Northwest Florida Water Management District



NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

2003 ANNUAL REPORT



Econfina Creek

2	2
4	4
6Econfina Creek: Nothing Could Be Finer	6
Districtwide Activities	11
9Escambia and Santa Rosa Counties	19
2 Bay, Holmes, Okaloosa, Walton and Washington Counties	
6	
Jefferson, Leon and Wakulla Counties	
Combined Balance Sheet	
4 Financial Statement	
6 District Addresses and Contact Information	

AN INCREASINGLY IMPORTANT RESOURCE

ater resources are becoming increasingly important each year in the Northwest Florida Water Management District's 16-county area. As the state's population grows, water availability is imperative and its value is acknowledged and recognized throughout the state. Water is integral for growth and for maintaining the quality of life. It is essential for the well-being and preservation of our natural environment.

In northwest Florida, we are fortunate that we have adequate water supplies for the most part, but there is a clear recognition that our water resources are finite. There are regions for which there are potential future limited supplies and the District has taken steps to identify those areas and is assisting local governments and utilities in the development of alternative sources to meet future needs.

The District's efforts to determine future water supply needs and the availability of water to meet those demands led to a Regional Water Supply Plan for Santa Rosa, Okaloosa and Walton counties in 2000. In 2003, the District reassessed and reevaluated demands and availability of water resources for the entire District and found, once again, that Region II – Santa Rosa, Okaloosa and Walton counties – remained the only area where a water supply plan was needed. The primary test used to determine if a water supply plan is needed was whether projected water withdrawals exceed water available from traditional sources. If not, a water supply plan is not needed.

The Region II Water Supply Plan is currently being implemented through the development of a sustainability model for the Floridan Aquifer and through identification and development of inland water supply sources, including the Sand and Gravel Aquifer. During 2003, the District made the final installment of a grant that totals nearly \$3 million in federal funding to the Fairpoint Regional Utility System for the development and construction of an inland Sand and Gravel Aquifer wellfield to meet the water supply needs of southern Santa Rosa County.

There are other areas within the District, that are experiencing, or are anticipated to experience, some limitations of water supply but these are primarily localized areas. For example, Franklin County is undergoing some growth and water is not as abundant there as in other areas of the District. Franklin County relies mostly on ground water rather than surface water, which requires more treatment. Ground water is limited along the coastline, where most of the county's population exists. Saltwater intrusion is a possibility if withdrawals are excessive. Alternative sources, such as an inland wellfield, are being explored for the area. The District is providing assistance with this assessment and is working closely with local utilities in examining alternatives for meeting the future needs of the area.

Bay County (Panama City and surrounding area) is presently the only area in the Northwest Florida Water Management District that relies on surface water for its water supply. More than ten years ago, the District identified lands along the Econfina Creek corridor and the nearby upland area as priorities for acquisition to protect Deer Point Lake Reservoir, the area's drinking water source, which is fed by Econfina Creek. The upland area is a primary recharge area for the Floridan Aquifer and is recharged each year by an estimated 40 inches of rainfall seeping through the soil to the aquifer. Today, more than 40,000 acres of the environmentally sensitive Econfina Creek area have been purchased through such programs as Save Our Rivers, Preservation 2000 and Florida Forever. Altogether, more than 200,000 acres throughout the District's 16-county area have been acquired to protect northwest Florida's water resources. All of the land is available to the public for natural resourcebased recreational activities.

This past year, marked the first time that Florida Forever grants were made available to local governmental agencies. In November, more than \$4 million in capital improvement construction grants were recommended for 11 local governmental recipients throughout the District's 16 counties. Projects recommended for grants included those addressing surface water quality improvement and protection, stormwater flood protection and sediment reduction. The District plans to offer these grants in future years, depending on the availability of funding.

On August 31, 2003, the Apalachicola-Chattahoochee-Flint (ACF) Rivers Compact Agreement expired. Georgia, Florida and Alabama had been negotiating a water-sharing agreement to equitably apportion the waters of this river system. These negotiations began in late 1997 with the passage of the ACF Compact Agreement. Since its ratification by the U.S. Congress and since being signed into law by the President of the United States in November of 1997, the ACF Compact Agreement was extended 17 times. The states had not reached agreement by August and the Compact Agreement was allowed to end. Florida, Georgia and Alabama will now turn to the court system to seek a solution for sharing the waters of this river system.

Northwest Florida has unique and relatively undisturbed natural systems. Its abundance of springs, rivers, lakes and natural and geologic features such as steephead ravines, sinkholes and karst topography as well as its highly diverse biology define both the character and quality of northwest Florida making it worthy of preservation and protection. The availability of water continues to draw attention. It is up to each of us to protect our finite water resources. Northwest Florida is, and is becoming, an increasingly important resource.

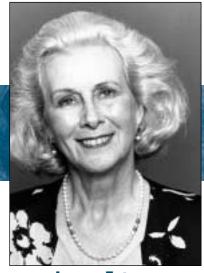
Joyce Estes

Chair, Governing Board

Douglas E. Barr **Executive Director**

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

GOVERNING BOARD



Joyce Estes
Chair
Eastpoint
Serves at Large
Appointed: March 5, 1999
Reappointed: March 2, 2003
Term Expires: March 1, 2007



Vice Chair
Sneads
Represents Basin IV
Appointed: July 1987
Reappointed: March 5, 1999
Reappointed: March 2, 2003
Term Expires: March 1, 2007



Stephanie Bloyd

Secretary/Treasurer

Panama City Beach

Serves at Large

Appointed: March 2, 2001

Reappointed: March 2, 2002

Term Expires: March 1, 2006



Richard P. Petermann

Fort Walton Beach

Serves at Large

Appointed: March 2, 2001

Term Expires: March 1, 2005

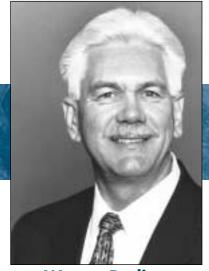


J. Russell Price
Tallahassee
Represents Basin V
Appointed: March 5, 1999
Reappointed: March 2, 2000
Term Expires: March 1, 2004



Pensacola
Represents Basin I
Appointed: April 10, 2000
Reappointed: March 2, 2001
Term Expires: March 1, 2005

^{*} NancyAnn Stuparich, who represented Basin I: Perdido and Escambia rivers, resigned from the Governing Board at the end of 2003.



Wayne Bodie
DeFuniak Springs
Represents Basin II
Appointed: March 5, 1999
Reappointed: March 2, 2003
Term Expires: March 1, 2007



Hulan Carter
Chipley
Represents Basin III
Appointed: March 2, 2001
Reappointed: March 2, 2002
Term Expires: March 1, 2006



Sharon T. Gaskin
Wewahitchka
Serves at Large
Appointed: March 5, 1999
Reappointed: March 2, 2000
Reappointed: March 17, 2004
Term Expires: March 1, 2008

2004 Governing Board Meetings

January 22	July 22
February 26	August 26
March 25*	September 15*
April 22	September 23*
May 27*	October 28
June 24	November 30
	December 1

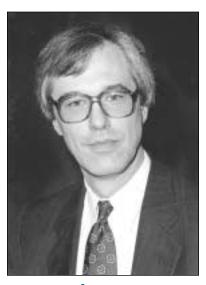
All meetings will be held at the District Headquarters except for those marked with an asterisk (*). The March 25 meeting will be held in Apalachicola, the May 27 meeting will be held in Pensacola, the September 15 (Public Hearing on the 2004-05 Fiscal Year Budget) will be held in DeFuniak Springs and the September 23 meeting will be held in Marianna. The schedule of meetings is tentative and subject to change.

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



Econfina Creek

narrow, rapidly flowing Econfina Creek (pronounced e-con-fine-a) begins north of Panama City in Jackson County, continues through Calhoun and Washington counties, then broadens, augmented by spring flow, in its middle reaches in Bay County. It ultimately flows into the Deer Point Lake Reservoir, formed in 1961, which provides the Bay County area with its water supply – an estimated 45 million gallons per day for public supply and for industrial water systems. Its name, "Econfina," is attributed to a Muskogean Indian word that means "a natural

bridge." Econfina Creek is frequently confused with Econfina River (pronounced e-con-fee-na) in Taylor County, but Econfina Creek is in a class by itself.

Designated a Class I water body (drinking water supply) by the State of Florida, preserving and protecting this significant natural water resource became one of the Northwest Florida Water Management District's goals, more than 12 years ago. The District identified lands – both stream corridor and adjacent uplands – along Econfina Creek as priorities for land acquisi-

tion to protect the area's drinking water supply and to conserve the creek's natural resources. More than 40,000 acres have been purchased by the District to preserve this drinking water source and its environmentally and geologically sensitive areas, which include springs, spring-run streams, solution holes, sinkhole lakes, bluffs and steephead ravines.

The District's first purchase was made in 1992 and the most recent was made in 2002. Acquisitions were made possible through several State of Florida land acquisition programs – Save Our Rivers, Preservation 2000, Florida Forever and the

Department of Transportation Mitigation Fund. All but 55 acres were purchased by the District at a cost of approximately \$45.5 million. The 55 acres were donated to the District by a private landowner along the main stem of the creek (14 acres) and The Nature Conservancy which donated a natural longleaf pine and wiregrass habitat area (41 acres).

Econfina Creek is one of the region's premiere natural-resource based recreational destinations. The Econfina Creek Water Management Area is available to the public for hunting, fishing, canoeing, horseback riding, hiking, picnicking, primitive camping and bird-watching. It is known for its exquisite scenery and geological and hydrological features springs, spring runs, steep-walled ravines and even waterfalls. It also is known for its 22-mile long state designated canoe trail, portions of which are considered a challenge by experienced canoeists who try "going with the flow."

Plants and shrubs found along the banks of the creek include oak leaf hydrangea, ash/pyramid magnolias, liverworts, dogwood, redbud, mountain laurel and wild azalea varieties. In the upland areas, the rare smooth barked St. John's wort, and other listed species, can be found around numerous Sand Hill Lakes. Animal species observed include the summer

tanager, endemic snails, deer, wild turkey, gopher tortoise and a very large warbler population.

Surface Water and Ground Water Interactions

While Bay County is the only area in northwest Florida that relies on surface water for its drinking water supply, the area also banks on ground water to replenish that surface water source. The Econfina Creek Water Management Area illustrates the interconnectedness of the area's geological features to both ground water and surface water. Karst topog-



© Jame

raphy, which characterizes the area, includes sinkholes, springs and openings such as solution holes that result from the dissolution of limestone. Interaction between surface water and ground water in a porous karst aquifer system can be rapid. The aquifer in this area is said to have high transmissivity, the ease with which water moves through an aquifer. The aquifer discharges to the cool springs that rise from underground to merge into Econfina Creek's surface flow. Preservation of these sensitive environmental areas is essential to protect both water quality and quantity.

Econfina Creek's Springs

Along the middle reaches of Econfina Creek are numerous springs which provide a stable ground water discharge to the creek. Springs, common to a karst topography, are natural openings, channels or conduits where ground water is discharged. Econfina Creek is directly connected to the aquifer. The middle reaches of Econfina Creek physically cut or erode

into the Floridan Aquifer, while the upper and lower portions of the creek do not.

The largest and most well known of these springs is the Gainer Springs Group which has an aggregate discharge of about 100 million gallons per day. Collectively, the Gainer Springs Group is classified as one of Florida's 33 first magnitude springs and is estimated to contribute 35 to 40 percent of the total flow that ultimately reaches the Deer Point Lake Reservoir.

Individually, the Gainer Springs Group consists of six known springs, all of which are second magnitude or smaller. Three of the springs in the group are privately owned and three are owned by the District. There are several other springs along Econfina Creek in addition to the Gainer Springs Group. Three of the more significant ones include Blue Spring (2nd magnitude), Williford Spring (2nd magnitude) and Pitt Spring (3rd magnitude). All of these are owned by the District.



ames Valenti

The Creek's Contribution

Altogether, Econfina Creek's contribution to Deer Point Lake is nearly 58 percent of the average annual streamflow into the lake. This average annual streamflow constitutes both ground water and surface water runoff. Under low flow conditions, though, the scenario changes. Low rainfall reduces the amount of surface water flowing into the creek and Deer Point Lake. When this occurs, the percentage of the creek's flow, stemming primarily from ground water, can rise to nearly 80 percent.



Econfina Creek Recharge Area

The upland area, the Sand Hill Lakes lying on the west side of the creek in Washington County, is a principal recharge area for the Floridan Aquifer. Numerous sinkhole lakes dot the Sand Hill Lakes landscape. On a clear day, the many blue sapphire-colored lakes appear to be a new found treasure. It is here that rainwater seeps through the porous limestone into the Floridan Aquifer. Recharge rates

in this area are estimated to be between 30 and 40 inches per year.

A major research effort by the District was undertaken in 1996-97 to identify and delineate the recharge area so that acquisition of these environmentally sensitive areas could be pursued. Among the District's purchases was a 28,954-acre upland tract in the Sand Hill Lakes area. This is the largest, single acquisition that the District knows of that

has ever been made to protect a recharge area.







Management and Restoration

With the acquisition of more than 40,000 acres comes the responsibility to manage and restore the

land to its natural state and condition. Restoration and reforestation are major undertakings on Districtowned land each year. Restoration activities in the Econfina Water Management Area are focused primarily on the upland xeric recharge areas that were formerly sand pine plantations. Last year, the District planted approximately 729,250 longleaf pine tubelings – most of them were planted in the Econfina Creek Water Management Area. Also planted were about 100,000 wiregrass plugs. More than 6,000 acres, of the 25,000 slated for restoration in the recharge area, have been planted with longleaf pine and wiregrass in order to restore the natural habitat of the area.

Protecting the Econfina Creek Water Management Area preserves ground water contributions to spring flow, crucial for the drinking water supply source. There have been instances within Florida where large water withdrawals from wells located in the vicinity of springs have resulted in reductions of ground water contributions to springs and decreased spring flows. Local governments have cooperated with the District to preserve this natural resource and to ensure that Econfina Creek is spared such negative impacts.

At the same time, the Econfina Creek Water Management Area provides unique natural-resource based recreational opportunities for local residents and can be appreciated by all.

In early 2004, the District printed its first full color poster of the Econfina Creek to increase awareness of the need to protect this significant resource. Two other posters will be produced – one of the springs in the middle reaches and one of the recharge area. The second poster in the series is expected to be available in late 2004 and the third in the spring of 2005. The photographs used for the poster series were taken by James Valentine, a naturalist photographer.

New and continuing projects and programs undertaken by the Northwest Florida Water Management District during 2003 are described on the following pages. Projects that encompass all or several of the District's 16 counties are discussed in the districtwide section. Other projects can be found in the county specific sections. Not all projects or programs are included in this Annual Report. The District engages in many others to protect and preserve the water resources of northwest Florida





Grotto Springs in Calhoun County

Florida Forever Grant Program

n November, the District's Governing Board approved more than \$4 million in capital improvement construction grants to local governmental agencies to help improve environmental and water resources within the District's 16-county area. Eleven recipients were designated to receive grant funds through the Florida Forever program.

This was the first year of the grant program and projects recommended for grants included those addressing surface water quality improvement and protection, stormwater management, water body and wetland restoration activities, shoreline erosion control, flood protection and sediment reduction. The District also has identified several other construction projects earmarked for funding outside the grant program. These additional projects have been developed

through the District's Surface Water Improvement and Management (SWIM) program activities and are identified in the Florida Forever work plan.

Regional Water Supply Planning

Every five years, the District's Governing Board is required to reevaluate whether or not a regional water supply plan is needed. The determination for the most recent review was that no new regional water supply plans were needed. This determination was, in part, based on an update of projected future public water supply demands through the year 2025 and a comparison of these demands to estimates of water available from traditional sources. Regional water supply planning is initiated where it is determined that traditional sources of water are not adequate for the planning period (20 years) to supply

water for all existing and reasonable anticipated future uses and to sustain the water resources and related natural systems.

In 1998, the District completed its first water supply assessment which included estimates of water availability. This assessment also led to the development of a regional water supply plan for Santa Rosa, Walton and Okaloosa counties (Region II) in July 2000. This was the only area where the traditional source, the coastal Floridan Aquifer, would not be sufficient to meet future demands and alternative sources would need to be developed. Alternative sources have been identified in the Region II plan and are currently being developed or under further investigation. The projected water supply demands through 2025 in millions of gallons per day (Mgal/d) are shown in the following table.

NWFWMD Public Water Use (Mgal/d)				
Region	2000 Public Supply Water Use	2025 Projected Public Supply Water Use	Primary Water Source	
Region I:				
Escambia	43.56	57.21	Sand and Gravel Aquifer	
Region II:				
Santa Rosa	14.54	26.85	Floridan/Sand and	
Okaloosa	23.05	36.51	Gravel Aquifer(s)	
Walton	7.35	14.34		
Region III:				
Bay	26.64	46.14	Deer Point Lake Reservoir	
Region IV:				
Holmes	1.38	1.90	Floridan Aquifer	
Washington	1.11	1.21		
Jackson	2.46	2.55		
Calhoun	.75	1.49		
Liberty	.35	.61		
Region V:				
Gulf	1.47	2.10	Floridan Aquifer/	
Franklin	1.92	2.68	St. Joe Canal	
Region VI:				
Gadsden	4.32	4.91	Floridan Aquifer	
Region VII:				
Leon	34.61	51.92	Floridan Aquifer	
Wakulla	2.02	3.87		
Jefferson	.70	.71		

Efficient Transportation Decision Making Process

In April, the District entered into multi-party agency operating and funding agreements to assist the Florida Department of Transportation (DOT) with the Efficient Transportation Decision Making (ETDM) process. The ETDM process creates linkages between land use, transportation and environmental resource planning initiatives. This process facilitates better interagency coordination and involves the District, as early as possible, in the planning and permitting process for DOT transportation projects. The District's role will include the evaluation of DOT projects with regard to potential water resources and wetland impacts and the development of related data and information. DOT, local governments and other state and federal resource agencies, including the District, will be able to use this information to streamline the environmental planning and permitting process as well as plan for better and more timely wetland mitigation projects.

FEMA Floodplain Map Modernization Grant

As one of its newest Cooperating Technical Partners (CTP), the District received notice in September from the Federal Emergency Management Agency (FEMA) to proceed with the development of a business plan for floodplain map modernization in northwest Florida. The business plan development is being funded by FEMA through the U.S. Department of Homeland Security as part of a recognized need for protection against flooding. The plan will be used to determine the amount of federal funding needed to implement a map modernization program covering all counties in northwest Florida through the year 2009. As part of the plan development, the District will be working with local governments to determine their specific needs. The District also will be coordinating with the state's other four water management districts to pool resources, where possible, as well as to facilitate future funding requests on a statewide basis.

Wetlands Mitigation Program

Pursuant to the mitigation requirements of section 373.4137, Florida Statutes, the District has made significant and important gains in the preservation, enhancement and restoration of wetland resources to compensate for DOT wetlands impacts. Mitigation for 26 DOT projects, with a total of 304.64 acres of

impact, has been planned or implemented since 1996 when the mitigation legislation was passed. Numerous notable accomplishments have taken place in 2003, in particular the ecological assessment, design and development of a banking instrument for the Sand Hill Lakes Mitigation Bank located in Washington County. Ecological management of the exceptional habitats within this property has been initiated and regulatory approval of the banking instrument is anticipated in the near future. Wetland enhancement and restoration activities continued within Devil's Swamp in south Walton County and were begun in other areas of the District including the Escambia and Choctawhatchee river floodplains. These activities include hydrologic restoration, chopping and burning to institute proper fire regimes and replanting with native wetland vegetation.

In an effort to streamline the DOT mitigation process, the District has drafted an innovative In-Lieu-Fee agreement with the U.S. Army Corps of Engineers. The In-Lieu-Fee program will match compensatory mitigation plans with proposed future DOT wetland impacts for up to 10 years in the future. Early matching of mitigation projects with proposed future wetland impacts will allow the District to ensure that wetland impacts are fully compensated in a timely and cost effective manner while protecting water resources and critical wetland habitat.

Florida Springs Initiative

For the past three years, the District has worked cooperatively with the Florida Department of Environmental Protection (DEP) to implement the Springs Initiative. This effort has involved data collection, sampling, flow monitoring and research into the conditions of first magnitude Floridan Aquifer springs.



In January, the District's agreement with DEP was amended to include an inventory of springs for Holmes Creek in Washington County. Additionally, the District will undertake the preliminary delineation of a ground water capture zone in the Spring Lake area of the Dry Creek watershed in Jackson County.

In June, the agreement was amended again to allow the District to assist with surface water sampling, flow monitoring and ground water basin delineation at Wakulla Springs, St. Marks Rise, Spring Creek, Jackson Blue Spring and Gainer Springs Group.

Integrated Water Resources Monitoring

An agreement between the District and DEP was amended in June to continue the sampling of ground and surface waters at a network of sites within the District. The amendment brings the total number of years the sampling program has been in place to 20. This cooperative project enables the District to continue to assist with collecting and interpreting water quality data from confined and unconfined aquifers, rivers, streams, springs and lakes as part of a statewide integrated water resources monitoring network.

Ambient Monitoring of Surface Waters

In September, an agreement between the District and DEP to continue the ambient monitoring of surface water quality program was renewed. The District has participated in this program for 12 years. The purpose of the program is to provide surface water quality data for the assessment of long-term water quality

trends and impacts from specific activities or land uses in watersheds. The District and DEP use the data to develop management strategies to improve surface water quality and minimize negative impacts on surface water resources. Funds are provided by a grant from the U.S. Environmental Protection Agency (EPA) to DEP for the purpose of monitoring and developing strategies for improving surface water quality throughout the State of Florida.

Hydrologic Conditions Information Program Developed

A link on the District's website (http//:www.state.fl.us/nwfwmd) has been created as part of a new program to provide the public with current information about hydrologic conditions within the District's 16-county area. The information developed, intended for a wide audience, will aid in facilitating a better understanding of the unique surface and ground water resources in the District as well as provide suggested water conservation practices.

Specific information posted for major water bodies, watersheds and aquifers includes accumulated rainfall amounts, drought conditions, stream flows, lake levels and ground water levels. The information is updated at least every six months or as conditions warrant.

Independent Auditor's Report

An independent financial audit of the District's past fiscal year was presented to the Governing Board in



District staff member reads river water level recorder.

February. The District was given the highest opinion possible and the auditors did not find any instances of noncompliance. The District received another "clean audit," as it has for the past 11 years.

Inspector General's Audit Report

The Inspector General's Audit Report for the past fiscal year was prepared and presented to the Governing Board in November. Included was a review of controls over, and testing of, transactions related to regulatory and lands permitting, acquisition and disposal of real property and equipment, payroll and procurement as well as a review of certain information technology controls. Additionally, a final accounting was performed for permits issued under the Resource Area Permit program, including a final accounting of unused permits returned to the District. No control flaws were found. An in-depth study of information technologies security will be conducted given the current interest in this area.

For the 2003-2004 fiscal year, the inspector general has developed an audit work plan that includes: planning, sunshine law requirements, regulatory and lands permitting, contract compliance, travel, items subject to personal use, discretionary items or areas and development of a final report.

In Lieu of Taxes Program

Each qualifying county in which the District has acquired lands can receive payments in lieu of taxes. These payments are made because lands that fall under public ownership are removed from the tax rolls. Under the program, initiated by the Florida Legislature, the maximum number of years that a county can receive these payments for a particular parcel is 10 years. In 2003, both Liberty and Washington counties had reached the 10-year limit on some parcels. Payments can continue to be made for those parcels that have not reached the 10-year limit. In February, approval was given to make payments to Bay County for \$4,453.76; Holmes \$1,997.13; Jackson \$8,373.69; Liberty \$53.00; Okaloosa \$916.80; Santa Rosa \$15,421.81; Walton \$15,560.60; Washington \$30,387.94.

Restoration and Reforestation Activities

Each year the District undertakes a number of restoration and reforestation activities on District

lands throughout its 16-county area. This past year, the District restored or reforested over 1,250 acres of cutover and/or disturbed longleaf pine, slash pine, pond cypress and wiregrass habitat within the Yellow River, Choctawhatchee River/Holmes Creek and Econfina Creek water management areas (WMA) and also within Elinor-Klapp Phipps Park in Leon County. Longleaf pine restoration was slated for two mitigation areas. Approximately 729,250 longleaf pine tubelings and 18,000 slash pine seedlings were planted. Most of the longleaf pines were planted in the Econfina Creek WMA.

Groundcover habitat restoration activities took place in the Devil's Swamp mitigation area and within the Econfina Creek WMA. About 14,000 wet prairie wiregrass plugs were planted at Devil's Swamp and 100,000 xeric sandhill wiregrass plugs within the Econfina Creek WMA.

In late 2002, the District conducted a large-scale collection of wiregrass seed. Approximately 121 pounds of wet prairie wiregrass seed were collected from District property on Garcon Point and 238 pounds of xeric sandhill wiregrass seed from the Econfina Creek WMA. These seeds were used to produce the wiregrass plugs needed for the restoration efforts as well as direct-seeded into specific areas.

Prescribed Burns

Plans to undertake prescribed burns for 8,781 acres of District-owned land were made in October for the remainder of 2003 and for early 2004. Most of the acreage to be burned is in the Choctawhatchee River, Holmes Creek and Econfina Creek water management areas. Approximately 1,422 burn acres are located within the Yellow River, Escambia River and Garcon Point water management areas. The right conditions for undertaking controlled burning activities must exist and there is usually a narrow prescription window for seasonal burns that includes the November through mid-March period.

Prescribed fire is one of the most cost effective and efficient tools available to land managers for maintaining fire dependent and fire maintained habitats such as wet prairie, longleaf pine and wiregrass. Prescribed fire is essential to reduce fuel loads and the threats of wildfires in slash and loblolly pine forests and other habitats and to enhance wildlife habitats.



Recreational Opportunities on District Lands

Although the District's primary focus for acquiring lands is for water resource protection and restoring and maintaining habitats in their natural state and condition, the District provides a number of opportunities for resource-based recreational activities on lands where appropriate. Over the years, the District has improved many existing boat launch locations

and has developed several canoe launches and group and primitive campsite locations that are popular with the public.

Recreational improvements have occurred in the Econfina Creek, Holmes Creek and Escambia River water management areas. Plans are being made to open several thousand acres of District property to public access on the upper and lower Choctawhatchee River.

Popular Recreational Areas			
Recreational Site/Area	Location	Activities Available	
Econfina Creek Canoe Launch	Highway 20/Econfina Creek	canoe launch, boardwalk, parking	
Croom's Branch	Highway 388/Econfina Creek	mobility impaired, hunters group campsite	
Rattlesnake South	Rattlesnake Lake	group campsite (permit required)	
Pine Ridge Equestrian Camp	Hammock Lake	equestrian group campsite	
Cotton Landing	Holmes Creek	canoe launch, picnic area	
Mystic Springs	McDavid, Florida	group campsite (permit required)	
Westville Public Access Point	Westville, Florida	under construction walking allowed, hunting, fishing	
Tilley Public Access Point	Red Bay/Seven Runs Creek	under construction walking allowed, hunting, fishing	

Conservation Easements

Conservation easements are a unique and cost-effective way to protect natural resources. Land purchased through a conservation easement (less-than-fee) stays with the owner and remains on the county's tax rolls.

When property rights or interests are purchased via a conservation easement, a long-term relationship with the landowner is established since the property remains in the landowner's possession.

A conservation easement is a way to acquire certain property rights and preserve property resources

that you could not have otherwise purchased in their entirety. With conservation easements, the water resources can often be protected for about half the cost of a fee simple purchase. However, because the property remains in private ownership, public access is generally not allowed.

Property rights typically acquired through a conservation easement include development rights, land use conversion rights, restriction of timbering in wetland and sensitive areas and any potential mining or other commercial or industrial uses. This, in turn, provides for the protection of significant natural areas.

acquired by the District since 1995:		
Watershed	Acres Acquired	
Apalachicola River	6.7	
Dead Lakes	809.4	
Econfina Creek	1,551.4	
Holmes Creek	1,111.0	
Ochlockonee River	312.0	
St. Marks River	183.1	
Spring Creek	716.3	
Total	4,689.9	

The landowner typically is allowed to maintain current agricultural uses, especially silvicultural and grazing uses, but conversion to more intense agricultural and silvicultural uses is usually limited or restricted in magnitude.

Rights generally retained by the owner include the right to timber upland areas and use of the property for cattle grazing and current livestock (using best management practices), hunting and fishing. But residential development and property subdivision are limited.

Preservation 2000 encouraged the use of conservation easements. Florida Forever requires two such purchases a year, if possible. With a conservation easement, staff must monitor the property to ensure enforcement of the conditions or restrictions associated with the sale of the property.

Conservation Easements Workshop

Staff assisted the Florida Forestry Association in hosting a Conservation Easements Workshop. The workshop was held March 27 in Blountstown. About 100 participants were given information about conservation easements and why they can be a desirable alternative for protecting important resources while maintaining private ownership. Resources are protected in perpetuity because detrimental uses are restricted under the conservation easement.

Well Permitting Requirements

An agreement between the District and DEP has been in effect since 1999 to implement the water well permitting requirements of Chapter 62-524, Florida Administrative Code. The program addresses potable well construction in areas delineated by DEP as having ground water contamination and includes Jackson, Leon, Santa Rosa and Escambia counties. That agreement was amended in June to continue for another year.

Water Conservation Materials

The District continues to make several water conservation brochures available to the public: 50 Ways to Save Water, Watering Wisely (outdoor watering), Retro Fit It, An Indoor Water Audit and Xeriscape.

Additionally, WaterWise Florida Landscapes, a 64-page full color plant guide developed by the five water management districts to promote water conservation, was updated and reprinted. Printed brochures may be requested from the District's Public Information office. All of the water conservation materials are available on the District's website: www.state.fl.us/nwfwmd

Water Resources Educational Materials

Reprints of several of the District's popular Big Picture brochures were undertaken in 2003. "Looking at the Big Picture" brochures are available for the Pensacola Bay, Choctawhatchee River and Bay, St. Andrew Bay and St. Marks River watersheds. Two informational posters continue to be available: Lake Jackson restoration project and the satellite image of the Apalachicola River and Bay.

Educational materials produced for schools and teachers were again distributed in 2003: *WaterWays*, an educational program for public middle schools within the District's 16-county area, and *Florida Waters*, a water resources manual for teachers.

Employee Service Awards and Recognitions

Each year, employees who have achieved 5, 10, 15, 20 and 25 years of service are recognized by the Governing Board. Additionally, two employees received special recognition during 2003: Helen K. Batts, Director, Finance Section, who retired after 23 years of service and W. Guy Gowens, Chief, Ground Water Regulation Bureau, for active duty in the U.S. Navy.

Employees recognized during 2003 for their years of service included:

For 15 years of service: W. Guy Gowens, Chief, Ground Water Regulation Bureau; Mark E. Ihlefeld, Assistant Field Representative; Lance Laird, Chief, Surface Water Regulation Bureau; Elaine C. McKinnon, Administrative Assistant; Richard B. Morgan, Senior Regulatory Administrator; Mike Snowden, Senior Systems Analyst.

For 10 years of service: Gilmar Rodriguez, Assistant Hydrologist.

For 5 years of service: Alva Houston Kemp, Forest Technician and Equipment Operator; Ronald R. Potts, Senior Hydrologist; Thomas W. Shepard, Field Representative Specialist.

Permits Issued by County (October 2002 to September 2003)				
County	Well Construction Repair and Abandonment	Consumptive Use (new/renewal/ modifications)	Surface Water Management (standard/general)	Agricultural and Forestry Surface Water Management (standard/general)
Bay	1,289	17	-	•
Calhoun	128	6	-	-
Escambia	1,231	13	1	2
Franklin	83	8	-	-
Gadsden	286	11	-	4
Gulf	80	5	-	-
Holmes	211	1	-	3
Jackson	512	19	-	2
Jefferson	108	1	-	1
Leon	613	14	2	-
Liberty	47	1	-	-
Okaloosa	1,247	12	8	9
Santa Rosa	907	8	-	1
Wakulla	182	2	-	-
Walton	635	10	3	15
Washington	399	4	-	2
Total	7,958	132	14	39



Escambia River

Local Governmental Agencies Recommended for Grants

gencies within Escambia and Santa Rosa counties were conditionally approved to receive environmental grants totaling \$1,441,608 and \$100,000 by the District's Governing Board.

Projects recommended for approval in Escambia County included a grant of \$816,608 to the Escambia Soil and Water Conservation District for the Big Escambia Creek restoration project to increase wetland habitat and reduce sedimentation reaching Escambia Bay; \$375,000 to the Santa Rosa Island Authority for Little Sabine Bay restoration project to improve water quality and bay habitat through stormwater treatment, sediment removal and recontouring of a spoil island; and \$250,000 to the City of Pensacola for a stormwater treatment vault and three stormwater treatment units to reduce sediments entering Carpenter Creek/Bayou Texar. The Blackwater River Soil and Water Conservation District in Santa Rosa County was tentatively approved to receive \$100,000 for the Clear Creek restoration project that includes the stabilization of 45 acres of an eroding gully.

Water Supply Development

In May, the District released \$2,322,935 in U.S. Environmental Protection Agency monies to the Fairpoint Regional Utility System, Inc. for the development and construction of an inland Sand and Gravel Aquifer wellfield to meet the water supply needs of southern Santa Rosa County. The \$2.3 million is the second installment of a grant that totals nearly \$3 million. The first was released in 2002 and was for \$606,911. The new inland wellfield is located near Interstate 10.

Fairpoint Regional Utility System, Inc., which is comprised of the Midway Water System, Inc., Holley-Navarre Water System, Inc. and the City of Gulf Breeze, planned to have the \$19 million inland regional wellfield and transmission system operational by the end of 2003. It will supply water to Midway, Holley-Navarre, Gulf Breeze, Navarre Beach and south Santa Rosa utilities.

The District and the Fairpoint Regional Utility System, Inc. entered into this cooperative effort to develop an alternative source of water supply. Ground water from the Floridan Aquifer in southern Santa Rosa County was not sufficient to meet projected needs of the area and the wellfield serves to help with the implementation of the District's Regional Water Supply Plan.

Floridan Aquifer Sustainability Model Analysis

In March, work began on the second of two salt water intrusion numerical models for water supply planning for Region II (Santa Rosa, Okaloosa and Walton counties). These models (three-dimensional solute transport modeling) are being developed to implement the District's Regional Water Supply Plan by examining the sustainability of withdrawals from the Floridan Aquifer in coastal areas of these three counties. The models will provide a means to examine the potential for salt water intrusion into the Floridan Aquifer under current and future ground water use scenarios.

Sand and Gravel Test Well

As part of an ongoing water resources development project recommended by the Regional Water Supply

Plan, the District continues to evaluate and collect hydrologic data for the Sand and Gravel Aquifer in Santa Rosa County. The primary area under investigation is the region north of Eglin Air Force Base between the Yellow and the Blackwater rivers. The western part of this water supply source includes the Fairpoint Regional Utility System wellfield.

Use of the Sand and Gravel Aquifer as a new source of public water supply will help alleviate continuing water demands on the Floridan Aquifer and help meet future water demands along the coast. The current investigation is intended to determine what additional amounts of water would be available from areas east of the existing wellfields to meet future demands and provide important information for establishing minimum flows and levels in the region. The District has installed 14 monitor wells and initiated several types of analyses to determine the potential yield of the aquifer as a viable water source. Additional wells were installed in the fall of 2003 to conduct a multi-well aquifer test and make better estimates of aquifer yields for future water supply purposes.

"L" Street Pond Alum Injection System

The objective of this project is to construct a pilot alum injection stormwater treatment facility to pretreat storm flows entering the upper portion of the Palafox drainage system. The project is designed to reduce total nitrogen, phosphorus and suspended solids loading to Pensacola Bay by chemically treating discharges to the "L" Street pond with aluminum sulfate. Secondary objectives are to demonstrate an innovative stormwater treatment technology to local governments and to educate the public about the significance of nonpoint source pollution.

Tests conducted at the proposed site by the District and its consultant indicate that annual load reductions of 77% for total phosphorus, 21% for total nitrogen, 73% for total suspended solids and 64% for BOD₅ (Biochemical Oxygen Demand) are attainable for a three-inch design storm. That equates to 960 kilograms per year (kg/yr) of nitrogen, 43 kg/yr of phosphorus, 8,114 kg/yr of BOD₅ and 22,686 kg/yr of suspended solids, all of which currently discharge almost untreated to Escambia Bay. During

2003, the design and permitting of the system was completed and construction is expected to begin soon.

Public Recreation Site Clean-up and Maintenance

The District entered into an agreement with a private contractor to conduct public recreation site clean-up and maintenance services for a portion of the District's western land management region

which includes the Escambia River, Garcon Point, Blackwater River and Yellow River water management areas. Several public recreation sites in these areas are extremely popular and undergo high use which necessitates clean-up services on a regular basis. These sites include Salters Lake, Bluff Springs, Mystic Springs ramp and campsite, Bogia, Cotton Lake, Little Williams, Webb and Keyser landings, Garcon Point north and south trailheads and Grassy Point.

Mystic Springs Campsite Opens

In May, the District announced the availability of the Mystic Springs Group Use Campsite within the Mystic Springs Recreation Area. The recreation area is a part of the District's Escambia River Water Management Area and is located north of Pensacola near the community of McDavid along the Escambia River. A permit application must be completed to reserve the site, available only on weekends. The Mystic Springs Group Campsite is an excellent location for hosting family reunions or other outdoor get-togethers, especially those involving small scout groups, church groups or other organizations.



BAY, HOLMES, OKALOOSA, WALTON AND WASHINGTON



Williford Spring in Washington County

Bay, Holmes and Walton Agencies Recommended for Grants

everal projects in Bay, Holmes and Walton counties were recommended to receive capital improvement grants by the District's Governing Board.

Projects approved for consideration in Bay County include Bay County Public Works, \$500,000 to stabilize seven miles of dirt roads to reduce sedimentation, erosion and nonpoint source pollution currently reaching Deer Point Lake, and Panama City Port Authority, \$140,000 to improve water quality by retrofitting the port area by installing seven sediment removal units to reduce stormwater impacts to St. Andrew Bay.

Those conditionally approved for Holmes and Walton counties include Holmes County, \$450,000 to stabi-

lize unpaved road/stream crossings to reduce sediment loads and stormwater impacts to tributaries of the Choctawhatchee River; Walton County, \$487,500 for the Oyster Lake project that calls for the restoration of natural flows of this coastal dune lake to predevelopment conditions, and \$259,032 for Hammock Point water quality improvements that will result in the retrofit of the existing stormwater drainage system by stabilizing unpaved roads and installing sediment removal structures to reduce impacts to Choctawhatchee Bay.

\$480,000 Provided to Niceville

The District and the City of Niceville entered into an agreement in February that will provide \$480,000 to Niceville for stormwater improvements. These funds, appropriated by the Florida Legislature, will be used for a regional stormwater treatment facility that will

capture stormwater runoff from an 11-acre area that discharges to lower Turkey Creek and upper Boggy Bayou. The funding will assist with the construction and acquisition of land necessary for the facility.

The facility, anticipated to cost slightly over \$1 million, will be an important component in the overall restoration of Boggy Bayou. The design of the stormwater treatment facility may include trails, boardwalks, picnic areas and interpretative and educational signs and displays.

\$290,000 for Stormwater Improvements

An agreement between the City of Valparaiso and the District was amended during 2003 to fund construction of an additional stormwater treatment facility and a shoreline restoration within the city. The additional stormwater treatment facility will be near Glen Argyle Park. Funds provided by the District were used to construct three other stormwater treatment facilities that used detention pools and constructed wetlands. The first was completed at Clearwater Park in June of 2002, the Lincoln Park facility in December of 2002 and the Glen Argyle Park facility in January of 2003. The amendment brought total funding for these projects to \$290,000.

Agreement with Lynn Haven

The District and the City of Lynn Haven entered into a cooperative agreement to provide for shoreline restoration and stormwater retrofits at the 5th Street Park in Lynn Haven. Through the agreement, the District will provide planning, engineering, permitting and construction assistance for the project. The project will consist of constructing a breakwater, filling eroded shoreline areas and planting with appropriate upland and saltwater marsh vegetation. Stormwater retrofits will provide treatment for an urban watershed that presently discharges untreated stormwater directly into the St. Andrew Bay system. As part of this agreement, the City of Lynn Haven will provide the land and long-term management and maintenance for the projects. The shoreline restoration part of this project will be funded by the Florida Department of Transportation (DOT) as compensation and mitigation for Highway 77 wetland impacts near the Fanning Bayou of North Bay in the St. Andrew Bay system.

\$200,000 Grant Awarded to CBA

A \$200,000 grant was awarded to the Choctawhatchee Basin Alliance (CBA) in March. These funds will enable the CBA to conduct water quality monitoring, public education and awareness activities and allow for the construction of one or more habitat and water quality restoration projects.

The District emphasizes efforts to restore, protect and manage the Choctawhatchee River and Bay watershed, a Surface Water Improvement and Management (SWIM) program priority water body. Concerns about the overall quality of the Choctawhatchee Bay waters have triggered a heightened public awareness of the general health of this estuarine ecosystem. The project was made possible through a special Florida legislative appropriation.



Valparaiso's Lincoln Park was completed in December 2002.



The same

Nick Wooten obtains data from a stream level recorder.

Deer Point Lake Reservoir Monitoring

An agreement to continue operating a streamflow and rainfall monitoring program for the Deer Point Lake Reservoir watershed was renewed in September. The District has operated and maintained this network since 1998. The monitoring program is a permanent network that includes six discharge stations and three rainfall stations in the Deer Point Lake watershed. Stations measure continuous discharge, rainfall and stage levels. Data are used to manage the water resources and identify land areas that may be purchased for additional protection of the watershed.

Deer Point Lake Reservoir is the primary drinking water supply for Bay County and Panama City. Preservation and management of this vital resource are priorities for both the District and the county.

Stormwater Flow Monitoring

In September, the District and Bay County agreed to continue a stormwater monitoring study. The District will continue to operate two stormwater monitoring stations and two rainfall monitoring stations for an additional year. The stormwater monitoring stations are located near the City of Lynn Haven on drainage channels that flow into North Bay. These monitoring stations provide continuous stage, discharge and precipitation records that will assist the county with stormwater runoff improvements to the conveyances into North Bay.

Cooperative Land Management Activities

In September, the District renewed its agreement with the Orange Hill Soil and Water Conservation District to conduct land management construction, maintenance, installation and repair services within the Econfina Creek and Choctawhatchee River/Holmes Creek water management areas. Projects undertaken included the development of the Croom's Branch mobility impaired group campsite



and general land management construction and maintenance activities.

Lands Donated to Muscogee Nation

The District's Governing Board approved the donation of two acres of land to the Muscogee Nation of Florida, a small tribe of Eastern Creek Indians living near the community of Bruce in southern Walton County adjacent to a traditional burial ground. The Muscogee Nation requested the land to enlarge their existing cemetery. The two acres will be sufficient to meet the Muscogee Nation's needs for many years. The District closed on the donation in December.

Econfing Creek WMA Overview

In September, Governing Board members reviewed portions of District-owned lands in the Econfina Creek Water Management Area. The District owns approximately 41,000 acres along Econfina Creek, upland areas and the Sand Hill Lakes recharge area. Several restoration, reforestation, construction and recreational sites were reviewed. The specific locations included Rattlesnake Lake, Hammock Lake and White Oak Landing.

Security On District Lands

In August, the District renewed its agreement with the Bay and Washington County Sheriffs' Departments to provide law enforcement and security services for the Choctawhatchee River, Holmes Creek and Econfina Creek water management areas. This service will be provided for all public recreation sites in the Econfina Creek recharge area and sites along the Choctawhatchee River and Holmes Creek. The Bay County Sheriff's Office security services will include the Pitt Spring day use recreational areas and the newly opened Econfina Creek canoe launch.

The District also renewed an agreement with a private contractor for the maintenance and site cleanup services for 22 recreational sites located in the Econfina Creek, Choctawhatchee River and Holmes Creek water management areas. These recreational sites include Pitt Spring, Econfina Creek Canoe Launch, Blue Spring, Williford Spring, Sparkleberry Pond, Rattlesnake Lake North, Rattlesnake Lake South, Walsingham Park, Tom Johns Landing, White Oak Landing and the Pine Ridge Equestrian Trail/Campsite. Several primitive campsites along Econfina Creek will receive these services as well: Devils Hole, Sea Shell, Walsingham, Anise and Croom's Branch. Sites in the Choctawhatchee River and Holmes Creek water management areas include Boyington, Hightower, Spurling, Live Oak, Claire Lane and Cotton Landing.

Land Acquisitions

The District initiated an exchange of properties in the Econfina Creek Water Management Area that resulted in 377.3 acres being protected with a conservation easement. The District deeded 197.9 acres (subject to a conservation easement) in exchange for a conservation easement on an additional, adjoining 179.4acre parcel. The additional acreage consists of xeric sandhill uplands, sinkhole ponds and other karst depression features. All of the acreage is located within the Econfina Recharge Area and has high ground water recharge rates of approximately 40 inches per year. The 179.4-acre parcel remains on Washington County's tax rolls and the 197.9 acres returns to the county's tax rolls. The District obtained and restricted the future development and land use conversion rights to the 179.4-acre parcel and continues to protect the 197.9-acre parcel as well. Under the agreement, both parcels will be restored to their natural state and condition (longleaf pine and wiregrass habitat) by the owner and maintained in perpetuity. The District closed on the property in October 2003.

In October, the District purchased a 1,173-acre conservation easement on Quail Run Plantation, located in the heart of the Econfina Recharge Area in Washington County. The property acquired has a ground water recharge potential of approximately 40 inches per year. The District has acquired more than 40,000 acres along Econfina Creek and within the Econfina Recharge Area to protect this crucial water resource that supplies Panama City and the surrounding area with drinking water. The District closed on this parcel in October 2003.



Governing Board members are given an overview of Econfina Creek WMA.

CALHOUN, FRANKLIN, GADSDEN, GULF, JACKSON AND LIBERTY



Cash Bayou in Tate's Hell Swamp

ACF River System Negotiations

he Apalachicola-Chattahoochee-Flint Compact Agreement was dissolved August 31, 2003, when Florida, Alabama and Georgia ceased discussions related to the development of a water allocation formula for the ACF river system. The Compact Agreement was passed by the legislatures of the three states in 1997, ratified by the U.S. Congress in 1997 and signed into law by the President of the United States in November of 1997. The negotiations were extended 17 times from 1997 through August 2003 in an attempt to reach a consensus on the equitable apportionment of the waters of this river system.

The three states now will turn to the court system to settle these water allocation issues. Several related lawsuits are pending: *State of Alabama v. U.S. Army Corps of Engineers*, U.S. District Court for the Northern District of Alabama, 1990 (original lawsuit); *Southeastern Federal Power Customers, Inc. v. Luis Caldera, et al.*, District of Columbia, 2000; and *State of Georgia v. United States Army Corps of Engineers*, U.S. District Court for the District of Georgia, 2001.

In September, the United States District Court, Northern District of Alabama reached a decision related to the settlement agreement in the Southeastern Federal Power Customers District of Columbia case. The Court found that the agreement violated the 1990 stay order and enjoined Georgia and the Corps from filing or implementing any part of the settlement agreement as well as from entering into any other new storage or withdrawal contracts affecting the ACF river system without approval of the Court.

Stormwater Improvements for Apalachicola

Total funding in the amount of \$467,497 was provided to the City of Apalachicola to make improvements to its stormwater conveyance system during 2002 and 2003. The agreement was amended in July to enable the city to clean the existing pipe system and conveyance channel between Battery Park and the Apalachicola River. The funds are being used to retrofit and repair collapsed segments of the City's

stormwater lines to reduce flooding and properly convey stormwater. Failed or degraded stormwater pipes are being replaced and water quality retrofits are being implemented.

Restoration Alternatives for the Apalachicola River and Floodplain

An agreement between the District and the U.S. Geological Survey (USGS) was approved in February that provided assistance to the District in evaluating restoration alternatives for the Apalachicola River and floodplain. The USGS assisted with assessing the restoration potential for sediment disposal sites and associated sloughs along the Apalachicola River. The District was able to obtain technical assistance in selecting and evaluating locations along the Apalachicola River and within the floodplain for possible restoration activities.



Sediment disposal site.



Bee Tree Slough along the Apalachicola River.

The U.S. Army Corps of Engineers has actively dredged portions of the Apalachicola River attempting to maintain a minimal channel of 100 feet wide and 9 feet deep for navigation. Under typical river flow conditions, an average annual volume of 835,000 cubic yards of dredged material has been placed in approximately 150 within-bank disposal sites along the river channel. Sediment from disposal sites, logs and woody debris from desnagging operations frequently block floodplain sloughs, creeks and tributaries. The District participates in an interagency effort to enhance and restore aquatic habitat in the floodplain which includes sediment and debris removal in tributaries and sloughs of the Apalachicola River. The District also is planning major floodplain restoration projects that the Corps is not currently authorized to conduct. Once Congress authorizes and funds the federal share of these projects, work should proceed on the removal of large areas of sand deposited by the Corps.

Eastpoint Regional Stormwater Management Systems

The District applied for and received a \$369,100 319(h) grant (\$350,000 matching funds) to design and construct regional stormwater systems in Franklin County within the community of Eastpoint. This project will incorporate two major components. The first is construction of a regional stormwater treatment facility to treat stormwater runoff from the 844-acre Indian Creek basin. The second will provide for installation of water quality treatment vaults within a series of stormwater conveyances that discharge into St. George Sound from the 205-acre Avenue "A" basin.

Within the Indian Creek basin, the project is anticipated to reduce pollutant loading by approximately 85% for suspended solids, 55% for total nitrogen and 66% for total phosphorus. Within the Avenue "A" basin, implementation of the treatment vaults is anticipated to reduce loading of suspended solids and phosphorus by approximately 70% and 30%, respectively. Stormwater and baseflow monitoring will be performed to evaluate the effectiveness. Other activities planned include public education about stormwater pollution and treatment and exploration of future funding opportunities local governments may have to provide for additional stormwater facilities.

Franklin County Water Supply Development Assistance

In August, work commenced in Franklin County on an evaluation of the Floridan Aquifer to determine where ground water is available and may be safely withdrawn to meet future public water supply needs. Planned work includes construction of test wells to locate the freshwater/saltwater interface and aquifer pump testing to determine hydraulic properties. Drilling will be conducted in the interior of the county, where little ground water information currently exists. Results of the evaluation will be used to guide future resource development within the county.

Tate's Hell Swamp Restoration

The District's hydrologic restoration effort in Tate's Hell Swamp continued during 2003. Tate's Hell had been extensively logged during the 1900s. These



Low water crossing in Tate's Hell Swamp.

previous silvicultural activities, chiefly logging access roads and drainage ditches, built in the 1960s and 70s, blocked natural drainages and altered the hydrologic regime over much of the original swamp. The goal of this restoration project is to enhance or restore the hydrologic connections of rivers, streams and wetlands that have been impacted. The District, in cooperation with the Florida Division of Forestry, has successfully restored hydrology in several parts of Tate's Hell and plans more restoration activities. In August, the District initiated an agreement that would provide for low water crossings, culverts, flashboard risers, road cuts, road restoration and ditch plugs with erosion control. This work will be concentrated in the Gator Creek and Gully Branch basins. Funding for this part of the restoration effort was provided through a special legislative appropriation for the Apalachicola River and Bay Surface Water Improvement and Management (SWIM) program.

Shoreline Restoration Project

As part of a project funded by the Florida Department of Transportation (DOT) for impacts associated with replacement of the St. George Island bridge, the District has designed a salt marsh restoration project to restore a part of the shoreline in northern Apalachicola Bay. Salt marshes provide critical habitat within the Apalachicola Bay ecosystem for a variety of fish and invertebrate species.

The project design calls for construction of a breakwater and planting of marsh vegetation. Initial construction is planned along the southeastern shore of Cat Point in Eastpoint adjacent to land managed by the Apalachicola National Estuarine Research Reserve (ANERR). ANERR also is providing assistance to help with project implementation. Funds for construction are being provided through a special appropriation by the Florida Legislature for the Apalachicola River and Bay SWIM program and a U.S. Fish and Wildlife Service coastal program grant.

Construction will consist of the removal and possible reuse of old concrete rubble, grading to restore the natural shoreline conditions, construction of 500 feet of breakwater about 10 feet offshore and planting a marsh and upland buffer behind the breakwater.

Land Acquisitions

In February, acquisition of a conservation easement on approximately 809.5 acres of property along Dead Lakes on the Chipola River in Gulf County was approved by the Governing Board. The majority of the acreage consists of mesic upland pine and hardwood forest and mixed bottomland hardwood forest. The property is bounded on two sides by Dead Lakes. The District closed on the easement in June 2003.

JEFFERSON, LEON AND WAKULLA



Lake Miccosukee

Leon County Recommended for Florida Forever Grants

eon County was recommended to receive capital improvement grants totaling \$800,000 by the District's Governing Board. Those projects recommended included the City of Tallahassee, \$300,000 to construct a wet detention pond to reduce localized flooding and to improve the quality of stormwater discharge in the Lake Munson basin (Caroline Court), and Leon County, \$500,000 for Harbinwood Estates drainage improvements that include the con-

struction of two wet detention ponds in the Lake Jackson watershed.

Cooperative Land Acquisitions

In December, the Governing Board approved an agreement between Tallahassee and Leon County Blueprint 2000 officials and the District to cooperate in land acquisitions to protect and preserve the county's water resources. The District will dedicate \$500,000 per year for five years for a total of \$2,500,000. Blueprint 2000 will contribute the same amount.

Area residents enjoy the St. Marks River, an Outstanding Florida Water.



This agreement provided an excellent opportunity for the District to partner with Blueprint 2000 to protect the water resources of the St. Marks River basin in Leon County and will stretch both agencies scarce land acquisition dollars. The cooperating entities will focus on purchases through a "less-than-fee" or conservation easement approach. This type of acquisition will allow for the protection of more acres at a lower cost. The property acquired will remain on the county tax rolls and will be managed by the landowner.

Each year, the District and Blueprint 2000 will identify, prioritize and develop a specific list of properties eligible for acquisition.

Okeeheepkee Regional Stormwater Treatment Facility

In January the Governing Board approved a grant agreement between the District and the Florida Department of Environmental Protection (DEP) to

help construct the regional stormwater treatment facility, provide educational materials and undertake water quality monitoring. The U.S. Environmental Protection Agency 319(h) Nonpoint Pollution Reduction program grant will be administered through DEP under the agreement.

The District has been working with Leon County on the design and construction of a regional stormwater treatment facility in the Okeeheepkee basin of the Lake Jackson watershed. Land has been acquired for the facility and designs and permit applications prepared. Land was acquired with funds from the DEP (U.S. Environmental Protection Agency 319(h) grant), Florida Department of Community Affairs and Leon County.

In addition to its use as a stormwater treatment facility, the property will be developed as a passive park with walking trails, a small picnic area, boardwalks and observation platforms. Educational materials

will address stormwater pollution issues, watershed resources and management, lake restoration, exotic plants and the archaeology of the site. Two different types of pervious surfaces for parking lots will be used to demonstrate techniques for reducing stormwater impacts of new parking areas and a small treatment pond for the parking lot will be installed to show visitors that stormwater management facilities can be aesthetically pleasing while being effective.

The property contains about 650 feet of frontage on the Meginniss Arm portion of Lake Jackson, an area that has been restored through the muck removal project implemented in 1999-2000 during the natural dewatering of the lake.

Stormwater Flow Monitoring Program

The District agreed to continue the operation of a stormwater flow monitoring program at the request of the City of Tallahassee and Leon County. The monitoring program includes 31 surface water and rainfall data collection stations. The agreement, approved in September, also includes the operation of four stream stations and one rainfall station for Leon County.

This stormwater monitoring network has been in operation for 13 years. The program provides storm

event and baseflow discharge data for the major drainage basins in the city and county. The data provides continuous records of precipitation and surface water discharges that are used to design and implement improvements in the stormwater drainage system. Improvements to the drainage system help reduce flooding and improve water quality.

Leon County has been awarded a grant, from the Florida Department of Community Affairs, to establish a real-time monitoring network. The Capital Area Flood Warning Network (CAFWN) will include existing and new monitoring stations in the Leon County area. The County, District, National Weather Service and City of Tallahassee will participate in the project to establish the basic infrastructure for realtime rainfall data collection that will facilitate the identification of developing flood conditions, notification for emergency managers and initiation of the appropriate emergency management response. The network will eventually support expansion to a broader gauging network for real-time stream and ground water conditions to improve the flood prediction capabilities of local, state and federal emergency staff. These capabilities are crucial in providing adequate community warning of conditions warranting evacuation as well as warnings for flood-affected infrastructure.



One of the 31 data collection stations in Leon County.

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

COMBINED BALANCE SHEET

SEPTEMBER 30, 2003

* **		
ASSETS		
Current Assets:		
	¢	00.000
Cash and Cash Equivalents	\$	80,009
Cash With Fiscal Agent		2,586,122
Investments		27,649,481
Accounts Receivable		464
Due From Other Governments		1,606,494
Due From Other Funds		1,620,550
Deposits		205
Prepaid Items		25,121
Total Current Assets	\$	33,568,446
Consued Courted Assets (Not of Appliable Donnesistion).		
General Capital Assets (Net of Appliable Depreciation):	¢	120 141 002
Land and Improvements	\$	120,141,893
Buildings and Improvements		523,683
Machinery and Equipment		882,908
Total General Fixed Assets	\$	121,548,484
Other Debits:		
Amount Available in Debt Service Fund	\$	4,885,000
Amount to be Provided for Retirement of	7	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
General Long-Term Debt		464,743
Total Other Debits	\$	5,349,743
	Ų	
Total Assets and Other Debits	\$	160,466,673
LIABILITIES AND FUND EQUITY		
LIABILITIES AND TOND EQUIT		
Liabilities:		
	\$	74,931
Liabilities:	\$	74,931 750,167
Liabilities: Refundable Deposits	\$	
Liabilities: Refundable Deposits Accounts Payable and Accruals	\$	750,167
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds	\$	750,167 3,513,154 1,620,550
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable	\$	750,167 3,513,154 1,620,550 4,885,000
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences		750,167 3,513,154 1,620,550 4,885,000 464,743
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities	\$	750,167 3,513,154 1,620,550 4,885,000
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity:	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities		750,167 3,513,154 1,620,550 4,885,000 464,743
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances:	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved:	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved: Unreserved:	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000 10,549,517
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved Unreserved: Undesignated	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000 10,549,517
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved: Unreserved: Undesignated Designated	\$ \$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000 10,549,517 422,902 16,637,225
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved: Unreserved: Undesignated Designated Total Unreserved	\$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000 10,549,517
Liabilities: Refundable Deposits Accounts Payable and Accruals Deferred Revenue Due to Other Funds Revenue Bonds Payable Liability for Compensated Absences Total Liabilities Fund Equity: Investment in General Capital Assets Fund Balances: Reserved: Prepaid Items Debt Service Land Acquisition Land Management/Acquisition Mitigation Total Reserved: Unreserved: Undesignated Designated	\$ \$	750,167 3,513,154 1,620,550 4,885,000 464,743 11,308,545 121,548,484 25,121 5,010,738 1,149,760 4,253,898 110,000 10,549,517 422,902 16,637,225

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

FOR FISCAL YEAR ENDED SEPTEMBER 30, 2003 W.F.W.M.O

Federal Sources:	
DEP/EPA-Best Management Practice Application-Sand Hills Lakes	73,7
DEP/EPA-Nonpoint Source Implementation Grant	17,6
DEP/EPA-Nonpoint Source Implementation Grant-"L" Street Pond	57,8
DEP/EPA Surface Water Sampling Grant Awards	87,3
DEP-Ambient Monitoring	203,6
EPA-Choctawhatchee Watershed Mitigation	10,2
EPA-Fairpoint Utilities	2,322,9
Total Federal Sources	\$ 2,773,4
State and Local Government Sources:	
DEP-Statewide Surface Water Restoration Projects	996,6
DEP-Chapter 62-524 F.A.C. Program Implementation	60,0
DEP-General Appropriations	1,757,4
DEP-Florida Forever Trust Fund	1,176,1
DEP-Preservation 2000 Trust Fund	155,7
DEP-Water Management Lands Trust Fund	6,488,1
DEP-Surface Water Management Permitting Program (Wetlands)	300,0
DEP-Florida Springs Initiative	98,5
DEP-Apalachicola-Chattahoochee-Flint Interstate Compact	68,1
DOT-Mitigation Plan and Restoration Projects	4,476,3
DOT-Roadside Beautification Assistance	10,9
FF&W Cons. Commission-Apalachicola Bay Salt Marsh	1,4
Walton/Okaloosa/Santa Rosa Regional Utility Authority	1,1
Leon County Stormwater Monitoring	83,3
Bay County Stormwater Monitoring	9,7
Bay County Deer Point Watershed Monitoring	29,6
Other Funding	1,1
Total State and Local Government Sources	\$ 15,714,4

Agency Sources:		
Ad Valorem Taxes (.05 mill)		2,440,244
Permit and Inspection Fees		494,045
Regulatory Penalties		1,055
Interest		301,779
Timber Sales		381,591
Miscellaneous		21,574
Total Agency Sources	\$	3,640,288
Total Revenues	\$	22,128,176
Other Sources:		
Sale of General Fixed Assets		47,105
Total Other Sources	\$	47,105
Balance Brought Forward from Prior Fiscal Year	\$	25,360,193
Total Revenue, Other Sources and Cash Balance	\$	47,535,474
Expenditures		
Salaries and Benefits		5,056,423
Contractual Services -Consultants		1,505,576
Operating Expenses		1,301,357
Grant and Aids		3,304,325
Operating Capital Outlay		6,168,425
Debt Service		2,589,724
Total Expenditures	\$	19,925,830
•		, ,
Fund Balance		
Reserved:		
Prepaid Items		25,121
Debt Service		5,010,738
Land Acquisition		1,149,760
Land Management/Acquisition		4,253,898
Mitigation		110,000
Total Reserved	\$	10,549,517
Unreserved:		
Undesignated		422,902
Designated		16,637,225
T-4-1 II	(17 060 127
Total Unreserved Total Expenditures and Fund Balance	\$ \$	17,060,127 47,535,474



District Offices

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Annual Report 2003

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Photography	Kris Barrios, John Crowe, Georgann Penson, Lori Ann Pollgreen, Paul Thorpe, Dan Tonsmeire, Nick Wooten

This document was produced by the Northwest Florida Water Management District Office of Public Information to inform the public of the District's activities and was printed at a cost of \$1.42 per copy. Printed on recycled paper.

Annual Report 2004-1