2000 Annual Report

Northwest Florida Water Management District

in the new millennium...

As we begin the new millennium, 2001 offers us many opportunities to review and reexamine traditional approaches to preserving and protecting our water resources. Addressing new challenges with limited financial resources while there are increasing demands on our water resources will require that every opportunity be taken to redefine how we manage those water resources.

Comprehensive water resource management plans are being developed, updated and revised to address these challenges. These include the Region II Water Supply Plan for Santa Rosa, Okaloosa and Walton counties, the District Water Management Plan and ongoing Surface Water Improvement and Management (SWIM) plans for priority water bodies. During 2000, a new SWIM management plan for the St. Andrew Bay watershed (which includes the St. Joseph Bay and the Sand Hill Lakes) was approved. While we are engaging in the development of these comprehensive water resource plans, we also are evaluating ways to reduce expenditures and redirect our efforts.

For the first time in its history, the Northwest Florida Water Management District Governing Board declared a "Water Shortage Warning" due to the below normal rainfall that had been experienced throughout the District's 16-county area. Eighteen months of below normal rainfall and extreme drought conditions made the June 2000 declaration necessary. We remain under this Water Shortage Warning as we begin 2001. Area residents and all water users are urged to continue monitoring water use and implementing water conservation measures. Several water conservation brochures have been made available by the District to assist the public with their efforts to reduce water use. These brochures address Xeriscaping (drought-tolerant plants), outdoor watering, retrofitting fixtures for more efficient use of water and common-sense practices that can be employed by anyone.

More than 9,000 permits were granted for well construction, repair and abandonment; consumptive use; surface water management; and agricultural and forestry surface water management during 2000. Water conservation measures are stressed with the issuance of consumptive use permits. Users are made aware of the need for water conservation and specific steps are prescribed for users in regions that have been designated water resource caution areas. In these areas, there is a need for more stringent permitting and management standards. Many utility companies and water suppliers also implement various water conservation awareness programs.

As we enter 2001, more than 187,000 acres of environmentally sensitive lands throughout our 16-county area are now under District ownership. Most of these lands were purchased through a "fee simple" method that entails purchasing all rights. We have, however, begun making purchases using a "less-than-fee" approach that enables the District to purchase lands at greatly reduced costs. This kind of purchase allows the District to bring more lands under our purview, protecting and preserving them, while actual ownership remains with the original owner.

Late in 2000, we made our first "less-than-fee" purchase – a 120.73-acre conservation easement along Black Creek, a tributary of the St. Marks River. This acquisition will safeguard these environmentally sensitive lands from future development. Under terms of the purchase agreement, land use will be limited to silviculture and improved pasture. Acquisition of this easement enhances water quality protection and preservation efforts in this floodplain and is expected to eliminate the need to build costly stormwater facilities for the area that were anticipated should development continue. One can see the advantage of this "less-than-fee" purchase when comparing the actual purchase price of $235,729 with the appraised value of $603,650 – an amount that would have been paid if all rights (fee simple) were

obtained for the 120.73-acre conservation easement. Other opportunities for conservation easements or "less-than-fee" purchases continue to be considered.

Once lands have been acquired, a priority of the District has been to restore various disturbed areas to their original state. For the past seven to eight years, reforestation and restoration efforts have been undertaken. Today, more than four million longleaf pine trees have been planted on various sites. Altogether, nearly six million longleaf, loblolly, slash, shortleaf pines; mixed hardwoods; and wiregrass plugs have been planted on District lands.

Partnering and out-sourcing maintenance activities are being pursued to keep popular recreational sites on District lands available to the public to use for resource-based recreational activities. This enables the District to minimize costs but yet keep these recreational areas open for the public. Users of District lands also should do their part and help keep these areas clean.

Throughout the past several years, this District has been very involved in assisting the State of Florida in its negotiations with Georgia and Alabama to address shared water resources, namely, the Apalachicola-Chattahoochee-Flint (ACF) river system. It has been a difficult and complex process with many of the issues being highly technical in nature. We have provided a comprehensive overview of these negotiations in this Annual Report. This overview will help explain this complicated negotiation process. The current ACF Compact agreement calls for a formula or formulas being developed for apportioning the waters of this river system by May 1, 2001.

This Annual Report contains many projects, programs and issues with which we have been involved throughout 2000. These descriptions will provide you with an understanding of water management issues and concerns within the Northwest Florida Water Management District. Resolving many of them has, and will, call for the assistance of many residents and water users within our District. It is essential that we all work together to continue to seek appropriate solutions that will sustain, preserve and protect our water resources.

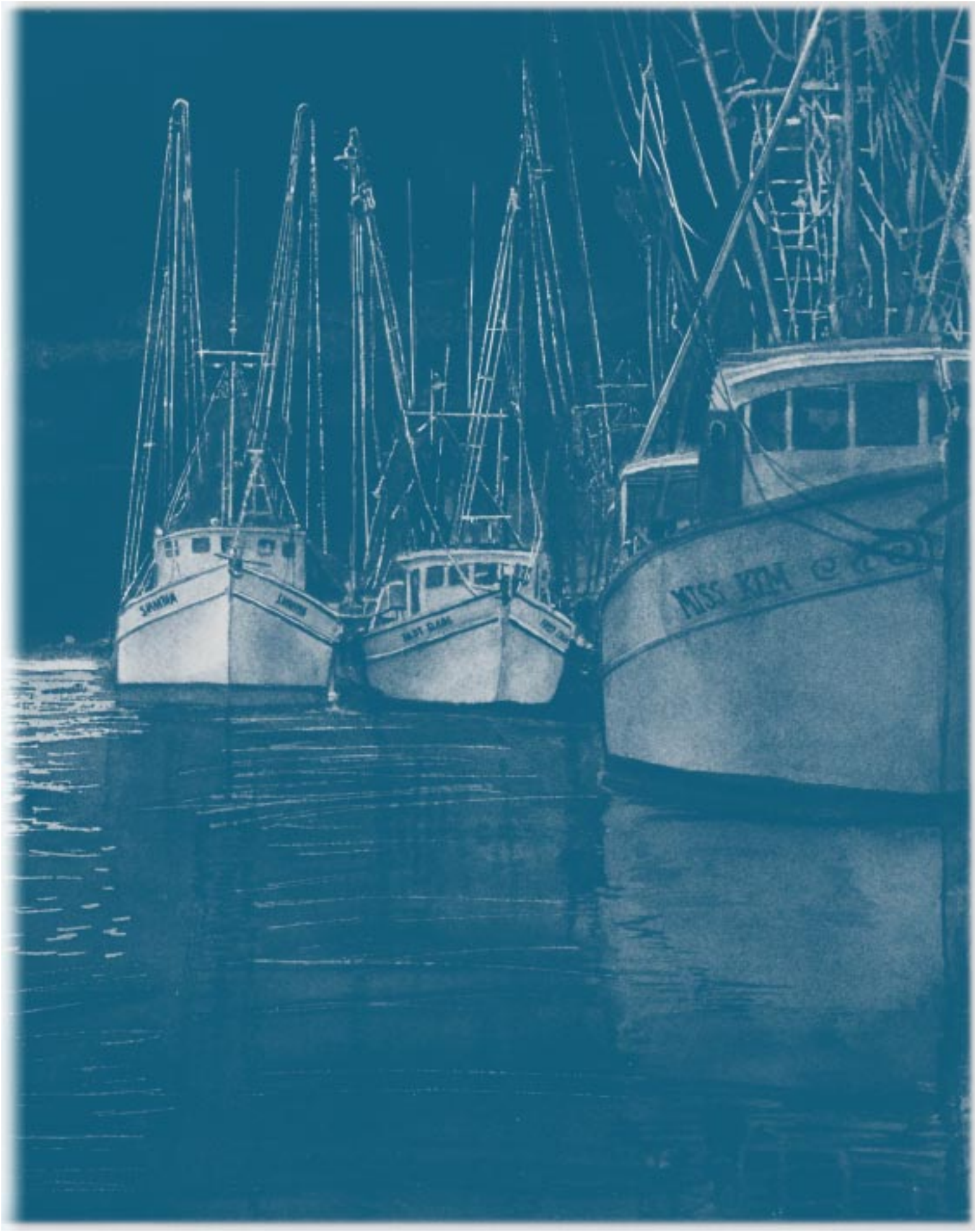
J. Russell Price
Chair, Governing Board

Douglas E. Barr
Executive Director

NEARLY A DECADE HAS PASSED SINCE THE STATES OF FLORIDA, GEORGIA AND ALABAMA BEGAN CONDUCTING COMPLEX, TECHNICAL STUDIES AND NEGOTIATIONS TO RESOLVE A DISPUTE OVER A PROPOSED REALLOCATION OF THE WATERS OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT (ACF) RIVER SYSTEM TO MEET METROPOLITAN ATLANTA'S GROWING NEEDS.

A DECADE OF NEGOTIATIONS

THROUGHOUT THE DELIBERATIONS, FLORIDA'S ONGOING concern has been the protection and preservation of the diversity and productivity of the Apalachicola River and Bay. It was recognized that there was a need to consider cumulative demands and impacts on the system and on the range of historical flows whether daily, seasonally, monthly or annually. Maintaining the historic or natural flow regime has been paramount for Florida. An emphasis was placed on defining the freshwater requirements needed for the continuing biological health and diversity of the river and bay and on developing tools capable of evaluating the effects of any alterations in the river's flow regime. The Northwest Florida Water Management District has been an active participant in both the studies and negotiation process since the early 1990s. The Apalachicola River and Bay are ranked as the highest priority on the District's Surface Water


SANDRA
MISS KIM

Improvement and Management (SWIM) program's list of surface waters in need of preservation or restoration.

While the negotiation process over this river system has been arduous, it has resulted in precedent-setting legislation and it has seen successes that many observers of the process thought to be improbable, if not impossible. While the process has been protracted, many legal disputes over water resources throughout the United States that have been settled by the court system have taken even longer. Some of these have taken decades. Many court-settled water disputes ultimately have concluded with legal decisions that none of the affected parties could consider optimal.

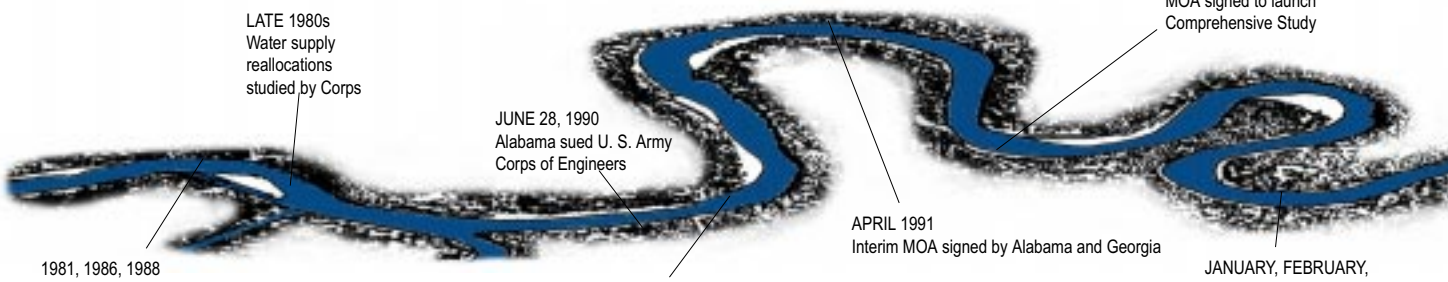
A negotiation process such as the one involving the Apalachicola-Chattahoochee-Flint river basin was envisioned as being more equitable. It brought together all of the parties to participate in the various studies, data-gathering efforts and negotiations. All decisions were to be reached by "consensus" not by majority vote. All had to agree.

Apalachicola River.

1990: THE LAWSUIT

In June of 1990, the State of Alabama, concerned about both the downstream and cumulative impacts of proposed and potential future reallocations of water from the ACF river system, filed litigation challenging the U. S. Army Corps of Engineers' actions to allocate additional water from Lake Lanier for the metropolitan Atlanta area. Alabama challenged the adequacy of the Corps' environmental impact documentation addressing the proposed reallocations and the procedures that the Corps had followed in operating the federal reservoirs. Florida filed a motion to intervene on behalf of Alabama and Georgia on behalf of the Corps. Shortly after, the three states and the Corps began discussions to resolve the conflict without pursuing legal avenues. There was general agreement that litigation was the least desirable option for seeking a resolution.

APALACHICOLA-CHATTAHOOCHEE-FLINT NEGOTIATIONS TIMELINE



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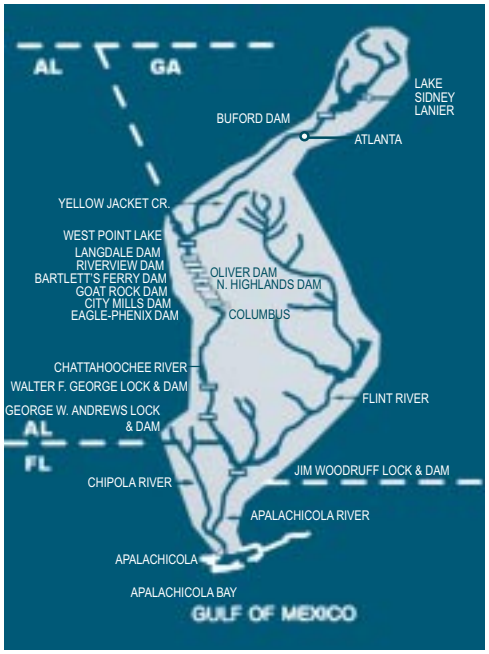
Conditions Leading to 1990 Lawsuit

- Rapid growth in metropolitan Atlanta and north Georgia resulted in substantial increases in water demands.
- U. S. Army Corps of Engineers received requests from local municipalities in the 1980s to reallocate water from north Georgia federal reservoirs.
- Droughts that occurred in 1981, 1986 and 1988 heightened the public's concern and awareness of water management in the basin.
- In the late 1980s, water supply reallocations were being studied by the Corps for Lake Lanier, Carters Lake and Lake Allatoona in the upper Chattahoochee basin.
- In 1990, the Corps completed reports and recommended reallocation of reservoir storage to water supply for the City of Chatsworth; the State of Georgia submitted plans for a water supply reservoir in west Georgia.

1992: COMPREHENSIVE STUDY INITIATED

In 1992, the governors of Florida, Alabama and Georgia and the Assistant Secretary of the U. S. Department of Army for Civil Works signed a Memorandum of Agreement (MOA) to address interstate water resource issues and promote coordinated systemwide management of the basin. This MOA initiated a Comprehensive Study of both the Apalachicola-Chattahoochee-Flint (ACF) and the Alabama-Coosa-Tallapoosa (ACT) river basins. Beginning in northeast Georgia, the ACF river system terminates in Florida at the Apalachicola Bay – a distance of 385 miles – with a drainage area of 19,600 square miles. The Chattahoochee and the Flint merge at Lake Seminole to form the Apalachicola River. The ACT river system originates in northwest Georgia and ends near the southwest corner of Alabama. The ACT extends some 320 miles and has a drainage basin of 22,800 square miles.

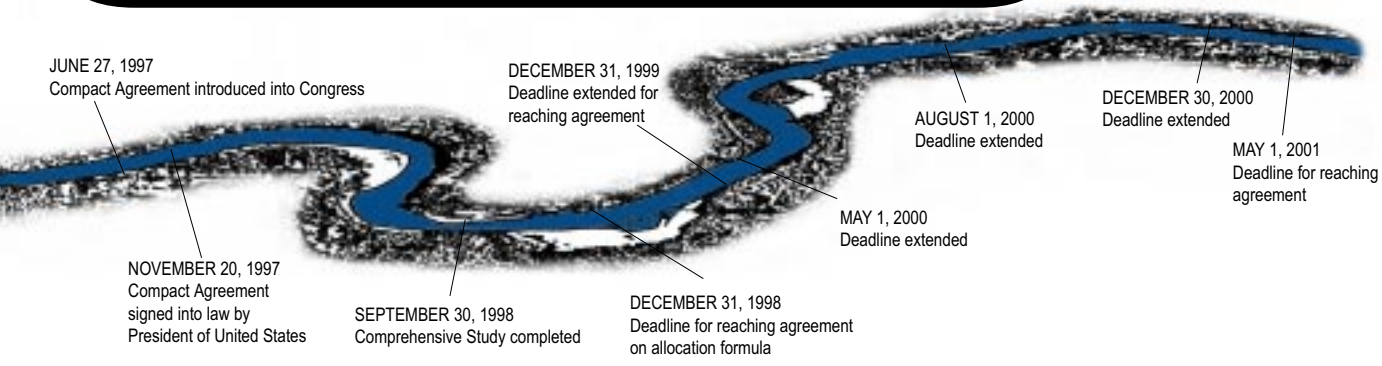
The purpose of the ACF Comprehensive Study was to "...determine the capabilities of the water resources of the basins, to describe the water resource demands of the basins and to evaluate



THE APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER SYSTEM

The ACF river system originates in north Georgia and Alabama. The Chattahoochee and the Flint rivers converge at Lake Seminole, created by the Jim Woodruff Dam, and form the Apalachicola River which terminates at the Apalachicola Bay. Only about 12 percent of the system is in the State of Florida.

APALACHICOLA-CHATTAHOOCHEE-FLINT NEGOTIATIONS TIMELINE



alternatives which utilize the water resources to benefit all user groups within the basins." Expected outcomes of the study included acquisition of technical information, development of strategies and plans and a recommendation for a formal coordination mechanism for basinwide management.

Throughout the Comprehensive Study, various water resource demands and other related elements were investigated and researched. Study elements were grouped into four major categories:

Water Resource Availability: Surface Water and Ground Water

Water Demand: Agriculture, Environment, Apalachicola River and Bay, Municipal and Industrial, Navigation, Power Resources (hydropower), Recreation and Water Quality

Process Support: Population and Employment, Data Base Management and Public Involvement

Comprehensive Management Strategy: Basinwide Management and Development of a Coordination Mechanism

Also contained in the Memorandum of Agreement (MOA) was language referred to as the "live and let live" policy, which addressed continued withdrawals of water from the system while the study and negotiations ensued. According to this provision, any person or entity who was withdrawing, diverting or consuming water resources within the ACF basin could continue to withdraw, divert or consume water resources in accordance with the laws of the state in which they resided. This agreement allowed reasonable increases in such withdrawals as permitted by applicable law. Written notice was to be provided in the event that any withdrawal, diversion or consumption of such water resources were to increase by more than 10 million gallons per day (mgd). If an individual or entity was not already withdrawing water at the time of the MOA, written notice was to be given in the event of a withdrawal, diversion or consumption of more than one million gallons per day.

Alum Bluff on the Apalachicola River.

The Comprehensive Study

- The three states and the Corps were to work together as equal partners to seek resolution on water resource issues.
- Purpose of the Comprehensive Study was to determine the capabilities of the water resources of the basin, to describe the water resources to benefit all user groups within the basin.
- Parties committed to a process for cooperative management and development of regional water resources.
- Study was consensus-based, requiring the approval of all participants on all of the elements.
- Comprehensive Study included 15 study elements that were largely technical in nature.
- Parties agreed that the Corps should withdraw the draft water supply reallocation report for Lake Lanier.
- MOA contained "live and let live policy" for water use while the study was underway; this included a notification procedure for proposed new withdrawals over one million gallons per day (mgd) or increased withdrawals over ten mgd.
- Corps agreed to operate the federal reservoirs in the two basins to maximize the water resource benefits of the basins as a whole.
- Parties committed to establish a system for facilitating the resolution of any future disputes regarding the Comprehensive Study.
- The court would be petitioned to place the litigation initiated by the State of Alabama against the Corps on an inactive docket pending completion of the Comprehensive Study.

1997: ACF COMPACT AGREEMENT RATIFIED

The Compact Agreement was passed by the Georgia, Alabama and Florida legislatures in

February and April of 1997. To be adopted, the language of the Compact Agreement had to emerge from the legislature of each state unchanged. Many thought this, in itself, to be a remarkable achievement. In May, the governors of the three states submitted the Compact Agreement to their respective congressional delegations. In June, the Compact Agreement was submitted to Congress and then subsequently ratified by the United States Congress and signed into law by the President of the United States on November 20, 1997. The Compact Agreement is the first interstate water compact for the southeastern United States.

ACF RIVER BASIN COMPACT AGREEMENT

A key element of the Compact Agreement is that it established an interstate ACF River Basin Commission to oversee the water resources of this system. The Commission is given the authority to develop, adopt and modify an allocation formula(s) for equitably apportioning the surface waters of the ACF basin among the three states while protecting the water quality, ecology and biodiversity of the system. At this time, the parties are engaged in the negotiations called for in the Compact Agreement and have until May 1, 2001, to adopt a formula.

Early morning sunrise finds oystermen on the Apalachicola Bay.

Parties to the Compact include the states of Alabama, Florida and Georgia and the federal government. The governors of the three states serve as State Commissioners, however, the governors can appoint one or more alternates. The Federal Commissioner and one alternate are appointed by the President of the United States. Each state has one vote on the Commission and all decisions by the Commission require a unanimous vote by the three states. The Federal Commissioner does not serve as a voting member but can participate fully in meetings expressing the views and positions of various federal agencies.

Only the three State Commissioners have the authority to develop, adopt and modify allocations apportioning the waters of the basin. Adoption of the allocations require the unanimous agreement of all three states. Once agreed upon by the three states, the Federal Commissioner has an opportunity to concur (or nonconcur) to the allocations. If the Federal Commissioner submits a letter of nonconcurrence to the allocation(s) adopted by the states, the Compact will be terminated. However, nonconcurrence of the Federal Commissioner has to be based solely on federal law.

The Compact has the full force and effect of federal law. It requires federal agencies to exercise their authority over the water resources of the basin, and the operation of federal reservoirs, in a manner consistent with the Compact and the water allocations adopted by the states. It does not repeal, modify or amend any federal law but rather is intended to ensure that federal agencies, such as the Corps of Engineers, operate the federal reservoirs in a manner consistent with the allocations, unless in direct conflict with other federal law. There are 16 reservoirs in the basin (five federal and 11 non-federal) that provide water resources for navigation, hydropower, flood control, water supply and recreation.

The Commission has the authority to undertake whatever technical and/or planning studies and monitoring activities are deemed necessary for purposes of minimizing the adverse impacts of floods and droughts and improving water quality, water supplies and water conservation programs.

The Compact includes a lengthy series of provisions that outline the specific process, procedures and corrective actions to be undertaken in the event the downstream states (Florida and Alabama) do not receive the agreed-upon allocations of water. The Compact provides for the three states to cooperate in the investigation, control and abatement of interstate sources of water pollution and to cooperate in maintaining the quality of water in the basin.

Funding for the activities of the ACF River Basin Commission is to be shared equally by the three

states. Any funding required by the Commission, however, must be agreed to by the three State Commissioners and will be subject to appropriation by their respective legislatures.

Compact Provisions

- Parties include Alabama, Florida, Georgia and the federal government.
- Governors of the three states serve as voting State Commissioners; the Federal Commissioner, appointed by the President of the United States, serves as a nonvoting member.
- Decisions require a unanimous vote by the three State Commissioners; State Commissioners have the authority to develop, adopt and modify allocations apportioning the waters of the basin.
- Once allocations have been agreed upon, the Federal Commissioner has an opportunity to concur or nonconcur; nonconcurrence must be based solely on federal law.
- The Compact has the full force and effect of federal law.
- The Commission has the authority to undertake technical and/or planning studies and monitoring activities.
- Contains a series of provisions that outline corrective actions should downstream states not receive the agreed upon allocations.

DEVELOPING AN ALLOCATION FORMULA

When the Compact Agreement was approved in 1997, the Commission was originally given until December 31, 1998, to develop an allocation formula or the Compact Agreement was to expire on that date. Several extensions of the Compact Agreement have occurred subsequently since agreement has not yet been reached.

Reaching Agreement

- ACF Compact Agreement called for developing an allocation formula by December 31, 1998.
- Deadline extended by the three states to December 31, 1999.
- Deadline extended to May 1, 2000.
- Deadline extended to August 1, 2000.
- Deadline extended to December 30, 2000.
- Deadline extended to May 1, 2001.

Several proposals for allocation formulas, and subsequent modifications of those proposals, have been considered during the negotiations. The proposals presented by the three states have differed in many ways reflecting the significantly different interests of each state. Florida's primary interests are the protection and preservation of the diversity and productivity of the Apalachicola River and Bay. Alabama's interests are economically based and reflect a concern about its ability to develop or expand these activities in the future as well as a concern about navigation on the river. Georgia's interests reflect a view that the water resources be used first for municipal and industrial uses, followed by agriculture and the environment.

During these continuing talks, it was recognized that there were inadequacies in the data for projected demands on the system, and the cumulative impacts of those demands, that would have to be considered in the development of an allocation formula. Florida envisioned that the formula should provide for flexibility so that allocations could be modified as new or refined information was

Sunset on the Apalachicola Bay.

obtained. Florida has characterized this approach as "adaptive management" of the system. An adaptive management approach provides the management tools to address the changes that are likely to occur and the uncertainties in water demands and the impacts of those demands.

Some of the issues and differences needing resolution among the parties are largely technical in nature and include: minimum stateline flows, operation of the federal reservoirs and development of operating procedures to ensure that minimum flows do not become targets, drought management, compliance measures and verification, duration of the allocation formula, municipal and industrial demand projections, basinwide monitoring and agricultural demand projections.

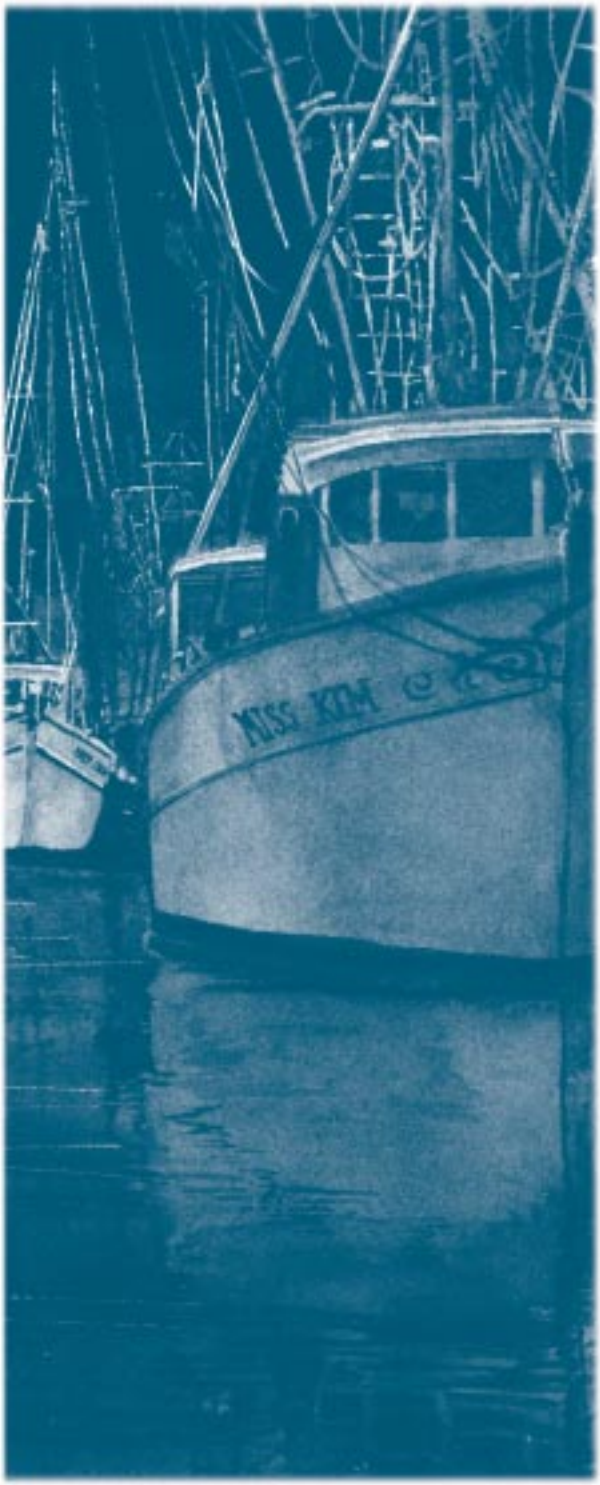
In November of 2000, the states took part in a week-and-a-half mediation process in an attempt to move the negotiations forward. Late in 2000, Georgia and Alabama reached a tentative agreement

Jim Woodruff Lock and Dam at Lake Seminole.

on an allocation formula for the ACT River Basin. Once the states reach agreement on either allocation formula, the process provides for a 60-day public review and comment period before the agreement can be finalized.

If agreement is reached, the Federal Commissioner will have 210 days to concur with the recommended allocation formula and an additional 45 days to submit a letter of nonconcurrence. However, nonconcurrence must be based solely on federal law. If the Federal Commissioner submits a letter of nonconcurrence, the voting members may agree to allow an additional 45 day period in which the Federal Commissioner and the State Commissioners attempt to renegotiate an allocation formula.

It has long been recognized that effective and sound basinwide management of the ACF system is the only way that our water resources can be protected. Basinwide management will provide a way to make long-term water management decisions that are founded upon the best scientific and technical information available and take into account the consequences of various water management actions by all users.



Governing Board Members

Northwest Florida Water Management District

J. RUSSELL PRICE
Chair
Tallahassee
Represents Basin V
Appointed: March 5, 1999
Reappointed: March 2, 2000
Term Expires: March 1, 2004

JOYCE ESTES
Vice Chair
Eastpoint
Serves At Large
Appointed: March 5, 1999
Term Expires: March 1, 2003

NANCYANN M. STUPARICH
Secretary/Treasurer
Pensacola
Represents Basin I
Appointed: April 10, 2000
Reappointed: March 2, 2001
Term Expires: March 1, 2005

WAYNE BODIE
DeFuniak Springs
Represents Basin II
Appointed: March 5, 1999
Term Expires: March 1, 2003

HULAN CARTER
Chipley
Represents Basin III
Appointed: March 2, 2001
Term Expires: March 1, 2002

SHARON T. GASKIN
Wewahitchka
Serves At Large
Appointed: March 5, 1999
Reappointed: March 2, 2000
Term Expires: March 1, 2004

STEPHANIE HUGHES
Panama City Beach
Serves At Large
Appointed: March 2, 2001
Term Expires: March 1, 2002

L. E. McMULLIAN, JR.
Sneads
Represents Basin IV
Appointed: July 2, 1987
Reappointed: March 5, 1999
Term Expires: March 1, 2003

RICHARD P. PETERMANN
Fort Walton Beach
Serves At Large
Appointed: March 2, 2001
Term Expires: March 1, 2005

Basin I: Perdido and Escambia rivers
Basin II: Blackwater and Yellow rivers
Basin III: Choctawhatchee River and St. Andrew Bay Coast
Basin IV: Apalachicola and Chipola rivers
Basin V: Ochlockonee, Wakulla and St. Marks rivers

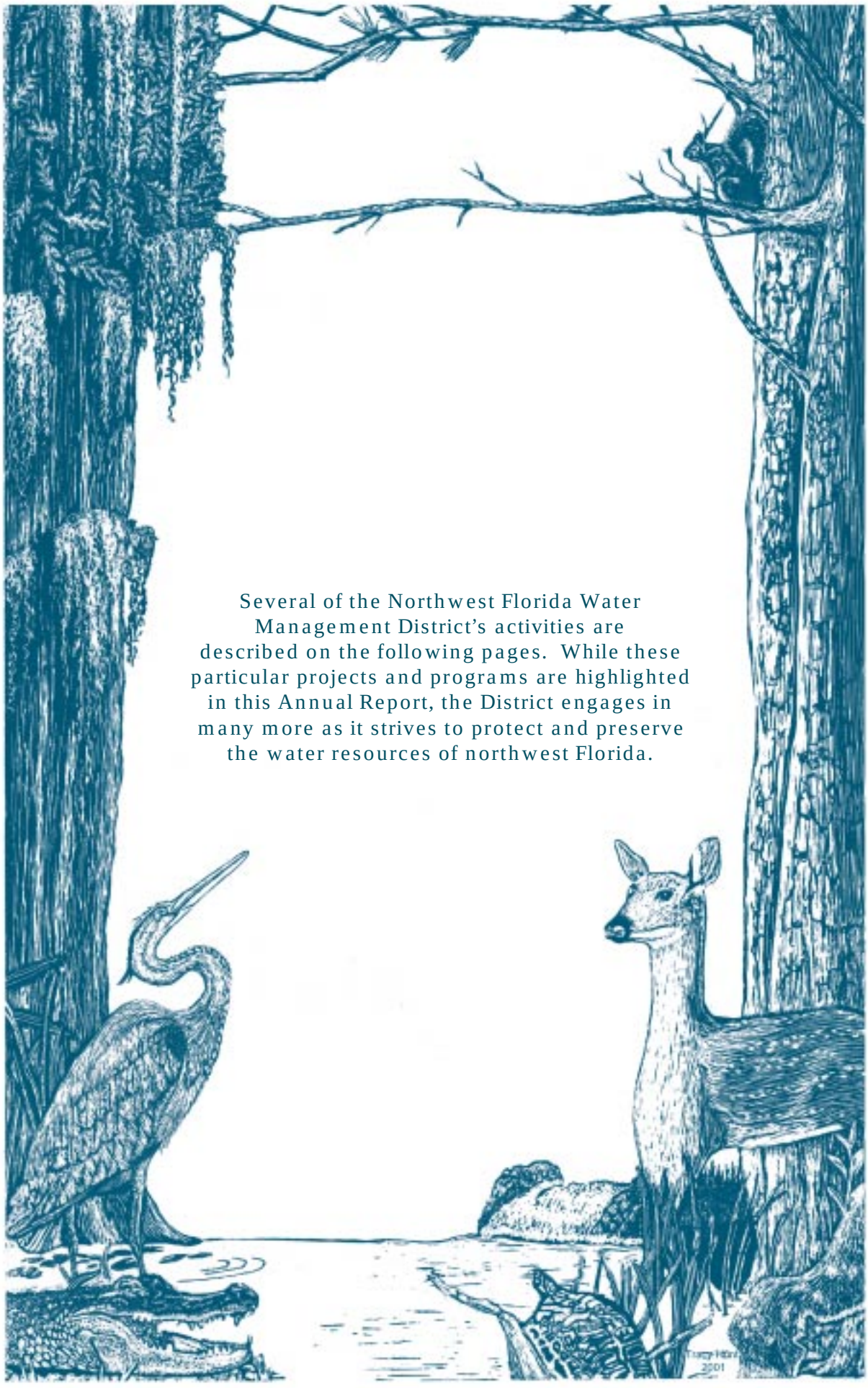
DOUGLAS E. BARR
Executive Director
Northwest Florida Water Management District
Appointed: February 1992

The District's nine-member Governing Board, appointed by the Governor and confirmed by the Senate, oversees and guides District activities. One Board member is appointed to represent each of the District's five major hydrologic basins and four are selected at-large. Board members serve four-year terms without compensation and may be reappointed.

Governing Board meetings are scheduled for the following dates during 2001:

January 25
February 22
March 22
April 26
May 24 (Pensacola)
June 28
July 26
August 23
September 27 (Panama City)
October 25
November 30
December 3

All meetings are held at the District's Headquarters unless noted. There also will be a public hearing on the budget on September 13 in Destin and one on September 27 in conjunction with the Governing Board meeting scheduled for Panama City.



Several of the Northwest Florida Water Management District's activities are described on the following pages. While these particular projects and programs are highlighted in this Annual Report, the District engages in many more as it strives to protect and preserve the water resources of northwest Florida.

DISTRICTWIDE ACTIVITIES

WATER SHORTAGE WARNING DECLARED

A Water Shortage Warning for the Northwest Florida Water Management District's 16-county area was declared in June by the Governing Board. Residents of the Panhandle were urged to reduce their use of water. Extreme drought conditions, as a result of eighteen months of below normal rainfall throughout much of the District, led to the emergency declaration. The area had experienced declining surface water flows and declining ground water levels. Public water supply systems had difficulties meeting customer demands and domestic wells in some localized areas needed to have their pumps lowered to continue operation. Under the Water Shortage Warning, all users were encouraged to reduce water use and to conserve water to the maximum extent possible through voluntary measures. The Water Shortage Warning was still in effect at the conclusion of 2000.

DISTRICT WATER MANAGEMENT PLAN REVISED

A draft of the revised District Water Management Plan was presented to the Governing Board early in the year for consideration and a public hearing (March) and public workshops (June) followed.

Revisions to the District Water Management Plan included adding an executive summary that clearly stated the District's priorities. There also were substantial changes to Section I which addressed legislatively mandated programs, funding issues, the Environmental Resource Permit, water resource and water supply development and water conservation. Other changes involved schedules and tables and a general reorganization of content for increased clarity in presenting information, activities and issues. The plan was submitted to the Department of Environmental Protection (DEP) in August and additional modifications followed. The District Water Management Plan received Governing Board approval in November.

REGIONAL WATER SUPPLY PLAN

Throughout 2000, the District continued to develop a Regional Water Supply Plan for Santa Rosa, Okaloosa and Walton counties. An earlier Water Supply Assessment conducted for the entire District, found that this region was the only area where sources of water supply were projected to be insufficient to meet demands in 2020. The plan will provide a regional framework for future water use decisions to ensure adequate water supply through the year 2020 and to identify where these demands can be met without harming water resources and related natural systems. The Regional Water Supply Plan was going through various reviews at the conclusion of 2000.

SWIM PROGRAM

Legislation creating the Surface Water Improvement and Management (SWIM) program was

adopted in 1987. The SWIM program was created to address water quality issues; restore polluted lakes, rivers, streams, estuaries and bays; and preserve the existing quality of the more pristine surface waters. Since that time, the District proceeded with identifying priority water bodies and developing and implementing plans for several of them.

Currently, there are 14 surface waters ranked on the District's SWIM Priority List: (1) Apalachicola River and Bay, (2) Lake Jackson, (3) Deer Point Lake, (4) Pensacola Bay System, (5) St. Marks River System, (6) Choctawhatchee River and Bay System, (7) St. Joseph Bay, (8) St. Andrew Bay, (9) Lake Munson, (10) Ochlockonee River and Bay, (11) Lake Iamonia, (12) Lake Lafayette, (13) Lake Miccosukee and (14) Sand Hill Lakes.

During 2000, the District developed a management plan for the eighth highest ranked water body, St. Andrew Bay, which also incorporates the Deer Point Lake Reservoir, St. Joseph Bay and the Sand Hill Lakes. Management plans for the surface waters ranked from one through six have already been developed.

REGIONAL MITIGATION PLAN AMENDED AND UPDATED

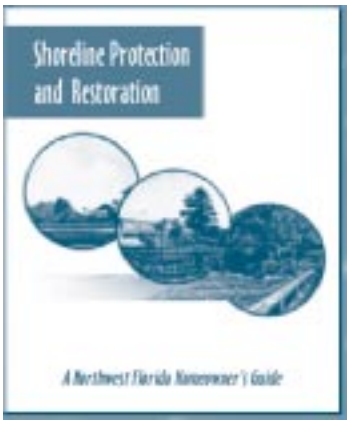
Two amendments to the District's Regional Mitigation Plan were approved in 2000 by the Governing Board. One involved a plan to acquire five land parcels within Jones Swamp. This area of approximately 32.5 acres will mitigate or offset wetland impacts caused by a weigh station project by the Florida Department of Transportation (DOT). Jones Swamp is part of a 2,700-acre watershed in Escambia County that drains into the western arm of Bayou Chico. Industrial, commercial and residential urbanization within the Bayou Chico watershed has led to degraded water and sediment quality. Development is now encroaching upon Jones Swamp, making the preservation of this area a priority. Nearly 400 acres of Jones Swamp have already been acquired by Escambia County and Florida Communities Trust with assistance from the District. The ultimate goal is to bring 1,300 acres under protection.

The second amendment involved a mitigation project to offset wetland impacts associated with a DOT project that impacts .3-acres of seagrass associated with the replacement of the Bryant Patton Bridge to St. George Island in Franklin County. The proposed mitigation project will result in the creation of .9-acres of salt marsh with associated breakwaters on the bay side of St. George Island.

In November, an update of the District's entire Regional Mitigation Plan for 2001-2004 was presented to the Governing Board. Proposed new mitigation project areas contained in the plan include Devils Swamp (U. S. 98 in southern Walton County), Jones Swamp and Garcon Peninsula (I-10/I-110 in Pensacola and the U. S. 90 Bridge at the CSX railroad); and Robinson Bayou in the Sand Hill Lakes Region (SR 77 in Bay County).

EDUCATIONAL SHORELINE RESTORATION BROCHURE

A homeowner's guide to shoreline protection and restoration was written and designed during this past year – a cooperative effort involving a number of agencies and groups. Waterfront property owners have special opportunities to protect and enhance the aquatic environment.



Leaving a buffer zone of natural vegetation is one of the best ways to protect a bay, stream or lake. Natural buffers stabilize shorelines, prevent erosion and provide fish and wildlife habitats. A natural shoreline helps maintain the distinctive appearance of the Florida Panhandle. The brochure, a multi-agency cooperative effort, involved the District as well as Santa Rosa County (Sea Grant Extension), Master Gardeners from Leon, Wakulla, Franklin and Okaloosa counties, Escambia County Marine Resources, City of Valparaiso, Go Native Nursery in Milton, DEP and the Northwest Florida Aquatic Preserve. It is anticipated that the brochure will be printed and available to the public in 2001.

FLORIDA FOREVER GOALS AND MEASURES

With the implementation of the Florida Forever land acquisition program, the successor program to Preservation 2000, came statutory requirements that the five water management districts jointly produce a report that establishes specific goals and measures for evaluating the districts' use of Florida Forever funds. That report was submitted on December 15. Reports on how each district performed in meeting these goals are expected to be prepared annually. These goals and measures will help the District design its Florida Forever Work Plan which is to be approved by June 1, 2001.

RESTORATION OF DISTRICT LANDS

The District has purchased more than 187,000 acres of environmentally sensitive lands primarily along river systems and other sensitive water resource areas within the Panhandle. These acquisitions protect many important wetland and natural vegetation communities in northwest Florida, including river floodplains, headwater wetlands, coastal marshes, first magnitude springs and pristine bottomland hardwood and associated upland forests. Natural areas such as these are vital to the health of rivers, lakes and water supplies.

Since 1993, about 8,575 acres will have been restored to their natural state and condition along the Choctawhatchee, Chipola, Apalachicola, Escambia and Yellow rivers and Holmes and Econfina creeks. Efforts have focused on reforestation of areas that once contained extensive stands of longleaf pine and wiregrass habitat, although restoration activities also have included other pine species such as loblolly, slash and shortleaf as well as mixed bottomland hardwoods. Approximately 4,372,400 longleaf pines have been planted on District lands, as well as 563,000 wiregrass plugs, 85,000 loblolly pines, 452,000 slash pines, 28,000 shortleaf pines and 482,500 mixed bottomland hardwoods.

Restoring District Lands
Number Planted

Year	Longleaf	Loblolly	Slash	Shortleaf	Mixed Hardwoods	Wiregrass	Acres
1993-94	110,000				79,000	8,000	356
1994-95	396,400	85,000	91,000	28,000	109,000		1,168
1995-96	932,000		181,000		80,800	60,000	1,843
1996-97	200,000		180,000		68,000	100,000	638
1997-98	500,000				90,700	100,000	1,091
1998-99	1,000,000				36,000	100,000	1,511
1999-00	647,000				19,000	95,000	1,052
2000-01	587,000					100,000	916
Total	4,372,400	85,000	452,000	28,000	482,500	563,000	8,575

Longleaf pine tubelings are planted on District lands.

Longleaf pines' growth is monitored.

COUNTIES RECEIVE FUNDS

Since 1993, the District has been authorized to make payments in lieu of taxes to qualifying counties to compensate for lands removed from the tax rolls because of District acquisitions. In 1999, the Florida Legislature made significant changes to this legislation. Today, all lands acquired under Save Our Rivers, Preservation 2000 or its successor program, Florida Forever, qualify for reimbursements. Counties with a population of 150,000 or fewer will qualify for the payments on properties purchased during 2000 or subsequent years.

The legislation does allow continuing payments to be made for a total of 10 payments to those counties that had qualified previously. Because Walton, Holmes, Washington, Jackson and Liberty counties had previously qualified, the Governing Board approved payments that were equal to the amounts last paid to those counties. In 2000, Holmes received $1,889.00; Jackson $8,373.69; Liberty $6,560.03; Walton $13,245.05; and Washington $30,004.86.

PUBLIC RECREATIONAL SITE MAINTENANCE

This past year, the District recognized the need to engage outside assistance in the cleanup and maintenance of District-owned public recreational sites. Out-sourcing these activities should result in considerable savings to the District. Regular maintenance is necessary if these sites are to be operated safely for the public, as well as to maintain their aesthetic appearance. Many recreational sites such as Pitt, Blue and Williford springs, various boat landings and several lakes are experiencing a high volume of use by the public. The public is urged to help keep these sites clean by dispensing of trash properly.

VOLUNTEER PARTNER OF THE YEAR AWARD

Dr. and Mrs. Ed Keppner of Panama City were presented with the District's Volunteer Partner of the Year Award in recognition of their efforts for inventorying and cataloging plants within the Econfina Creek Water Management Area. The Keppners spent hundreds of hours identifying botanical species in and around the Sand Hill Lakes area and collected over 200 specimens for an herbarium. The Keppners have long been active in environmental and resource protection in and around the Bay County area. The herbarium is housed at the Northwest Florida Water Management District's Field Office in Marianna.

BRIDGES FOR DISTRICT-OWNED LANDS

Many land management roads and bridges have accompanied District land acquisitions and provide the access necessary for land management purposes as well as public access to recreational sites. As a result of several inspections, a new land management bridge on the middle Yellow River property and the replacement of three existing bridges on the Apalachicola and Choctawhatchee rivers and Econfina Creek will be undertaken (Deadfall Creek Bridge, Florida River Island Bridge, East River Island Bridge and Walsingham Bridge). This construction will provide for both increased safety and management options.

GROUND WATER MODELS TO BE DEVELOPED

The first of two proposed saline water intrusion models was begun in March through an agreement with HydroGeologic, Inc. The models to be developed are for the Region II water supply planning area (Santa Rosa, Okaloosa and Walton counties). When completed, these models will provide tools that can be used to determine the potential for saline water intrusion into the Floridan Aquifer. They also can be used to examine the long-term sustainability of coastal withdrawals.

AMBIENT MONITORING OF SURFACE WATER

For the past nine years, the District has participated in an ambient surface water quality assessment program with DEP. The program provides surface water quality data for the assessment of long-term water quality trends and impacts from specific activities and land uses in watersheds. These data are used by DEP and the District to develop management strategies that will improve surface water quality or minimize negative impacts on surface water resources. Water quality samples are collected at 24 surface water sites monthly. Funds for the program are provided by a grant from the U. S. Environmental Protection Agency (EPA) for the purpose of monitoring and improving surface water quality throughout the State of Florida.

GROUND AND SURFACE WATER MONITORING

Ground and surface waters at a network of sites around the District will be sampled for another year through an agreement between the District and DEP. This renewal marks the 17th year of this cooperative agreement. The District will assist DEP with collecting and interpreting water quality data from confined and unconfined aquifers, rivers, streams and lakes as part of a statewide integrated water resources monitoring network.

PERMITTING OF WELLS IN CONTAMINATED AREAS

Since September of 1990, the District has maintained an agreement with DEP to implement the well permitting requirements of Chapter 62-524, Florida Administrative Code. This program addresses potable well construction in areas of delineated ground water contamination in Jackson, Leon, Santa Rosa and Escambia counties.

WATER WELL ADVISORY COMMITTEE

Terms of five members of the District's Water Well Advisory Committee expired in 2000. In July, all five members were appointed to serve another term. These appointments included Alan Ard and Clifton Myers, Perdido River basin; Terry Woodward and Frank Adams, Blackwater River basin; and Charles Hubbard, Choctawhatchee River basin. Continuing members include: Clifford Taylor, Choctawhatchee River basin; Charles Basford, lower Chattahoochee-Apalachicola River basin; and Thomas Kwader and E. M. Glover, Ochlockonee River basin.

The Water Well Advisory Committee is an ad hoc committee appointed by the District's Governing Board to provide information and well industry input to the staff on technical issues dealing with water well construction. Members are appointed for a two-year term.

Permits Issued by County
(October 1999 to September 2000)

County	Well Construction Repair and Abandonment	Consumptive Use (new/renewal)	Surface Water Management (standard/general)	Agriculture and Forestry Surface Water Management (standard/general)
Bay	1,218	28	-	3
Calhoun	167	1	-	3
Escambia	1,294	12	-	4
Franklin	123	5	-	-
Gadsden	276	18	1	7
Gulf	118	4	-	-
Holmes	239	3	-	2
Jackson	711	10	-	2
Jefferson	124	3	-	1
Leon	919	14	1	1
Liberty	44	1	-	-
Okaloosa	1,478	23	4	5
Santa Rosa	952	13	1	5
Wakulla	202	2	-	-
Walton	817	22	1	16
Washington	479	3	-	2
Total	9,161	162	8	51

DOQs TO BE ACQUIRED

A joint funding agreement between the District and DEP will allow for the acquisition of 1999-2000 Digital Orthophoto Quarter Quads (DOQs). DOQs are digital images processed from aerial photographs. The U. S. Geological Survey (USGS) contributes about half of the cost for the acquisition and Florida agencies contribute the remainder. The new DOQs are based on photographs taken recently. The DOQs, which have a higher degree of accuracy and resolution, are used extensively throughout the District for various projects. They are useful for boundary delineations, locating features on the ground and detecting changes to the landscape.

2000 AUDIT

James Moore and Company, the District's independent auditors, presented their report to the Governing Board. As in previous years, the District received a very favorable review and was given a "clean opinion." The audit covered the fiscal year ending on September 30, 2000, and found that the District's operations were in conformity with generally accepted accounting principles.

INSPECTOR GENERAL AUDIT PLAN

In October, the District's Inspector General presented the 2000-2001 audit plan to the board. The plan calls for the examination of several areas that include planning, control review of outlying offices, regulatory permitting division, acquisition/ disposal of real property and equipment, travel, procurement and reporting.

EMPLOYEE SERVICE AWARDS

Employees who have reached 20, 15, 10 and 5 years of service are recognized by the Governing Board each year for their dedication and service to the District. During 2000, a number of employees received these awards:

For 20 years of service: Helen K. Batts, Finance Section Director; Robert L. Echols, Assistant Field Representative; and Rodger R. Willis, Field Representative Specialist.

For 15 years of service: Duncan J. Cairns, Environmental and Resource Planning Chief; Jerry L. Sheppard, Associate Field Representative; and Hector L. Montford, Print Shop Manager.

For 10 years of service: Carol L. Bert, Lands Specialist; and Georgann E. Penson, Public Information Director.

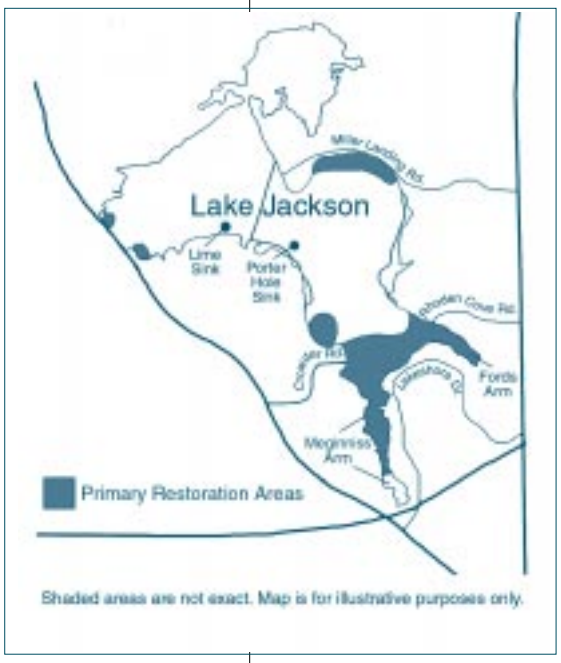
For 5 years of service: Doris J. Cutchins, Field Office Staff Assistant I; and Gale Y. Thompson, Fiscal Assistant.

JEFFERSON, LEON AND WAKULLA COUNTIES

LAKE JACKSON RESTORATION

When the natural draining of the southern portion of Lake Jackson occurred on September 16, 1999, through Porter Hole Sink, a number of governmental entities acted quickly to begin removing the nutrient laden sediment, or muck, from the bottom of the lake so that the lake's water quality would be improved once it refilled. In the spring of 2000, the majority of the northern portion of the lake drained through Lime Sink. On May 6, the draining was complete.

While the lake has experienced these natural drainings or dewaterings a number of times in past years, restoration efforts were never undertaken in conjunction with the previous natural drainings. Muck from approximately 600 acres, or almost two million cubic yards of the lake bottom, has been removed since September of 1999. Funding for this extensive restoration effort was made available by Leon County, the Governor's Office, the Florida Legislature, the Northwest Florida Water Management District, the Department of Environmental Protection (DEP) and the Florida Fish and Wildlife Conservation Commission. Restoration efforts continued through the end of 2000.



CONSERVATION EASEMENT ACQUIRED

A 120.73-acre conservation easement along Black Creek, a tributary of the St. Marks River, was acquired in December. The property consists of approximately 54 acres of loblolly pine plantation and 66 acres of hardwood forest habitat. This acquisition will safeguard the property from future development. Land use will be limited to silviculture and improved pasture. Development is restricted to two residential dwellings. Acquisition of this conservation easement will enhance water quality protection and preservation efforts in the Black Creek floodplain and will decrease the need to build stormwater facilities proposed for the area if development were to have occurred. Additionally, this acquisition will enhance the downstream water quality protection and preservation efforts for the St. Marks River.

This acquisition was a "less-than-fee" acquisition, which allows the District to preserve the area without purchasing all rights to the property. It will be protected in perpetuity at far less cost than a "fee simple" (all rights) acquisition. This is the first "less-than-fee" purchase made by the District. Other "less-than-fee" purchases also are being considered.

ARCHAEOLOGICAL ASSESSMENT OF PROPOSED STORMWATER FACILITY

Over the past years, the District has been working with Leon County on the design of regional stormwater treatment facilities to protect Lake Jackson. In 1999, the District and Leon County entered into a cooperative agreement for the design and construction of such a regional facility on the western shore of the Meginniss Arm portion of Lake Jackson (Okeeheepkee Basin on Fuller Road). During 2000, District staff assisted with an archaeological assessment of the proposed site, which is near a prehistoric Indian ceremonial center listed on the National Register of Historic Places. High densities of prehistoric ceramics were found in one small portion of the northwest corner of the proposed pond. Altogether, approximately 62 pieces of prehistoric ceramics were recovered. Preliminary indications are that this was a farming homestead dating to the time of the temple mound construction. The find will provide additional information about the village surrounding the mound complex as well as interesting factual exhibit material.

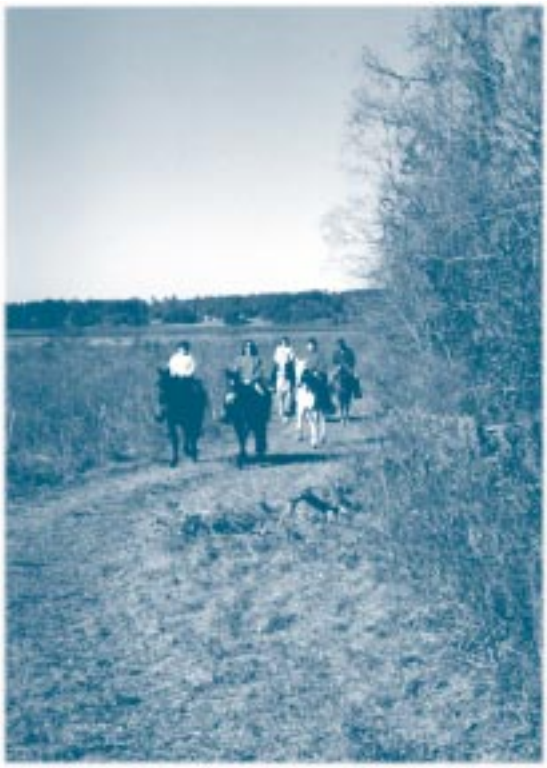
SEPTIC TANK AND SEWER ISSUES IN THE LAKE JACKSON BASIN

A report was completed in November that looked at the effects of septic tanks on Lake Jackson and considered possible approaches to addressing this issue. The report was undertaken by the District through the SWIM program in cooperation with DEP, Leon County and the Leon County Public Health Unit of the Florida Department of Health. The purpose of the study was to identify the potential effects of septic systems on surface water quality in the Lake Jackson watershed. Generally, the effects of pollution from any source are exacerbated by the closed nature of the Lake Jackson watershed. While the observations obtained through this assessment were not conclusive about the overall impact of septic system effluent on water quality in the watershed, high concentrations of coliform bacteria were found in water draining into the lake. Recommendations included improved treatment of stormwater and baseflow discharge, improved septic system maintenance, public education and an evaluation of extending sewer service into residential areas to the west of Lake Jackson.

ELINOR KLAPP-PHIPPS MANAGEMENT

Several land management reviews have been undertaken by the District for the lands under its ownership. The reviews are conducted by a committee that represents a broad cross section of local interests and advocates. The objective of the reviews is the ultimate development of very specific land management plans.

During 2000, the 516-acres (original acquisition of 509 plus a 7-acre donation) of the Elinor Klapp-Phipps Park that are owned by the District underwent such a review. A 162-acre adjacent area (including the soccer and baseball fields) are owned by the City of Tallahassee. The entire park has been managed by the city through an agreement with the District. The review team found that the park was being managed for the purposes for which it was acquired and in accordance with the management plan that was developed for the park. Given particular recognition were the initiation of recreational trails and facilities. In the future, plans call for specific restoration objectives for the District-owned portion and greater emphasis on both restoration activities and habitat management.



Riders enjoy the trails around Elinor Klapp-Phipps park.

CONTROLLING EXOTIC PLANTS

Invasive, exotic plants have been found within the Elinor Klapp-Phipps Park. Approximately 40 acres of the southeastern section of the park (District-owned portion) are infested with coral ardisia. This plant can be found in lesser densities throughout the 671-acre park. Other invasive exotic plants found within the park include the Chinese tallow tree, Camphor tree, Chinese privet, Heavenly bamboo, Chinaberry and Tung tree.

The District entered into an agreement with DEP to implement control activities to eliminate or reduce the impacts of coral ardisia. This species has been recognized as a major land management concern and can be found on both the District-owned 516 acres as well as the area owned by the city. If left untreated, coral ardisia could displace many of the native ground cover species and also prevent the establishment of shrub and tree seedlings.

STORMWATER FLOW MONITORING

An agreement for stormwater flow monitoring involving the City of Tallahassee, Leon County and the District will be continued for another year. The stormwater flow monitoring program includes the operation of 31 surface water and rainfall data collection stations throughout the city and the county. The District has operated this stormwater

monitoring network for the past 10 years. Dry weather and storm event discharge data for the major drainage basins within the city and county are obtained through this program. These data provide continuous records of precipitation and surface water discharges that are used to design and implement improvements in the stormwater drainage system.

In November, the current agreement was amended and monitoring services for four stations on the inflow and outflow of two Leon County stormwater holding ponds were added. Data obtained will determine the efficiency of pollutant removal of the two holding ponds.

HYDROLOGIC DATA COLLECTION

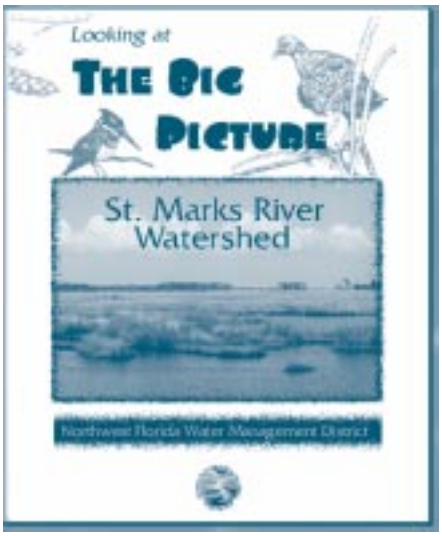
As a participant in a cooperative water resource investigation, the District and the U. S. Geological Survey (USGS) jointly share the costs of the program that provides for a hydrologic data collection program for Lake Jackson in Tallahassee. The agreement to continue this program was approved in August. The program supplies valuable water resource information and enables the District to maintain cooperating agency status with the USGS, which allows the District access to maps, records, reports and computer data bases maintained by USGS.

MOVEMENT AND FATE OF NITRATES

A joint funding agreement between the District and the USGS was renewed in September to continue an investigation into the sources and fate of nitrates in the ground and surface water resources of Leon and Wakulla counties. The work to be conducted by USGS is a component of a larger District-sponsored investigation to determine and quantify the inputs, movement and fate of nitrates as an indicator of nonpoint source contamination of ground water and surface water in the Woodville karst plain. This research effort also may help predict how water quality will change in response to increased nonpoint source loadings as population in the area continues to grow. The study, partially funded by a U. S. Environmental Protection Agency (EPA) grant administered by DEP, is expected to take five years to complete.

EDUCATIONAL BROCHURE FOR ST. MARKS

An educational brochure for the St. Marks watershed was planned and designed during this past year. This brochure will be the second in a series of "Looking at the Big Picture" brochures that have been produced through the SWIM program. The first dealt with Lake Jackson and focused on the effects of stormwater runoff. The St. Marks big picture brochure will address environmentally sensitive issues in the St. Marks watershed such as the movement of nitrates, effect of development, characteristics of karst geology, effects of stormwater runoff and threatened and endangered species as well as other elements. The Lake Jackson brochure has been used widely in classroom settings and for educational field trips. The St. Marks brochure is expected to be available in 2001.



Cover for St. Marks River Watershed educational brochure, second in the "Looking at the Big Picture" series.

LAKE JACKSON FIELD TRIPS

The seventh year of the Lake Jackson educational stormwater field trip program was completed in 2000. Offered as part of the SWIM program, students in grades K-12 from schools in Gadsden, Leon, Liberty, Wakulla and a portion of Jefferson counties are provided the opportunity to participate in this outdoor educational program. The field trip includes the District's Lake Jackson Stormwater Treatment facility, presentations and hands-on interactive activities. Students learn about stormwater runoff (nonpoint source pollution) and other environmental topics. Since the inception of the program, approximately 6,000 area students have participated.

CALHOUN, FRANKLIN, GADSDEN, GULF, JACKSON AND LIBERTY COUNTIES

ACF NEGOTIATIONS FUNDED

A funding agreement with the Department of Environmental Protection (DEP) was amended in September to allow the District to continue activities associated with the Apalachicola-Chattahoochee-Flint Compact Agreement and the Apalachicola River and Bay Freshwater Needs Assessment. Funding for this effort is provided through a special appropriation by the Florida Legislature. It enables the continued application of various watershed and hydrodynamic models and the development of related biological, chemical and physical information needed to negotiate a water allocation formula to protect the Apalachicola River and Bay.

CONSERVATION EASEMENT DONATED

In November, the Governing Board accepted the donation of 362 acres bordering three-and-a-half miles of the Ochlockonee River in Gadsden County. This donation, when combined with several other tracts already protected with conservation easements and with state-owned lands, provides a high level of protection to this area of the Ochlockonee River. Under terms of the agreement, any further construction will be limited and the owner retains the rights related to hunting and fishing and managing the pine timber resources on the property. The agreement prohibits activities such as dumping, mining or cutting hardwood timber and other activities that would harm wildlife or natural habitats.

WELLS PLUGGED TO PROTECT WATER RESOURCES

Two wells have been plugged to protect the water resources in Jackson and Gadsden counties. The District initiated an agreement with the Town of Campbellton in Jackson County to share in the cost of plugging one Claiborne Aquifer well. The aquifer is a source of potable water for this area. Additionally, the District entered into a cost-sharing agreement to plug a Floridan Aquifer well within the City of Gretna in Gadsden County. Wells can be a source of contamination to an aquifer because they can serve as a conduit for pollution from activities occurring on the surface of the land or between aquifers.

AGREEMENT WITH USGS

As a participant in a cooperative water resource investigation, the District and the U. S. Geological Survey (USGS) jointly share the costs for a hydrologic data collection program for Telogia Creek near Bristol. The program supplies valuable water resource information and enables the District to maintain cooperating agency status with the USGS, which allows the District access to maps, records, reports and computer data bases maintained by USGS.

MONITORING FOR QUINCY CREEK

For the past five years, the District and the City of Quincy have cooperated on stream flow and rainfall monitoring for Quincy Creek. The monitoring station is located at SR 267 near the city's water treatment plant. This station is the only long-term data collection station for the creek. The monitoring station provides the city and the District with continuous rainfall and stream discharge data which assists the city with calculating the annual discharge volumes and planning for future consumptive use needs.

HYDRODYNAMIC ANALYSIS OF APALACHICOLA BAY

An extension to the agreement with the Florida State University (FSU) for the hydrodynamic model analysis of the Apalachicola Bay was approved in October. Applications of the hydrodynamic model will continue to examine the effects of altered freshwater inflows resulting from various reservoir and water management scenarios being negotiated for a water allocation formula for the Apalachicola-Chattahoochee-Flint river basin. These model results will provide insight into changes in the salinity regime and data used by biologists to estimate the potential for increased oyster mortality with changes in freshwater inflow.

BIOLOGICAL ANALYSIS OF APALACHICOLA BAY

During the past several years, the District has worked with the FSU Biological Science Department on a statistical analysis of long-term biological data for the Apalachicola Bay. The relationships between major environmental factors (river flows, temperature, salinity and rainfall) and a variety of biological variables including the dominant fishes, invertebrates, infauna and the major feeding groups within the bay were examined. A linkage of the hydrodynamic model developed by the District with biological models of oysters was recently completed. The result showed that reducing freshwater inflows to the estuary, with the accompanying increased salinity, will increase summer oyster mortality. The current agreement with FSU was extended so that the biological model could be linked with outputs from the hydrodynamic model under different flow scenarios.

NAVIGATIONAL CHANNEL PERMIT

Changes in the Apalachicola River navigation channel permit conditions have made possible significant improvements in proposed channel maintenance activities. The revised permit conditions are intended to reduce negative impacts on the river's natural resources. Coordination among private citizens and local, state and federal governments has been critical to ensure appropriate implementation of the permit conditions. Activities called for in the permit will help restore floodplain habitat and sloughs on public lands as well as on District lands. During this past year, District efforts concentrated on coordination, preliminary surveys and mapping and potential funding for floodplain restoration projects.

TATES HELL AND EAST BAY RESTORATION

Monitoring of previous restoration demonstration sites, which were completed in 1999, continued until March of 2000. Reports finalized this past year on the restoration effort documented construction techniques, lessons learned and analyses of data collected before and after construction. The techniques developed during this demonstration project continue to be useful in planning for hydrologic restoration in other areas of the Tates Hell region. Statistical analysis of monitoring data indicates substantial improvements to the hydrology functions in the restored areas. Additional monitoring is necessary to determine the long-term response of vegetation and changes in water quality in these areas.

STORMWATER IMPACT ANALYSIS

The impact of urban stormwater runoff on the Apalachicola Bay has been examined by the District through monitoring and characterizing the quality and quantity of runoff from selected watersheds. Stormwater runoff samples, flow measurements and related field parameters at five streams discharging to the Apalachicola Bay around the urban coastal areas were collected and a computer simulation model was applied to evaluate the potential stormwater impacts. Cumulative impacts of increased stormwater contaminants were a primary concern. Additional sampling was undertaken to differentiate coliform bacteria from human or nonhuman origins. A final report was completed this past year and it provides guidance on developing and implementing an integrated nonpoint management plan for the City of Apalachicola, as well as other municipal areas along the bay.

ST. GEORGE ISLAND MITIGATION PROJECT

Two amendments to the District's Regional Mitigation Plan were approved in 2000 by the Governing Board. One amendment involved a mitigation project to offset wetland impacts associated with a Florida Department of Transportation project that impacts .3-acres of seagrass associated with the replacement of the Bryant Patton Bridge to St. George Island in Franklin County. The proposed mitigation project creates .9-acres of salt marsh with associated breakwaters on the bay side of St. George Island. Breakwaters will protect planted areas and encourage expansion of the salt marsh habitat. The marsh creation is expected to stabilize

A constructed breakwater at St. George Island.

up to several thousand feet of shoreline and provide nesting and feeding grounds for many birds. The other amendment involved a project for Escambia County.

BIG RIVER CLEANUP

In March, the District organized a large-scale cleanup of the entire course of the Apalachicola River. Excessive amounts of trash had accumulated along the river's banks. Spanning two weekends, the "Big River Cleanup" was successful. Contacts for specific communities and areas were identified and a number of sponsors provided boats, supplies such as gloves and trash bags and refreshments. Approximately 250 area residents volunteered to help with the cleanup event. Volunteers filled their boats, canoes and trash bags. Inmates from nearby correctional facilities helped collect the trash. This is planned to be an annual event.

Volunteers help with the Big River Cleanup.

BAY, HOLMES, OKALOOSA, WALTON AND WASHINGTON COUNTIES

SAND HILL LAKES RESTORATION

A $300,000 grant from the U. S. Environmental Protection Agency (EPA) was awarded to the District to protect, enhance and monitor water resources in the Sand Hill Lakes in Bay and Washington counties. A large part of the Sand Hill Lakes region serves as a recharge area for a portion of the Floridan Aquifer that discharges into Econfina Creek. Econfina Creek, a Class I water body, flows into the Deer Point Lake Reservoir which is the primary drinking water supply source for Panama City and Bay County. In addition to their importance for ground water and potable water resources protection, the Sand Hill Lakes area is known to have a very diverse plant and animal life including several rare, threatened and endangered species. The goals of the project include abating erosion, reducing nonpoint source pollution, preventing habitat degradation and improving water and sediment quality. The grant funds, administered by DEP, constitute about 59 percent of the total project cost and the remainder will be matched by the District's Land Management program.

In September, the District entered into an agreement with the Orange Hill Soil and Water Conservation District to provide the design for the stabilization and restoration work and, in December, to implement the restoration work at two sites adjacent to Rattlesnake Lake.

Sand Hill Lakes area slated for restoration.

SWIM PLAN DEVELOPED FOR ST. ANDREW BAY

A draft Surface Water and Improvement Management (SWIM) plan for St. Andrew Bay was presented to the public for comment in mid-June and a public workshop was held in Panama City to obtain input. Subsequently, the plan was presented to the Governing Board in September, receiving final approval late in 2000. The St. Andrew Bay plan also includes the Deer Point Lake Reservoir, St. Joseph Bay and the Sand Hill Lakes. The plan was developed in cooperation with the Department of Environmental Protection (DEP), the Bay Environmental Study Team (BEST), the St. Joseph Bay Committee, other state and federal agencies, local government and private nonprofit organizations.

Satellite view of the St. Andrew Bay watershed.

The management plan includes goals, programs and proposed activities for protecting St. Andrew Bay, North Bay, West Bay, East Bay, Deer Point Lake Reservoir, the Sand Hill Lakes and St. Joseph Bay, as well as the respective tributaries and surface water basins of each of these water bodies. The watershed covers approximately 736,000 acres in five Florida counties and nearly 65 percent of the watershed is in Bay County.

AGREEMENT WITH REGIONAL UTILITY AUTHORITY

An agreement between the Walton/Okaloosa/Santa Rosa Regional Utility Authority was amended in March as a result of changes in the project. The agreement calls for the construction of four test wells and the development of up to three-salinity transport models of the area. The models will examine the sustainability of withdrawals from the Floridan Aquifer in the coastal areas of the three counties and the potential for saltwater intrusion under current conditions as well as future conditions.

This project, which was begun in 1999, was to be completed in three phases. Phase I, the test wells, has already been completed and Phase II, the first of the salinity transport models, is currently under development. Phase III will involve the development of the remaining model(s).

VALPARAISO STORMWATER TREATMENT SYSTEM

An agreement between the City of Valparaiso and the District was entered into in February for the design, permitting and construction of stormwater treatment facilities and best management practices within the city. The agreement defines the responsibilities of both the District and the city in the implementation of these nonpoint source pollution control projects. Through the agreement, the District will provide for the design, permitting and on-site construction inspection services as well as funding for the construction, which will be made possible through an EPA 319 (h) grant administered by DEP. The City of Valparaiso agreed to provide land for the facilities, administer construction contracts and assume ownership and management responsibilities of all facilities constructed.

DEER POINT LAKE RESERVOIR MONITORING

The operation of a streamflow and rainfall monitoring network for the Deer Point Lake Reservoir watershed in Bay County will be continued for another year. An agreement between the District and Bay County was approved in August. This surface water monitoring program is a permanent monitoring network that includes six discharge stations and three rainfall stations in the Deer Point Lake Reservoir watershed. These stations measure dry weather and storm event discharge, rainfall and stage levels. Data measured provide information to quantify streamflow discharges during wet and dry weather conditions that can be used to manage water resources.

Deer Point Lake Reservoir is the primary drinking water supply source for Panama City and the surrounding area. Preservation and management of this resource is a priority for both the District and Bay County.

STORMWATER FLOW MONITORING

In August, the District and Bay County agreed to continue stormwater monitoring. The District will continue the operation of two stormwater monitoring stations for an additional year. One is located on a drainage channel on 11th Avenue in Panama City and it flows into Watson Bayou. The other is on south Bear Creek in the northern part of the county and it flows into Deer Point Lake. Two rainfall monitoring stations in the same area also are operated by the District. The District will validate and archive the data in the District's surface water data base and provide the county with stage, discharge and rainfall data. These monitoring stations provide continuous records of precipitation and surface water discharges that will be used to assist the county with calculating stormwater runoff into Watson Bayou and Deer Point Lake and making improvements to the stormwater drainage system.

RECREATIONAL RESOURCE INVENTORY FOR ECONFINA CREEK

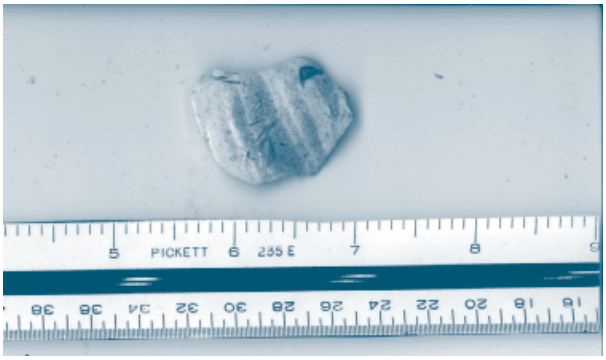
A recreational resource inventory for the Econfina Creek Water Management Area (ECWMA) was completed during 2000. It was undertaken to

Econfina Creek.

accomplish several objectives that included determining which areas could be used for sustainable resource-based recreational activities, estimating current and future demand, identifying factors that might limit such activities, recommending site-specific activities and identifying areas where recreational use should be eliminated or held to minimal levels so that the natural systems would not be degraded. The report also recommended the monitoring of these recreational activities so that the natural system will continue to be protected. Located in Bay, Jackson and Washington counties, the ECWMA is a unique resource and these lands have been acquired by the District primarily for water resource protection and preservation. The area is known for its significant aquifer recharge capability. The District owns and manages some 37,281 acres within the ECWMA. A variety of hunting and other resource-based recreational activities such as canoeing, swimming, fishing, boating, hiking, horseback riding and camping are offered on these lands. Acquisition of these lands protects and preserves the water resources and water supply for Panama City and the surrounding area. Some 80 percent of the water flowing into Deer Point Lake Reservoir comes from Econfina Creek.

ARCHAEOLOGICAL SURVEY OF ECONFINA CREEK

An archaeological survey of the ECWMA will be undertaken by Panamerican, Inc. through an agreement with the District and with a grant of $18,450 from the Division of Historical Resources, as well as with funding and assistance from the District. The survey report will present major findings and site information for all archaeological or historical sites discovered. The survey was begun in April of 2000 and is expected to be completed by April 30, 2001.



A flint chip recovered at the Econfina Creek archaeological site.

HERBARIUM CREATED

This past year, through the volunteer efforts of Dr. and Mrs. Ed Keppner, a collection of vascular plants primarily within the ECWMA in Bay and Washington counties was completed. Currently housed at the Northwest Florida Water Management District's Field Office in Marianna, the collection serves as a reference and provides information about protected species that occur in the area.

Species of vascular plants that are protected by the State of Florida and the U. S. Fish and Wildlife Service are present in this area in significant numbers. The ECWMA contains about 30 percent of the known habitat for smoothbark St. John's wort. A reference collection such as this with information pertaining to the distribution of species can aid in developing appropriate habitat management plans as well as serve as a source for plant identification. To complete the collection, specimens were collected from several sites at various times during the year, pressed, dried, mounted on specimen sheets, labeled and then sealed in mylar envelopes. The specimens were then consecutively numbered and arranged by family, genus and species.

REFORESTATION ACTIVITES SLATED FOR DISTRICT LANDS

Approximately 916 acres of disturbed longleaf pine and wiregrass habitat in Bay, Holmes, Walton and Washington counties, lying within the Choctawhatchee and Econfina Creek water management areas, will be restored or reforested. Continuing efforts directed to restoration activities such as these have focused on restoring the lands to a natural xeric sandhill upland vegetation community of longleaf pine and wiregrass. Most of the activities will be centered in the Econfina Creek area in northern Bay and Washington counties where 88 percent of the restoration activities will occur. The remaining 12 percent will be in the Choctawhatchee River area. The District plans to purchase approximately 587,000 longleaf tubelings for this restoration effort scheduled to take place during 2000-2001.

Over 833 acres will be planted with longleaf pines and 83 acres will be planted with wiregrass.

RATTLESNAKE ROAD TO BE STABILIZED

In April, the District finalized plans to address erosion and associated adverse water quality impacts to Rattlesnake Lake. Plans call for Rattlesnake Lake to be used as a group camping area as well as for fishing. Plans also are being made to open the lake to the general public for fishing on Tuesdays, Wednesdays and Thursdays. Rattlesnake Road will be the only designated public access road leading to this popular recreational area. The road also will aid the District with its management and restoration activities by providing easier access.

SLOUGHS TO BE RESTORED

In exchange for an easement agreement, Alabama Electric Cooperative agreed to restore the natural hydrologic function of four backwater slough systems on District-owned property along the Choctawhatchee River. The restoration work included the installation of 72 culverts and four low-water crossings, as well as a public access road. These drainage structures will help minimize impacts to the normal flow and drainage patterns in this area of Choctawhatchee River floodplain. The structures also will provide public and management access to some 2,000 acres of District lands that had been inaccessible.

PUBLIC ACCESS EASEMENT DONATED

In August, the District received a donation of a vital public access easement from Mr. Emmitte H. Tilley on the middle Choctawhatchee River Water Management area near Red Bay. This easement will provide public and land management access to over 2,000 acres of District land in an area known as Lost Lake. Lost Lake is a locally known fishing and hunting area that has not been open to the general public for many years. In September, the District's Governing Board adopted a special resolution to express appreciation for Mr. Tilley's public access easement donation.

SEVERAL DISTRICT ACQUISITIONS

Approximately 142.3 acres (an 81-acre tract and another 61.3-acre tract) were approved for purchase in June in Okaloosa County and will be made part of the Yellow River Water Management Area. The 81-acre tract consists of xeric sandhill uplands containing longleaf pine. The 61.3-acre tract consists of cutover xeric uplands. Both parcels are adjacent to District lands on the south side. Acquisition of these tracts will provide public access, help buffer potential development and enhance the protection of the Yellow River floodplain. Both tracts front Trawick Creek Road and provide land and management access where none had been available previously.

In September, the acquisition of 114.8 acres that were associated with the floodplain of the Econfina Creek was approved. The tract consists of upland mixed forest, slope forest, xeric sandhill uplands and a seepage stream. The parcel is contiguous to other District-owned land.

Another 65.65-acre parcel was approved for purchase in November. This tract consists primarily of xeric sandhill upland habitat and contains a 10-acre karst lake, Lake Sewell.

In August, the purchase of a 59.4-acre tract was approved in Holmes County. This tract is adjacent to existing District-owned land in the Choctawhatchee River Water Management Area and will enhance the District's water resource protection efforts. It is primarily a mixed bottomland hardwood floodplain habitat associated with the Choctawhatchee River floodplain.

In October, the purchase of 49.05-acres was approved along the middle Choctawhatchee River in Walton County. This property will enhance the District's water quality protection/preservation efforts in the Choctawhatchee River floodplain and reduce the acreage associated with an inholding in this water management area.

Four 10-acre parcels that were all inholdings within the Econfina Creek Water Management Area were approved for purchase in April, May and June respectively. Three parcels are lake bottom lots at Hammock Lake and their acquisition will enhance the District's water resource protection efforts. The fourth parcel is at Sparkleberry Lake and consists of natural xeric sandhill habitat with a small intermittent stream.

ESCAMBIA AND SANTA ROSA COUNTIES

JONES SWAMP PRESERVATION ACTIVITIES

An amendment to the District's Regional Mitigation Plan was approved early in 2000 by the Governing Board. Through the amendment, a plan to acquire land parcels within Jones Swamp was approved. This area of approximately 32.5 acres will mitigate or offset wetland impacts caused by a weigh station project planned by the Florida Department of Transportation. Jones Swamp is part of a 2,700-acre watershed in Escambia County that drains into the western arm of Bayou Chico. Industrial, commercial and residential urbanization in the Bayou Chico watershed has led to degraded water and sediment quality. Development is now encroaching upon Jones Swamp, making the preservation of this area a priority. Nearly 400 acres of Jones Swamp have already been acquired by Escambia County and Florida Communities Trust with assistance from the District. The ultimate goal is to bring 1,300 acres under protection.

SAND AND GRAVEL AQUIFER WELLFIELD PLANNED

The District received $328,000 in federal funding to assist in the planning and final design of a Sand and Gravel Aquifer inland wellfield by Fairpoint Regional Utility System (Midway Water System, Holley-Navarre Water System and the City of Gulf Breeze) in 1999. This funding was obtained through a congressional appropriation for the development of alternative water supplies in the State of Florida.

In February of 2000, the District entered into a contract with the U. S. Environmental Protection Agency (EPA) for the transferal of these funds and a cooperative agreement with Fairpoint Regional Utility System. The funds will be used for the final design and preparation of technical specifications for four large capacity production wells, an elevated storage tank, wellfield piping and approximately 18.5 miles of water transmission main and rechlorination facilities. The grant requires a 50 percent match, which will be provided by Fairpoint Regional Utility System.

Water supply for the coastal area of southeastern Santa Rosa is currently obtained from Floridan Aquifer wells located along the coast. With increasing growth in the area, withdrawals from the Floridan Aquifer also have increased significantly. Water levels in the aquifer have steadily declined with a concomitant increase in the concentrations of sodium, chlorides, total dissolved solids and other constituents. The Floridan Aquifer cannot continue to meet the projected needs of the area. The new wellfield will be located approximately 15 miles from the coastline.

WET PRAIRIE RESTORATION

As a result of a successful Phase I wet prairie habitat restoration research project involving District-owned property (Garcon Point) in Santa Rosa County, the District entered into an agreement with the University of West Florida for Phase II of the project. Phase I of the research effort called for collecting plant species from specified plots, recording their numbers and determining the vegetative cover for each of the plant species. The species were ranked according to their relative abundance and botanical and common names for each were recorded. Phase II of the project will involve inventories of plant species after prescribed or controlled burns have been undertaken on the research plots. The results of the research will enable the District to restore wet prairie habitat for disturbed sites that are both cost effective and likely to have a high degree of success.

MAGGIE'S DITCH RESTORATION

For many decades, runoff had been collected and directed into Maggie's Ditch, a channelized and highly altered one-time natural stream and a tributary to the east arm of Bayou Chico. As a result of a successful collaboration between private industry, state government, local government and private citizens, the 240-acre drainage basin has been retrofitted with stormwater controls. Cooperating in the restoration effort were the District, Department of Environmental Protection, Escambia County, Escambia County Utilities Authority, Bayou Chico Association and Gulf Power Company.

As part of the design, the District chose a combination of wet detention pond and marsh area, incorporating the best designs for the treatment of stormwater with eye appeal and a natural appearance. A wildlife sanctuary also was located at the site and, as a result of the design process, protected bird nesting islands and more space for the animals at the sanctuary were incorporated. The end result was that a drainage area was converted into a city park. This restoration project was selected as the 2000 Environmental Project of the Year by the Florida Chapter of the American Public Works.

Maggie's Ditch was designed for natural appeal.

AQUIFER MAPS TO BE PRODUCED

In July, the District and the Escambia County Utilities Authority agreed to share in the cost of preparing Sand and Gravel Aquifer potentiometric surface maps for southern Escambia County. Recent drought conditions increased interest in updating the potentiometric surface maps which were last done in 1991. The potentiometric surface maps will be developed to represent water level conditions as measured on or about October 2000. Preparation of the maps is expected to take a year. These maps will provide information needed for the protection, preservation and management of the ground water resources of southern Escambia County.

VARIOUS LANDS ACQUIRED

Approximately 118 acres along the Escambia River were approved for purchase in September. This tract is a forested floodplain with a small amount of cutover mesic uplands and will provide management access to existing District lands where none existed previously.

In August, approval was given to purchase 104 acres (a 94-acre parcel in the lower floodplain of the Escambia River and a 10-acre tract on Garcon Point). The 94-acre parcel will provide protection to the floodplain and estuarine systems of the lower Escambia River, as well as provide for a natural buffer from adjacent development and the 10-acre tract will provide for additional wet prairie protection for Garcon Point.

The District's Governing Board approved the acquisition of 48 acres of environmentally sensitive lands in Escambia County in July. The tract consists primarily of wetlands containing mixed bottomland hardwoods. The parcel is contiguous to existing District lands on the south side. The acquisition of this parcel will provide additional protection to the Escambia River floodplain, protection to downstream estuarine systems and provide public and land management access where there was none previously.

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
COMBINED BALANCE SHEET
SEPTEMBER 30, 2000

Assets	
Current Assets:	
Cash and Cash Equivalents	$ 34,365
Investments	16,708,904
Cash with Fiscal Agent	2,581,306
Due from Other Funds	1,196,108
Accounts Receivable	1,404
Due from Other Governmental Units	1,699,293
Deposits	205
Other Assets	1,457
Total Current Assets	**$ 22,223,042**
General Fixed Assets:	
Land and Improvements	97,851,954
Buildings and Improvements	1,085,331
Machinery and Equipment	2,827,413
Total General Fixed Assets	**$ 101,764,698**
Other Debits:	
Amount Available in Debt Service Fund	5,000,806
Amount to Be Provided for Retirement of General Long-Term Debt	6,709,503
Total Other Debits	**$ 11,710,309**
Total Assets and Other Debits	**$ 135,698,049**
Liabilities and Fund Equity	
Liabilities:	
Refundable Deposits	$ 68,103
Accounts Payable and Accruals	588,664
Deferred Revenue	404,919
Revenue Bonds Payable	11,270,000
Capital Lease Payable	33,116
Liability for Compensated Absences	407,193
Due to Other Funds	1,196,108
Total Liabilities	**$ 13,968,103**
Fund Equity:	
Investment in General Fixed Assets	**$ 101,764,698**
Fund Balances:	
Reserved:	
Designated for Debt Service	5,000,806
Designated for Land Acquisition	1,117,153
Designated for Land Management/Acquisition	3,068,437
Total Reserved	**$ 9,186,396**
Unreserved:	
Undesignated	526,659
Designated	10,252,193
Total Unreserved	**$ 10,778,852**
Total Liabilities and Fund Equity	**$ 135,698,049**

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT FINANCIAL STATEMENT

For Fiscal Year Ended September 30, 2000

Revenue and Other Receipts		
Federal Sources:		
DEP/EPA-Ambient Monitoring of Surface Water	$	84,630
DEP/EPA-Best Management Practice Application-Sand Hills Lakes		17,916
DEP/EPA-Groundwater Risk Analysis System Grant		29,714
DEP/EPA-Nonpoint Source Implementation Grant		9,971
DEP/EPA-Nonpoint Source Restoration Grant		71,952
DEP/EPA-Nonpoint Source Nitrate Analysis		101,131
FSU/Dept. of the Interior-Nearshore Coastal Monitoring		2,567
Total Federal Sources	**$**	**317,881**
State and Local Government Sources:		
DEP-Ground Water Quality Monitoring Network	$	155,756
DEP-Chapter 62-524 F. A. C. Program Implementation		55,000
DEP-Sweetbay Wetlands Restoration Project		81
DEP-Apalachicola Freshwater Needs Assessment		520,000
DEP-Lake Jackson Natural Drawdown Restoration Project		250,000
DEP-Surface Water Improvement and Management Program		761,694
DEP-General Appropriations		1,099,922
DEP- Preservation 2000 Trust Fund		5,158,878
DEP-Water Management Lands Trust Fund		6,883,003
DEP-Surface Water Management Permitting Program (Wetlands)		300,000
DOT-Mitigation Plan and Restoration Projects		876,979
Dept. of State-Econfina Creek Archaeological Survey Project		14,945
Dept. of State-Yellow River Basin Archaeological Survey Project		5,000
City of Quincy Stream Flow and Rainfall Monitoring		2,700
Leon County Stormwater Monitoring		35,160
City of Tallahassee Stormwater Monitoring		35,160
Leon County Lake Jackson SWIM Match		16,912
Escambia County Pensacola Bay SWIM Match		15,001
ECUA Risk Match		3,218
Walton/Okaloosa/Santa Rosa Regional Utility Authority		23,764
Bay County Storm Water Monitoring		14,450
Bay County Deer Point Watershed Monitoring		26,460
Town of Campbellton Abandoned Well Plugging	$	2,405
City of Gretna Abandoned Well Plugging		4,055
Other Funding		6,628
Total State and Local Government Sources	**$**	**16,267,171**

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT FINANCIAL STATEMENT

(continued from page 34)

Agency Sources:	
Ad Valorem Taxes (.05 mill)	$ 1,932,015
Permit and Inspection Fees	547,815
Regulatory Penalties	16,806
Interest	902,660
Timber Sales	434,535
Miscellaneous	34,687
Total Agency Sources	**$ 3,868,518**
Total Revenues	**$ 20,453,570**
Other Sources:	
Sale of General Fixed Assets	5,070
Total Other Sources	**5,070**
Balance Brought Forward from Prior Fiscal Year	**$ 17,213,192**
Total Revenue, Other Sources and Cash Balance	**$ 37,671,832**
Expenditures	
Salaries and Benefits	$ 4,712,631
Contractual Services - Consultants	1,179,849
Operating Expenses	993,682
Grants and Aids	1,843,699
Operating Capital Outlay	6,373,381
Debt Service	2,603,342
Total Expenditures	**$ 17,706,584**
Fund Balance	
Reserved:	
Designated for Debt Service	$ 5,000,806
Designated for Land Acquisition	1,117,153
Designated for Land Management/Acquisition	3,068,437
Total Reserved	**$ 9,186,396**
Unreserved:	
Undesignated	526,659
Designated	10,252,193
Total Unreserved	**$ 10,778,852**
Total Expenditures and Fund Balance	**$ 37,671,832**

Annual Report 2000

Produced by the Northwest Florida Water Management District's Office of Public Information

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