

Current and Emerging Issues in
Florida Water
Policy

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FOREWORD

This report, "Current and Emerging Issues in Florida Water Policy," was produced under the auspices of the Florida Water Law and Policy Program at the Center for Governmental Responsibility (CGR), University of Florida College of Law. It is intended to address substantive issues concerning the ability of the current legal and policy structure to sustainably manage the state's water resources into the 21st century. The report also contributes to the structure of a reorganized research agenda for the Florida Water Law and Policy Program.

This Program of research, workshops, conferences, and publications focuses on a wide range of topics, including surface and ground water quality, water allocation strategies, wetlands regulation and mitigation banking, sovereign lands issues, coastal zone issues and ecosystem management. The Program is intended to serve as a continuing source of legal and policy-related information on Florida's water issues which will benefit state and local practitioners, regulators, legislators, policymakers and the general public.

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TABLE OF CONTENTS

Foreword	i
TABLE OF CONTENTS	ii
INTRODUCTION	2
HISTORICAL CONTEXT FOR DEVELOPMENT OF FLORIDA WATER POLICY	
I. Eastern Riparian System	4
II. Western Prior Appropriation System	5
III. Water Use Regulation Prior to 1972	6
IV. Florida Water Resources Act of 1972	9
PRIOR EVALUATIONS AND POLICY STUDIES	
I. Comprehensive Review of Water Resources Policies, Planning and Programs in Florida (June 1986)	13
II. Governor's Water Resource Commission: Final Report (December 1, 1989)	17
III. A Review of Water Management Policy and Planning Activities (November 1993)	20
IV. Recommendations of the Land Use and Water Planning Task Force: Final Report (December 1994)	22
V. Water Supply Policy Considerations: Interim Project Report (December 1995)	24
VI. Bridge Over Troubled Water: Recommendations of the Water Management District Review Commission (December 1995)	26
CURRENT LEGAL AND POLICY ISSUES	
I. Protection of Water for Environmental Needs	30
A. Establishing Minimum Flows and Levels	30
1. Waters Which are Subject to MFLs	31

	2.	"Best Information Available"	32
	3.	"Significant Harm"	33
34	a.	Science-based or Policy-based
	b.	Existing Uses	35
	4.	Scientific Peer Review	37
	5.	Proper Timeframe	38
	6.	Administrative Process for Establishing MFLs	39
40	7.	Establishing MFLs for Outstanding Florida Waters
	B.	Relationship of Minimum Flows and Levels to Management of the Water Resource.	41
	1.	General Water Resource Planning and MFLs.	41
	2.	Water Shortage Planning Process and MFLs.	42
	3.	Consumptive Use Permitting Process and MFLs	43
	a.	Role of MFLs in Consumptive Use Permitting	45
	b.	Mitigation for Consumptive Uses Violating MFLs	45
	C.	Consumptive Use Permitting Issues	46
	1.	Duration of Permits	46
	2.	Mitigation for Consumptive Use Impacts	48
50	D.	Role of Public Trust Doctrine
	E.	Reservations from Use	54
	1.	Relationship Between MFLs and Reservations from Use	54
55	2.	Defining "Contrary to the Public Interest"
	II.	Promoting Efficient Uses of Water.	55
	A.	Reallocation of Inefficient Uses
		55	
	1.	Determining the Public Interest	56
	2.	Potential Water Use Priorities Established by Law	57
	B.	Transfer or Sale of Permits	57
	1.	Reallocations for Other Purposes	58
	2.	Potential Effect of Long Duration Permits

	3.	Potential Effect on Permitting Process	
59			
	C.	Interdistrict Transfers.	59
	1.	Consistency of Applicable Criteria	60
	2.	Local Sources First	61
	3.	Definition and Extent of "Feasible Alternatives"	
61			
	4.	Definition of "Prior Right"	61
	D.	Alternative Sources	62
	E.	Water Pricing	63
	1.	"Pure" vs. "Regulated" Markets	64
	2.	Uniform or Region-Specific Charges	
64			
III.		Relationship Between Land Use and Water Use Planning and Regulation	
65			
	A.	Inclusion of Water Availability in Concurrency Requirements	65
	B.	Consistency with Local Land Use Plans as Consumptive Use Permitting Criterion	
66			
	C.	Relationship Between Water Planning Information and Local Comprehensive Plans and Land Use Decisions	66
IV.		Administrative Structure and Agency Relationships	
67			
	A.	State Oversight of Water Management Districts	68
	B.	Structure of Water Resources Comprehensive Planning	70
	C.	Relationship of Consumptive Use Permitting to Water Resource Planning.	71
		PARTICIPANTS AND CONTRIBUTORS	73
		BIBLIOGRAPHY	76

INTRODUCTION

Florida has some of the most abundant surface and ground water resources in the United States, as well as some of the highest rates of population growth and urban development in the country. In 1972, responding to needs for more comprehensive management of the state's waters, the legislature adopted the Florida Water Resources Act based on recommendations from several study commissions, and on an integrated administrative structure developed by Dean Frank Maloney and Professor Richard Ausness at the University of Florida, and Professor Scott Morris at Southern Methodist University. A MODEL WATER CODE (the Code) was intended to combine the most successful features of eastern and western water law and policy, while avoiding the deficiencies of those systems, to produce an approach that could efficiently and equitably manage the state's waters.

Modified in certain ways from the approach put forth in the Code, the Water Resources Act is still considered a model for other states attempting to develop comprehensive approaches to water management. However, since its adoption, flood and drought, population growth, agricultural and industrial growth, technological advances, environmental damage and politics have all shaped the development of the Act in ways that might not have been foreseen by its originators. The result has been a mixed set of policies, plans and regulations that show signs of losing the relative coherence of the original enactment and the structure envisioned by A MODEL WATER CODE. At the same time, increases in technical capability and in our understanding of the resource present issues that were not anticipated in the development of the Code or the Act.

In recent years, as pressures on the resource and stresses within the administrative structure have become more apparent, attention has been focused on many aspects of water policy in this state. This report attempts to summarize the wide range of current issues related to water law and policy, as well as some of those which appear to be on the horizon. It also provides historical context and some understanding of prior policy

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press (1972).

studies, and includes a bibliography of important publications. Including this introduction, the report contains six sections.

Section Two of the report presents an "Historical Context for Development of Florida Water Policy," which briefly summarizes earlier common law principles, traces the process by which Florida developed a more administrative approach to water management, and ends with a brief synopsis of relevant events leading up to the adoption of and subsequent development of the Water Resources Act of 1972. Section Three of the report reviews and summarizes "Prior Evaluations and Policy Studies" in Florida from the past ten years, focusing on the more salient recommendations and recurring themes in those evaluations.

The primary focus of this report, Section Four, surveys and briefly analyzes a large number of "Current Legal and Policy Issues" related to water management in Florida. These are categorized under four general headings: Protection of Water for Environmental Needs; Promoting Efficient Uses of Water; Relationship Between Land Use and Water Use Planning and Regulation; and Administrative Structure and Agency Relationships. The evaluation attempts to provide some of the various perspectives being taken on most issues.

Section Five lists those experts in water law and policy who participated in one or more of the several meetings associated with the project, engaged in discussions, provided comments, or otherwise contributed to the development of this report. Section Six comprises a bibliography of books, studies, reports, law review articles, and the "gray literature" which is relevant to a more complete understanding of the issues discussed in the report.

The report is intended to review and clarify many of the controversies relative to the management of water resources in Florida, in an effort to create a more coherent structure for additional research and problem-solving.

HISTORICAL CONTEXT FOR DEVELOPMENT OF FLORIDA WATER POLICY

I. Eastern Riparian System

Historically, Florida operated under the common law riparian system of water rights, as did most of the eastern states. This system provided an exclusive right to riparian landowners to withdraw and use water from watercourses and lakes abutting their lands. Though the water could only be used on the riparian lands, riparian rights were considered property rights which could not be severed from the uplands.

The strict form of the riparian system, known as the natural flow doctrine, entitled lower riparians to the undiminished flow of a watercourse, and prohibited upper riparians from altering the flow unless necessary for domestic water uses. Eventually, Florida shifted to what is known as the "reasonable use doctrine," under which each riparian could cause some alteration of the flow for non-domestic uses, so long as this did not unreasonably interfere with another riparian's use. If interference occurred, the issue was normally resolved by requiring all users to make reasonable adjustments in their use in order to allow all uses to continue.

Though this approach was well-adapted to the eastern states for much of their history, it had several disadvantages. Limiting water use rights to riparian owners tended to restrict commercial and other activities on non-riparian lands, while ongoing riparian uses were subject to the uncertainty of having to constantly adjust to new uses of a waterbody. Considerations of reasonableness also change over time. The only means of resolving disputes was litigation on a case-by-case basis, thus there was

See, RESTATEMENT (SECOND) OF TORTS §850A (1979). Factors to be considered in determining reasonableness include: (1) the purpose of the use, (2) the suitability of the use to the watershed or lake, (3) the economic value of the use, (4) the social value of the use, (5) the extent and the amount of the harm it causes, (6) the practicality of avoiding the harm by adjusting the use or method of use of one proprietor or the other, (7) the practicality of adjusting the quantity of water used by each proprietor, (8) the protection of existing values of water uses, land, investments and enterprises, and (9) the justice of requiring the user causing harm to bear the loss.

no provision for planning. Preventing damage to environmental values was not addressed by the reasonable use doctrine, unless water needs for environmental protection coincided with the rights of a riparian owner.

Florida's approach to withdrawals of "percolating" ground water was also a reasonable use rule, which provided an unlimited right to use ground water as reasonably related to the activities on the overlying land. The presumption was that ground water percolated, though if it could be proved that water was moving through defined channels in underground "streams," the approach was the same as that for surface waters. Transfers of ground water for use on other lands were only permitted if this would not interfere with a nearby landowner's ground water withdrawals for use on his land.

II. Western Prior Appropriation System

In addressing Florida water law, it's important to also understand something of the approach to water rights taken by states west of Mississippi, known as the "prior appropriation" doctrine. Under this system, the right to use a certain quantity of water is established by the act of using the water, and the basic principle in determining who owns water rights is "first in time, first in right." Such rights are separate from the land, and can be bought and sold without regard to land ownership.

Senior appropriators have superior water rights, and in times of low flows, junior appropriators can be required to reduce or stop withdrawals in order to satisfy the senior rights. This approach is generally applied to ground waters as well as surface waters.

Although prior appropriation introduces an element of certainty into water rights, the protection afforded to senior appropriators tends to perpetuate what might be economically unsound or inefficient uses of water.

The doctrine also tends to discourage conservation, since a reduction in water use may lead to a loss of vested rights in the original amount appropriated. In response, western courts added a "beneficial use" standard, similar to the eastern "reasonable use" rule. A right of prior

Koch v. Wick, 87 So.2d 47 (Fla. 1956).

Maloney, Capehart and Hoofman, "Florida's Reasonable Beneficial" Water Use Standard: Have East and West Met?", 31 U. FLA. L. REV.

appropriation cannot be lost unless it loses its status as a beneficial use. Until recently, the prior appropriation system did not provide consideration of the needs for instream uses and the protection of environmental values. In many western states, administrative changes in the doctrine now address the need to consider ecosystem needs.

III. Water Use Regulation Prior to 1972

Several steps preceded the adoption of Florida's Water Resources Act of 1972. By the 1950s, municipalities had been granted the power of eminent domain in order to establish wellfields for public supply. Saltwater intrusion into coastal wellfields was already occurring, and the first modest controls were established in the 1950s. Special purpose districts were also becoming popular management tools. These included irrigation districts, aqueduct districts, sewer districts, mosquito districts, conservation districts, navigation districts, sanitary districts and drainage districts, which were also known as "Chapter 298 districts," after their authorizing statute.

In 1949, in response to flood control concerns created by recent hurricanes, the Florida legislature adopted the Flood Control Act, which among other provisions, allowed for the formation of flood control districts. These "Chapter 378 districts" had no regulatory powers, and were limited to cooperating with the federal government in its flood control projects, and to constructing, maintaining and operating projects such as canals, levees, dikes and pumping stations. The legislature also created the Central and Southern Florida Flood Control District (later renamed the South Florida Water Management District) for the purposes of the Flood Control Act, except that it also authorized the district to levy ad valorem taxes. This C & SF district, which replaced an earlier flood

253, 265 (1979). See also, Hamann, "Consumptive Use Permitting," in *FLORIDA ENVIRONMENTAL AND LAND USE LAW*, Vol. I, 10-4, 10-5 (1993).

See, Canter, Bram, "Overview of Florida's System of Water Use Regulation," in Water Resource Regulation and Planning: The Water Saga in the Next Century, Environmental and Land Use Law Section, Florida Bar (May 1995).

Ch. 25209, 1949 FLA. LAWS, codified as FLA. STAT. Ch. 378 (1949).

control district and a drainage district, was governed by five gubernatorial lay appointees.

The 1955 Florida Water Resources Study Commission was established to determine the need for a comprehensive water law in Florida. In its report to the 1957 Florida Legislature, it recommended: (1) ensuring that there was legal authority to capture, store and use water in excess of reasonable uses; (2) authorizing diversions of such waters beyond riparian or overlying land; and (3) restricting the withdrawals of water which would exceed the natural replenishment of such waters or cause salt water intrusion or other harm. The Commission also recommended "new multipurpose water management districts" and "a permanent administrative agency."

In 1957, the Florida Legislature adopted a Water Resources Law which created a Department of Water Resources within the State Board of Conservation, and gave the department broad powers to manage water resources. The Board was given authority to adopt rules to protect water supplies from salt water intrusion and other types of pollution; allow diversions of "excess" water beyond riparian or overlying land; and create regulatory districts to issue permits for capturing excess water. It is not apparent that any water use permits were issued under the program created by the Act.

After disastrous floods in 1959 and 1960, the 1961 legislature also created a Chapter 378 district for southwest Florida, but called it the Southwest Florida Water Management District, rather than a flood control district. In the late 1960s, both the C & SF district and the Southwest Florida district began requiring permits for water withdrawals.

See Canter, *supra* note 5.

Ch. 57-380, 1957 FLA. LAWS, codified in FLA. STAT. Ch. 373 (1957).

"Excess" water was defined as surface water in excess of average minimum flows, and ground water in excess of mean low levels.

See generally, MALONEY, PLAGER AND BALDWIN, WATER LAW AND ADMINISTRATION: THE FLORIDA EXPERIENCE, Ch. 9 (1968).

See Canter, *supra* note 5.

In 1970-71, a severe drought highlighted the deficiencies of the existing approach to water planning and management. The Governor's Conference on Water Management was convened in September of 1971, and recommended a long-range plan for land and water use, in order to avoid future conflicts and problems. By 1971, A MODEL WATER CODE (the Code), had been developed by Dean Frank Maloney and Professor Richard Ausness at the University of Florida College of Law, and Scott Morris of Southern Methodist University, which attempted to combine the best features of the riparian and prior appropriation systems while avoiding their deficiencies. The Code, which provided the type of comprehensive approach recommended by the Governor's Conference on Water Management, was published in 1972, and galley proofs of the document were made available to legislators prior to the 1972 legislative session.

The primary features of the Code included: (1) establishment of a five-member State Water Resources Board with the power to review and rescind any regulation of a water management district; (2) establishment of water management districts along watershed boundaries, with governing boards appointed by the Governor; (3) extensive planning requirements; (4) a permit system for water withdrawals, surface water management and well construction, with water withdrawals based on "reasonable-beneficial use," combining aspects of both eastern and western water rights; (5) an allocation system for water shortages; (6) water quality standards; (7) permits for pollutant discharges; and (8) a program for studying and licensing weather modification.

IV. Florida Water Resources Act of 1972

The 1972 legislature adopted the Florida Water Resources Act of 1972, following the basic structure of A MODEL WATER CODE, though it altered several

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press (1972).

Defined as "the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose and in a manner which is both reasonable and consistent with the public interest." *Id.* §1.03(4).

FLA. STAT. Ch. 373 (1972).

provisions, changed the relationships between certain provisions, and eliminated others. The most significant changes made were replacing the appointed state water board with the Governor and Cabinet sitting as the Department of Natural Resources, eliminating the citizen suit provision, separating out water quality control for regulation by the Department of Air and Water Pollution Control, and omitting the weather modification provisions.

The Water Resources Act created a two-tiered management structure originally headed by the Department of Natural Resources (DNR), a predecessor of today's Department of Environmental Protection (DEP). Six water management districts originally comprised the second tier, but one, the proposed Ridge and Gulf Coast Water Management District was absorbed into other districts. The DNR was given general supervisory authority over the districts, as well as authority to exercise any power of the districts.

Over the years, pursuant to legislative intent, most of its regulatory functions have been delegated to the districts. Originally, the DNR was also given power to review the policies and rules of the districts to insure compliance with the provisions and purposes of the Act, though in 1975 this power was transferred to the Florida Land and Water Adjudicatory Commission (Governor and Cabinet).

The Act also required the development of an "integrated, coordinated plan for the use and development of the waters of the state" (State Water Use Plan), based on studies of:

...existing water resources in the state; means of conserving and augmenting such waters; existing and contemplated needs and uses of water for protection and procreation of fish and wildlife, irrigation, mining, power development, and domestic, municipal, and industrial uses; and all other related subjects, including drainage, reclamation, flood plain or flood hazard

See Canter, *supra* note 5.

FLA. STAT. § 373.114 (1975).

FLA. STAT. § 373.036 (1972).

area zoning, and selection of reservoir sites.

The State Water Use Plan was to be combined with the state water quality classifications and standards in order to create the "Florida Water Plan."

Development and use of the State Water Use Plan has never proceeded as originally envisioned. Sufficient funding was not supplied to the DNR for planning purposes, and in 1974, it delegated its planning responsibilities to the water management districts. The South Florida and Southwest Florida districts immediately began extensive planning programs, such that when the Department of Environmental Regulation (DER) was created in 1975 and initiated additional planning efforts, it was faced with a diversity of more mature programs. Its intent was to take the executive summaries of the five districts' plans and combine them with the goals and policies of the state comprehensive plan to create the State Water Use Plan. The plan was to be presented at public hearings in 1978, but the hearings and the planning were postponed.

The Department of Environmental Protection, in cooperation with the water management districts, recently completed a state water plan, titled the "Florida Water Plan 1995." The Act requires that the state water plan be comprised of a State Water Use Plan "developed in coordination with" and combined with state water quality standards. The Florida Water Plan 1995

Id.

See Canter, *supra* note 5.

The Department of Environmental Protection was created by legislation in 1993, which required combining the former Department of Environmental Regulation and Department of Natural Resources.

Florida Department of Environmental Protection, Northwest Florida Water Management District, St. Johns River Water Management District, South Florida Water Management District, Southwest Florida Water Management District, and Suwannee River Water Management District, Florida Water Plan 1995, Tallahassee, Florida (December 8, 1995).

FLA. STAT. § 373.039 (1995).

states that it is intended to comply with these requirements, however, a State Water Use Plan does not exist, and it appears that water quality standards have been incorporated by reference, not in coordination with the plan. Though the Florida Water Plan 1995 is well organized, it remains to be seen how influential it will actually be in the planning and management process. The plan is not self-implementing, and as with previous efforts, is largely an accumulation of policies which appear in existing statutes and rules. The Florida Water Plan 1995 will be updated on a five-year basis.

The Water Resources Act also required the department to adopt by rule a state water policy which provided goals, objectives and guidance for the development and review of water resource programs, rules and plans. The department first adopted a state water policy rule in 1981, and has amended it several times. It includes several provisions important to the continued development of water policy in Florida:

- Reserve from use that water necessary to support essential non-withdrawal demands, including navigation, recreation, and the protection of fish and wildlife.
- Establish minimum flows and levels to protect water resources and the environmental values associated with marine, estuarine, freshwater, and wetlands ecology.
- Advocate and direct the reuse of reclaimed water as an integral part of water and wastewater management programs, rules, and plans consistent with protection of the public health and surface and ground water quality.
- Encourage demand management and the development of alternative water supplies, including water conservation, reuse of reclaimed water, desalination, stormwater and industrial wastewater reuse,

See Florida Water Plan 1995, at 5-6 (1995).

Id. at 6.

FLA. STAT. § 373.026 (1995).

FLA. ADMIN. CODE Ch. 17-40 (1981), transferred to FLA. ADMIN. CODE Ch. 62-40 in 1994.

FLA. ADMIN. CODE r. 62-40.310 (July 1995).

recharge, and aquifer storage and recovery.

- Protect aquifers from depletion through water conservation and preservation of the functions of high recharge areas.
- Encourage the development of local and regional surface and ground water supplies within districts rather than transfer water across District boundaries.
- Identify existing and future public water supply areas and protect them from contamination.

Id.

PRIOR EVALUATIONS AND POLICY STUDIES

This section of the report describes and summarizes major water policy studies that have been completed in recent years. These include:

- Comprehensive Review of Water Resources Policies, Planning, and Programs in Florida (June 1986);
- Governor's Water Resource Commission: Final Report (December 1989).
- A Review of Water Management Policy and Planning Activities (November 1993);
- Recommendations of the Land Use and Water Planning Task Force (December 1994).
- Water Supply Policy Considerations - Interim Project Report (December 1995);
- Bridge over Troubled Water: Recommendations of the Water Management District Review Commission (December 1995).

I. Comprehensive Review of Water Resources Policies, Planning, and Programs in Florida (June 1986)

A. Introduction

In the spring of 1985, the Florida Legislature enacted the State Comprehensive Plan and major growth management legislation. This legislation required the Florida Department of Environmental Regulation (DER) to prepare a State Water Use Plan. To provide coordinated input to the DER for use in preparation of the State Water Use Plan, Florida's five water management districts entered into an interagency agreement in the summer of 1985 to conduct a comprehensive review of water resource policies, planning and implementation programs in Florida. An objective of the study was to explore options available to the districts for planning

Viessman, Warren, Gay M. Biery-Hamilton, James May, Sue Snaman, and Donna Christie, Comprehensive Review of Water Resources Policies, Planning and Programs in Florida (Vols. I-V). State University System, Gainesville, Florida (June 1986).

FLA. STAT. Ch. 187 (1985).

and implementation of programs necessary to insure sound water resource management in Florida. Planning processes utilized throughout the entire United States were to be examined. The study was conducted by Florida University System contractors.

The five-volume study, Comprehensive Review of Water Resources Policies, Planning, and Programs in Florida, was produced in June 1986 and presented to the Florida water management districts. An executive summary of each volume was also published, and a staff report summarizing the entire five-volume study was prepared.

B. Report Summary

Volume I, "An Assessment of Water Resource Management Issues and Options," is a summary of water resource management issues and policy options which are included in the State Comprehensive Plan, along with a detailed analysis of the programs, authority, and rules of the water management districts and their relationships to the State Comprehensive Plan. Program implementation constraints, alternative approaches to implementation problems or issues, implementation schedules, and relative funding are examined. The volume is organized so as to conform to the listing of issues in the State Comprehensive Plan. Twenty-one subjects and 119 policy areas in the State Comprehensive Plan are organized into eight major categories of policy options, with recommendations for improvement of water management programs that are related to each category. Volume I represents the major written input from the districts to the DER for use in preparation of the State Water Use Plan.

Volume II, "Florida's Water Resources - Trends, Issues, Strategies," reviews water resources trends and issues and examines how the water management districts were addressing those issues. Strategies are offered for analyzing the issues, establishing needed policies, and appropriately implementing these policies. A three-tiered framework for future planning is suggested, emphasizing state-wide "Policy Planning," regional "Strategic Planning," and local "Comprehensive Planning." Volume II includes specific recommendations for improvement of water management district programs to begin addressing major water resource management issues in a more comprehensive fashion.

Volume III, "An Analysis of State Water Resources Planning Processes in the United States," reviews each state's planning processes and institutions and presents a model water resources planning strategy incorporating the most attractive elements of the various state approaches.

A data base was developed consisting of each state's planning processes, planning goals, types of planning, frequency of review and revision, public participation, and implementation methods, with the objective of providing guidance for recommending possible changes in Florida's water resources planning and management processes.

Volume IV, "A Critique of Water Resources Planning in Florida - State, Regional, and Local," is a history and critique of water resource planning in Florida from statehood in 1845 to the present. The evolution of water resources planning is analyzed in relation to basic planning concepts. Future planning opportunities are discussed in detail, including problems which must be considered and resolved if future planning initiatives are to be successful.

Volume V, "The Legal Environment for Water Resource Planning in Florida," discusses the legal institutional framework for water resources management. The relationship of water management districts to local, regional and state agencies is presented. The role of the districts in the state's comprehensive planning scheme is analyzed to provide a basis for reviewing legal authority, impediments, and approaches to water management district strategic planning. Included is discussion of how Florida's water management programs and state planning scheme are related to the three-tier planning process, with regional water resource planning emphasized as being the vital, pivotal element missing from the current planning scheme.

C. Report Conclusions

The following conclusions are listed in the report as being of particular importance because of their potential impact on ongoing district planning and program development, or because the conclusion relates to subject matter requiring timely action, or because the conclusion may frame a district's response to planning efforts of other agencies.

1. The overall management strategy is well-suited to meeting present and future resource management challenges in the state. The ability to implement policy with respect to regional needs

and priorities is probably the strongest asset of the management strategy.

2. The states will assume greater responsibility in fashioning their own water resources planning and management approaches because of the diminishing role of the federal government. With this responsibility comes expense, and competition for financial resources from all levels of state and local government will put pressure on the districts to assume increasing water quantity and water quality management responsibilities.
3. The trend in planning is away from state-level project and comprehensive planning and toward issue analysis and policy planning. Model state-level planning will consist of priority setting, policy and issue analysis, interagency coordination, consistent planning at state, regional and local levels of government, and clarification of planning roles of all levels or units of government.
4. There is a positive climate in Florida for water resources planning. Programs of the water management districts have received consistent support from the legislative and gubernatorial levels of state government, and there is a growing trend of local governments increasing recognition of the role of the water management districts in regional water resource management.
5. The current state-level water resource planning activities will not resolve the major or emerging water resource issues facing the state due to unrealistic deadlines, shallow process design, and failure to include in-depth policy or issue analysis.
6. Florida does not have a viable mechanism for issue analysis, priority setting, or integrated problem solving with regard to water resource management.
7. The State Comprehensive Plan bypassed the principal operational element of water resource planning and management: regional water resource planning and management by the water management districts. The opportunity, authority and flexibility exists for the districts to take an aggressive role in the planning and management of water resources in Florida.

D. Report Recommendations

These overall recommendations focus attention on issues which might be of importance for near-term decision making.

- The water management districts should develop and implement

"Strategic Plans" based on analysis and understanding of priority issues and consistent with each district's fiscal capacity for planning and implementation. The strategic plans should define actions with measurable objectives tailored to address water resource issues in a manner consistent with the State Comprehensive Plan. The strategic plans of each district should be coordinated in order to achieve maximum consistency.

■ The districts should develop a formal mechanism for coordinated issue management in areas such as identifying emerging or changing issues, issue analysis, and development of implementation alternatives.

The staff report concludes by stating that the water management districts, because of the institutional framework in Florida, are uniquely suited to manage water resource issues in keeping with regional/local priority of a particular issue, while at the same time maintaining consistency with state policy.

II. Governor's Water Resource Commission: Final Report (Vols. I and II) (December 1, 1989)

A. Introduction

In April 1989, Governor Bob Martinez signed an executive order creating the Governor's Water Resource Commission and directing it to analyze the state of Florida's water resources. The Commission was asked to "assess the quantity of water available in Florida, its continued viability as a source of drinking water and steps necessary to ensure its continued use by all Floridians." The report was to include an assessment of statutory environmental safeguards and their effectiveness in protecting the state's aquifers.

The Commission was composed of two board members from each water management district, including the chairman of each board. It was staffed by employees of each district and the Department of Environmental Regulation, and received testimony from experts in the field, including

Governor's Water Resource Commission, "Final Report," Tallahassee, Florida (December 1, 1989).

Id. at 1.

administrators, policy analysts and technicians from several agencies.

B. Report Summary

The first volume of the final report includes sections providing a report summary, recommendations, and information on continued viability of water resources, with additional discussion of recommendations. The second volume includes appendices on Florida's surface and ground water resources; future outlook for Florida's water resources and projected needs; statutory authority to protect water resources; and threats to water resources.

C. Report Conclusions

The report notes that although Florida has extensive ground water and surface water resources, surface waters are vulnerable to stormwater runoff from many sources, while ground water, with varying levels of natural protection, is particularly vulnerable to contamination from surface discharges.

Regulation of the quality and quantity of water in Florida is through the Department of Environmental Regulation (now Department of Environmental Protection) and the water management districts. Requirements for land and water use planning at the local, regional and state level are contained in Florida Statutes Chapters 163, 186, 187 and 373. Included in these statutes are the Local Government Comprehensive Planning and Land Development Regulation Act, the State Comprehensive Plan and Regional Policy Plans, and the Water Resources Act. Prevention of pollution discharges, and the cleanup and resoration of water resources damaged by hazardous wstes, petroleum products and other pollutants is addressed by Chapter 376, while Chapter 403 provides authority for the Department of Environmental Regulation to prevent, control and abate pollution of waters of the state.

A primary water use problem in Florida is that population is not distributed in the same areas as the most available fresh water supplies. Much of north Florida is a "water surplus area," while most of the state's population is located in major urban areas such as Miami, Ft. Lauderdale, West Palm Beach, Tampa and St. Petersburg, along the southern coasts. Approximately 80 percent of the population is located in coastal areas, and local fresh water sources may be inadequate to readily meet the competing

needs of agriculture, industry and public supply, leading to demands for advanced treatment technology. An additional problem is the seasonality of rainfall patterns.

Another water resource concern is the lack of a comprehensive, integrated planning process that joins land and water use planning for the entire state. The water management districts and local governments have planning responsibilities that are not coordinated with respect to water resources. There is a critical need for well defined procedures or requirements to coordinate water use planning at all levels of government, and to join this issue to growth management through land use planning.

D. Report Recommendations

The bulk of the report is a series of 18 recommendations with discussion, that address the problems identified by the Commission. These are categorized by topic under: water supply planning, critical water supply problem areas, conservation, and funding. Many of the recommendations reflect an understanding of the general deficiencies of the water management system, and existing policies and rules, while also providing some new approaches. Some of the key recommendations include:

- Integrate water and land use planning at the state, district, regional and local government levels.
- Require water management districts to complete District Water Management Plans, including "needs and sources" assessments by 1994. These should be phased by region and coordinated for consistency between the districts and the Department.
- Require local governments to rely on the water management district's needs and sources assessments to assure water availability prior to land use commitment. Require water use permits to be consistent with the needs and sources assessments.
- In addition to existing regulations, in the designation of critical water supply problem areas, require consideration of: demonstration of long-term environmental degradation due to water resource limitations; or stress on local supplies requiring advanced treatment technologies; or existing or projected need for water importation.
- Set reclaimed water rates and distribute water reclamation costs in a manner to encourage reuse.
- Collect a fee from all users based on water used. Credits shall be given for aquifer recharge, use of reclaimed water, reverse

osmosis, desalination, or other alternative technologies. Accrued funds in a Water Resource Trust Fund shall be used for:

- alternative sources development in critical water supply areas.
- promotion of area-wide water supply authorities and reuse systems.
- resource protection activities, such as wellhead and recharge area protection, with priority given to activities in "donor" water supply areas.
- water quality testing mandated for public water supply systems; infrastructure improvement; incentives for conservation.

III. A Review of Water Management Policy and Planning Activities (November 1993)

A. Introduction

This report, prepared by the staff of the Senate Committee on Natural Resources and Conservation, State Senator Rick Dantzler, Chairman, reviews the activities that the water management districts and the Department of Environmental Protection undertake when developing a policy framework for water management. The report also examines the relationship between the confusing and conflicting statutory and administrative rule provisions which were intended to provide guidance and direction to the state's water resource managers.

The report is divided into five sections: Background, State Water Policy, Water Management District Plans, the State Water Management Plan, and the 1993 Growth Management Legislation.

B. Report Summary

The report reviews and describes aspects of the water policy adopted pursuant to ch. 17-40, F.A.C., and efforts by the five water management districts to develop district water management plans. Previous efforts by water districts to develop the statutorily required water use plan pursuant to s. 373.036, F.S., are discussed, as is the State Comprehensive Plan.

C. Report Conclusions

Since the enactment of the Water Resources Act in 1972, several laws,

Florida Senate Committee on Natural Resources and Conservation,
"A Review of Water Management Policy and Planning Activities,"
Tallahassee, Florida (November 1993).

rules and planning documents have been created to guide water management activities. As of 1993, a multitude of documents addressing water policies and strategies exist, without a clear, universally understood relationship between and among these documents. It is not clear which of these laws, rules or planning documents express the highest level of policy for water management in Florida.

D. Report Recommendations

The staff report recommends legislative action to clarify water policies and incorporate these policies into ch. 373, F.S. It would be desirable to specify in ch. 373, F.S., the requirements for water management districts to develop district water management plans and reconcile the requirements with apparently outdated statutory requirements for a Florida Water Plan and a State Water Use Plan. Staff also recommends that the current water policies in the State Comprehensive Plan in ch. 187, F.S., be replaced and modified to cross-reference the water policies that would now be incorporated into ch. 373, F.S.

IV. Recommendations of the Land Use and Water Planning Task Force:

Final Report (December 1994)

A. Introduction

Florida's comprehensive planning framework calls for planning at all levels of government. Governmental entities ranging from state to regional to local governments are involved in land and water planning. In 1993 the Florida Legislature directed the Governor to appoint a Task Force with local, regional, state and private sector membership to recommend the appropriate relationship between the various land and water plans, including the district water management plans, the growth management portion of the State Comprehensive Plan, the strategic regional policy plans, and local government comprehensive plans. Governor Chiles also asked the Task Force to review the status and purpose, if any, of the State Water Use Plan, the Florida Transportation Plan, and the State Land Development Plan. In 1994, the Legislature asked the Task Force to also

Governor's Task Force on Land Use and Water Planning,
"Recommendations of the Land Use and Water Planning Task Force:
Final Report," Tallahassee, Florida (December 1994).

consider how state water policy should be developed and adopted.

B. Report Summary

The report contains five sections, plus an introduction and an appendix. Three sections discuss planning at the state, regional, and local levels. One section is devoted to water management district assistance to regional planning councils and local governments. The final section discusses the timing aspect of linking all these areas of planning.

The Task Force focused its efforts on several key areas:

1. Strengthening the gathering, interpretation and dissemination of water resources data to all levels of government;
2. Placing emphasis on the use of this data by local governments;
3. Linking the strategic regional policy plans with the district water management plans to ensure that important water resources are appropriately considered at a regional level;
4. Developing better coordination between, and integration of, the statutorily required state-level plans, and between the state-level plans and regional and local plans;
5. Abolishing unneeded layers of plans;
6. Adding procedures for public participation and accountability.

C. Report Recommendations

Each section of the report contains specific and detailed recommendations, with 15 of the 29 recommendations devoted to the state-level planning area. Some of those recommendations include:

- Designating the State Comprehensive Plan as the state planning document for Florida and repealing the requirement for a Growth Management Portion of the State Comprehensive Plan.
- Reviewing the water, land, and transportation plans for consistency and compatibility with the Comprehensive Plan;
- Using the best available data at all levels of government planning.
- Giving the Secretary of the Department of Environmental Protection responsibility for adopting the State Water Policy.
- Having the Florida Land Plan be prepared by the Department of Community Affairs and not include a land use map.

- Having statutorily specified minimum content for the district water management plans.

The report includes charts to help illustrate the relationships between the various plans under the new recommendations.

V. Water Supply Policy Considerations: Interim Project Report (December 1995)

A. Introduction

The Florida House of Representatives established the Select Committee on Water Policy to address water policy issues and to create or amend water policy for the state during the 1994-1996 legislative term. The Committee's interim staff report focuses on water supply issues and the water management system.

C. Report Summary

The report examines the differences between the water management system we have today and the system envisioned by A MODEL WATER CODE, (the Code) under the premise that the Code may be instructive in suggesting solutions to problems we have today. The report is divided into five sections, including:

1. A description of the existing water supply policy framework and identification of serious threats to Florida's water resources and water supplies;
2. An analysis of Florida's water management system from a water supply perspective, comparing today's system to that envisioned by A MODEL WATER CODE;
3. An assessment of the availability of quantitative data on water sources and uses necessary to develop a system of comprehensive water resources planning;

Florida House of Representatives Select Committee on Water Policy Staff, "Water Supply Policy Considerations: Interim Project Report," Tallahassee, Florida (December 1995).

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press (1972).

4. A discussion of the lack of linkages between land and water use planning, including recommendations of the Land Use and Water Planning Task Force (a 21 member task force appointed by Governor Lawton Chiles in the fall of 1993, as recommended by the third Environmental Land Management Study Committee (ELMS)); and
5. Conclusions and recommendations.

C. Report Conclusions

The report concludes that many of the water management problems we have today are a result of incomplete adoption or implementation of A MODEL WATER CODE. For example, the report notes that there is insufficient programmatic supervision of water management districts. However the Code envisioned oversight of water management districts by a single state agency with responsibility for both water quality and quantity, in order to provide accountability for the implementation of state water policy and to ensure consistency in its application statewide.

Another example involves insufficient coordination of water resource planning with decisions regarding water allocations and the development of water supplies. Under the present system, water allocations and development of water supplies do not proceed pursuant to a functional plan that ensures the integrity of the hydrologic system. In contrast, a fundamental premise of the Code is that comprehensive water resource planning occur in order to ensure the long-term availability of water.

Similarly, minimum flows and levels have not been determined for many of Florida's lakes and streams, and thus, many water allocation decisions are made without knowing whether we are significantly harming the resource or ensuring its long-term sustainability. This is contrary to the Code, which viewed minimum flows and levels as essential planning tools which should be incorporated into consumptive use regulatory programs so as to accomplish long-term water supply allocation objectives.

The report also analyzed data and information obtained from the water management districts that form the basis for water supply planning and allocation and other permitting decisions. The report concluded that this data and information was insufficient to provide an overall assessment of the sustainability of water supplies and current patterns of use. Further

the data and information were insufficient to develop comprehensive water supply plans that would ensure the long-term sustainability of the water supply. The report also notes the lack of linkages between land and water use planning.

D. Report Recommendations

Key recommendations of the report include the following:

- Establish planning areas by statute that correspond to areas where demand for water is such that it is in the public interest to allocate water within the area pursuant to a plan.
- Amend statute to eliminate all planning requirements except for the newly-created planning areas and to provide specific accountability for implementation of state policy and oversight authority and responsibility.
- Require the development of a supply plan by the appropriate water management district for each planning area, that makes allocation decisions in the plan and provides for water supply development within the planning area. These water supply plans must be adopted by the Legislature.
- Strengthen statutory language regarding the fundamental principles of Florida's water law:
 - water is a public resource; and
 - minimum flows and levels must be established so that water resources are sustained for future human use.

VI. Bridge over Troubled Water: Recommendations of the Water Management District Review Commission (December 1995)

A. Introduction

In 1994, the Florida Legislature created the 21 member Water Management District Review Commission and directed it to conduct a comprehensive review of Florida's system of regional water management. In response to this charge, the Commission conducted seventeen public hearings to receive public comment regarding the specific programs and operations administered by water management districts. The Commission established

Florida Legislature, Water Management District Review Commission, Bridge Over Troubled Waters: Recommendations of the Water Management District Review Commission, Tallahassee, Florida (December 29, 1995).

subcommittees to conduct detailed reviews of topics described in the enabling legislation, including financial structure and budgeting, district responsibilities and operations, and land acquisition, planning, and management. The Commission reported its recommendations to the Governor and the Legislature in 1995. The recommendations are based on testimony from the general public, written comments from the public, water management districts and other agencies, and the expertise of the Commission members.

B. Report Summary

The Commission report contains 80 specific recommendations relating to Florida's water management system, but deliberately omits any discussion of the history of state water resource regulation, descriptions of the various proposals discussed, and recommendations of Commission members' reasoning, in order to "facilitate efficient review." The recommendations are divided into the following categories:

1. Recommendations regarding district governance, oversight, financial structure, and budgeting;
2. Recommendations regarding district responsibilities and operations, including balancing and prioritization; and
3. Recommendations regarding district land acquisition, planning, and management.

C. Report Conclusions

Although the report is comprised primarily of specific recommendations, the following general conclusions are included:

1. The Legislature's authority to adjust districts' statutory millage caps remains an effective check on *ad valorem* taxation for water management purposes.
2. Districts' accountability could be strengthened through enhanced oversight by both executive and legislative representatives.
3. Although directed by the Legislature to perform additional tasks, the districts have not always been separately funded by that body to accomplish the extra assignments, and district governing boards have, of necessity, made the difficult decisions to split the local-revenue pie in response to Legislators' directives.
4. District governing boards are best situated to handle an area's water management issues and problems.

5. There is a lack of coordination and integration of the various land acquisition programs within the state.
6. There is a need for implementation of alternative resource protection methods, such as less-than-fee acquisition, conservation easements or public-private partnerships to enhance land acquisition programs.

D. Report Recommendations

As noted above, the Commission's report contains 80 specific recommendations relating to district governance, oversight, financial structure, and budgeting; district responsibilities and operations, including balancing and prioritization; and district land acquisition, planning, and management. While it is beyond the scope of this report to examine each of these, a sampling of the recommendations follows.

With respect to district governance, oversight, and financial structure, the Commission recommended the following:

- The annual budgets of districts be approved or rejected by the governor.
- Establishment of standing legislative committees on water resources as additional checks and balances on district operations and budgeting processes.
- Legislative adoption of the state's water policy and plan.
- State funding of legislatively mandated programs that are implemented by districts.
- Equalization of constitutional millage caps among all water management districts.

With respect to district responsibilities and operations, the Commission made recommendations to address statewide water concerns, including the following:

- Facilitate district-public interaction and understanding.
- Streamline permitting through the use of district ombudsmen and consistent rules.
- Extend permit duration by encouraging water conservation and the use of alternative sources.

- Amend Section 373.042, F.S., to require establishment of priority water bodies and to define the term "significant harm." Also, require impartial scientific peer review of district rules, establishment of minimum flows and levels, concepts, plans, and other district documents.
- Fund an aggressive war on invasive exotic plant species.
- Provide an opportunity for mediation prior to formal administrative proceedings under Chapter 120, F.S.

Commission recommendations pertaining to land acquisition, planning, and management endorsed the following:

- Less-than-fee acquisitions.
- Inventory of public lands.
- Private management of public lands.
- Creation of mitigation banks.
- Development of a conceptual management plan prior to acquisition of lands.
- Development of a final management plan after acquisition.
- Conduct a cost/benefit analysis comparing the costs of conservation programs with the costs and benefits of development.

CURRENT LEGAL AND POLICY ISSUES

I. Protection of Water for Environmental Needs

One of the most important general issues in Florida water policy concerns the relationship between human consumptive uses of fresh water for agriculture, industry and development, and ecosystem needs for adequate quantities and qualities of water at the proper times. Though Florida is a water-rich state, with many types of ecosystems and species which have evolved in response to fresh water, population pressures, particularly in coastal areas, and increasing agricultural and industrial demands are beginning to call into question the long-term sustainability of current water management practices. In significant parts of the state, over-permitting of water for consumptive uses has resulted in severe damage to several types of ecosystems, including inland wetlands and coastal estuaries. The importance of human uses of water for domestic and commercial purposes, and the state's population growth require that adequate sources of fresh water be made available. Though the most apparent threats are to the property values of waterfront landowners and to agricultural needs for surface and ground water, there is also concern that tourism, a large sector of the state's economy will be damaged if environmental quality is not carefully considered by state water policies.

A. Establishing Minimum Flows and Levels

Florida's water management districts are responsible for implementing several legislatively mandated programs which require plans, rules and regulations for establishing the proper relationship between human and environmental uses of fresh water, and for preventing uses which damage water resources or aquatic ecosystems. One of the most important planning requirements is for the establishment of "minimum flows and levels" (MFLs).

Florida's Water Resources Act requires that the districts establish MFLs for surface waters, watercourses and groundwaters. The provision was

FLA. STAT. § 373.042 (1995). See also, *Concerned Citizens of Putnam County for Responsive Government v. St. Johns River Water Management District*, 622 So.2d 520 (Fla. 5th DCA 1993) (water management districts are required, not merely authorized, to establish minimum flows and levels).

enacted in 1972, and to the present, only a moderate number of MFLs have been established. Within each section, or within each water management district as a whole, the Department of Environmental Protection (DEP) or the water management district governing board must establish "minimum flows" for all surface watercourses, defined as "the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area."

"Minimum levels" for surface waters and for aquifers must also be established, and are defined as "the limit at which further withdrawals would be significantly harmful to the water resources of the area." The protection of nonconsumptive uses must be considered, and may be provided for, in the establishment of minimum flows and levels. Such nonconsumptive uses include: navigation, boating, fishing, swimming, and aesthetics. Several issues have become important in determining how these provisions of the Water Resources Act are to be interpreted and implemented.

1. Waters Which are Subject to MFLs

The Act requires MFLs to be established for all watercourses, waterbodies and aquifers. The State Water Policy rule requires the districts to have submitted to the Secretary of DEP by January 1, 1995 the dates on which MFLs would be established for surface waterbodies, with priority given to Outstanding Florida Waters, Aquatic Preserves, Areas of Critical State Concern and areas subject to Resource Management Plans under Chapter 380, F.S., when the plans identify waters that need additional protection. Though on its face, this provision implies that all waters

Section 373.036(6), F.S., which describes the State Water Use Plan, provides a likely definition of "section": "For the purposes of this plan the department may, in consultation with the affected governing board, divide each water management district into sections which shall conform as nearly as practicable to hydrologically controllable areas and describe all water resources within each area."

FLA. STAT. § 373.042 (1995).

Id.

FLA. ADMIN. CODE r. 62-40.473 (1996).

will eventually have MFLs, the requirement has not been universally observed.

If "water resources" are recognized as including interconnected series of watercourses, wetlands, lakes and aquifers, as is true in many parts of the state, the primary question is how to define a discrete surface watercourse, or wetland or aquifer for the purposes of setting a level. One issue in this regard is whether, instead of setting MFLs for every water in a district, it is sufficient for districts to set MFLs for certain waters which are spaced, so as to provide effective coverage to other waters in the area.

During the 1996 legislative session, amendments to Section 373.042, F. S. required the Southwest Florida Water Management District to submit a priority list for the establishment of minimum flows and levels and delineating the order in which the governing board will establish the MFLs for surface watercourses, aquifers and surface water in Hillsborough, Pasco, and Pinellas counties. The district has met this requirement, but it is not clear whether other districts will now be subject to a similar prioritization process. The policy issues concern what criteria a prioritization strategy should use, and whether it is sufficient to set MFLs for representative waters which have the effect of protecting associated waters.

2. "Best Information Available"

A second issue raised in reference to MFLs is the requirement that "best information available" be used in establishing such flows and levels. The water management districts have noted that "best information available" is not defined by the legislation or by regulation, and is technically difficult to develop when considering all ecologically related functions of a minimum flow or level. Additionally, if the establishment of an MFL could have regulatory impacts on existing water rights, there are potential legal ramifications associated with the scientific basis for the MFL. As a result, one perspective is that "best information available"

CS/CS/HB 2385, CS/HB 2399 (1996).

FLA. STAT. § 373.042 (1995).

requires that extensive research programs must be completed before flows and levels can be established which will withstand all scientific and legal challenges. In some cases, the cost and time associated with this approach have been cited as a justification for the slow progress in establishing MFLs.

Another perspective on the issue notes that provisions of the Water Resources Act make clear that the various planning initiatives called for in the Act are to follow an iterative process which allows for future amendments and supplements, as additional data are acquired. In this context, "best information available" might be construed as "best information reasonably available," and it would suffice to adopt a reasonably rigorous approach which allows for the expeditious establishment of flows and levels. As with other planning initiatives, these could be updated as additional information became available. The related public policy issue is how quickly MFLs *should* be established, given their importance in establishing a baseline for understanding the needs of natural systems, and in providing standards for management and regulatory decisions.

3. "Significant Harm"

The legislative provision regarding MFLs defines "minimum flows" for surface watercourses as "the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area." "Minimum levels" for other types of surface waters and for aquifers are defined as "the limit at which further withdrawals would be significantly harmful to the water resources of the area."

The term "significantly harmful" is not defined by legislation or by rule, though Florida's Water Policy Rule lists several factors to be considered in establishing MFLs. The policy issue is how the phrase should

FLA. STAT. § 373.042 (1995).

Id.

These include: (a) recreation in and on the water, (b) fish and wildlife habitats and the passage of fish, (c) estuarine resources, (d) transfer of detrital material, (e) maintenance of freshwater storage and supply, (f) aesthetic and scenic

be interpreted, since this will have repercussions on the relative amounts of water which may be taken from a system for consumptive uses, and how much must be left within that system to protect its functioning as an ecosystem. One perspective is that there is a relatively self-apparent meaning to what is meant by the phrase in different circumstances, such that for instance, loss of a certain meaningful percentage of littoral zone in lakes or salt water intrusion occurring at certain rates can be designated as representing significant harm.

Another perspective is that DEP should adopt a rule which establishes criteria and priorities to be used by the water management districts in determining significant harm, or that the water management districts themselves should go through the process in order to address regional variations in ecosystems. This highlights the related issue of whether or to what extent there is a need for consistency between the districts in defining "significant harm."

a. Science-based or Policy-based

An additional issue is whether "significant harm" should involve a strictly scientific analysis of ecological and biological responses to variations in fresh water levels and flows, or whether the term is inherently value-laden, requiring policy direction from the water management district governing boards. One perspective is that if the intent of the MFL provision is to define a measure of ecosystem sustainability, there should be no political influence in the process of determining what constitutes significant harm.

A contrary perspective is that the inclusion of the adjective "significant" requires a public policy determination that necessarily involves direction by district governing boards, composed of lay members who represent the public. To date, in districts where water resources and ecosystems have not been as severely impacted by human withdrawals, district scientific staffs have tended to have greater autonomy in determining significant harm, while in those districts with greater

attributes, (g) filtration and absorption of nutrients and other pollutants, (h) sediment loads, (i) water quality, and (j) navigation. FLA. ADMIN. CODE r. 62-40.473(1) (February 1996).

existing impacts, the process of setting MFLs appears to have had more involvement by governing boards.

b. Existing Uses

This issue involves the question of how to address existing uses of water in determining the minimum flow or level for a waterbody. During the process of establishing MFLs, should the effects of permitted consumptive uses be considered in evaluating "significant harm"? In one approach, existing uses currently impinging on a watercourse or waterbody would be given equal consideration to environmental values and purely scientific concerns as factors to be considered in determining significant harm.

The concern with this approach is that when placed into a balancing test with ecological values, permitted existing uses of a waterbody or watercourse would tend to carry more weight in the setting of the MFLs. "Significant harm," according to this view, is not subject to a balancing test, and if established using such a test, the basic value of MFLs, setting standards for the long-term ecological sustainability of water resources would be lost. One approach associated with this position is that best available scientific information should be used to establish MFLs, and where necessary, appropriate policy responses can be made to move toward restoration. The opposing perspective is that existing permitted uses must necessarily be considered when determining MFLs, since by going through the permitting process, existing uses have been determined to be in the public interest. The issue in this regard would be whether regulatory decisions such as permitting take legal precedence over policy and planning determinations such as MFLs.

Some commentators have noted that to date, very few MFLs have incorporated the impacts of existing uses, and that the problem may be a relatively specialized one which might be addressed by amendments to the legislation. One possibility is to have MFLs in impacted areas established on a strictly scientific basis, then, for cases in which an existing use would be affected by that MFL, establish a separate process by which the affected user could appeal to the Florida Land and Water Adjudicatory Commission. Policy issues concerning whether the use should then be continued, curtailed or adjusted could be discussed in a forum appropriate

to those issues.

A related legal issue is the degree to which the Water Resources Act requires that existing rights to water be protected in the promulgation of MFLs. Subsection 373.171(2), F.S. requires that in promulgating rules and regulations and issuing orders, the governing boards must "act with a view to full protection of existing rights to water in this state insofar as is consistent with the purpose of this law." Subsection 373.171(3), F.S. clarifies this provision by stating that rules, regulations and orders requiring modification of an existing use or disposition of water will be allowed if it is shown that the use or disposition proposed for modification is detrimental to other water users or to the water resources of the state.

One perspective is that establishing MFLs to assist in determining needs for the long-term sustainability of the resource may not necessarily affect existing rights to water, and should not trigger the provisions of subsection 373.171(2), F.S. After MFL establishment, water management district efforts to modify existing consumptive use permits which violated an MFL might be held to invoke subsection 373.171(2), F.S., since this would necessitate the issuance of an order modifying the permit. However, it has been argued that subsection 373.171(3), F.S. could justify such a modification, since a governing board could find that an existing use which conflicted with an MFL was detrimental to the water resources of the state.

An associated issue concerns the proper interpretation of the phrases in subsection 373.171(2), F.S., which state that boards must act "with a view" to protection of existing water rights "consistent with the purposes of this law," when one of the primary purposes of the Act is maintaining the long-term sustainability of the state's water resources.

4. Scientific Peer Review

In most cases, determining minimum flows and levels requires complex scientific and technical analyses. A current policy issue in this area is

FLA. STAT. § 373.171(2) (1995).

FLA. STAT. § 373.171(3) (1995).

FLA. STAT. § 373.171(2) (1995).

whether the water management districts should be subject to scientific peer review relative to the establishment of MFLs. The related legal issue concerns the status of the doctrine of deference to agency science, which has been closely observed in the establishment of coastal construction control lines and in the planning processes required under the Surface Water Improvement and Management Act (SWIM). One view is that district scientists are at least as capable as scientists in other agencies to whom the deference doctrine is applied, and that in any case, the composition and decisionmaking of independent review panels are prone to political manipulation. Other commentators have indicated that the review process can assure scientific accuracy and representation of all viewpoints.

Recent legislation requires the Southwest Florida Water Management District to prioritize water bodies in Hillsborough, Pasco and Pinellas counties for establishment of minimum flows and levels. If there is a factual dispute regarding the minimum flows and levels, a request may be made by a substantially affected person for the determination to be subjected to independent scientific peer review, using a panel which should be selected within 60 days. Costs must be born equally by all involved parties, and a report must be submitted within 120 days after selection. The report is not binding, but the governing board must give it "significant weight."

An implied issue is whether these requirements should be extended to the other water management districts. If such peer review panels are adopted, additional issues include: (1) How should the panels be structured? (2) Who should be included in the panels, and how should they be chosen? (3) Should criteria be established to guide panels in the decisionmaking process?

5. Proper Timeframe

Another issue related to the establishment of MFLs concerns the proper point in time to be used in establishing the environmental standard

FLA. STAT. § 161.053 (1995).

FLA. STAT. §§ 373.451-.459 (1995).

CS/CS/HB 2385, CS/HB 2399 (1996).

against which "significant harm" should be measured. The volume and timing of fresh water flows to many estuaries and wetlands are significantly altered from conditions existing before extensive human water withdrawals began. Minimum flows and levels necessary to maintain ecosystem functions measured as of the late 1800s would be very different from those necessary to maintain ecosystem functions as measured at the present time.

The Water Resources Act, including the provision requiring the establishment of minimum flows and levels, was adopted in 1972. Though the MFL provisions of the Act do not include deadlines for establishment of MFLs, one perspective is that the proper timeframe should relate to conditions as of 1976. Absent specific deadlines, legislative mandates are normally construed as requiring implementation within a reasonable period of time after passage of the legislation. The water management districts were established the year after the adoption of the Act, and according to this view, a reasonable time period for setting MFLs subsequent to the establishment of the districts would have been 1976.

A second perspective is that MFLs should be based on the present state of ecosystem functioning, with some provision made for restoring functions in the most severely impacted systems. A concern associated with this approach is that present conditions may not in fact represent the standard required in the MFL provision of the Water Resources Act, since present conditions have crossed the threshold of "significant harm" for many ecosystems. The opposing response is that regardless of the status of water-based ecosystems relative to earlier conditions, equitable considerations require that current conditions as affected by existing legal uses must be the general standard.

6. Administrative Process for Establishing MFLs

An important issue in establishing MFLs is the administrative process by which they should be incorporated into the water management structure. The Water Resources Act does not indicate how MFLs are to be established. In some cases, MFLs have gone through the formal rulemaking process and been subject to public review and comment. Though larger areas should be addressed using this approach, thus providing a broader perspective on

environmental water needs in the district, a concern raised is that in regions of the state where water supply problems are critical, the process may be subject to extreme political pressure.

In other cases, MFLs have been incorporated into consumptive use permits as administrative orders. Essentially, within the influence of the withdrawal, a criterion designed to protect the water resources and ecosystems from significant harm is incorporated into the permit as a condition. Though this approach can be characterized as actually linking an MFL with a condition in a consumptive use permit, another perspective is that it fails to provide the broader perspective anticipated in the MFL provision of the Water Resources Act and tends to circumvent the public review process found in rulemaking. In another approach, MFLs have been established by district staff with essentially no public review or comment, then "accepted" by the governing board. There are additional questions concerning the status and role of these types of MFLs.

7. Establishing MFLs for Outstanding Florida Waters

This issue concerns how the MFL "significant harm" standard should be interpreted and applied in setting an MFL for an "Outstanding Florida Water" (OFW). Outstanding Florida Waters are a special category of waters which reflect higher standards for water quality, biological values and aesthetic significance. Unless otherwise named as Outstanding National Resource Waters, OFWs generally include: waters in national parks, preserves, memorials, wildlife refuges and wilderness areas; waters in the state park system and wilderness areas; waters within properties acquired by the state under several types of land acquisition programs; rivers designated as Wild and Scenic Rivers; waters within national seashores, marine sanctuaries, and estuarine research reserves; waters in Florida Aquatic Preserves (Ch. 258, F. S.); waters within the Big Cypress National Preserve; certain waters within national forests; and categories of OFWs designated as Special Waters under rule 62-302.700(9), F. A. C.

FLA. ADMIN. CODE r. 62-302.700 (March 1995).

Id.

In addition to other criteria, permits for activities which will significantly degrade an OFW must not merely be consistent with the public interest, but must be "clearly in the public interest," and otherwise must not lower the existing ambient water quality of the OFW. Consumptive use withdrawals from surface waterbodies in or affecting an OFW may also be required to comply with water quality standards applicable to OFWs.

The relationship between the MFL "significant harm" standard and other standards applicable to OFWs has not been defined. The essential issue is whether an evaluation of "significant harm" which establishes an MFL at a flow rate allowing detrimental shifts in salinity gradients to occur in the OFW, or otherwise increasing ratios of pollutants, is consistent with the purposes and higher standards for OFWs.

B. Relationship of Minimum Flows and Levels to Management of the Water Resource

Water resource management responsibilities include data acquisition, planning, monitoring, regulation, permitting and enforcement. A MODEL WATER CODE (the Code), on which much of the Water Resources Act is based, presented an integrated and comprehensive approach to water management, including a clear role for minimum flows and levels. However, the Water Resources Act, and its subsequent amendments, did not adopt the structure of the Code in all respects, and the role of MFLs in several parts of that structure is not clear.

1. General Water Resource Planning and MFLs

The policy issue recently posed concerns what role MFLs should play in the planning process, and whether they should be more closely tied to other required water resource planning efforts. In the original water

FLA. ADMIN. CODE r. 62-4.242(2)(a)2. (February 1995). "Existing ambient water quality" represents the better water quality, based on best available scientific information, of either (1) that which would reasonably be expected for the baseline year of an OFW designation, or (2) that which existed the year prior to the date of the application. FLA. ADMIN. CODE r. 62-4.242(2)(c) (February 1995).

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Presses, Gainesville, Florida (1972).

management structure put forth by A MODEL WATER CODE (the Code), minimum flows and levels were to be included as part of the State Water Use Plan, which was itself included as part of the State Water Plan. The regulatory and permitting criteria of the Code were then closely tied to the policies, goals and objectives of the State Water Plan.

The original enactment of the Water Resources Act included a requirement that minimum flows and levels be included in the State Water Use Plan, which was to be incorporated as part of a State Water Plan. However the year after its adoption, amendments to the Act took that requirement out of the State Water Use Plan and transferred it to a separate and unconnected statutory provision, thus confusing the role of MFLs in the planning process.

As a result of this alteration of the original relationship between MFLs, water resource planning and regulation, the role and status of MFLs in the planning process have never been clearly established in the Water Resources Act. The confusion is also exacerbated by the fact that the overall water planning scheme envisioned by the Water Resources Act has been delayed and subjected to various pressures, resulting in the recent adoption of a State Water Plan ("Florida Water Plan 1995"), which does not specifically incorporate a State Water Use Plan.

2. Water Shortage Planning Process and MFLs

A second issue under this topic concerns what role MFLs should have in the water shortage planning process. One problem is that the Act authorizes the water management districts to declare that a "water shortage exists within all or part of the district when insufficient ground or surface water is available to meet the needs of the users or when conditions are such as to require temporary reduction in total use within

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, §§1.07, 1.08, University of Florida Presses, Gainesville, Florida (1972).

Section 6, Chapter 72-299, Laws of Florida.

See, FLA. STAT. § 373.036 (1995).

FLA. STAT. § 373.042 (1995).

the area to *protect water resources from serious harm* " The Act also authorizes the DEP or the districts to "declare that a water shortage exists for a source or sources within all or part of the district when insufficient water is or will be available to meet the present and anticipated requirements of the users or when conditions are such as to require temporary reduction in total use within the area to *protect water resources from serious harm* " However, the Act does not specify how the emphasized phrases should be defined.

Though they bear a similarity to the "significant harm" standard to be used in establishing MFLs, the phrases do not include a reference to ecological criteria. Thus, the issue involves the relationship between the "serious harm" standard applicable to determining water shortages, and the "significant harm" standard applicable to MFLs, as well as the relative amounts of damage to the resource represented by each. One perspective is that the phrases have essentially the same meaning. Since water shortage provisions are meant to help meet user demand while protecting water sources during extraordinary circumstances, they must incorporate an MFL standard or one which is essentially the same.

Pursuant to its general supervisory authority under the Act, the DEP has adopted a State Water Policy rule which provides guidance to the districts in implementing relevant provisions of the Act. The rule requires established minimum flows and levels to be protected when districts declare water shortages pursuant to sections 373.175 or 373.246, F.S., but it is not clear how the requirements have been addressed. Additional research may be necessary to determine how the water management districts are interpreting and implementing these rule provisions.

3. Consumptive Use Permitting Process and MFLs

Part II of the Water Resources Act authorizes the water management

FLA. STAT. § 373.175(1) (1995) (emphasis added).

¹FLA. STAT. § 373.246(2) (1995) (emphasis added).

FLA. ADMIN. CODE r. 62-40 (February 1996).

FLA. ADMIN. CODE r. 62-40.473(2)(c) (February 1996).

districts to regulate use of water through the issuance of consumptive use permits (CUPs). The MFL provisions of the Act require that minimum flows represent "the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area," and that minimum levels represent "the limit at which further withdrawals would be significantly harmful to the water resources of the area." Though the language suggests a relationship between MFLs and consumptive uses ("further withdrawals"), it does not clearly specify the role which MFLs should have in managing the water resource through consumptive use permitting.

As originally conceived under A MODEL WATER CODE, minimum flows and levels were to be protected in the permitting process. Such flows and levels were to be included as part of the State Water Use Plan, and in addition to meeting other criteria, a consumptive use permit was required to be consistent with the public interest and the State Water Plan, which included the State Water Use Plan.

This approach was not taken in the Water Resources Act. The Act only requires that, in addition to other criteria, water use permits be consistent with the public interest, not the State Water Plan, thus removing any potential linkage between MFLs and permitting. Even if permitting criteria included the State Water Plan, the Act would not link consideration of MFLs to permitting. The original enactment included a requirement that minimum flows and levels be included in the State Water Use Plan, however the year after its adoption, amendments to the Act

FLA. STAT. Chapter 373, Part II (1995).

FLA. STAT. § 373.042(1) (1995).

FLA. STAT. § 373.042(2) (1995).

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press (1972).

Id., §§1.07, 1.08, 2.02.

FLA. STAT. § 373.223 (1995).

Section 6, Chapter 72-299, Laws of Florida.

removed MFL provisions from the State Water Use Plan and transferred them to a separate and unrelated provision.

a. Role of MFLs in Consumptive Use Permitting

The primary issue under this topic is what role MFLs should have in the permitting process. One perspective is that they are defined to represent "the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area," and thus, should be considered inviolate in consumptive use permitting. Another perspective is that as planning standards, they should represent guidelines for permitting. Information in MFLs related to avoiding significant harm is relevant to whether an applicant meets the "reasonable-beneficial use" test and the public interest test. Technical realities in setting MFLs also introduce complexity into permitting, since for surface water systems, they normally involve a range of levels which include a frequency and duration.

However, the State Water Policy rule requires established MFLs to be protected "where relevant to" the issuance of consumptive use permits pursuant to Part II of the Water Resources Act. As with water shortage planning requirements, the interpretation and implementation of these provisions varies, and additional research is necessary to determine how they are addressed by the water management districts.

b. Mitigation for Consumptive Uses Violating MFLs

If MFLs are to be considered during the permitting of consumptive uses, an additional issue is whether a use which results in the violation of an MFL should be permitted in return for mitigative activity by the applicant. This issue is a more specific version of the question of

See, FLA. STAT. § 373.036 (1995).

FLA. STAT. § 373.042 (1995).

FLA. STAT. § 373.042(1) (1995).

FLA. ADMIN. CODE r. 62-40.473(2)(b) (February 1996). See also, *Concerned Citizens of Putnam County for Responsive Government v. St. Johns River Water Management District*, 622 So.2d 520 (Fla. 5th DCA 1993).

whether mitigation can or should be allowed for consumptive uses which violate other types of environmental criteria. Consumptive use permitting criteria used by the water management districts make various references to environmental harm which must be avoided, and consideration is being given to whether the Water Resources Act allows such permits to be issued if mitigative activity can reduce environmental impacts to acceptable levels.

To some extent, this is based on comparisons between the part of the Act regulating impacts to wetlands, which allows such mitigation, and the part which regulates consumptive uses, which does not make specific reference to mitigation.

Minimum flows and levels provisions in the Water Resources Act are placed in Part I, which includes planning requirements, and MFLs are not specifically linked to the permitting provisions in Part II of the Act. As previously mentioned, the State Water Policy rule does require established MFLs to be protected "where relevant to" the issuance of consumptive use permits pursuant to Part II of the Act, but no reference is made to mitigation for consumptive use impacts to other types of environmental values or to MFLs.

C. Consumptive Use Permitting Issues

1. Duration of Permits

The Water Resources Act authorizes the issuance of consumptive use permits with up to 20-year durations. The water management districts have the flexibility to issue permits of shorter duration as necessary, on a

See *infra*, footnotes 85-88, and accompanying text.

FLA. STAT. Ch. 373, Part IV (1995).

FLA. STAT. Ch. 373, Part II (1995).

FLA. ADMIN. CODE r. 62-40.473(2)(b) (February 1996).

FLA. STAT. § 373.236 (1995). Durations may be as high as 50 years for governmental or public service entities where necessary to provide for the retirement of bonds for the construction of waterworks and waste disposal facilities. *Id.*

case by case basis. Generally, the districts have limited CUP permits to 10 years or less, based on uncertainties in scientific understanding of the extent of the resource, the potential effects of longer permits on the sustainability of the resource, and the unpredictability of water demand from developing areas.

One of the features of the regulatory structure established by the Water Resources Act was an attempt to increase the security and predictability of expectations by providing that existing legal consumptive uses would be protected in the permitting process. However, at the time of a permit renewal, if more than one applicant is competing for a source of water that is inadequate for all requested withdrawals, the Act allows district governing boards to modify the amounts of water originally allocated to permitted uses, or to permit another application over an existing permit.

A concern being raised is that limiting the duration of permits can have the effect of making holders of existing short-term permits vulnerable to reduction in withdrawal allocations or to loss of permitted uses at the time of renewal, often after large financial investment. A potential response is to increase permit durations to twenty years for most types of withdrawals, and include monitoring "triggers" to allow permit modification for unanticipated impacts. Longer durations could provide more security for economic investment and business decisions, and ease the process of securing loans to finance capital investment. However, long term permits tend to limit the opportunities the districts might have to address changes in the regulatory and technical landscape during the permit renewal

See, eg., FLA. ADMIN. CODE rules 40E-2.321 (December 1995), 40D-2.321 (May 1994), 40C-2.321 (May 1996), 40B-2.381 (February 1995), 40A-2.321 (October 1995).

To obtain a permit under Chapter 373, F.S., an applicant must demonstrate that the proposed use: (a) is a reasonable-beneficial use, (b) will not interfere with any presently existing legal use of water and (c) is consistent with the public interest. FLA. STAT. § 373.223 (1995).

FLA. STAT. § 373.233 (1995).

process. It is also more difficult to redistribute water to more beneficial and efficient uses with shorter renewal permits.

The general issues include: how to balance needs for secure water rights with needs for long-term sustainability of the resource; whether current scientific knowledge can sufficiently characterize source amounts to allow twenty-year permits on a sustainable basis; and whether it is good policy to grant extended permits in a growth state, with unforeseen new needs and potentially increased efficiencies, given the "senior" status that existing uses might have, even if considered less efficient.

Specific questions include: (1) Would this approach tend to create permits of potentially indefinite duration, that would never be subject to competition and that could only be revoked or reduced if the district proves the permit had become detrimental to the state's water resources? (2) Would long term permits essentially eliminate the possibility of employing reservations from use as a tool in cases where restoration is necessary to meet MFL standards? (3) Would new users with more beneficial or efficient uses of water find it significantly more difficult to get a permit if existing users are not subject to competition? (4) If improvements in technology occur, could the district require existing holders of long-term permits to implement them before the permit expires?

2. Mitigation for Consumptive Use Impacts

Another important issue is whether consumptive use permits should be granted which negatively impact ecosystems or the water resource, in exchange for compensatory mitigation by the permittee. An increasing problem in certain parts of the state is that consumptive use withdrawals have impacted wetlands and other ecosystems which depend on adequate amounts of fresh water. Currently, to obtain a permit, applicants must demonstrate that the proposed consumptive use: (a) is a reasonable-beneficial use, (b) will not interfere with any presently existing legal use of water and (c) is consistent with the public interest. One perspective is that if an applicant can meet the first two criteria, the issue is whether mitigation for the impacts of the consumptive use falls

FLA. STAT. § 373.223 (1995).

within the public interest. The countervailing perspective is that the reasonable-beneficial use test also has a public interest component, and in any case, the Act does not authorize the issuance of permits that result in harm to the resource. It is arguable that a consumptive use which requires mitigation in order to be approved does not fall within the requirements for permit approval under Part II of the Act.

Generally, mitigation for impacts to wetlands as a result of dredge and fill permitting has been used in Florida since the 1970s. Section 373.4135, F.S. specifically allows adverse impacts to wetlands under Part IV of the Water Resources Act (dredge and fill, and management and storage of surface waters permitting) to be offset by the creation and maintenance of mitigation banks. There are no similar provisions applying to Part II of the Act, which addresses consumptive use permitting, though one perspective is that section 373.4135, F.S. is analogous to the consumptive use provision in Part II which allows the districts to impose permit conditions to assure that consumptive uses are "not harmful to the water resources of the area."

A contrasting perspective is that in addition to a lack of express authority in the statute to consider consumptive use mitigation, there may be fundamental differences in the scope of impacts to the water resource caused by filling wetlands or diverting surface water and those impacts caused by withdrawing the amounts of groundwater sufficient to alter surface ecosystems. This position also notes the inconsistent record of attempts to mitigate for destruction of wetlands during the dredge and fill permitting process.

State Water Policy (Rule 62-40.410(6), F.A.C.), states that "(p)ermits authorizing consumptive uses of water which cause unanticipated significant adverse impacts on off-site land uses existing at the time of permit application, or on legal uses of water existing at the time of permit application, should be considered for modification, to curtail or abate the adverse impacts, unless the impacts can be mitigated by the

FLA. STAT. § 373.4135 (1995).

FLA. STAT. § 373.219(1) (1995).

permittee." An argument can be made that mitigation for consumptive use impacts is consistent with this provision, though it is not clear that the language refers to ecosystems so much as to existing "land uses" and "legal uses of water," such as agricultural or utility withdrawals. An additional issue is whether the rule itself reflects a legally acceptable interpretation of delegated authority under the Act.

If the legal authority for instituting a CUP mitigation program is recognized, there are additional issues concerning under what circumstances a water user would be allowed to cause adverse environmental impacts in exchange for mitigation. Among these questions are: (1) How can the extent of adverse impacts from a specific water use be accurately predicted in order to determine the mitigation ratio? (2) How can water use impacts be distinguished from adverse impacts from drainage or other changes due to land use? (3) To what extent should a water user be required to first avoid and minimize environmental impacts before being allowed mitigation? (4) Should the mitigation program prohibit wetland impacts on lands not owned by the water use permittee? (5) What property rights does a wetland landowner have to prevent impacts to the wetland caused by off-site consumptive uses? (6) Should there be a limit on the size of a wetland that can be impacted or should this be a case-by-case determination?

D. Role of Public Trust Doctrine

Under traditional interpretations of the public trust doctrine, the title to land underlying tidal waters and navigable freshwaters is held in trust by the sovereign, for the benefit of the public. The common law of England, including the public trust doctrine, was transposed to America during colonial times, and was eventually adopted into the law of the thirteen original states. Under the equal footing doctrine, states which came into the Union after the original thirteen also took title to navigable waters for public trust purposes, on an "equal footing" with the original states.

FLA. ADMIN. CODE r. 62-40.410(6) (July 1995).

Martin v. Waddell, 41 U.S. 367, 410 (1842); Shively v. Bowlby, 152 U.S. 1 (1894); Broward v. Mabry, 50 So. 826 (Fla. 1909); State v. Gerbing, 47 So. 353, 355 (Fla. 1908).

Historically, in addition to basic restrictions on alienation of trust lands, the core purposes of the public trust have included protection of commerce, navigation and fishing, though in many cases the doctrine has been invoked to protect other types of uses associated with such waters and lands, such as boating, swimming, bathing, hunting and recreational use. There is growing recognition that the public trust doctrine is properly applicable to other contemporary values, including the protection of water for environmental purposes.

As defined by the Supreme Court of California in *National Audubon Society v. Superior Court*,

"[T]he public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is

E.g., *Lamprey v. Metcalf*, 52 Minn. 181, 53 N.W. 1139 (1893) (public trust doctrine protects sailing, rowing, fowling, bathing, skating, and domestic, agricultural, and city water needs).

See, eg. *District of Columbia v. Air Florida, Inc.*, 750 F.2d 1077 (D.C. Cir. 1984). ("Recently, courts and commentators have found in the [public trust] doctrine a dynamic common-law principle flexible enough to meet diverse modern needs. The doctrine has been expanded to protect additional water-related uses such as swimming and similar recreation, aesthetic enjoyment of rivers and lakes, and preservation of flora and fauna indigenous to public trust lands. It has evolved from a primarily negative restraint on states' ability to alienate trust lands into a source of positive state duties.") *Id.* at 1083.

National Audubon Society v. Superior Court, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, *cert. denied*, 464 U.S. 977 (1983), also known as the Mono Lake case. (California Supreme Court recognized that the public trust doctrine applies to the protection of entire ecosystems, and that the doctrine can be used to prohibit diversions of fresh water from natural systems which depend on that water to maintain ecological health.)

Id.

consistent with the purposes of the trust."

The issues under this topic are how the public trust doctrine should be interpreted in Florida, and whether the planning and permitting requirements of the Water Resources Act incorporate the affirmative duties found by the court in *National Audubon Society*. Most public trust cases in Florida have addressed questions involving the validity of legislative grants of sovereign lands and the boundaries of sovereign lands. Among the specific public trust interests also recognized by Florida courts are navigation, commerce, fishing and bathing.

However, as noted by the Florida Supreme Court in *Ex parte Powell*, waters overlying sovereignty lands are subject to appropriate regulations in order to maintain the benefits they provide to the public. Florida's Water Resources Act preempted the common law for allocating water, and in its place substituted a comprehensive administrative system for creating and apportioning water rights. All water in Florida is now subject to regulation, whether diffused or defined, on the surface or below the

Id. at 723-724.

See, e.g., *Deering v. Martin*, 116 So. 54 (Fla. 1928); *State ex rel. Buford v. Tampa*, 102 So. 336 (Fla. 1924); *Apalachicola Land & Development Co. v. McRae*, 90 So. 505 (Fla. 1923); *Martin v. Busch*, 112 So. 274 (Fla. 1927).

State v. Black River Phosphate Co., 13 So. 640, 648 (Fla. 1893) (submerged lands held "for at least the purposes of navigation and fishing and other implied purposes"); *Broward v. Mabry*, 50 So. 826, 829 (Fla. 1909) ("The rights of the people...relate to navigation, commerce, fishing, bathing and other easements allowed by law."); *State v. Gerbing*, 47 So. 353 (Fla. 1908) (submerged lands held for "navigation, commerce, fishing, and other useful purposes afforded by the waters"); *White v. Hughes*, 190 So. 446, 453 (Fla. 1939) (right to bathing recognized); *Hicks v. State*, 156 So. 603, 604 (Fla. 1934) (right to fishing recognized in dictum); *Ferry Pass Inspectors' & Shippers' Assn. v. Whites River Inspectors' and Shippers' Assn.*, 48 So. 643 (Fla. 1909) (right to fishing recognized).

70 So. 392 (Fla. 1915).

FLA. STAT. § 373.217 (1995).

ground, percolating or flowing in defined channels. The water management districts are required to engage in water resource planning which includes protection of environmental values, and are authorized to require permits for any consumptive use of water except individual domestic use, and impose a variety of conditions on permits related to sustaining ecosystems and water resources.

What is not clear however, is whether the administrative structure of water resource planning, regulation and permitting established by the Water Resources Act represents the sole mechanism for protection of public trust values in water, or whether state management decisions which are considered by an interested party not to adequately protect public trust values could be appealed to courts of law on the basis of the doctrine. There is also a question of whether those provisions of the Act which are interpreted as protecting public trust values actually meet the standard of protection required under the public trust doctrine. With regard to water allocation decisions implemented through consumptive use permitting, the specific issues would be whether the "reasonable-beneficial" use test and the public interest test provided sufficient protection of public trust values, and whether minimum flows and levels should take a clearer role and higher priority in water allocation decisions.

Though the Water Resources Act was adopted in preemption of the common law of water rights, and its permitting and enforcement provisions might be held to represent the sole means of protecting public trust values, public trust rights can also be argued as holding a unique and higher position. As stated in the commentary to A MODEL WATER CODE, "The public trust concept provides the legal underpinning for a viable enforcement procedure to safeguard a transient natural resource such as

FLA. STAT. § 373.019(8) (1995).

FLA. STAT. § 373.219(1) (1995).

FLA. STAT. § 373.223 (1995).

See MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, 84 (1972).

water.... The implications of this status may be that "state agencies can be held to a higher standard with respect to their actions and omissions concerning the trust *res*. The actions of state agents, as fiduciaries of the *res*, could be judicially attacked as not displaying the high standard of care needed to protect the *res*."

E. Reservations from Use

Section 373.223(3), F.S. permits the water management districts or the DEP, by rulemaking, to "reserve from use by permit applicants, water in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety." Such reservations are discretionary, and are subject to periodic revision in response to changed conditions. The section also states that "all presently existing legal uses of water shall be protected so long as such use is not contrary to the public interest." How these provisions of the Water Resources Act should be interpreted and applied has not been fully addressed.

1. Relationship Between MFLs and Reservations from Use

One issue involves defining the relationship between minimum flows and levels (MFLs) and reservations from use. If MFLs are based on a "significant harm" standard, how is this related to "protection of fish and wildlife" in reservations from use? If MFLs are determined to serve a planning function in the water management process, should reservations from use "to protect fish and wildlife" be based on the needs of natural systems established by the MFLs, or is that standard more strict than the MFL "significant harm" standard?

2. Defining "Contrary to the Public Interest"

The provision states that in making reservations from use, an

Id., at 83-84.

Id., at 84.

FLA. STAT. § 373.223(3) (1995).

Id.

See FLA. STAT. § 373.042 (1995).

existing legal use of water must be protected unless it is "contrary to the public interest." If a use has been permitted under the Water Resources Act, it has passed the "three-pronged test," including the criterion requiring that it be "consistent with the public interest." Since the statute does not address the topic, the issue is how to define under what circumstances an existing permitted use can then be found to be contrary to the public interest.

II. Promoting Efficient Uses of Water

A. Reallocation of Inefficient Uses

Under the Water Resources Act, if two or more applications for a consumptive water use are pending which otherwise comply with the standards for permitting, under conditions in which either there is not enough water available for both uses or the uses otherwise conflict, governing boards may give preference to that use which "best serves the public interest." Where competing applications equally serve the public interest, the district must give preference to a renewal application over an initial application.

1. Determining the Public Interest

The principal issue is how to determine which of several otherwise equal applications "best serves the public interest." The Water Resources Act does not include any criteria or other guidance for this determination, though A MODEL WATER CODE, on which the Water Resource Act was based, includes commentary that "Public bodies, such as municipalities, governmental agencies, and public utilities, should be preferred over private users.

The test is whether a proposed use: (a) is a reasonable-beneficial use, (b) will not interfere with any presently existing legal use of water and (c) is consistent with the public interest. FLA. STAT. § 373.223 (1995).

FLA. STAT. § 373.233 (1995).

Id.

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press, Gainesville, Florida (1972).

Economically more productive uses should normally be preferred over less productive users...." The commentary to A MODEL WATER CODE also indicates that protection of fish and wildlife values are expressly within the public interest. At least one Florida case has implied that the water management districts should evaluate competing applications in terms of the potential for increased efficiencies in both users, attempting to satisfy both applications and avoiding questions concerning the public interest.

There is also an issue concerning the public interest test used in the initial consumptive use permitting process, and its relationship to the public interest analysis used to evaluate competing uses. One concern is that, in order to avoid confusion and have substantive meaning, the public interest test used for ranking competing uses should be different from that used in the initial permit. The countervailing perspective is that there should not be a difference, since the "three-pronged" permitting test provides opportunity to distinguish competing uses.

2. Potential Water Use Priorities Established by Law

A related issue is whether state or federal laws may establish a hierarchy of water uses which have priority over certain other competing applications or which are otherwise entitled to certain water rights. Potentially different classifications of use with different status include: (1) domestic uses by individuals, which are exempt from permitting under the Act; (2) quantities of water guaranteed to the Seminole Tribe of Florida under the *Water Rights Compact Between the Seminole Tribe of Florida and the District* (1987); (3) reservations of water for the protection of fish and wildlife or for public health and safety under Section 373.223(3), F.S.; (4) water necessary for maintenance of minimum flows and levels under Section 373.042, F.S.; and (5) existing legal uses at the time of new permit applications, including those issued at the time the Act was adopted.

Id. at 188.

Id.

Harloff v. Sarasota and Southwest Florida Water Management District, 575 So.2d 1324, 1328 (Fla. 2d DCA 1991).

B. Transfer or Sale of Permits

Florida's water use permitting system does not include any form of market based allocation. Currently, allocation is limited based on need, hydrologic impacts and the public interest. To some extent, a market outside of the permitting process already exists. Water management districts allow the transfer of consumptive use permits from one person or entity to another if the source, use and withdrawal quantities are not altered, and if the transferee agrees to the terms and conditions of the existing permit. When an existing water use permit holder sells the land covered by the permit and transfers the permit to the new owner, the price of the land may be somewhat higher because of the existence of the permit.

Where water management districts have restricted new withdrawals in certain areas, the constraint on new water use permits potentially gives existing water use permits much more value than previously existed.

These facts raise the possibility of markets in which consumptive use permits could be sold or traded to other users. The policy issue is whether this approach promotes the most efficient use and conservation of water resources, or whether the competing applications process currently established in the Act should be considered the most appropriate strategy to managing limited water resources. One perspective is that in any situation other than a sale of property on which a withdrawal point is located, with abundant water resources in the area, such a market compromises the "three-pronged" permitting test and is at odds with a fundamental tenet of Florida law, that water is a public resource.

1. Reallocations for Other Purposes

The issues here are what criteria should be applied to evaluate proposed reallocations in areas of limited withdrawals, and whether such reallocations to other locations should be allowed for purposes of, for

See *eg.*, FLA. ADMIN. CODE r. 40D-2.351 (May 1994).

See FLA. ADMIN. CODE r. 40D-2.331(3) (1995). (In Southwest Florida Water Management District's "Southern Water Use Caution Area," permits may be transferred to another person or to the permittee at a different facility).

example, protecting water resources. There is also the related question of whether reallocations should be considered acceptable if confined to the same basin or water use caution area. In principle, if such reallocations result in the same total quantity of water being withdrawn from an area, there is potential to reduce the environmental impact of the total withdrawal by reducing rates of withdrawal in one part of that area and increasing them in another. However, the question is whether such reallocations generally should be considered more acceptable, since site-specific considerations are always important in determining the relative environmental impacts of two different withdrawals.

2. Potential Effect of Long Duration Permits

This issue concerns the potential effect that granting longer term consumptive use permits might have on permit markets and district efforts to manage the resource. Normally, considerations of efficiency and conservation go into the districts' evaluations and determinations of permit length. If, based on conservation and environmental criteria, a short duration permit is granted, the permittee could attempt to buy or trade for a permit with a longer duration, thus undermining the process by which districts evaluate and allocate water use.

3. Potential Effect on Permitting Process

The issue is how to ensure that district decisions concerning competing uses are not defeated by a permit market. Chapter 373, F.S., currently gives preference to renewal permits over new permits in consumptive use permitting. If permit owners are able to purchase an existing permit for an alternative site, the policy behind renewals may be defeated. A permit applicant who is denied a permit by the senior status of a renewal could obtain, through purchase or trade, the same permit denied under the preference scheme.

C. Interdistrict Transfers

The original enactment of the Water Resources Act recognized that water crossed political boundaries, but did not make provisions for how to evaluate or provide for transfers between water management districts. In *Osceola v. St. Johns River Water Management District*, Florida's Supreme

504 So.2d 385 (Fla. 1987).

Court determined that the Act provided authority to allow for the interdistrict transfer of water and that the authority was properly delegated to the water management districts. Subsequent legislation established criteria related to the interdistrict transfer of ground water.

Generally, a proposed interdistrict transfer of ground water requires the approval of the district where the withdrawal will take place. In addition to meeting the criteria for a consumptive use permit, proposed interdistrict transfers of ground water must meet additional public interest requirements related to the needs of projected populations of both the supplying and receiving areas.

Interdistrict transfers of surface water must be approved for a consumptive use permit within the withdrawal district, be approved by the receiving district, and should meet additional criteria related to the public interest test, including:

- (a) comprehensive water conservation and reuse programs are implemented and enforced in the receiving area;
- (b) major costs, benefits, and environmental impacts have been adequately determined for both supplying and receiving areas;
- (c) the transfer is an environmentally and economically acceptable method to supply water for the given purpose;
- (d) the present and projected water needs of the supplying area can be satisfied if the transfer takes place;
- (e) the transfer plan incorporates a regional approach to water supply and distribution;
- (f) the transfer is otherwise consistent with the public interest.

FLA. STAT. § 373.2295 (1995). Recent amendments to the State Water Policy, FLA. ADMIN. CODE r. 62-40.422 (July 1995), specify certain policies which apply to interdistrict transfers of surface water.

See FLA. STAT. § 373.2295(2), (3) (1995); FLA. ADMIN. CODE r. 62-40.422(1) (July 1995).

FLA. STAT. § 373.2295(4) (1995).

FLA. ADMIN. CODE r. 62-40.422(1), (2) (July 1995).

1. Consistency of Applicable Criteria

One issue in this area is whether the additional criteria applicable to surface water transfers should also apply to proposed transfers of ground water. This may be particularly important where there are significant interconnections between ground waters and surface water ecosystems in the supplying region.

2. Local Sources First

A second issue is whether criteria should specify that local sources of supply must be fully utilized before an area may receive an interdistrict transfer. The listed criteria currently applying to surface water transfers state that water conservation and reuse programs *should* be implemented in the receiving area. Additionally, general policies listed in the Water Policy Rule include the statement that water management district programs "shall seek to... *(e)ncourage* the development of local and regional surface and ground water supplies within districts rather than transfer water across District boundaries." However, there is no specific requirement that local sources must be fully utilized before an area may receive water from outside of the district.

3. Definition and Extent of "Feasible Alternatives"

Related to the second issue are questions concerning what is implied by a requirement that local sources be used first, including feasible alternatives. Relevant statutes and administrative rules provide no guidance or criteria for determining priorities. Do feasible local alternatives include the construction of reverse osmosis and desalination plants, and if so, what percentage of supply should be required from these sources? In theory, communities could produce unlimited supplies of potable water using these technologies, however funding capabilities and

FLA. ADMIN. CODE r. 62.40.310(1)(f) (July 1995) (emphasis added). See also, FLA. STAT. § 187.201(8)(b)3. (1995) (State Comprehensive Plan policy to "encourage the development of local and regional water supplies within water management districts instead of transporting surface water across district boundaries.").

environmental concerns may be limiting factors. Similar questions are raised concerning the extent to which re-use, stormwater and aquifer storage and recovery should be required under tests emphasizing use of feasible local alternatives.

4. Definition of "Prior Right"

Section 373.1961(1)(e), F.S. states that in pursuing its authority to plan for and assist in meeting water supply needs, water management districts shall not deprive any county from which water is withdrawn of the "prior right" to the reasonable and beneficial needs of the county or of inhabitants or property owners. The wording also appears in section 373.1962(5), F.S., as applied to the activities of regional water supply authorities.

The term "prior right" has not been defined. Though it might be interpreted to refer to those users holding water use permits or using water prior to the time the permitting system was imposed, these uses have been defined as existing legal uses under section 373.226, F.S., raising the question of why a completely different term would have been used in section 373.1961. In addition to questions concerning the definition of "prior right," there are questions concerning if, and how, the requirements of sections 373.1961(1)(e) and 373.1962(5), F.S., should apply to attempts to implement interdistrict transfers.

D. Alternative Sources

State Water Policy includes, as one factor in determining whether a consumptive use will be "reasonable-beneficial," the feasibility of alternative sources such as reclaimed water, stormwater, brackish water and salt water. The water management districts have not dictated in CUP permits which type of source must be used by an applicant. Presumably, a permit could be denied if there were insufficient water available from normal ground water and surface water sources, forcing the applicant to request consideration of a more alternative source. An important issue under this topic concerns what criteria should be included in an evaluation of the feasibility of a particular alternative source.

FLA. ADMIN. CODE r. 62-40.410(2)(j) (July 1995).

In 1995, legislation was adopted which requires the water management districts to utilize ad valorem tax monies to help develop alternative water supplies, with authority to fund grants, revolving loans, or other similar programs designed to enhance availability of alternative water supplies in water resource caution areas. To be funded, such projects must be consistent with the local government comprehensive plan, and all appropriate facilities within the service area must connect to and use such alternative supplies. The set of issues includes: (1) whether there should be additional flexibility to allow such programs in other areas; (2) who should be responsible for the more expensive alternative water supply sources; (3) how the need to protect the "prior rights" of counties, or the reservation of water for environmental protection or the evaluation of competing users will impact the development of alternative supplies; (4) what role alternative sources and related information should play in the revision of local government comprehensive plans.

E. Water Pricing

In addition to regulatory approaches to water allocation, there is growing recognition of the potential for harnessing economic factors in managing water supply systems. At present, the only fees authorized under the Water Resources Act are those charged for the "processing, monitoring, and inspecting for compliance" of a permit. However, proposals are being considered in which additional charges, or water user fees, would be assessed for volume use of water. The primary rationale for this approach is that water is a public resource which is underpriced, thus used inefficiently, in a way that tends to ignore public values such as environmental needs. Charging the real value of water in a market environment has the potential to reduce the need for regulation, because

FLA. STAT. § 373.1961(2) (1995).

FLA. STAT. §§ 373.1961(1)(e), 373.1962(5) (1995).

FLA. STAT. § 373.109 (1995).

See, eg., Fla. HB 2013, at § 1(2) (1991) (proposed legislation which would have imposed a fee of 10 cents per 1000 gallons of water).

users will tend to conserve in order to reduce costs, and the benefits of conservation will be felt system-wide. The fees generated can also reduce the burden on water management district revenue funds from ad valorem tax sources.

1. "Pure" vs. "Regulated" Markets

One issue in analyzing this approach is whether such markets should be free to operate with no regulatory conditions attached by the implementing agency, or whether certain permit conditions designed to assure the protection of public values should be imposed on all potential uses, and markets then allowed to evolve within these constraints. The first approach emphasizes economic efficiency, with the expectation that maximizing water conservation would also protect public values. The second essentially redefines the water quantities available within the market, in order to assure protection of public values, rather than relying entirely on unrestrained markets.

2. Uniform or Region-Specific Charges

Should water fees be uniform statewide, or should they be specific to various regions of the state? The primary rationale for applying differing water charges in certain regions is to reflect the differing characteristics of those regions, though a political concern is that if variation is permitted, less-developed areas may attempt to artificially set charges at low levels to encourage the development of industry in inappropriate locations. Probably the most important reason for applying a uniform charge for water is the difficulty of deciding on the level of charges that should be applied in different regions, since regionalizing charges tends to be politically controversial.

Related issues concern the advisability of allowing variations in a uniform charge, using techniques such as surcharges on new plants, allowing regional variation, but with an established minimum charge, variation based on type of use, and application of varying time schedules for phasing in charges to reflect the different amortization needs of diverse industries.

III. Relationship Between Land Use and Water Use Planning and Regulation

Water supply demand is closely related to land use decisions and population growth. Though Florida has adopted legislation which requires water use and land use planning, these are implemented by several different levels of government. The State Comprehensive Plan includes land use and water resources policies which encourage officials to consider water availability in all decisions regarding development and growth. However, the Plan does not indicate which actions are necessary to achieve the policies, nor does it grant authority or assign responsibility to any agency to assure implementation of the relevant policies and goals.

Various state commissions appointed over the last twenty years have recommended that land use and water use planning and regulation be integrated, however there have not as yet been concerted efforts to coordinate the two sets of requirements or provide guidance to the responsible agencies. The result has been a fragmented approach to land and water management decisions which focuses on immediate and discrete problems, rather than on coordinated solutions to interrelated problems.

A. Inclusion of Water Availability in Concurrency Requirements

Florida's Growth Management Act requires that local government services and facilities necessary to accommodate growth be available concurrently with the need for those services and facilities. Though potable water facilities are included in the concurrency requirements, that

FLA. STAT. Ch. 373 (1995) (Florida Water Resources Act).

FLA. STAT. §§163.3161 - 163.3243 (1995) (Local Government Comprehensive Planning and Land Development Regulation Act).

FLA. STAT. Ch. 187 (1995).

FLA. STAT. § 187.201(16) (1995).

FLA. STAT. § 187.201(8) (1995).

FLA. STAT. §§ 163.3174(10)(h), 163.3180 (1995).

FLA. STAT. § 163.3180(1) (1995).

provision only requires that such facilities be in place for new development, not that the locality demonstrate adequate water resources to supply the facilities. In this case, the issue involves whether concurrency requirements should include assurance of the availability of water necessary for new development.

B. Consistency with Local Land Use Plans as Consumptive Use Permitting Criterion

Florida's Water Resources Act requires that any potential consumptive use be a "reasonable-beneficial" use, that it not interfere with an existing legal use, and that it be consistent with the public interest. Though neither the reasonable-beneficial use nor the public interest tests specifically require that CUPs be consistent with local land use plans, there may be sufficient flexibility in both tests to allow such an interpretation. The legal issue is whether in fact the water management districts can assert such authority in applying the consumptive use permitting tests. An important policy issue is whether such a linkage should be made specific through legislative amendment to the Act, or through rulemaking at the state or regional level.

C. Relationship Between Water Planning Information and Local Comprehensive Plans and Land Use Decisions

One criticism of local government planning efforts is that they do not adequately address questions concerning the relationship between future land use and availability of sufficient water quantities. Often, this is attributed to a lack of adequate information on the part of local governments. The issue involves what role existing water planning data should play in local land use planning and regulation.

The Water Resources Act requires the water management districts to provide technical assistance to local governments in the development and revision of comprehensive plan elements related to water resource issues, including information on minimum flows and levels, as well as information

FLA. STAT. § 373.223(1) (1995).

FLA. STAT. § 373.0391 (1995).

assessing water availability and supply issues. This information "shall be reviewed by the affected municipalities, counties, and regional planning councils for consistency with the local government comprehensive plan and shall be considered in future revisions of such plan." The section also expresses the legislative intent "that future growth and development planning reflect the limitations of the available groundwater or other available water supplies."

Related issues concern the most appropriate role for water planning data in the growth management process. Though these provisions confer authority and responsibility to water management districts for providing water resource information, there are few requirements in the Growth Management Act that local governments use any of the information provided by the districts. Nor are there guidelines or standards for evaluating whether the plans generated are actually based on the information, or procedures or penalties for ensuring that it is.

IV. Administrative Structure and Agency Relationships

Much of Florida's Water Resources Act was based on the provisions of A MODEL WATER CODE (the Code). The drafters of the Code envisioned a water management system at the state level that accounted for the hydrologic interrelationships of all water resources, and that provided for an integrated approach to water quality and water quantity issues. Among the primary provisions of the Code were: (1) the creation of a state agency with consolidated responsibility for regulation of consumptive uses and water quality; (2) a statewide comprehensive water resources planning process which addressed water supply and water quality; (3) a water use permitting system that would implement the higher level water planning decisions.

FLA. STAT. § 373.0395 (1995).

Id.

Id.

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, University of Florida Press, Gainesville, Florida (1972).

The Water Resources Act, as amended, departs from each of the above provisions in ways that call for additional research and analysis. First, the current water management system is regional rather than statewide, and the Department of Environmental Protection, charged with exercising "general supervisory authority" over the water management districts, actually exercises little programmatic control. Second, although the Act authorized development of a State Water Use Plan as a comprehensive approach to the development and use of water resources, only recently was a "Florida Water Plan 1995" adopted. The document does not attempt to provide a comprehensive plan for the allocation of water resources, as envisioned in A MODEL WATER CODE. Finally, without a well-defined plan for water allocation, there has been a lack of connection between any type of statewide water supply policy guidance, and the actual allocation decisions made by water management districts through their consumptive use permitting programs.

A. State Oversight of Water Management Districts

Though the Code assigned authority to address both water quality and quantity to a State Water Resources Board, the Water Resources Act did not establish such a board, but gave state level authority to the predecessor of the current Department of Environmental Protection (DEP). The Department was assigned general supervisory authority over the water management districts, although the Legislature also stated its intent that the Department delegate most program responsibilities to the districts. Over time, the districts, with ad valorem taxation authority, have gained the bulk of the resources related to water management, producing a situation in which the DEP, the oversight agency, has less capability for evaluating and planning than do the implementing agencies.

The policy issue involves what level of oversight is appropriate for the water management districts, and if necessary, which state agency or entity should exercise that oversight. One perspective is that as regional agencies conforming to hydrologic boundaries, the districts are the appropriate entities to address regionally specific allocation issues

Id. § 1.05 (1972).

working, as they do now, in partnership with DEP. The plans, policies and permitting programs which have evolved in each district are specific to conditions in that district, and according to this perspective will not benefit from, and may be weakened by, additional oversight at the state level.

There is also the countervailing view that the absence of a State Water Use Plan and continuing debate over who should have responsibility for development of state water policy represent a failure to realize the comprehensive and integrated nature of the approach recommended by the Code, and result in an uncoordinated system which is largely regional in nature. According to this perspective, although the districts may be appropriate for implementing policies at the regional level, a truly integrated approach to statewide water resource management will require more specific oversight or guidance by one or more state-level entities.

Though recent legislation grants authority to the Governor's Office to approve or disapprove, in whole or in part, the budgets of all water management districts, and the Florida Land and Water Adjudicatory Commission (Governor and Cabinet) have exclusive authority to review orders and rules of the districts, there are several other potential approaches to oversight.

Questions have been raised as to whether the Act should be amended to include a new level of oversight by something similar to the State Water Resources Board promoted by A MODEL WATER CODE. Beyond the many issues concerning the structure of such a body and its membership, there is also the basic policy question of whether its authority should include the ability to make state-level allocation decisions that would override the regional focus of the Water Resources Act, and if such limits are considered important, how to balance the state-level and the regional perspective and authority.

B. Structure of Water Resources Comprehensive Planning

This issue involves consideration of the proper structure for water

CS/CS/HB 2385, CS/HB 2399 (1996).

FLA. STAT. § 373.114 (1995).

resource planning. One of the most salient characteristics of the approach advocated by A MODEL WATER CODE is a coordinated process for developing and implementing plans for water resource development and protection. The Code called for the development of the "State Water Use Plan," an integrated program for the use and development of water resources. As part of this plan, each district was to be divided into sections, roughly comparable to "hydrologically controllable" areas. Within each section, current water use was to be inventoried, and the quantities of water available for reasonable-beneficial uses determined. Additionally, minimum flows and levels were to be established within sections to protect "public purposes," which included boating, fishing, hunting, swimming and ecological protection. Finally, the Code required consumptive use permitting to be coordinated with the State Water Use Plan to implement the planning objectives. Such permits had to be consistent with the Plan and conditioned on preservation of minimum flows and levels.

Under the Water Resources Act, the Department was authorized to develop and adopt as rapidly as possible an "integrated, coordinated plan for the use and development of the waters of the state..." also to be known as the State Water Use Plan. Diluting the potential utility of the planning process originally conceived in A MODEL WATER CODE, and adopted to some extent in the Water Resources Act, is the disjointed history of efforts to comply with such planning provisions in the Act. Over the years, the Department has made several attempts to develop such a plan or a similar document, however none has emerged as a significant policy making instrument. The most recent attempt, which resulted in the development of the "Florida Water Plan 1995," was a joint effort of the DEP and the water management districts, and was intended to comply with statutory requirements for a plan which combined a State Water Use Plan with the state water quality standards. The Department's former attempt at developing a State Water Use Plan was abandoned in 1979 and has never been

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, §1.07 (1972).

FLA. STAT. § 373.036 (1995).

FLA. STAT. § 373.039 (1995).

revived, thus it is unclear what comprises that component of the "Florida Water Plan 1995."

Though it remains to be seen what role the Florida Water Plan will actually take in the planning process, it is not self-implementing, and does not include functional planning for supply allocation to guide consumptive use permitting, as envisioned in A MODEL WATER CODE. The Florida Water Plan 1995 will be updated on a five-year basis, and a primary issue will concern whether it should include more specific water allocation planning guidance for consumptive use permitting programs.

C. Relationship of Consumptive Use Permitting to Water Resource Planning

As originally envisioned in A MODEL WATER CODE, there were close ties between planning and permitting, which was viewed as necessary to achieving optimal allocation of water resources. A prospective consumptive use, in addition to meeting other criteria, was required to be consistent with the public interest and the State Water Plan, which included the State Water Use Plan. The Water Resources Act, in addition to other criteria, only requires prospective consumptive uses to be consistent with the public interest, not the State Water Plan, removing state level water allocation goals as potential permitting criteria.

Removing the linkage between the State Water Plan and consumptive use permitting criteria eliminated the potential ability of the Plan to provide long-term guidance for water use allocation decisions. Perhaps not incidentally, it also removed the necessity of completing a plan as a prerequisite to implementing a regulatory permitting program. The ongoing

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, 103 (1972).

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE (1972) ("A system of consumptive water use permits coordinated with a program of comprehensive planning is the most effective means of implementing planning objectives and directing development along planned lines.") *Id.* at 74.

MALONEY, AUSNESS AND MORRIS, A MODEL WATER CODE, §§1.07, 1.08, 2.02 (1972).

FLA. STAT. § 373.223 (1995).

issue is whether there should be specific linkage between plans, such as the District Water Management Plans and Florida Water Plan 1995, and consumptive use permitting criteria.

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