

## 5.0 RIVER MANAGEMENT PROGRAM

Section 5.1 identifies the general management principles that will guide the management program. Section 5.2 describes the geographic areas that are the subject of the management program. Specific management objectives and actions are described in Section 5.3. Objectives are organized into two general thematic areas: natural resources, which include terrestrial and aquatic ecology and geologic and water resources; and human resources, which include economic, scenic, recreational, and cultural and historic resources. Finally, Section 5.4 describes factors affecting recreational carrying capacity along the Wild and Scenic River segment.

### 5.1 GENERAL MANAGEMENT PRINCIPLES

The recommendations for the day-to-day management of the river are based on principles derived from the management program's statutory and policy directives. For the purpose of this plan, principles are general statements that guide the development of specific management objectives and actions. The following principles, together with subsequent policy direction, legislation, and public input, will direct the river management program and the implementation of this plan.

- The permanent preservation, enhancement, and management of the river's resource values are the primary purpose of the management program.
- Effective management of the river requires effective management of uplands along the river and in the river's watershed. Management of the watershed will be in accordance with existing authorities.
- When the utilization of the river and its resource values conflicts with the protection and enhancement of these values, the protection and enhancement of resource values should prevail.
- The intensity of management may vary on different segments of the river area. Management activities will be developed for specific portions of the river area based on management needs in the immediate locale.
- Existing management authorities will not be curtailed or limited by any action of the management program. The management plan may recommend establishment of additional authorities or modification to existing authorities to accomplish the purposes of the management program.

- Land uses and developments on private lands within the river area, in existence on January 1, 1986, will continue.
- Management will be a continuing effort. Management actions will be evaluated and revised as necessary for best management results.
- Coordination and cooperation between local, regional, state, and federal agencies and the public is crucial to the success of the management program. The plan's management actions are intended to be implemented to the fullest extent possible under each management agency's statutory authority.
- Maintaining the cooperation and support of affected landowners and river users is essential to long-range understanding and support of the program.

## 5.2 OVERVIEW OF RIVER MANAGEMENT PROGRAM

The river management program is aimed at bringing existing governmental authorities to bear on protecting the river's resource values. In order to accomplish this, the multiplicity of management agencies and authorities must be coordinated. New authorities will be sought only as they are needed to correct management deficiencies identified in the planning process.

The program recommended in this plan for protecting the Myakka River's resource values will focus on three geographical areas: the river and adjoining wetlands ("river area"), a contiguous protective zone ("wild and scenic protection zone"), and the watershed ("watershed"). Each geographical area will require different levels of management by different combinations of agencies and authorities in order to accomplish the most effective overall management results.

The river area is identified in the Myakka River Wild and Scenic Designation and Preservation Act as consisting of the river and its adjoining wetlands. Of the three management areas, the river area is the zone of maximum protection. Section 258.501, Florida Statutes, authorizes DNR to adopt and enforce regulations addressing any activity that would adversely affect resource values in the river area. The boundaries of the river area will be delineated after approval of this plan and after adoption of subsequent management rules by the Governor and Cabinet.

A wild and scenic protection zone is proposed to be established as a corridor of uplands surrounding the river area. Such a zone is required to buffer the river area from manmade physical and visual intrusions. The wild and scenic protection zone is intended as an area of intermediate management protection. Management should be aimed at ensuring the compatibility of land development within the zone. Many uses and activities could be permitted in the protection zone consistent with maintaining the resource values of the river area. Establishment of the protection zone would require additional legislation.

The watershed is proposed as the zone of least intensive management. Watershed management is aimed primarily at minimizing hydrological impacts on the river from development activities in the watershed. Typical uses in the watershed that can have a direct or indirect adverse impact on the river include intensive agricultural, residential, and commercial development; mining; and construction of urban infrastructure facilities.

#### 5.2.1 River Area

The river area is defined in Subsection 258.501(3)(g) as ". . . that corridor of land beneath and surrounding the Myakka River from river mile 7.5 to river mile 41.5, together with a corridor extending from the center of the river to the maximum upland extent of wetlands vegetation." The river area is further defined in this plan as the upland extent of wetlands vegetation established by DER, pursuant to Chapter 403, Florida Statutes, and Chapters 17-3 and 17-312, Florida Administrative Code (see Appendix E for excerpts from these rules). The line is generally represented by the river and contiguous marshes and hardwood swamps which extend either to the river bank or to an adjacent tree line. In certain areas along the river, DER may also establish portions of mesic-hydric hammocks as waters of the state (see Appendix B for a description of the mesic-hydric hammock).

DNR will be the primary agency responsible for the management of the river area. The river area will be the zone of most intensive management and over which maximum protection will be achieved. Immediately after approval of the plan, DNR will promulgate rules to establish a process for reviewing

activities in the river area which have an adverse impact on the river's resource values. The rule will establish a permit program, including application procedures, forms, review and approval processes, and specific criteria for reviewing applications for proposed activities within the river area. This program will be administered by DNR in the local area if staff and funds are available for this purpose. The program will apply only to activities proposed to occur in the river area. No other geographic area will be affected by this program.

The rule will identify three specific types of activities in the river area: activities which are prohibited, activities which may be conducted after obtaining a permit, and activities which are allowed without a permit.

Activities that are recommended to be prohibited in the river area include the following:

- Point discharge of wastes or effluents;
- Sale, lease, or transfer of sovereignty submerged lands except where determined to be in the public interest;
- Dredge and fill except when determined to be clearly in the public interest;
- New road crossings in unimpacted areas;
- Relocation or setting of bulkhead lines waterward of mean high water except where determined to be in the public interest;
- Major new activities that would alter natural or historic hydrologic conditions unless determined to be beneficial for the protection, management, and preservation of the river area;
- Excavation of minerals except for dredging of dead oyster shells as approved by DNR;
- Structures not related to water-dependent activities;
- Use of lands for providing public or private road access and utilities to islands where such access did not previously exist;
- Disruption of native vegetation except for riparian ingress and egress;
- Airboat use north of U.S. 41 except for uses officially allowed by government agencies; and
- Construction of new marinas.

It is recommended that the following activities be allowed in the river area after permit review and a finding that such activities will not have an adverse impact on resource values in the river area:

- Creation or maintenance of shore protection structures;
- Maintenance of existing navigational channels and aids;
- Creation and maintenance of public and private landings, docks, decks, or piers;
- Maintenance or expansion of existing marinas;
- Maintenance, replacement, or expansion of existing facilities for utilities or roads;
- Relocation or setting of bulkhead lines waterward of mean high water where determined to be in the public interest;
- Disruption of native vegetation resulting from riparian ingress and egress only;
- Stormwater management facilities or other drainage discharges;
- New utility crossings;
- New road crossings in impacted areas;
- Other activities or structures, which are a public necessity or are necessary to enhance the quality or utility of the river area, that are consistent with the Act and rule; and
- Resource-based recreational facilities on publicly owned lands and waters consistent with applicable rules and regulations.

It is recommended that the following activities be allowed in the river area without requiring a permit:

- Resource-based recreational activities on publicly owned lands and waters consistent with applicable rules and regulations;
- Commercial fishing;
- Agricultural and forestry activities similar in nature to those in existence on January 1, 1986;
- Resource management practices for the protection, conservation, rehabilitation, or restoration of resource values;
- Continuation of existing drainage and water management practices, unless such existing practices adversely affect, degrade or diminish existing water quality; and

- New water resource management practices which will have no adverse impact on resource values in the river area.

### 5.2.2 Wild and Scenic Protection Zone

During the development of this plan, DNR and the Council determined that management of the river area, as defined in subsection 258.501(3)(g), alone would not be adequate for the permanent protection of the resource values that were identified by the Council in the management planning process. Therefore, to meet the legislative intent of providing "permanent protection and enhancement" of these resource values, adequate management and protection of an upland buffer adjacent to the river area is needed. The act, subsection 258.501 (5)(d), states that the management plan may also include such provisions as deemed necessary by the DNR to be necessary or advisable for the permanent protection of the river as a wild and scenic designated river. It is recommended that section 258.501, Florida Statutes, be amended to establish a "wild and scenic protection zone" surrounding the river area to buffer the river area and its resource values against impacts from adjoining land uses.

In establishing the protection zone along the river, three considerations should be paramount:

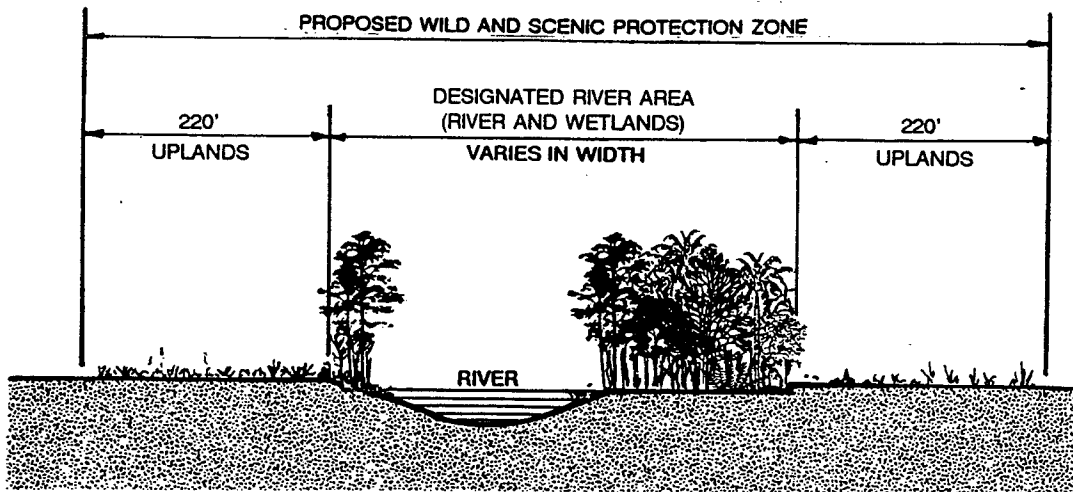
- 1) Ensure an adequate width along the river area to minimize potential adverse physical and visual impacts on resource values,
- 2) Provide a uniform boundary configuration to facilitate management, and
- 3) Minimize potential adverse impacts on private landowners.

Based upon the research conducted in the development of this plan, the river's visual corridor--the area along the river that is visible from the river--was estimated. This distance varies significantly based on season, time of day, river stage, successional stage, and other factors. Generally, the visual corridor ranges from as wide as 2,200 feet in nonforested communities, to as narrow as 150 feet in the denser hammock areas. These distances were determined as a result of onsite observations taken along the river. Observations were recorded for a range of different vegetative communities

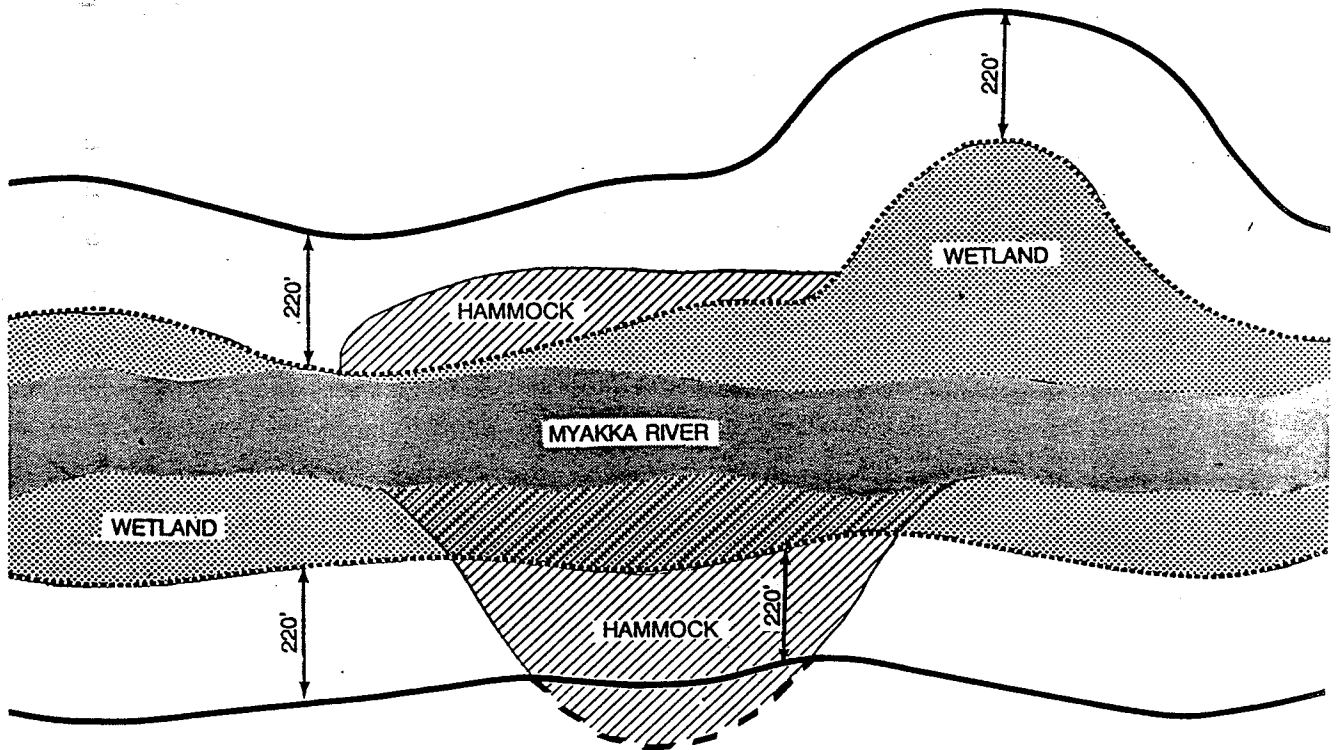
including oak hammock (35 observations), pine flatwoods (35 observations), palm hammock (15 observations), scrub (15 observations), and nonforested communities. Over the entire length of the wild and scenic segment of the river, the average width of the visual corridor was determined to be 220 feet landward from the edge of the river area. Based on these factors, it is recommended that a "wild and scenic protection zone" be created as a supplemental buffer area extending 220 feet on each side of the river, measured from the landward edge of the river area (see Figure 5-1 for a conceptual diagram).

Additional legislation would be required to create the wild and scenic protection zone. To this end, Section 258.501, Florida Statutes, should be amended to formally establish the zone and to provide policy direction for its management. DNR, with the Department of Community Affairs, should be directed to develop guidelines and performance standards for local governments to apply in managing the wild and scenic protection zone. Such guidelines and performance standards should be adopted in state-local agency agreements between DNR and the Department of Community Affairs and the local governments. Local governments should be directed to amend their comprehensive plans as may be necessary to be in conformance with, or more stringent than, the act, this plan and the management guidelines and performance standards. Local governments should also be required to adopt any necessary ordinances and regulations to carry out the purposes of the act, this plan and the guidelines and performance standards.

In developing management guidelines and performance standards for the wild and scenic protection zone, consideration should be given to the numerous single-family residences along the river. The intent of the wild and scenic protection zone is to provide for such residential use along the river while instituting appropriate safeguards to reduce the threat of adverse impacts to the resource values in the river area. To effectively manage the wild and scenic protection zone, consideration should be given to those activities which should be prohibited altogether, or must undergo review and either be denied, or permitted with or without conditions, so as to minimize potential adverse environmental and visual impacts to the resource values in the river area, and to minimize adverse impacts on private landowners' use of land for



CROSS SECTION



PLAN VIEW

..... DESIGNATED RIVER AREA  
 ——— PROPOSED WILD AND SCENIC PROTECTION ZONE

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Figure 5-1  
 RIVER AREA AND WILD AND SCENIC PROTECTION ZONE CONCEPT

MYAKKA WILD AND SCENIC RIVER  
 MANAGEMENT PLAN

FLORIDA DEPARTMENT OF NATURAL RESOURCES

SOURCE: HUNTER, 1989.



residential purposes. Activities that should be prohibited, except their appurtenant structures which may be permitted if they have no adverse visual or measureable adverse impacts to resource values in the river area, include, but are not limited to, the following:

- Landfills,
- Clear-cutting,
- Major new infrastructure facilities,
- Major activities that would alter historic water or flood flows,
- Multifamily residential construction,
- Commercial and industrial development, and
- Mining and major excavations.

### 5.2.3 Watershed

The permanent protection and enhancement of the wild and scenic segment of the Myakka River cannot be completely achieved without effective management of the river's watershed. Covering approximately 550 square miles in Sarasota, Manatee, Hardee, and DeSoto Counties, the watershed is managed by an array of federal, state, and local agencies; special districts; and private landowners. The main objective of managing the watershed, insofar as this plan is concerned, is to bring all existing management authorities to bear on preventing future adverse impacts on water quality, water quantity and timing of flow in the river.

Existing management and regulatory authorities are adequate for accomplishing this objective. No new authorities are required. In some cases, however, existing regulatory programs need to be strengthened or improved to increase the level of protection the river receives.

Specifically, Sarasota County should adopt strict performance standards for reviewing new subdivisions, developments, and changes in zoning densities in the basin to prevent adverse impacts on water quality, water quantity, and timing of flow in the river. The County should avoid placing new infrastructure facilities in a way that would encourage development east of the Myakka River. The County should examine the possibility of providing tax incentives to landowners in the watershed to maintain land in agricultural and other non-urban uses. Manatee County should also adopt these provisions, as

well as amend its mining and reclamation ordinance (No. 81-22) to minimize mining and mining impacts in the watershed.

The SWFWMD should adopt special basin water management rules for the Myakka watershed to strengthen criteria for reviewing applications for surface water management permits. The District should also adopt a goal of willing-seller purchasing as much of the river's headwaters as possible.

Better coordination between the many management and regulatory agencies in the watershed is urgently needed. Many land use and water management decisions are presently made without adequate coordination. As a result, potential impacts on the river's water resources are not always considered adequately in these decisions. Section 258.501 should be amended to require all state and local agencies to provide DNR with notification of requests for approval of activities which may adversely affect the river area.

### 5.3 SPECIFIC MANAGEMENT OBJECTIVES AND ACTIONS

Objectives are specific long- or short-term conditions toward which management actions are directed. Actions are the specific measures and procedures that are implemented by management agencies to protect and enhance the river's resource values and to resolve priority concerns.

DNR shall implement those actions for which it is primarily responsible, subject to the availability of staff and funds for those purposes. Other agencies are expected to implement the actions assigned to them, within their funding and staff capabilities. DNR and the Council shall coordinate and encourage each agency to implement specific actions to achieve the management objectives.

Table 5-1 summarizes each of the management program's objectives and corresponding actions. Each action contains a responsible agency, geographic area subject to management actions, estimates of funding requirements based on available information, and implementation/completion dates. The ability of agencies to perform many of the actions listed below and summarized in Table 5-1 is contingent upon the availability of funding.

## OBJECTIVE 1

To protect, enhance and maintain the unique and irreplaceable values, functions, diversity and benefits of the natural resources along the Myakka River.

### Action 1.1

DNR shall adopt a rule to establish standards for regulating activities in the river area.

### Action 1.2

The Legislature should amend 258.501, Florida Statutes, to: 1) establish the wild and scenic protection zone, 2) require local governments to amend their comprehensive plans as may be necessary to be in conformance with or more stringent than the act, this plan and management guidelines and performance standards to be developed and adopted by State-local agreements involving DNR and DCA with Sarasota County and with the City of North Port, and 3) require local governments to adopt any necessary ordinances and regulations to carry out the purposes of the act, this plan, and the guidelines and performance standards.

### Action 1.3

DNR, DCA, and other appropriate agencies should monitor and review Sarasota County's land use, zoning, and all pertinent regulatory activities to ensure that policies contained in APOXSEE are carried out consistently with the management plan guidelines and criteria.

### Action 1.4

DER should determine the boundaries of the river area by delineating the landward extent of wetlands vegetation as provided in Chapter 403, Florida Statutes, and Chapters 17-3 and 17-312, Florida Administrative Code.

### Action 1.5

DNR and FGFWFC should conduct a study to determine the use of the river area and wild and scenic protection zone by wildlife and to determine measures that may be necessary to better protect and manage wildlife in the river area and the wild and scenic protection zone.

Table 5-1 Myakka River Management Program Objectives and Actions.

	Program Focus					Implementation/ Completion Date
	Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	
<b>OBJECTIVE 1</b>						
To protect, enhance and maintain the unique and irreplaceable values, functions, diversity and benefits of the natural resources along the Myakka River.						
<b>ACTIONS</b>						
Action 1.1	DNR	X	--	--	\$30,000 (funded)	12-89/12-90
Adopt a rule to establish standards for regulating activities in the river area.						
Action 1.2	Legislature DNR Sarasota County North Port	X	X	--	--	4-90/12-90
The Legislature should amend 258.501, Florida Statutes to: 1) establish the wild and scenic protection zone, 2) require local governments to amend their comprehensive plans as may be necessary to be in conformance with or more stringent than the act, this plan and management guidelines and performance standards to be developed and adopted by state-local agreements involving DNR and DCA with Sarasota County and the City of North Port, and 3) require local governments to adopt any necessary ordinances and regulations to carry out the purposes of the act, this plan and the guidelines and performance standards.						
Action 1.3	DNR DCA	X	X	X	Staff Assignment	7-90/ongoing
Appropriate agencies should monitor and review Sarasota County's land use, zoning, and all pertinent regulatory activities to ensure that policies contained in APOXSEE are carried out consistently with the management plan guidelines and criteria.						
Action 1.4	DER	X	--	--	\$60,000	1-91/7-92
Determine the boundaries of in the river area by delineating the landward extent of wetlands vegetation as provided in Chapter 403, Florida Statutes and Chapters 17-3 and 17-312, Florida Administrative Code.						
Action 1.5	DNR FGF/MFC	X	X	--	\$30,000	1-91/12-91
Conduct a study to determine the use of the river area and wild and scenic protection zone by wildlife and to determine measures that may be necessary to better protect and manage wildlife in the river area and the wild and scenic protection zone.						

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus					
		Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	Implementation/Completion Date
<b>OBJECTIVE 1</b>							
To protect, enhance and maintain the unique and irreplaceable values, functions, diversity and benefits of the natural resources along the Myakka River.							
Action 1.6	Acquire through willing-seller purchase, donation, or exchange, headwater wetlands, tributaries, and land bordering the Myakka River.	Applicable Management and Acquisition Agencies	X	X	X	Variable	7-90/Ongoing
Action 1.7	Establish a local land trust to facilitate willing-seller/donor land and easement acquisition of environmentally sensitive lands in the Myakka River watershed.	Applicable Management and Acquisition Agencies	X	X	X	Staff Assignment	7-90/Ongoing
Action 1.8	Revise habitat-based regulatory programs to maximize protection of wetlands and hammock vegetation along the Myakka River.	Sarasota County	X	X	X	Staff Assignment	7-90/7-91
Action 1.9	Implement a prescribed burning and fuel reduction program involving landowners along the Myakka River.	DNR Division of Forestry Sarasota County	X	X	X	Staff Assignment	7-90/Ongoing
Action 1.10	Implement an integrated program of exotic and nuisance species management for the river area and the wild and scenic protection zone.	DNR FGFWFC Division of Forestry	X	X	--	Staff Assignment	1-91/Ongoing
Action 1.11	Develop and implement a plan to locate, catalog, and protect listed plant and animal species and species of local concern within the river area and the wild and scenic protection zone.	DNR FGFWFC	X	X	--	\$10,000	1-91/Ongoing
Action 1.12	Recommend legislative amendments which would make it unlawful to harvest or destroy any endangered or threatened plant species within the river area and the wild and scenic protection zone.	DNR DACS FGFWFC	X	X	--	Staff Assignment	1-91/7-91
Action 1.13	Compile an inventory of special ecological features along the Myakka River.	DNR Sarasota County FNAI Appropriate Management Agencies	X	X	--	Staff Assignment	1-91/1-92

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus				Estimated Funding Requirements	Implementation/Completion Date
Agency Responsibility	Wild and Scenic River Area	Zone	Watershed	Protection			
<b>OBJECTIVE 1</b>							
To protect, enhance and maintain the unique and irreplaceable values, functions, diversity and benefits of the natural resources along the Myakka River.							
Action 1.14	Inventory and monitor changes to animal and plant communities in the river area and wild and scenic protection zone.	DNR Sarasota County	X	--	\$30,000 biennial	1-91/Ongoing	
Action 1.15	Develop an inventory program to monitor and prioritize the important nesting, roosting, and breeding sites along the Myakka River corridor in order to protect these sites from any actions that may disrupt cause their discontinued use.	DNR FGF/MFC Sarasota County	X	--	Staff Assignment	7-90/6-91	
Action 1.16	Distribute warning signs around the two wading bird rookeries in the Myakka River near the Sarasota/Charlotte County line.	DNR FGF/MFC Sarasota County	X	--	Staff Assignment	7-90/12-90	
Action 1.17	Develop and implement a habitat and restoration plan for the river area and wild and scenic river protection zone.	Applicable Management Agencies	X	--	Staff Assignment	1-91/Ongoing	
Action 1.18	Develop guidelines for fence placement and educate landowners on how fences that border the Myakka River can be modified or newly constructed to facilitate easier crossing by wildlife.	DNR Sarasota County	X	--	Staff Assignment	1-91/Ongoing	
<b>OBJECTIVE 2</b>							
To protect and/or enhance the surface and ground water resource values of the Myakka River, including protection and enhancement of water quality and designated uses, and protection and restoration of optimal quantity and timing of freshwater discharge.							
<b>ACTIONS</b>							
Action 2.1	Strictly enforce regulations relating to water resources.	Applicable Management Agencies	X	X	Staff Assignment	7-90/Ongoing	

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program focus					
		Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	Implementation/Completion Date
<b>OBJECTIVE 2</b>							
To protect and/or enhance the surface and ground water resource values of the Myakka River, including protection and enhancement of water quality and designated uses, and protection and restoration of optimal quantity and timing of freshwater discharge.							
Action 2.2	Identify and seek funding sources to develop and institute programs for best management practices to control and reduce nonpoint source pollution within the Myakka River watershed.	Applicable Management Agencies	X	X	X	Staff Assignment	7-90/Ongoing
Action 2.3	Revise Manatee County Ordinance No. 81-22, Mining and Reclamation, to include language similar to that for the Myakka River watershed.	Manatee County	--	--	X	Staff Assignment	7-90/7-91
Action 2.4	Evaluate existing water quality monitoring programs where needed to determine whether to continue and/or expand these programs to include: <ul style="list-style-type: none"> <li>a. Better coordinated and more comprehensive monitoring efforts,</li> <li>b. Linkage to regulatory actions and programs,</li> <li>c. Landfill and borrow pit monitoring, and</li> <li>d. Monitoring of tributaries; for example, Howard Creek and Big Slough.</li> </ul>	Applicable Management Agencies	X	X	X	To be Determined	7-90/Ongoing
Action 2.5	Remove trash and debris within the river and along the river shoreline and sponsor a "Myakka River Cleanup Day" at least once per year.	DNR Sarasota County	X	--	--	Staff Assignment	7-90/Ongoing
Action 2.6	Conduct a hydrologic study that considers all existing and potential water control structures and diversions of river water.	SWFMD Applicable Management Agencies	X	X	X	\$250,000	7-90/7-91
Action 2.7	Petition the Environmental Regulatory Commission to amend Chapter 17-3, FAC, to designate the entire Myakka River as an Outstanding Florida Water.	DER Management Agencies	X	--	--	Staff Assignment	7-90/12-91
Action 2.8	Seek an exemption from the exotic aquatic plant control program within Myakka River State Park to allow the limitation or prohibition of power boats on Upper Myakka Lake and Lower Myakka Lake.	DNR SWFMD	X	--	--	Staff Assignment	7-90/1-91

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus				Estimated Funding Requirements	Implementation/Completion Date
Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed				
<b>OBJECTIVE 2</b>							
	To protect and/or enhance the surface and ground water resource values of the Myakka River, including protection and enhancement of water quality and designated uses, and protection and restoration of optimal quantity and timing of freshwater discharge.						
Action 2.9	Investigate alternatives to the chemical control of aquatic weeds, and effective and environmentally sound management and control practices for chemical, mechanical, biological, and/or physical weed control.	X	--	--	\$60,000	7-90/Ongoing	
		DNR SWMMD					
Action 2.10	Develop emergency action procedures to include timely monitoring response and remediation of spills of contaminants which could potentially affect the Myakka River.	X	X	X	Staff Assignment	1-91/1-92	
		DNR SWMMD TBRPC SWMRPC Sarasota County					
Action 2.11	Maintain and coordinate monitoring programs for the consumptive use of ground water within the Myakka River watershed. Particular emphasis should be placed on the maintenance of wetland hydroperiods.	X	X	X	Staff Assignment	1-91/Ongoing	
		SWMMD					
Action 2.12	Prohibit mining of resources in the river area. Establish recommended guidelines and design criteria for regulating mining discharges in the wild and scenic protection zone to ensure post mining runoff meets pre-mining runoff for water quality and quantity.	X	X	X	Staff Assignment	7-90/Ongoing	
		DNR Applicable Management Agencies					
Action 2.13	Conduct a master watershed study to allow for comprehensive stormwater master planning.	X	X	X	\$180,000	1-91/7-92	
		SWMMD Sarasota County North Port Venice DNR DER					



Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus					
		Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	Implementation/Completion Date
<b>OBJECTIVE 3</b>							
To preserve, protect and restore natural aquatic habitat necessary for the continued healthy existence of aquatic populations and communities within the Myakka River.							
<b>ACTIONS</b>							
Action 3.1	Identify, prioritize and implement feasible aquatic habitat restoration projects upon completion of the hydrologic study.	DNR Applicable Management Agencies	X	X	X	Staff Assignment	1-92/Ongoing
Action 3.2	Continue monitoring programs and baseline studies with respect to major potential water withdrawals including consumptive use permits and potable water withdrawals from the Myakka River.	Sarasota County SFP/MD USGS	X	X	X	Staff Assignment	7-90/Ongoing
Action 3.3	Post significant submerged aquatic vegetation beds in the lower Myakka River to reduce the incidences of prop cuts caused by boat traffic in these shallow and sensitive areas.	DNR Sarasota County	X	--	--	Staff Assignment	7-90/12-90
Action 3.4	Periodically remove derelict crab traps and fishing gear from the river to enhance aquatic resources.	DNR	X	--	--	Staff Assignment	7-90/Ongoing
Action 3.5	Implement a manatee management plan that incorporates the appropriate findings and recommendations of the Mabor and Patton study (1989) and newly proposed boat speed limits.	DNR	X	--	--	Staff Assignment	7-90/Ongoing
<b>OBJECTIVE 4</b>							
To coordinate with local, regional, state, and federal agencies in the use and regulation of land management practices that protect the quality of the Myakka River and its tributaries.							
<b>ACTIONS</b>							
Action 4.1	Evaluate the function and composition of the Council as a management coordination body and implement any necessary modifications.	DNR Myakka River Management Coordinating Council North Port Sarasota County	X	X	X	Staff Assignment	7-90/Ongoing

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus					
		Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	Implementation/Completion Date
<b>OBJECTIVE 4</b>							
To coordinate with local, regional, state, and federal agencies in the use and regulation of land management practices that protect the quality of the Myakka River and its tributaries.							
Action 4.2	Designate officers who will be in charge of reviewing significant permits/development applications within the Myakka River watershed.	DNR Applicable Management Agencies	X	X	X		7-90/1-91
Action 4.3	Permitting agencies at the federal, state, regional, and local levels should notify DNR's designated permit review officer of all permits/development applications within the Myakka River watershed and enter into memorandums of understanding or similar agreements to facilitate coordination of review of such applications.	Applicable Management Agencies	X	X	X	Staff Assignment	7-90/1-92
Action 4.4	Encourage consistent land use planning and regulations in the watershed among all local governments and regional and state agencies.	Applicable Management Agencies	X	X	X	Staff Assignment	7-90/Ongoing
Action 4.5	Monitor local codes and review and comment on proposed land development controls that regulate development within environmentally sensitive areas of the Myakka River watershed.	DNR DCA	X	X	X	Staff Assignment	7-90/Ongoing
Action 4.6	Develop and implement land use design standards for development within the river and wild and scenic protection zone.	DNR DCA	X	X	--	Staff Assignment	7-90/7-91
<b>OBJECTIVE 5</b>							
To minimize urban and suburban encroachment and resultant adverse impacts upon the river and allow appropriate land uses within the watershed.							
<b>ACTIONS</b>							
Action 5.1	Continue to ensure through comprehensive plans, land development regulations and/or appropriate ordinances, that urban and suburban land uses are minimized with the river area, wild and scenic protection zone, and the watershed.	Applicable Management Agencies	X	X	X	Staff Assignment	7-90/Ongoing

Table 5-1 Myakka River Management Program Objectives and Actions.

	Program Focus					Implementation/ Completion Date
	Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	
<b>OBJECTIVE 5</b>						
To minimize urban and suburban encroachment and resultant adverse impacts upon the river and allow appropriate land uses within the watershed.						
<b>Action 5.2</b>	DNR Sarasota County North Port	X	X	--	Staff Assignment	7-90/Ongoing
	River crossings shall be regulated by DNR. New infrastructure crossings shall be discouraged in undeveloped areas. Improvements should be made to existing facilities and new facilities should be collocated along existing facilities which cross the river to minimize the demand for new facilities that must cross the river. Regulatory agencies should ensure that adequate protection is given to wild and scenic values in all river crossing permits.					
<b>Action 5.3</b>	DCA DNR SFWMD TBRPC North Port Sarasota County Applicable Management Agencies	X	X	X	Staff Assignment	7-90/Ongoing
	Require that land development review and approval consider sea-level rise, subsequent landward migration of wetlands, and resultant need for an upland buffer.					
<b>Action 5.4</b>	FDOT	--	X	X	Staff Assignment	7-90/7-91
	Modify existing lighting to significantly reduce the spill of light into the Myakka River from the I-75/West River Road Interchange.					
<b>Action 5.5</b>	FDOT	--	X	X	Staff Assignment	7-90/7-92
	Relocate the rest area located at the I-75/West River Road Interchange.					

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus					
		Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed	Estimated Funding Requirements	Implementation/Completion Date
<b>OBJECTIVE 6</b>							
To provide for the regulation, control, and distribution of public access to the Myakka River where necessary to protect and enhance the resource values of the river area.							
<b>ACTIONS</b>							
Action 6.1	Limit uncontrolled public access to the Myakka River on the Carlton Reserve to the extent allowed by the rivers' carrying capacity, and include toilets, designated campfire areas, and refuse containers with a suitable vegetated buffer from the river area.	DNR Sarasota County	X	X	--	\$25,000	7-90/12-91
Action 6.2	Restrict additional public access on the Myakka River until a recreational carrying capacity is established and enforceable.	DNR Sarasota County	X	--	--	Staff Assignment	7-90/12-91
Action 6.3	Establish pedestrian-only nature trails on publicly-owned land in an area of the wild and scenic protection zone to promote nature study and research.	DNR Sarasota County	X	X	--	\$5,000	7-90/12-91
<b>OBJECTIVE 7</b>							
To minimize the disturbances to natural resources of the Myakka River from river-related recreational uses.							
<b>ACTIONS</b>							
Action 7.1	Conduct a comprehensive boat utilization study to quantify recreational carrying capacities by river segment and enforce recreational activity levels after carrying capacities are determined.	DNR	X	X	--	\$40,000	7-90/12-91
Action 7.2	Enact by rule a slow/minimum wake speed for the Myakka River from the Sarasota/Manatee County line to the Sarasota/Charlotte County line except in the main channel downstream of U.S. Highway 41 and except for the official government agency use of watercraft.	DNR	X	--	--	Staff Assignment	7-91/7-92

Table 5-1 Myakka River Management Program Objectives and Actions.

	Program Focus				Estimated Funding Requirements	Implementation/Completion Date
	Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed		
<b>OBJECTIVE 7</b>						
To minimize the disturbances to natural resources of the Myakka River from river-related recreational uses.						
Action 7.3	DNR Sarasota County North Port	X	--	--	Staff Assignment	7-91/7-92
Enact a nuisance noise ordinance, if warranted by the boat utilization study, to minimize noise impacts on the Myakka River.						
Action 7.4	DNR	X	--	--	Staff Assignment	7-90/Ongoing
Prohibit airboats except for official permitted use by agencies operating in the wild and scenic portion of the Myakka River.						
Action 7.5	DNR Sarasota County	X	--	--	Staff Assignment	7-91/7-92
Establish idle speed/no-wake zones in the vicinity of marinas, boat ramps, structures near navigable channels and in other locations where the river is too narrow to safely accommodate two-way traffic.						
Action 7.6	Applicable Law Enforcement Agencies	X	X	--		7-90/Ongoing
Assign additional law enforcement personnel to enforce existing and adopted regulations on and adjacent to the Myakka River.						
Action 7.7	DNR Sarasota County	X	X	--	\$8,000	7-90/Ongoing
Educate the public through a sign placement program, at river access points which describes the resource values and regulations of the wild and scenic designated portion of the river.						
Action 7.8	DNR	X	--	--	\$2,000	7-90/7-91
Signs indicating river miles should be placed at suitable intervals to establish common reference points for describing locations.						
<b>OBJECTIVE 8</b>						
To protect archaeological/historical sites from adverse impacts associated with development, vandalism, and artifact collecting.						
<b>ACTIONS</b>						
Action 8.1	DNR DHR Applicable Management Agencies	X	X	X	Staff Assignment	7-90/Ongoing
Support a policy on the preservation of archaeological/historical sites on public lands in the watershed.						

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus				Estimated Funding Requirements	Implementation/Completion Date
Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed				
<b>OBJECTIVE 8</b>							
To protect archaeological/historical sites from adverse impacts associated with development, vandalism, and artifact collecting.							
Action 8.2	Develop management guidelines to facilitate the preservation or conservation of cultural resources, including development review of project impacts on cultural resources in the watershed.	X	X	X	Staff Assignment	1-91/Ongoing	
		DHR SWFRPC Sarasota County North Port Applicable Management Agencies					
Action 8.3	Enforce existing laws and coordinate with state and local police authorities to protect archaeological/historical sites and educate law enforcement officials and the general public of these laws and regulations.	X	X	X	Staff Assignment	7-90/Ongoing	
		DHR Applicable Management and Law Enforcement Agencies					
<b>OBJECTIVE 9</b>							
To expand the knowledge and data base of the archaeological/historical resources in the Myakka River vicinity and in the watershed.							
<b>ACTIONS</b>							
Action 9.1	Commission a cultural resource assessment survey of the watershed and the wild and scenic protection zone to acquire a greater knowledge and understanding of the watershed's archaeological/historical resources. The surveyors shall consult existing sources of information retained by DHR and Sarasota County Division of Historical Resources.	X	X	X	\$40,000	1-91/1-92	
		DHR DHR Sarasota County					

Table 5-1 Myakka River Management Program Objectives and Actions.

		Program Focus				Estimated Funding Requirements	Implementation/Completion Date
Agency Responsibility	River Area	Wild and Scenic Protection Zone	Watershed				
<b>OBJECTIVE 9</b>							
To expand the knowledge and data base of the archaeological/historical resources in the Myakka River vicinity and in the watershed.							
Action 9.2	Develop a cultural resource sensitivity map that would locate areas of relatively high probability of cultural resource distribution.	DHR DHR Sarasota County	X	X	\$15,000	1-91/1-92	
Action 9.3	Designate a local museum in the Myakka River vicinity as an educational and curatorial facility to receive artifacts collected within the Myakka River watershed.	Applicable Management Agencies	--	X	Staff Assignment	1-91/1-92	
Action 9.4	Develop a monitored public access site to an interpretive exhibit at one of the prehistoric Indian mounds/middens near the river in the Myakka River State Park or Carlton Reserve.	DHR DHR Sarasota County	--	X	\$10,000	1-91/1-92	
Action 9.5	Sponsor an annual Myakka River Pioneer Festival at a restored homestead, farmstead or the Myakka School House with demonstration of pioneer crafts, music, storytelling, exhibits, and costumes.	DHR DHR Sarasota County	--	X	Staff Assignment	1-91/Ongoing	
Action 9.6	Design markers to indicate historic features of the river area.	DHR DHR	X	--	Staff Assignment	1-91/1-92	

USCOE - U.S. Army Corps of Engineers  
 DER - Department of Environmental Regulation  
 SWFWMD - South West Florida Water Management District  
 DNR - Department of Natural Resources  
 FDOT - Florida Department of Transportation  
 FGFWFC - Florida Game and Fresh Water Fish Commission  
 USGS - United States Geological Survey  
 DCA - Department of Community Affairs  
 SWFRPC - Southwest Florida Regional Planning Council  
 TBRPC - Tampa Bay Regional Planning Council  
 DHR - Division of Historical Records  
 Council - Myakka River Management Coordinating Council

Source: Hunter, 1989.

#### Action 1.6

The applicable management and acquisition authorities should acquire headwater wetlands, tributaries, and lands bordering the Myakka River through willing-seller purchase, donation, or exchange. Areas that should be considered include the following: the wild and scenic protection zone, lands adjacent to Myakka River State Park, the Walton Tract, the Carlton Reserve, Tatum Sawgrass, portions of Vanderipe Slough, Flatford's Swamp, and Myakkahatchee Creek. DNR shall coordinate with applicable management agencies to identify the proposed land area boundaries for acquisition. The applicable management agencies should attempt acquiring these areas through fee-simple purchase and through purchase of easements or development rights. The efforts of others, such as Sarasota County, Manatee County, the Nature Conservancy and the Trust for Public Land, will also be needed to accomplish these acquisitions.

#### Action 1.7

Applicable management and acquisition agencies should coordinate to establish a local land trust to facilitate willing-seller/donor land and easement acquisition of environmentally sensitive lands in the Myakka River watershed.

#### Action 1.8

Sarasota County should revise its habitat-based regulatory programs to include protection of wetlands and hammock vegetation specifically along the Myakka River. The county should revise language in APOXSEE to provide for regulation of existing upland vegetation at a minimum of 220 feet wide to be required around all wetlands/surface waters that are contiguous to the designated Myakka River area. APOXSEE should also be revised with language that provides for special protection to wetland-fringing hammocks that are contiguous to the wetlands and/or surface waters along the designated Myakka River area from river mile 7.5 to river mile 41.5.

#### Action 1.9

DNR shall coordinate with all landowners along the Myakka River to implement a prescribed burning and fuel reduction program. Ecological burning should be utilized where appropriate to control the encroachment of hardwood vegetation into the river marsh, restore and perpetuate pine flatwoods, reduce fuel levels, increase species diversity and reduce the threat of wildfire along the



Myakka River. A long-range program should be established to identify the timing, location, and extent of ecological burning needed to restore and enhance vegetation within the river area and the wild and scenic protection zone, where practicable. The burn plan should be implemented by a series of annual work programs to be conducted by the Division of Forestry and DNR, and should provide for periodic reviews of progress made toward implementing the program. The plan should also provide for restoration of fire breaks and plow lines. A program for controlling wildfire along the river should also be established.

#### Action 1.10

DNR shall implement an integrated program of exotic and nuisance species management for the river area and the wild and scenic protection zone to eradicate or control exotic and nuisance species of plants and animals. Procedures should be devised for locating exotic plant species and removing them to the maximum extent possible. Priority consideration will be given to the river area and to those portions of the wild and scenic protection zone which are in public ownership.

#### Action 1.11

DNR shall coordinate with the Game and Fresh Water Fish Commission (GFWFC) and develop and implement a plan to locate, catalog and protect listed plant and animal species and species of local concern within the river area and the wild and scenic protection zone. The study should include all native animals and plants that are of interest and worthy of protection. This listing of animals and plants will be proposed by GFWFC and then be reviewed by the Council.

#### Action 1.12

DNR shall coordinate with the Florida Department of Agriculture and Consumer Services (DACS) and the GFWFC to recommend legislative amendments which would make it unlawful to harvest or destroy any plant species within the river area and the wild and scenic protection zone that are listed under the state's regulated plant index (the Native Flora of Florida Act, Chapter 581, Florida Statutes) as endangered or threatened.

#### Action 1.13

DNR shall compile an inventory of special ecological features along the Myakka River. These features should be protected to the maximum extent possible by law or public ownership. A program for public education should be implemented to inform the public of the special attributes these features possess that should be protected.

#### Action 1.14

DNR shall inventory and monitor changes to animal populations and plant communities in the river area and the wild and scenic protection zone. DNR, in conjunction with appropriate state agencies and local governments should inventory and monitor changes to animals and plants in these areas to manage these resources properly.

Plants--A periodic inventory should be conducted through the use of long-term aerial photography to document the changes to the flora.

Animals--Research should be conducted by interested agencies on topics concerning local animal life for later use in wildlife management activities and public education programs. Animal populations will be cataloged and monitored thereafter on a regular basis to provide data on which detailed biological carrying capacities and management criteria can be evaluated. A particular emphasis of these activities should be to monitor the effects of public recreational use of the river. The development of this environmental database should be coordinated with other appropriate agencies to maximize utilization of the information collected (e.g., current studies being conducted by the Sarasota County Ecological Monitoring Division and cooperative United States Geological Survey programs).

#### Action 1.15

DNR shall develop an inventory program to monitor and prioritize the important nesting, roosting, and breeding sites along the Myakka River corridor in order to protect these sites from actions that may cause their discontinued use.

Action 1.16

DNR shall coordinate with the GFWFC and Sarasota County to distribute warning signs around the two wading bird rookeries in the Myakka River near the Sarasota/Charlotte County line. DNR shall nominate these two rookeries for designation as critical wildlife habitat areas by the GFWFC.

Action 1.17

DNR will coordinate with applicable management agencies and develop and implement a program of habitat restoration in the river area and wild and scenic protection zone. In conjunction with GFWFC, Sarasota County, the City of North Port, and other appropriate agencies, DNR will implement a voluntary program of habitat restoration. The program should provide for replanting and other restoration actions in areas that have been historically altered. Reforestation of areas on the upland fringes of the wild and scenic protection zone will be accomplished where past lumbering and agricultural land clearing have eliminated large areas of woody shrubs and trees, such as slash pine and oaks. Disturbed wetlands should also be restored where practical through manipulation of water levels, replanting native aquatic vegetation, and other management methods. The vegetation plan should determine priority habitat restoration needs within the wild and scenic protection zone and establish a schedule for meeting them.

Action 1.18

DNR shall develop guidelines for fence placement and educate landowners on how fences that border the Myakka River can be modified or newly constructed to facilitate easier crossing by wildlife.

OBJECTIVE 2

To protect and/or enhance the surface and ground water resource values of the Myakka River, including protection and enhancement of water quality and designated uses, and protection and restoration of optimal quantity and timing of freshwater discharge.

Action 2.1

Applicable management authorities should strictly enforce regulations relating to water resources.

#### Action 2.2

Applicable management authorities should identify and seek funding sources to develop, institute, and monitor programs for best management practices to control nonpoint source pollution within the Myakka watershed.

#### Action 2.3

Manatee County should revise Ordinance No. 81-22, Mining and Reclamation, to include language for the Myakka River watershed similar to that for the Manatee River watershed. This language requires best possible technology for mining in the watershed.

#### Action 2.4

Applicable management agencies should evaluate existing water quality monitoring programs to determine whether to continue and/or expand these programs to include:

- a. Better coordinated and more comprehensive monitoring efforts,
- b. Linkage to regulatory actions and programs,
- c. Landfill and borrow pit monitoring, and
- d. Monitoring of tributaries; for example, Howard Creek and Big Slough.

#### Action 2.5

DNR shall coordinate the removal of trash and debris within the river and along the river shoreline and sponsor a "Myakka River Cleanup Day" at least once per year.

#### Action 2.6

Applicable management agencies should conduct a hydrologic study that considers all existing and potential water control structures and diversions of river water. The study should evaluate all aspects of the water resource, including net benefits, as well as the living resources of the river, and develop guidelines for preserving, enhancing, and restoring the hydrologic regime of the river. The study should specifically include, but not be limited to:

1. Downs' Dam,

2. Blackburn Canal (Curry Creek),
3. The restoration of the Clay Gully diversion,
4. The restoration of Tatum Sawgrass,
5. The restoration of Vanderipe Slough,
6. The restoration of Deer Prairie Creek and Slough,
7. The water control structure at the lower end of Upper Myakka Lake,
8. The shoal area at Deer Prairie Creek,
9. The proposed Sarasota County potable water reservoir project, and
10. The existing dolomite mine discharge.

The study should assess potential effects of these areas and provide recommendations to mitigate negative impacts where indicated. The study should also be coordinated with Sarasota County's river modeling efforts and the results of the U.S. Geological Survey's (USGS) study. Efforts should be coordinated with agencies and organizations that are presently evaluating individual aspects or projects referenced above.

#### Action 2.7

DNR shall coordinate with applicable management agencies and petition the Environmental Regulatory Commission to amend Chapter 17-3, FAC, to designate the entire Myakka River as an Outstanding Florida Water.

#### Action 2.8

DNR should seek a U.S. Corps of Engineers exemption from the exotic aquatic plant control program within Myakka River State Park to allow the limitation or prohibition of recreationally used power boats on the Upper Myakka Lake and Lower Myakka Lake.

#### Action 2.9

DNR shall investigate possible alternatives to the chemical control of aquatic weeds and encourage effective and environmentally sound management and control practices for chemical, mechanical, biological, or physical weed control.

Action 2.10

Sarasota County, in conjunction with the applicable regional planning councils, should develop emergency action procedures to include timely monitoring, response and remediation of spills of contaminants which could potentially affect the Myakka River.

Action 2.11

SWFWMD should maintain and coordinate monitoring programs for the consumptive use of ground water within the Myakka River watershed. Particular emphasis should be placed on the maintenance of wetland hydroperiods.

Action 2.12

DNR shall prohibit mining of resources in the river area. DNR and applicable management agencies shall establish recommended guidelines and design criteria for prohibiting mining in the wild and scenic protection zone and regulate mining discharges to ensure post mining runoff meets premining runoff for water quality and quantity. Mining permitting should place particular emphasis on protection of the Myakka River and mine reclamation plans should enhance the ecological resources adjacent to the river protection zone.

Action 2.13

DNR shall petition applicable management agencies to conduct a master watershed study to allow for comprehensive stormwater master planning.

OBJECTIVE 3

To preserve, protect and restore natural aquatic habitat necessary for the continued healthy existence of aquatic populations and communities within the Myakka River.

Action 3.1

DNR shall identify, prioritize and implement feasible aquatic habitat restoration projects upon completion of the hydrologic study.

Action 3.2

Sarasota County, SWFWMD and USGS should continue monitoring programs and baseline studies with respect to major potential water withdrawals, including Consumptive Use Permit and potable water withdrawals from the Myakka River.

Action 3.3

DNR shall post significant submerged aquatic vegetation beds in the Lower Myakka River to reduce the incidence of prop cuts caused by boat traffic in these shallow and sensitive areas.

Action 3.4

DNR shall periodically remove derelict crab traps and fishing gear from the river to enhance aquatic resources.

Action 3.5

DNR shall implement a manatee management plan that incorporates the appropriate findings and recommendations of the Nabor and Patton study (1989) and newly proposed boat speed limits. The plan should include idle speed zones as well as no-wake zones upriver of the Interstate 75 bridge to Downs' Dam.

**OBJECTIVE 4**

**To coordinate with local, regional, state, and federal agencies in the use and regulation of land management practices that protect the quality of the Myakka River and its tributaries.**

Action 4.1

After adoption of this plan, DNR and the Council shall jointly evaluate the function and composition of the Council as a management coordination body and implement any necessary modifications.

Action 4.2

DNR shall designate an officer who will be in charge of reviewing significant permits/development applications within the Myakka River watershed, including but not limited to Department of Environmental Regulation (DER) and Army Corps of Engineers' (COE) dredge and fill permits; SWFWMD Consumptive Use Permits; SWFWMD Stormwater and Surface Water Management permits; Coast Guard Bridge Permits, Development of Regional Impact/Applications for Development Approval documents; and, Sarasota County, City of North Port, Manatee County, Hardee County, Charlotte County, and DeSoto County development applications. It will be the DNR officer's responsibility to determine whether any adverse effects

to the Myakka River's resources will result from the issuance of a permit/development approval and provide comment to the permitting/approval agency. On substantial issues, the Department's officer shall elicit the assistance of the Myakka River Management Coordinating Council in an advisory capacity. After adoption of this plan, the Department and Council will develop procedures for keeping the Council informed.

The DNR officer shall be located in a field office along the Myakka River. The field office should be established on public land adjacent to or within the Myakka River Wild and Scenic River segment. DNR shall seek funding for staff to operate the permit program and will establish reasonable fees to help defray the cost of processing applications.

In addition to the review of permits/development applications of the Myakka watershed, the onsite field officer shall be responsible for coordination of DNR permits necessary for activities within the river area. In accordance with Section 258.501(12), Florida Statutes, the DNR officer is also responsible for providing field reviews of the Myakka River area and enforcing the Act.

#### Action 4.3

Permitting agencies including the Department of Environmental Regulation, USCOE, SWFWMD, U.S. Coast Guard, each county's planning, natural resources, building and zoning, and transportation departments, and the City of North Port, should notify the DNR's designated permit review officer of all permits/development applications within the Myakka River watershed and enter into memorandums of understanding or similar agreements to facilitate coordination of review of such applications.

#### Action 4.4

DNR shall encourage consistent land use planning and regulations in the watershed among all local governments and regional and state agencies.



Action 4.5

DNR shall monitor local codes and review and comment on proposed land development controls that regulate development within environmentally sensitive areas of the Myakka River watershed.

Action 4.6

Sarasota County and the City of North Port should develop and implement land use design standards for development within the wild and scenic protection zone. These regulations should include setbacks behind bluffs and native landscaping and xeriscaping to provide for visual uniformity, a screen from the river and a habitat for wildlife. The regulations should provide for transfer of density, agricultural bonuses, or tax abatements to compensate landowners for wild and scenic protection zone buffer requirements. Landowners along the river should be encouraged to plant appropriate native trees and shrubs within and adjacent to the protection zone.

OBJECTIVE 5

To minimize urban and suburban encroachment and resultant adverse impacts upon the river and allow appropriate land uses within the watershed.

Action 5.1

DCA and local governments should continue to ensure through comprehensive plans, land development regulations and/or appropriate ordinances, that urban and suburban land uses are minimized within the river area, the wild and scenic protection zone and the watershed.

Action 5.2

DNR shall regulate river crossings. New infrastructure crossings shall be discouraged in undeveloped areas. Improvements should be made to existing facilities which cross the river to minimize the demand for new facilities that must cross the river. Regulatory agencies should ensure that adequate protection is given to wild and scenic values in all river crossing permits.

Action 5.3

DCA, DNR, the water management district, the applicable regional planning councils, and local governments should require that land development review and approval consider sea-level rise, subsequent landward migration of wetlands, and resultant need for an upland buffer.

Action 5.4

FDOT should modify existing lighting to significantly reduce the spill of light into the Myakka River from the Interstate 75/West River Road interchange.

Action 5.5

FDOT should relocate the rest area located at the Interstate 75/West River Road Interchange.

OBJECTIVE 6

To provide for the regulation, control and distribution of public access to the Myakka River where necessary to protect and enhance the resource values of the river area.

Action 6.1

DNR and Sarasota County should limit uncontrolled public access to the Myakka River on the Carlton Reserve to the extent allowed by the river's carrying capacity, and include toilets, designated campfire areas, and refuse containers with a suitable vegetated buffer from the river area.

Action 6.2

DNR shall restrict additional public access on the Myakka River until a recreational carrying capacity is established and enforced. Also, DNR shall monitor and regulate boat traffic in that portion of the Myakka River from State Road 72 to Border Road to study recreational/natural systems carrying capacity, as proposed for further research.

Action 6.3

DNR and Sarasota County should establish pedestrian-only nature trails on publicly owned land in an area of the wild and scenic protection zone to promote nature study and research.

**OBJECTIVE 7**

To minimize the disturbances to natural resources of the Myakka River from river-related recreational uses.

Action 7.1

DNR shall undertake a comprehensive boat utilization study to quantify recreational carrying capacity by river segment and enforce recreational activity levels after carrying capacity is determined.

Action 7.2

DNR shall enact by rule, a slow/minimum wake speed for the Myakka River from the Sarasota/Manatee County line to the Sarasota/Charlotte County line except in the main channel downstream of U.S. Highway 41 and except for the official government agency use of watercraft.

Action 7.3

Applicable management agencies should enact a nuisance noise ordinance, if warranted by the boat utilization study, to minimize noise impacts on the Myakka River.

Action 7.4

DNR shall prohibit the operation of airboats, except for official, permitted use by agencies in the designated area of the wild and scenic Myakka River.

Action 7.5

DNR shall establish idle speed/no-wake zones in the vicinity of marinas, boat ramps, structures near navigable channels and in other locations where the river is too narrow to safely accommodate two-way traffic.

Action 7.6

Applicable management agencies should assign additional law enforcement personnel to enforce existing and adopted regulations on and adjacent to the Myakka River. Personnel should be assigned from the Division of Recreation and Parks, Florida Marine Patrol, FGFWFC, Sarasota County, and City of North Port.

Action 7.7

DNR shall educate the public through a sign program at river access points briefly describing resources values and regulations in the designated river area.

Action 7.8

Signs indicating river miles should be placed at suitable intervals to establish common reference points for describing locations.

**OBJECTIVE 8**

To protect archaeological/historical sites from adverse impacts associated with development, vandalism, and artifact collecting.

Action 8.1

DNR shall support a policy for the preservation of archaeological/historical sites on public lands in the watershed.

Action 8.2

DNR shall coordinate with the Division of Historical Resources (DHR), Sarasota County, and the City of North Port to develop management guidelines to facilitate the preservation or conservation of cultural resources. A uniform process for the review and comment of project impacts on cultural resources should also be developed. Reviews will ascertain project impacts to cultural resources and recommend appropriate measures to minimize or mitigate adverse effects of such projects to significant cultural resources in the watershed.

Action 8.3

Applicable management agencies should enforce existing laws and coordinate with state and local police authorities to protect archaeological/historical

sites and educate law enforcement officials and the general public of these laws and regulations.

#### OBJECTIVE 9

To expand the knowledge and data base of the archaeological/historical resources in the Myakka River vicinity and in the watershed.

##### Action 9.1

DNR shall commission a cultural resource assessment survey of the watershed or the wild and scenic protection zone to acquire a greater knowledge and understanding of the watershed's archaeological/historical resources. The surveyor shall consult existing sources of information retained by DHR and Sarasota County Division of Historical Resources.

##### Action 9.2

DNR shall coordinate with DHR and Sarasota County Division of Historical Resources to develop a sensitivity map that would locate areas of relatively high probability of cultural resource distribution.

##### Action 9.3

Applicable management agencies should designate a local museum in the Myakka River vicinity as an educational and curatorial facility to receive artifacts collected within the Myakka River watershed. Such agencies should develop educational materials on the prehistoric and historic heritage of the watershed to describe the responsibility of all users to be stewards of such resources.

##### Action 9.4

DNR or Sarasota County should develop monitored public access to an interpretive exhibit at one of the prehistoric Indian mounds/middens located near the river in the Myakka River State Park or Carlton Reserve.

##### Action 9.5

DNR should sponsor an annual Myakka River Pioneer Festival at a restored homestead, farmstead or the Myakka School House with demonstrations of pioneer crafts, music, storytelling, exhibits, and costumes. The festival should involve or include the media, school, groups, and law makers.

## Action 9.6

Design markers to indicate historic features of the river area.

### 5.4 RECREATIONAL CARRYING CAPACITY

One of the most important functions of the Myakka River management program is to determine and monitor the amount and kinds of recreational uses that are permitted on the river without creating adverse impacts on the resource values of the river area. Although the term "carrying capacity" of rivers is used frequently, there is no definitive methodology for estimating a river's recreational carrying capacity. There are many concepts and factors involved in assessing carrying capacity, and these factors and concepts can differ from river to river and also along different segments of the same river.

In determining the recreational carrying capacity of the Myakka River, an identification of the constraints on recreational use due to the physical characteristics of the river must first be made. The predominant physical constraints are width and depth of the river channel and the water control structures located south of Lower Myakka Lake and at the outfall to Upper Myakka Lake. These constraints limit the type of recreational use (i.e., canoeing or powerboating) and the actual areas where recreational use may occur. For purposes of determining carrying capacity of the Myakka River in this management program, the river should be considered in four segments. The first segment consists of the state park, including Upper Myakka Lake, and the Lower Myakka Lake. The second segment runs from the southern state park boundary to Border Road. The third and fourth segments run from Border Road to U.S. Highway 41 and U.S. Highway 41 to the Sarasota/Charlotte County line, respectively.

#### 5.4.1 Considerations in Determining Recreational Carrying Capacity

After differentiating the river segments by physical constraints, the concept of carrying capacity can be addressed. The two perspectives from which to address carrying capacity are the capacity of natural features, and the demands of the human population. When considered with variables such as seasonal climatic fluctuations, geographic service area, and river water level fluctuations, these perspectives can be further differentiated into four

categories: physical capacity, ecological capacity, facility capacity, and social capacity.

Human recreational impacts on the river's resource are immensely important. Every recreational use of the river produces some level of impact on the river. The recreational use becomes significant when any adverse impacts created outweigh any recreational benefit gained.

The ultimate physical limit of capacity is the amount of space available for people and their defined recreational needs. In the case of the Myakka River, it might include the number of recreational uses that could physically occur on the river segments at any one time with enough spacing between them to allow for a minimum level of user safety. The ultimate carrying capacity under such conditions would be far more than the current use levels on the river.

Currently, there is no segment of the river on which the physical capacity has been attained. Ecological carrying capacity of the river is probably also above current use levels, although certain areas exhibit impacts from use. There are problems with the agitation of sediment, the destruction of grass beds, and the possibility of injuries to manatees by motorboat use.

To facilitate recreational use of the river, public access and facilities are required. The limited access to the northern segment of the Myakka River currently imposes a limited facility carrying capacity. When use of these facilities are maximized, the facility carrying capacity of these facilities has been attained. Access and facility capacity are probably the most flexible of the categories since they may exact the smallest initial cost and may be the most acceptable solutions in the general public view.

Facility capacity in the state park is partially measured in terms of the size of the parking area at the State Park boat ramp. This capacity is exceeded on many weekend days during the year, particularly in the spring. Facility capacity could be increased by the construction of additional parking areas. The southern segment of the river has many private facilities that can generally accommodate peak demands.

Probably the most subjective capacity perspective is social capacity. Social capacity involves the issue of visitation level in an area before the recreational experience is significantly degraded. Social carrying capacity is complex due to many different recreational uses available on the river. A single canoeist's impact on social carrying capacity is quite different from that of tourists on a 70-passenger tour boat.

The most significant variable affecting recreational carrying capacity on the Myakka River is probably social capacity. In establishing a recreational carrying capacity for the river, the management program recognizes that there is no widely shared preference regarding experience types by recreational users of the river. The management program should, therefore, accommodate a wide range of recreational uses and preferences without promoting overcrowding, safety problems or degradation of natural resources.

#### 5.4.2 Derivation of Recreational Carrying Capacity

Two basic patterns of recreational use presently occur on the Myakka River. The first is recreational use which provides the solitude associated with the unique natural attributes of the river. The second is recreational use more socially oriented in nature. These patterns reflect preferences for two distinct types of recreational experiences. The first type is a wilderness experience, typified by quiet, slow movement affording the opportunity to appreciate the river's vegetation and wildlife. Types of activities associated with this type of use are small groups of canoeists, fishermen, and nature observers. Such activities generally occur on the northern river segment and selected areas of the southern segment of the river distant from development. The participants who prefer this type of experience may tolerate some visual or auditory contact with other people but only on a limited basis. Generally, the morning hours are preferred for such activities, since this is usually the time of least human activity and greatest wildlife activity on the river.

The second type of experience is less of a wilderness-oriented, resource-based activity than it is a people-oriented experience. Such activities include large groups of canoeists, pleasure boaters, and swimmers. Generally,



such uses occur on the southern segment of the river where access, adequate width and depth of the river, and private recreational facilities are available. An anomaly to these experiences is the tour boat operating on the Upper Myakka Lake which accommodates groups of people trying to obtain the first type of wilderness-oriented, resource-based experience in a social atmosphere.

Additional criteria have been used to derive the recreational carrying capacity for the Myakka River. These include interviews with facility operators along the river, an informational survey, guidelines for resource-based outdoor recreation activities, and the estimated 1990 outdoor recreation demand-supply ratios for Manatee and Sarasota Counties.

Based on information at hand, it has been determined that the segments of the river will have different recreational carrying capacities. Upper Myakka Lake will contain a recreational carrying capacity based on current recreational facilities available. Boat ingress should be limited to the boat ramp on the lake and access along the lakeshore should be discouraged. The segment which occurs from Upper Myakka Lake downstream to Border Road will have a carrying capacity based on wilderness-oriented, resource-based activity and experience. The majority of this area is within the boundaries of the Myakka River State Park or adjacent to the Carlton Reserve and based on activities originating at the park or from downstream private launch facilities.

Presently, the state park does not limit the number of users of the boat ramp. The actual number of parking spaces available at the boat ramp is 79; however, users frequently park in nondesignated areas around the ramp when the parking spaces are full. Parking, ingress, and egress at nondesignated access points along the park road and State Road 72 should be restricted.

A determination of the recreational carrying capacity for the segment of the river from Border Road to U.S. Highway 41 is also based on physical restrictions. The river is not appreciably wider than upstream segments and contains numerous meanders and bluffs that restrict visibility. Erosion is also a greater problem in this river segment due to the presence of steep river banks and meanders which cause greater wakes due to boat turning

movements. Currently, there is no public access located in this area. There are several private access facilities including Snook Haven, Ramblers Rest Resort, and Becky's Bait. These private facilities promote various recreational activities. The recreational carrying capacity of the Myakka River from Border Road to U.S. Highway 41 should be set by the existing private facilities which provide access to the river. In the extreme southern area of the river there are several residential communities and extensive private access to the river. Limiting the recreational carrying capacity for this area of the river should also be based on existing access for recreational use. Additional facilities for access to the Myakka River should be discouraged by the various river management agencies. The natural sill north of U.S. Highway 41 will act as a physical constraint for certain boats to access upper reaches of the Myakka River.

Because of the limited duration of research conducted during the development of the Myakka Wild and Scenic River Management Plan, there is a need to establish a more accurate recreational carrying capacity for the wild and scenic segment of the Myakka River. Therefore, after adoption of the plan a monitoring of recreational use will be conducted by DNR on the Myakka River. The Department will closely monitor impacts resulting from the levels of use. Carrying capacities will be reviewed on at least an annual basis, and adjustments will be made, as needed, after consideration of known resource impacts, increases in use, user preferences, river conditions, and other factors.

#### 5.4.3 Scheduling and Enforcement

After adoption of the plan, DNR and other appropriate agencies, with input from interested groups and individuals, will develop and implement a system for monitoring use of the river and the determination and enforcement of recreational carrying capacity. This system would be jointly implemented by the Department and other appropriate agencies in accordance with formal interagency agreements. It shall not be the DNR's policy to deny public recreational use on the river, except as noted under certain actions in the plan.