workshops should be developed and presented throughout the state on a continuing basis to teach landowners, timber operators, and professionals Best Management Practices for controlling erosion and sedimentation.....	18
42. Lobby Congress to continue funding the Farm Bill's Conservation Reserve Program (CRP) provision for new contracts and to lengthen existing contracts on lands planted to trees from 10 to 15 years	18
43. Fund and expand the Conservation Enhancement Act to provide a State cost-share program to maintain lands currently enrolled in the federal CRP program which are planted in trees.....	19

44. There needs to be more aggressive enforcement of existing water-related regulations. Policies need to be streamlined to simplify what dictates a violation and which agency has the authority for enforcement. The use of numerous warnings and permit extensions should be avoided.....20
45. Consideration should be given to establishment of a Riverkeeper Program in Illinois20
46. Ongoing water-related research is a necessity. Water-related research programs need to be expanded and better funded..... 20
47. Department of Agriculture should take the lead in developing education and voluntary compliance programs relating to farming practices and their contribution to non-point source pollution21
48. Research concerning erosion, safer fertilizers and pesticides, improved farming practices, and other topics directly related to ground and surface water quality should be continued and expanded21
49. The state should redirect its research and education efforts toward management practices that promote the responsible use of all chemicals and farming practices that are more environmentally friendly21
50. The state should utilize all educational methods available, including mass media, to develop a public awareness of non-point source pollution from both urban and agricultural sources.....22
51. State agencies, such as DOA and EPA, must work together and develop a water quality and soil erosion strategy. State and federal organizations must cooperate in compliance monitoring and modify rules and regulations where conflicts exist. They also need to assist and promote the merits of the various incentive programs available22
52. The state should more closely monitor oil field brine disposal operations where the threat of contamination of water supplies exist. The state should work with states where this is a major problem to aid in the development of a progressive program to contain this type of pollution.....22
53. Continue to monitor areas within the state where mining is or has occurred. Programs in other states should be reviewed as a potential model for adoption in Illinois.....22
54. Residual waste sludge should be treated as a potentially harmful contaminant, but reuse as a potential resource should be encouraged where environmentally practical.....23
55. Local governments should be involved with design and installation of septic systems. Systems should be inspected upon resale. Local



governments should pursue a program of required scheduled cleaning of septic systems based on pertinent variables.....23

56. Treatment plants need to expand their facilities where necessary to handle polluted stormwater. Retention areas could aid in the storage problem prior to treatment. Direct discharge into waters should be strictly regulated24

57. The dumping of snow from snow removal processes into waters should be prohibited except in emergency situations as permitted by EPA24

58. The state should research the development and use of alternative, benign snow and ice removal materials.....24

LAND RECOMMENDATIONS

1. The state should establish a system of macrosites, meaning large ecological reserves or "sustainable ecosystems," via acquisition, easements, management agreements, or a combination thereof, including agricultural use consistent with the prime habitat function26

2. Natural resource agencies should develop and promote programs which use conservation easements, purchase of development rights, and other mechanisms to supplement direct land acquisition for conservation purposes. DOC should institute an educational program to inform government agencies, citizens groups, corporations, and private landowners about alternatives for preservation of land. A first step would be to prepare a handbook for distribution to other agencies.....27

3. The Task Force endorses DOC's purchase of the tract currently known as Site M and recommends this site be used as a pilot project in managing the area as a "sustainable ecosystem"27

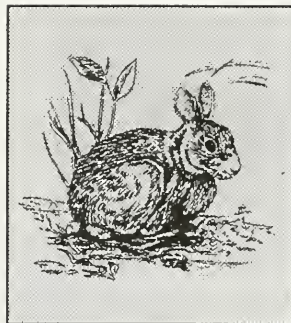
4. DOC should use its position as a state natural resource agency to encourage federal management policies that recognize natural resource conservation as the first priority for the Shawnee National Forest27

5. The Natural Areas Preservation Act should be amended to require all entities of state government to consult with DOC when taking actions that might affect dedicated state nature preserves, natural areas, and registered natural areas27

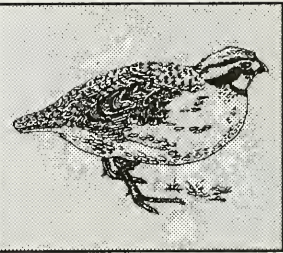
6. DOC and other state-owned properties should maintain a consistent natural resources management philosophy, in recognition that all natural resources should be managed with protection of the native flora and fauna and provision of natural resources based outdoor recreation as priorities28



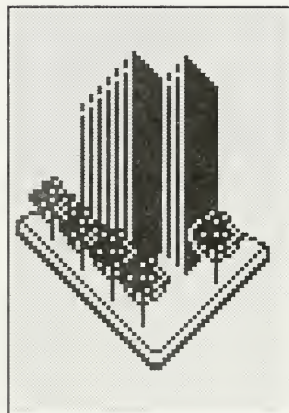
7. DOC needs to accept that increased public land acquisition need not be coupled with related development, e.g., roadways, parking, and/or camping facilities, management staff requirements, etc., which is costly and often detrimental to terrestrial and aquatic game and non-game species' habitat28
8. The state should coordinate its land acquisition efforts with those of other state, federal, and local government entities to meet multiple open space needs such as flood control, wetland preservation, protection of groundwater recharge areas, floodplains, and flood retention reservoirs 28
9. DOC needs to more vigorously advocate programs that facilitate donation of lands to the state for wildlife habitat or natural heritage designation28
10. DOC should be particularly receptive to accepting corporate land donations, especially when corporate lands are available as donations with corporate retention of the obligation and liability for reclamation and pollution 29
11. Systems for streamlining disposition of tax delinquent lands should be developed giving priority to public natural resource agencies and providing such disposition for a conveyance fee or at cost.....29
12. The state's natural resource agencies should pursue legislation which removes barriers to land exchanges with private property owners based on fair market value -- the exchange being "developable land" for land with a high conservation value29
13. There should be a substantial increase in the number of DOC Private Lands Biologists, Natural Heritage Biologists, District Fisheries Biologists, and District Foresters assisting private landowners and local governments in the management of species and habitat on private property and local government lands.....29
14. Administrative rules to implement the Register--a list of lands judged worthy of preservation and voluntarily enrolled by their owners--should be promulgated as authorized in the Natural Areas Preservation Act30
15. State agencies with natural resource and public health responsibilities should be able to accept volunteer assistance on any state-owned land from private citizens and organizations and should encourage the same....30
16. DOC's Division of Forestry should be strengthened to enhance the stewardship of private forest land.....30
17. Illinois should pass legislation to limit owner liability associated with public use of all private, including corporate, lands for conservation and recreational purposes.....30



18. Via Illinois' Congressional Delegation, work to achieve continuation of the federal Conservation Reserve Program.....	31
19. Legislation should be passed to provide property tax incentives on lands managed to provide habitat and recreational opportunities. Recapture, reimbursement, and compensation mechanisms should be included in the legislation to insure that local governments are not adversely affected.....	31
20. The Department of Revenue (DOR) should review classes of preferential assessment and be required to educate local assessors and private property owners on these assessment classes.....	31
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22. The Illinois Department of Agriculture (DOA) and DOR should investigate tying the current preferential assessment based on the productivity of farmland to farmland preservation agreements and/or soil conservation plans.....	33
23. The state should strengthen and support existing state and local farmland preservation programs such as the Farmland Preservation Act and the Agricultural Areas Conservation and Protection Act. In addition, the state should provide assistance to county and local governments in the development of local zoning ordinances for farmland protection.....	33
24. The State of Illinois should interface with the Association of Illinois Soil and Water Conservation Districts (SWCD) to enable the local SWCD offices to become the local point of contact to provide advice and technical guidance on federal, state, and local land use policies and regulatory programs.....	33
25. A conversion fee should be considered as a possible tool to protect agricultural lands and terrestrial and aquatic game and non-game habitat from development and to encourage redevelopment of urban areas.....	34
26. Legislation should be introduced to eliminate property taxes on lands under long-term conservation easements or enrolled in wetland protection programs.....	35
27. State legislation should require planning as a prerequisite to local government's authority to zone and otherwise regulate land use. Legislation should mandate required elements of local plans e.g.,	



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28. In order to more effectively balance growth with farmland and habitat protection, cooperation between and among units of local government must be strengthened. Plans and ordinances should be coordinated among local units of government	36
29. For the purposes of farmland preservation and/or habitat protection, land use ordinances should provide more flexibility. Land banking, density transfer, and cluster zoning should be explored.....	36
30. As an off-set to increased densities, legislation should be developed which will allow for improved economical mass transit design with a goal to reduce traffic impacts that might be generated by higher density developments	36
31. State-level land use standards, which apply solely to highly specialized land uses that protect critical or vital interests of the State of Illinois, such as prime farmland preservation, should be considered	36
32. The concept of development rights transfer needs to be further explored	37
33. The downsizing of subdivision and other design standards should be considered as a means of reducing land consumption.....	38
34. The process for adjusting Wastewater Planning Areas needs to be depoliticized. Planning areas should be based on technical needs and requirements and should promote compact, contiguous development	38
35. The growth management recommendations can be applied not only to protect residential open space and farmland, but they also could be used to protect and promote the development of habitat, recreational opportunities, and high quality habitat (natural areas and habitat for endangered species and critical wildlife populations)	38
36. The state should pursue enlightened tax policies that provide incentives for landowners who contribute to the public welfare and environmental well-being of the State of Illinois through responsible stewardship of private lands. The counter-incentives to responsible land use created by reliance on the property tax should become a part of the debate on education funding and tax caps.....	39
37. State and local conservation and agricultural agencies need to expand public education programs related to ecology, agricultural production, and economic and land use planning	39



38. The State of Illinois should enhance the Illinois Geographic Information System (IGIS), building upon the existing system managed by the Department of Energy and Natural Resource (ENR). A biologically defensible land classification system that retains the capacity to be responsive to federal and state programs should be developed, mapping standards should be enforced, and availability of data needs to be expanded.....40

RECREATION RECOMMENDATIONS

1. The state's natural resource agencies should acquire recreational land throughout the state while balancing regional needs and cost effectiveness.....43
2. The state's natural resource agencies should regularly update inventories of significant natural and historical sites for possible acquisition, protection, and dedication.....43
3. The state should inventory the use made of all state recreational resources, and, based on that inventory, establish a program of priority use which will help alleviate conflicts inherent in multi-use recreational programs43
4. An inventory should be conducted of all state-owned lands to determine if those lands are adaptable to recreational uses.....43
5. The Governor should convene a meeting of corporate and business leaders for the purpose of facilitating the creation of an external foundation able to receive both public and private funds for recreational uses. The foundation's board of directors (consisting of members from the public and private sectors) would have responsibility for fund management and for matching donors and projects with other foundations, non-governmental organizations, and land holding entities....43
6. DOC should expand its use of volunteers to enhance recreational areas and support existing staff. This expansion should be done by establishing an "Adopt-a-Park" or other local pride program for support of recreational resources at specific sites and by initiating "Volunteer Stewardship" programs based on The Nature Conservancy's model, which is in place for natural areas, for other categories of natural and recreational resources44
7. The Governor should convene a Conference on Parks, Recreation, and Conservation periodically (at least once every five years) to improve communication and coordination among governmental entities and the public and private sectors44

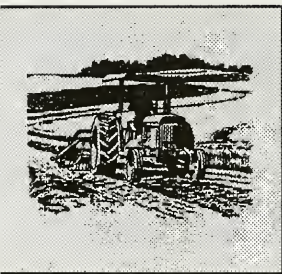
8. The state should recognize the key role of local governments in meeting conservation and recreational needs; local governments must have flexible and adequate tools to meet these needs..... 44
9. Local officials should convene summits to prepare regional recreational resources management plans that protect natural resources, provide for the most efficient use of property tax dollars, and integrate the transportation and local housing needs with recreational needs..... 44
10. Consistent with the Americans with Disabilities Act, DOC should survey recreational facilities and make reasonable accommodation for people with disabilities..... 44
11. DOC should be the lead agency to develop a plan for establishing by 2010 a network of greenways and trails across the state which link parks, forest preserves, and natural areas and that determines priorities for action 45
12. DOT should accommodate greenways and trail corridors that are included in regional or statewide plans when developing or constructing roadways 45
13. In its grant-making process, DOC should give special consideration to trails and greenways that are part of a network or plan..... 46
14. DOC should conduct workshops for park districts, forest preserve districts, municipalities, etc., to provide assistance in developing community participation processes and in designing trails and greenways that reduce property owners' concerns regarding liability, security, and privacy 46
15. DOC should require applicants for state funding for trails and greenways to submit a public participation plan when they apply for state funding..... 46
16. DOC should identify, in consultation with other state agencies including DOA, Department of Energy and Natural Resources (ENR), and Department of Transportation/Division of Water Resources DOT/DOWR), natural resources (i.e., streams, linkages between prairie remnants, and key wildlife corridors) that need to be protected as greenways..... 46
17. DOC should have a key role in programming and spending transportation enhancement funds which are available through the Intermodal Surface Transportation Efficiency Act (ISTEA). This new source of money must be used to supplement existing funds dedicated to enhancement and alternative transportation 46
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19. The State of Illinois should adopt a policy which supports the use of abandoned rights-of-way for trails and greenways.....47
20. DOT should plant appropriate road rights-of-way in native vegetation and manage such plantings to enhance wildlife habitat47
21. DOC should provide interpretive signage, maps, and brochures to enhance the experiences of trail users on DOC lands.....47

CROSSOVER RECOMMENDATIONS

1. The Task Force recommends the Governor create by executive order a Coordinating Council for Natural Resources and the Environment.....48
2. The state should develop better coordination and cooperation among state agencies so that site identification and permitting can be examined from several perspectives concurrently rather than sequentially51
3. The state should be part of the decision-making process when siting regional facilities; the Coordinating Council for Natural Resources and the Environment should take the lead in defining the state's role52
4. The State of Illinois should develop a system to anticipate the need for, and prioritize the development of, regional facilities52
5. The state should ensure sufficient opportunities for the general public to comment on the siting of regional facilities. Public hearings, public informational meetings, etc., should establish a climate that encourages the general public to participate52
6. Legislation should require that all environmental and economic impacts on areas adjoining and/or neighboring a proposed regional facility be documented, presented, and discussed at a public permit or zoning hearing.....52
7. The State of Illinois should encourage remediation and reuse of previously contaminated property by providing incentives to potential new owners of the land to clean up and develop it without assuming historic liability. Incentives could include tax incentives, caps on cleanup cost, etc. These incentives should in no way diminish the liability of historic owners/operators.....53
8. State agencies with natural resource and public health responsibilities should encourage and support the development of alternate systems of pest control (crop rotations, baits and traps, biological controls, pest prevention) to reduce or eliminate the need for chemicals. Within agriculture this development would include concepts and practices



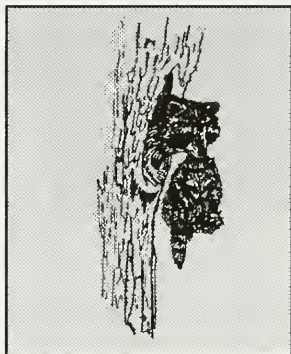
- currently identified as Integrated Pest Management, Sustainable Agriculture, Organic Farming, and Best Management Practices as well as other unnamed or undiscovered systems 54
9. State agencies with natural resource and public health responsibilities should encourage and support the development of chemical compounds, or substitutes for chemical compounds, which pose less risk to non-target species through lower rates, reduced toxicity, and less persistence 54
10. State agencies with natural resource and public health responsibilities should encourage and support the refinement of application rates, chemical carriers/inert ingredients, and equipment that reduces risk to non-target species 54
11. State agencies with natural resource and public health responsibilities should educate the public about the current high level of environmental responsibility already achieved by the entire spectrum of the chemical industry to date through voluntary and regulatory programs..... 55
12. State agencies with natural resource and public health responsibilities should transfer information about alternatives to chemical use to the end users of such products..... 55
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14. State agencies with natural resource responsibilities should carry out laboratory and field demonstrations of practices which further promote the safe use of chemical compounds 55
15. State agencies with natural resource responsibilities should carry out laboratory and field demonstrations of practices which reduce and eliminate the need for chemical compounds..... 55
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18. Soil and water conservation standards should be updated for more efficient implementation	57
19. Recommit all state and federal agencies and provide the funding necessary to achieve the T by 2000 goal or revise the goal to meet more realistic expectations (T by 2010?)	57
20. The Governor should request that all farm plans developed as part of the 1985 Federal Food Security Act meet the stricter state standards for soil erosion	57
21. All state resource agencies and federal agencies with an Illinois program component should be required to designate a T by 2000 coordinator from existing staff	58
22. Increase funding for Soil and Water Conservation Districts	58
23. Reinstate funding to existing state cost-share programs and fund and implement new programs, such as the Save Illinois Topsoil Program, which would supplement current efforts to reduce soil loss and improve water quality.	58
24. State and federal cost-share funding should be targeted at the areas of greatest need (i.e. those areas with the highest soil loss rates)	59
25. State natural resource agencies should provide technical assistance, materials, and training for Illinois SWCD field staff to improve state conservation education programs	59
26. The state should mandate urban erosion control programs for developments within the jurisdiction of municipal and county governments. The state also should revise the current Erosion and Sediment Control Complaint Program to include monetary penalties for owners/operators of both rural and urban lands who fail to comply once a complaint has been verified	60
27. The protection of groundwater recharge areas and aquifers should be a key part of all soil and water conservation programming	60
28. As a parallel initiative to traditional erosion control and water quality programs, the state should actively promote the development and use of sustainable farming practices. Such practices could have a tremendous indirect effect on soil conservation and water quality	60
29. The Task Force supports the Illinois SA Committee's primary recommendation, which is for the Illinois General Assembly to appropriate funds for the immediate implementation of the Sustainable Agriculture Act (P.A. 86-1022)	62

30. The Task Force supports the SA Committee recommendation to establish a research and education grant program to encourage public institutions, private agencies, and non-profit organizations to initiate exploratory and/or adaptive research and educational programs on the long-term sustainability of Illinois agriculture 63
31. The Task Force supports the SA committee recommendation to establish a farmer-to-farmer mentoring program to facilitate exchange of information and ideas among new and experienced farmers wanting to try new products and practices 63
32. The Task Force recommends the implementation of an Outreach and Education Grants Program to accompany the Research and Education Grants Program recommended by the SA Committee 63
33. The Task Force supports the SA Committee recommendation to establish an in-service education program for professional agricultural field staff from the University of Illinois Cooperative Extension Service, the Association of Illinois SWCD, the USDA Soil Conservation Service, DOA, DOC, professional crop consultants, farm managers, fertilizer dealers, and representatives of the agrichemical industry..... 64
34. The Task Force supports the SA Committee recommendation that long-term cropping system/rotation/tillage studies be initiated by appropriate research institutions..... 64
35. The Task Force supports the SA Committee recommendation that all public agencies associated with agriculture in Illinois support and cooperate with state and regional farmer-managed sustainable agriculture organizations to achieve common goals and objectives 64
36. The Task Force supports the SA Committee recommendation that the current DOA Fertilizer Research and Education Program be funded at the full level provided by its original legislation, with some conditions 65
37. The Task Force supports the SA Committee recommendation that the Illinois General Assembly appropriate funds to support Public Act 86-253, which would support the Illinois Research Farm System, if sustainable agriculture research is a major program component of that system 65
38. Current state policy, regulations, and programs should be reviewed to identify and address environmental concerns without precluding minerals development in Illinois. That review should cover all mining and oil drilling and address regulatory deficiencies and/or excesses, regulatory and/or interagency conflicts, and needed program initiatives....67
39. To maintain mineral extraction industries in Illinois as viable economic enterprises, the state should support research to identify and expand





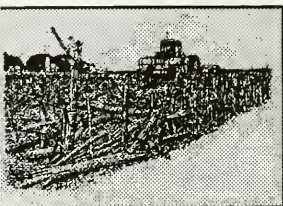
- programs to promote environmentally safe mineral extraction, development, and utilization, as well as reclamation of wastes and affected areas.....67
40. The state should continue funding agriculture reclamation research/ demonstration programs to ensure that long-term studies are available to validate reclamation success.....67
41. The state should develop ecologically sound and technologically feasible guidelines for successful wetland reclamation and encourage wetland establishment as a post-mining land use67
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43. The state should evaluate the need for more stringent/comprehensive regulations for aggregate mining and reclamation.....67
44. The state should encourage and continue to support research and demonstration programs for precombustion and postcombustion sulfur reduction from Illinois coal.....67
45. The state should research, evaluate, and support environmentally acceptable methods for disposal or use of coal combustion by-products....68
46. The state should continue support of mine subsidence research in the areas of prediction, prevention, and remediation measures.....68
47. The state should implement a remediation/reclamation program for soils adversely affected by oil well runoff and oil brine salinization68
48. The State should review current state programs and policies to determine possible road blocks and need for additional statutory or regulatory authorities for ecosystem protection across geopolitical boundaries69
49. The state should re-energize and promote metropolitan-type planning organizations which would provide a regional clearinghouse and undertake planning efforts authorized by the Local Land and Resource Management Planning Act69
50. Planning relating to the protection and enhancement of Illinois' unique natural systems should provide and promote public dialogue and opportunities for public comment and participation.....69
51. DOC should investigate forming a statewide nature bank system to allow mitigation and restoration in exchange for the loss of natural features of lesser significance. IDOC should identify the appropriate steps and

elements necessary to create a system incorporating the requisite safeguards necessary to ensure that the bank does not contribute to the net loss of, or loss of high quality, natural habitats or systems	70
52. DOC should use the U.S. EPA's Lakewide Management Plan process as a pilot for a natural resource systems-based management approach	70
53. DOC should expand Illinois' Biological Conservation Database to allow for the identification of "Areas of Critical Concern," landscape-scale systems possessing significant natural resources and serving critical ecological functions.....	70
54. The state should identify "Areas of Critical Concern" and assist and cooperate with local units of governments and landowners in the preparation of plans and regulations for the responsible use of the areas	70



FUNDING RECOMMENDATIONS

1. The State of Illinois should appropriate adequate GRF and capital funds to support the acquisition, development, maintenance, and operation of conservation and recreational resources	72
2. A major new initiative to provide substantial new revenues for natural resources protection and outdoor recreation should be undertaken. The alternatives described below should be thoroughly investigated, including determining which are the most viable, which have the most opportunity for building constituent support, and which are most likely to yield the ability to meet the needs identified by the Task Force. The Task Force recognizes that a consensus must be built for any funding initiative to be implemented. The Governor and General Assembly should consider legislation to place an advisory referendum on the ballot as part of the statewide general election to determine the level of support for the following options.....	72
3. A 5-10% sales tax on outdoor recreational equipment, similar to the federal excise tax on fishing and hunting equipment through the PR/DJ (Pittman-Robertson, Dingell-Johnson) program, should be considered. This tax would be on outdoor recreational equipment of every type that is not taxed under the provisions of the PR/DJ program. Such a tax would in effect be a user fee as the proceeds would be used exclusively to fund state and local outdoor recreational opportunities.....	73
4. There should be a fee for access to state conservation and recreational lands, such as conservation areas and state parks, excluding small areas or areas with low visitation where fee collection is not cost effective. Some of the entitlements currently provided to special segments of the public should be eliminated. However, free days, established by	



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6. DOC should increase the cost of the following licenses and fees: resident and non-resident recreational hunting and fishing licenses; commercial fishing licenses; commercial mussel licenses; boat registration; deer and turkey permits; and camping and other fees.....	74
7. DOC should eliminate non-landowner entitlements, but may consider reduced fees for existing entitlement holders.....	75
8. DOC should gradually increase the Habitat Stamp fee to \$10.00 to match the Duck Stamp fee.....	75
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10. DOC should modify the state put-and-take pheasant programs to allow gradual privatization. The state-owned areas now used for put-and-take hunting may be managed for natural production of wildlife, for public hunting and viewing of wildlife, or may be leased to private operators for put-and-take hunting opportunities. The state might consider production of pheasant chicks at the Lincoln Hatchery for sale to private operators	76
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APPENDIX C

List of Agency Abbreviations

AMLRC

Illinois Abandoned Mined Lands Reclamation Council

DMM

Illinois Department of Mines and Minerals

DOA

Illinois Department of Agriculture

DOC

Illinois Department of Conservation

DOR

Illinois Department of Revenue

DOT/DOWR

Illinois Department of Transportation/Division of Water Resources

DPH

Illinois Department of Public Health

EPA

Illinois Environmental Protection Agency

ENR

Illinois Department of Energy and Natural Resources

HPA

Illinois Historic Preservation Agency

PCB

Illinois Pollution Control Board

USDA

United States Department of Agriculture

USEPA

United States Environmental Protection Agency

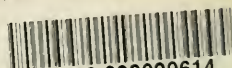


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