

**Aquatic Management Strategies and Actions  
Through a Comprehensive Management Plan for the  
Gulf Coastal Plain Ecosystem Partnership (GCPEP)  
Phase I and II**

**Final Report  
FY 2003-2004**

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## NOTICE

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## CHAPTER 1. INTRODUCTION

The Gulf Coastal Plain Ecosystem Partnership (GCPEP) is an example of a successful partnership that has been able to frequently attain ambitious landscape scale conservation goals and objectives through respectful, positive, and result-oriented action. Operating under a Memorandum of Understanding since 1996, the strength of the partnership is facilitating cooperative projects among partners of differing missions while overcoming significant challenges. GCPEP has established effective cross-boundary methods for managing and restoring both aquatic and terrestrial systems in northwest Florida and south Alabama.

Initially, the partnership consisted of 850,000 acres with 6 public and private partners enrolled (see Figure 1). The goal was to connect adjacent lands for wildlife habitat as well as for addressing other land management issues. The GCPEP partners continue to receive extensive benefits from involvement in the partnership including resource and information sharing, cooperative project support, and leverage of existing funds for each of the partners. Collectively, the partnership now contains over 1,052,000 acres (see Figure 2) of land and water in one of the most biologically significant regions in North America with the 10 partners enrolling lands that are being managed for a wide variety of missions.

Below is a table listing the GCPEP partners and the acreage enrolled in the partnership.

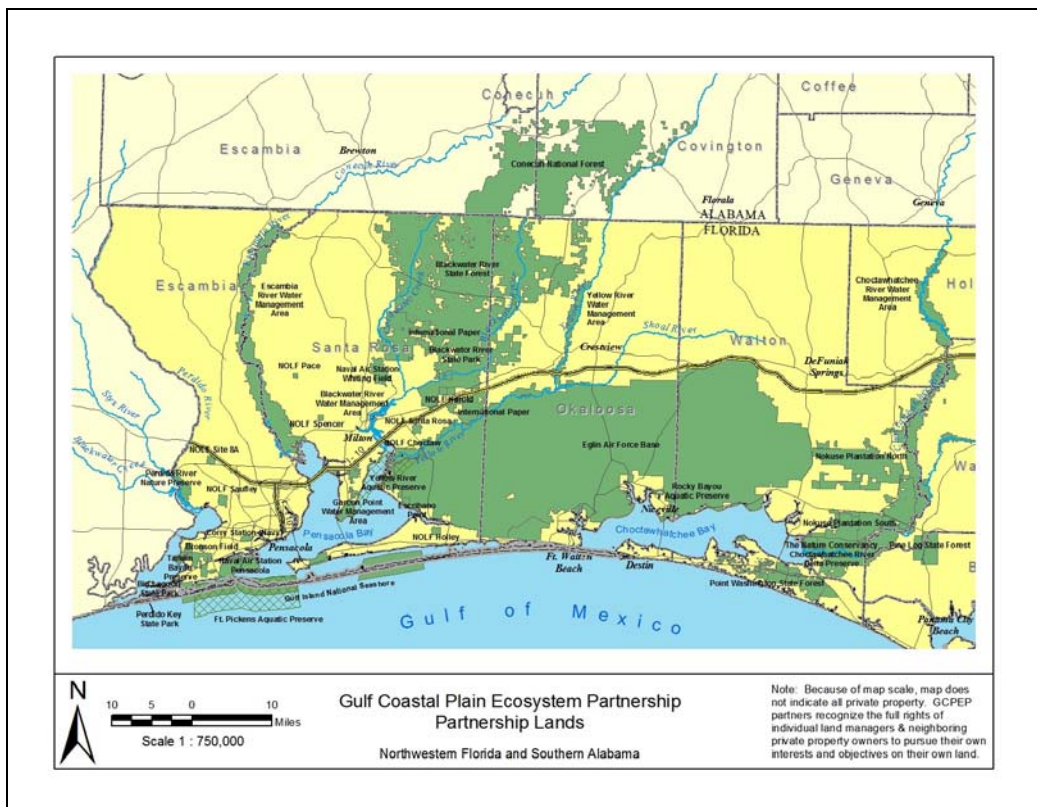
**Table 1. Partners' Acreage Enrolled In GCPEP As Of December 2005**

<b><u>GCPEP Partner</u></b>	<b><u>Partner's Abbreviations</u></b>	<b><u>Partner's Acres in GCPEP</u></b>
Department of Defense	DoD	481,241
Division of Forestry	DoF	211,752
Northwest Florida Water Management District	NWFWMD	112,963
United States Forest Service	USFS	83,790
Florida Department of Environmental Protection	FDEP	57,270
Nokuse Plantation	Nokuse	50,000
National Park Service	NPS	24,795
International Paper	IP	24,263
The Nature Conservancy	TNC	5,081
Florida Fish and Wildlife Conservation Commission	FWC	1,166
<b>TOTAL Acres Enrolled in GCPEP</b>		<b>1,052,321</b>

**Figure 1: GCPEP Lands Map Towards the Beginning of the Partnership**



**Figure 2: Current GCPEP Lands Map as of December 2005**



Contained within the GCPEP connected lands are portions of five major watersheds. Of 87 watersheds identified by The Nature Conservancy as United States “hotspots” for at-risk freshwater fish and mussels, four of them are found within the GCPEP region. Together, these wetlands, bays and rivers support numerous globally rare or imperiled species. Despite being a small percentage of the land and water area within the 47 million-acre East Gulf Coastal Plain (EGCP) Ecoregion, GCPEP lands and waters contain many of the Ecoregion’s target species and natural communities identified in the EGCP. The Florida Fish and Wildlife Conservation Commission rated this region as having the greatest concentration of rare and imperiled fish species in Florida, with two federally listed species.

The partners have completed a GCPEP Conservation Area Plan (CAP), which addresses and prioritizes actions to abate identified critical threats to the GCPEP targets in order to provide for protection and restoration of both terrestrial and aquatic ecosystem and species conservation targets. Aquatic systems are especially vulnerable in this region due to increasing threats to the water supply and encroaching incompatible development. Incompatible development has been identified by the GCPEP Steering Committee as a “killer” threat in the GCPEP area. This threat is also increasingly impacting the military mission capacity and management actions of the surrounding Air Force and Navy bases.

In addition to the CAP, the GCPEP staff has completed a GCPEP Aquatic Management Plan. The Aquatic Management Plan adapts The Nature Conservancy’s “5-S” approach to conservation to the much larger GCPEP landscape. Briefly, the 5-S approach focuses on: (1) Systems, or specific targets of identified conservation value, (2) Stresses, any assault to a target or collection of targets, (3) Sources of those stresses, (4) Strategies to abate source of stress, and (5) Successes, the measure of conservation accomplishments, the abatement of the stress. Incompatible/inadequate water management was addressed as a new “killer” threat, increasing the need for science-based, regional water conservation planning. Other threats to aquatic systems include sedimentation, nutrient loading, in-stream woody debris removal, landscape-level fragmentation of riparian buffers, and the incompatible/inadequate management of lands adjacent to the water.

This collaborative project is modeled on previous successful GCPEP projects and addresses the following threats: encroaching incompatible development, incompatible/inadequate water management, information and data gaps, and other emerging threats. The GCPEP Steering Committee identified the following as priority issues to be addressed through research, improved management and cooperative projects:

- Aquatic species and natural communities management;
- Land and watershed protection;
- Dirt road management;
- Invasive/Exotic species management and native plant restoration;
- Nature based tourism and recreation; and
- Communications and public education.

This report outlines accomplishments for Phase I and Phase II of the project during the period from October 2003 to December 2005. The main emphasis of this project involved working with the GCPEP partners to develop a comprehensive GCPEP Aquatic Management Plan. The GCPEP



staff accomplished this task by facilitating and participating in successful aquatic-oriented collaborations which sustain and strengthen conservation strategies and actions previously identified in the GCPEP Conservation Area Plan.

Overcoming many existing challenges to implement this scientifically sound management plan will require additional cooperative projects with local universities, agencies, and partners. The GCPEP Aquatic Management Plan will assist in further improving and implementing the natural resources management plans of Eglin Air Force Base, Naval Air Station-Pensacola and Naval Air Station-Whiting Field to attain and sustain meaningful protection and restoration of aquatic systems, natural communities, and species.

With support from the Legacy Resource Management Program, forward progress has been made in improving management of the focal conservation targets selected by the GCPEP Steering Committee. This progress towards improving conservation conditions on the lands and waters surrounding military lands within the GCPEP area has led to greater flexibility for the military mission.

This project significantly increases the options available to Eglin AFB flight path and military operations, while improving the management and restoration of aquatic species and natural community conservation targets found on Eglin AFB and the surrounding GCPEP landscape in both Florida and Alabama. This project addresses threats and solutions on and surrounding Eglin AFB, leading to a more effective regional aquatic conservation effort. In addition, this regional landscape scale effort could prevent future state or federal listings of imperiled aquatic species, such as the Florida bog frog (*Rana okaloosae*), by improving the conservation status of imperiled aquatic species and natural communities regionally. GCPEP is having significant regional and national implications, serving as a model of how to regionally manage and restore aquatic resources.

## CHAPTER 2. HURRICANES IMPACTS AND RESPONSES WITHIN THE GCPEP AREA

During the time period of this project, the GCPEP area received direct hits from two major hurricanes (Ivan and Dennis) and numerous tropical storms. The area also received damage from Hurricane Katrina even though it was not a direct hit. In addition to the tropical activity, the northern Gulf Coast received record amounts of rainfall in early 2005 causing extensive flooding and erosion.

The catastrophic damage caused by these storms not only affected personal property and businesses, but also had impacts on the natural systems of the Northern Gulf Coast. Each of the GCPEP partners sustained various degrees of impact, both financially and environmentally. For a majority of the partners, the damage was moderately to severely significant. Assessments are for the most part complete, though the extent of some of the damages and the long-term results will not be known for several years.

The main focus for the partners continues to be the recovery efforts, some of which will be on-going for years. During the recovery efforts it has been noted and commented on that areas that have been well-managed with prescribed fire and restoration projects better withstood the negative impacts from the storms.

The cumulative damages within the partnership included, but are not limited to:

- Direct mortality and loss of cavity trees for the endangered red-cockaded woodpecker;
- Direct mortality and loss of habitat for the endangered *Cladonia perforate*;
- Beach, shoreline, and streambank erosion;
- Loss of dune habitat;
- Current and future die-offs from saltwater intrusion;
- Enormous debris fields and wracklines;
- Significant tree loss;
- Increased fuel loads and noxious fuels and the potential for wildfires;
- Increased threat of pine beetle infestations;
- Loss and/or damage of buildings, facilities, and infrastructure;
- Impacts to recreational areas;
- Current and future water quality concerns;
- Dropped timber prices hindering salvage operations; and
- The postponement of some of the partners' management plans reviews.

### *GCPEP staff activities:*

- The GCPEP staff continues to assist with any on-going needs that the partners identify related to hurricane restoration and recovery. The EST assistance in the partnership's post-Hurricanes Ivan and Dennis recovery efforts included work at Eglin AFB, NAS-Whiting Field,

Blackwater River State Forest, several of the State Parks, Blackwater River Heritage Trail, Northwest Florida Water Management District, and the Perdido River Nature Preserve;

- All of the GCPEP staff have been involved and have participated in both the Escambia County and Santa Rosa County FEMA Long Term Recovery Plan processes. This included attending public meetings, providing comments on portions of the draft plans, and meeting one-on-one with FEMA workers to provide direct recommendations; and
- Submitted a FEMA proposal to the Division of Forestry requesting financial support to further expand the Ecosystem Support Team in order to better provide hurricane recovery assistance to the partners.

*Next steps for the GCPEP staff:*

- Continue with hurricane recovery and restoration activities with the partners and
- Attend the public meetings for the newly formed Coastal High Hazard Study Committee. This committee was appointed by Governor Jeb Bush and is charged with studying and formulating recommendations for managing growth in Coastal High Hazard Areas, which are defined as the Category 1 Hurricane Evacuation Zones.

### **Waterways and Shoreline Restoration**

Part of the FEMA Long Term Recovery Plan process was to develop plans to address Waterway and Shoreline Restoration after the hurricanes. The hurricane-impacted region is abundant with freshwater and tidal creeks and rivers, bayous, bays and other types of waterways that offer a rich freshwater, estuarine, and marine environment. These resources have long-provided unmatched opportunities for water-based conservation, recreation, and commerce. Hurricane Ivan and all of the subsequent storms of the last 2 seasons exacerbated erosion and washed remnants of damaged construction across the counties, clogging many waterways and shorelines with sediment and debris. If performed correctly, restoring affected waterways would facilitate long-term environmental, economic, and recreational recovery as well as upgrades and improvements. However, if done improperly, such efforts could result in water quality impacts and violations, may harm listed species, and potentially cause an explosion of invasive species.

These projects begin with the development of comprehensive plans to restore impacted waterways, inlets, wetlands, and marinas. The waterway and shoreline restoration plans will be based on a comprehensive survey of affected areas coordinated by NOAA and will identify appropriate restoration methods that avoid negative environmental consequences. These plans will also clarify the roles of each agency and organization participating in the restoration efforts. Guided by this plan, actual waterway and shoreline restoration efforts can be initiated. These restoration efforts should include shoreline rehabilitation throughout entire watersheds and focus on the sources of excessive sedimentation while minimizing dependence on short-term repetitive dredging projects. It was recommended that the waterway and shoreline restoration efforts be spearheaded by the Gulf Coastal Plain Ecosystem Partnership's Ecosystem Support Team. This team has the expertise for these tasks but will need to expand capacity with additional manpower, training, and equipment. Examples of specific restoration sites would include the following, in addition to many other waterways within the region:

- Perdido Bay, Perdido River and Weekley Bayou;
- Bayou Grande and Big Lagoon;
- Escambia Bay and River;
- Pensacola Bay, Bayou Chico, Fisherman's Cove, Bayou Texar and Carpenter's Creek;
- East Bay and Bayou Garcon; and
- Santa Rosa Sound and Little Sabine Bay.

The goals of the Waterway and Shoreline Restoration plan include:

- Restore freshwater, estuarine, and marine systems chemical and biological functions, hydrology, water quality, and drinking water safety;
- Restore navigability, safety, health and beauty to local waterways;
- Remove structural hazards to navigation and restore function and hydrology in order to reduce impacts from future storms;
- Improve aesthetics, health, recreational functions; and
- Meet local, state, and federal environmental standards, for example TMDLs (Total Maximum Daily Loads).

The action steps would include:

- Work with NOAA to identify and map specific affected waterways and shorelines in order to coordinate all cleanup and restoration work;
- Develop a program effort for the identification, prioritization and implementation of a series of restoration and channel recovery and shoreline rehabilitation projects using native plant species to recover from storm impacts;
- Identify an entity that will manage the funds and activities for this program and coordinate clean-up work with State Department of Environmental Protection, Escambia County Marine Resources, NOAA, Florida Fish and Wildlife Conservation Commission, The Nature Conservancy, the Gulf Coastal Plain Ecosystem Partnership, Bay Area Resource Council, University of Florida in Milton, University of West Florida, the Gulf Coast Keepers, and others;
- Secure funding for waterway clean-up of debris, sediment and hazards along and in the waterways; and
- Implement waterway and shoreline restoration efforts including removal of invasive species using proper mechanisms.

*GCPEP staff activities:*

- The GCPEP staff worked with surrounding counties and FEMA to develop proposals and plans that address Waterway and Shoreline Restoration.

*Next steps for the GCPEP staff:*

- Implement the action items in the GCPEP Aquatic Management Plan that will address Waterway and Shoreline Restoration.

## **CHAPTER 3. AQUATIC SPECIES AND NATURAL COMMUNITIES MANAGEMENT**

Several aquatic conservation targets, both species and natural communities, have been identified in the GCPEP Conservation Area Plan. Targets were defined as ecologically important and significant biological species, communities, and systems that if protected and restored would ensure the sustainability and viability of this significant region and its natural resources. During this project several activities were performed that either directly or indirectly relate to the implementation of conservation strategies for one or more of the identified aquatic conservation targets. Aquatic management, particularly maintaining adequate and appropriate hydrology and water quality, is critical to protecting conservation targets.

### **GCPEP Aquatic Management Plan**

The GPCEP landscape contains five major watersheds (Perdido River, Escambia River, Blackwater River, Yellow/Shoal River, and the Choctawhatchee River), all of which contain similar and distinct characteristics and examples of outstanding ecological diversity and significance. The GCPEP Steering Committee recommended as a top priority the development of a region-wide aquatic management plan to encompass all five watersheds for the purpose of providing a unified foundation of individual partners, stakeholders, and the community to better guide and steer actions and uses of the land and waters contained in these basins. As a result of this project, the GCPEP Aquatic Ecologist, by working with the GCPEP Aquatic Subcommittee and other experts, has produced the GCPEP Aquatic Management Plan. This plan identifies and addresses key aquatic targets and the threats associated with them in the western Florida Panhandle and southern Alabama.

#### *GCPEP staff activities:*

- Established a GCPEP Aquatic Subcommittee consisting of aquatic experts who participated in the development of the GCPEP Aquatic Management Plan;
- Developed an “Aquatics Needs Survey” that the members of the GCPEP Aquatic Subcommittee completed which was followed up and discussed in person or on the phone;
- Had the GCPEP Aquatic Subcommittee review a draft of the Aquatic Management Plan; and
- Completed and delivered the GCPEP Aquatic Management Plan to the Department of Defense as part of the final Legacy Report in January 2006.

#### *Next steps for the GCPEP staff:*

- Deliver the GCPEP Aquatic Management Plan to the members of the GCPEP Aquatic Subcommittee and the GCPEP Steering Committee;
- Incorporate the GCPEP Aquatic Management Plan into the updating and revision process for the GCPEP Conservation Area Plan; and
- Begin implementing the Action Items identified within the Aquatic Management Plan.

### **GCPEP Aquatic Expert Working Group and Workshop**

In order to ensure adequate and sound science are considered and applied to all strategic plans and conservation activities within the GCPEP landscape, the GCPEP Steering Committee has placed

emphasis on the use of local and regional outside expertise to review, make recommendations on, and strengthen many aspects of efforts taken by the partnership, individual partners, and the stakeholder community. The GCPEP staff has played an integral part in facilitating the use of outside scientific expertise in reviewing and guiding conservation plans and actions through many different formats including working groups and workshops.

*GCPEP staff activities:*

- In the development of the GCPEP Aquatic Management Plan the GCPEP staff utilized local and regional aquatic experts in addressing threats and solutions for conservation targets through meeting(s), phone calls and emails;
- GCPEP staff have conducted and/or participated in numerous meetings and teleconferences with aquatic experts from the Florida and Alabama Chapters of The Nature Conservancy, the US Fish and Wildlife Service, the Florida Fish and Wildlife Conservation Commission, the Yellow River Aquatic Preserve Manager, and the Perdido River Nature Preserve Manager; and
- The GCPEP Aquatic Ecologist has stayed in close contact with local and regional aquatic experts via the telephone and electronic mail.

*Next steps for the GCPEP staff:*

- GCPEP staff will continue to utilize local and regional aquatic experts to keep the GCPEP Aquatic Management Plan up-to-date, including new targets, new and abated threats, and to develop the necessary strategies and action items to abate new threats and
- GCPEP staff will continue to conduct and/or participate in meetings and teleconferences with aquatic experts from the Florida and Alabama Chapters of The Nature Conservancy, the US Fish and Wildlife Service, the Florida Fish and Wildlife Conservation Commission, the Yellow River Aquatic Preserve Manager, and the Perdido River Nature Preserve Manager.

**GCPEP Aquatic Memorandum of Agreement**

The Memorandum of Agreement (MOA) for the Stewardship of Aquatic Resources of the Gulf Coastal Plain Ecosystem, which was signed in July 2005, is between The Nature Conservancy (Florida Chapter), Florida Fish and Wildlife Conservation Commission, US Fish and Wildlife Service (Panama City Field Office) and Eglin AFB (Environmental Management). Under this MOA, the parties agree to develop and implement voluntary and cooperative stewardship strategies for the conservation and management of the aquatic systems of the GCPEP area.

*GCPEP staff activities:*

- Worked closely with partners on the completion and signing of the MOA by all parties.

*Next steps for the GCPEP staff:*

- Utilize the MOA to implement identified strategies and action items developed in the GCPEP Aquatic Management Plan.

## **GCPEP Aquatic Assessments and Monitoring**

Aquatic assessment and monitoring are critical needs in the GCPEP aquatic landscape and the GCPEP Aquatic Subcommittee has written several goals, strategies, and action items into the GCPEP Aquatic Management Plan to address those needs. Of the 63 action items in the GCPEP Aquatic Management Plan, nearly half are directly or indirectly related to aquatic assessment and monitoring. Specific projects have been developed to assess and monitor the GCPEP aquatic landscape for the next five years and the plan will be updated annually to reassess these projects, to remove successful projects from the list, re-develop specific action items to assure continued success, and add new projects and action items.

### *GCPEP staff activities:*

- Assisted the US Fish and Wildlife Service in surveying and monitoring Gulf sturgeon populations and spawning sites within the Escambia and Yellow River watersheds and
- Assisted the FWCC in surveying potential flatwoods salamander ponds on several on the GCPEP partner lands.

### *Next steps for the GCPEP staff:*

- GCPEP staff will continue to assist US Fish and Wildlife Service and FWCC in surveying and monitoring Gulf sturgeon populations and spawning sites across the GCPEP landscape;
- GCPEP staff will continue to assist FWCC in surveying potential flatwoods salamander ponds on the GCPEP partner lands;
- GCPEP staff and partners will begin assessing additional aquatic needs across the landscape, particularly the assessment and monitoring of imperiled aquatic species; and
- GCPEP staff will aggressively seek out funding opportunities to bring on new aquatic staff.

## **Proposed Yellow River Dam and Reservoir**

The Yellow River is an important ecological riverine system in the GCPEP landscape and its biological integrity affects many GCPEP partners, including Eglin AFB. Currently, the Yellow River is free flowing and many significant species and community conservation targets are found throughout this system. In addition, the State of Florida has recognized the Yellow River as an “Outstanding Florida Water.” Okaloosa County requested the US Army Corps of Engineers, Mobile District, to conduct a water supply feasibility study for Okaloosa County. Particularly, the requested study was to assess the feasibility of constructing a water supply reservoir on the Yellow River in northern Okaloosa County. The Final Draft Report of the feasibility study was distributed in February 2004. Alterations to the natural hydrologic regime of the Yellow River, as a result of this proposed project and/or other initiatives could potentially have severe ecological ramifications on GCPEP conservation targets. The proposed Yellow River Dam and Reservoir was identified by the GCPEP Steering Committee as a priority threat to several conservation targets.

*GCPEP staff activities:*

- Reviewed and presented a summary and findings of the Final Draft Report of the Yellow River Dam and Reservoir Feasibility Study to the GCPEP Steering Committee and a group of local citizens with the Gulf Coast Environmental Defense.

*Next steps for the GCPEP staff:*

- Proactively monitor the progress of this proposal and allow the partnership and other community stakeholders to stay abreast on this issue and provide input on future actions needed to abate this potential threat.

**Strategic Environmental Research and Development Program (SERDP)**

The Strategic Environmental Research and Development Program (SERDP) is the Department of Defense's corporate environmental research and development program. The purpose of SERDP is to reduce or remove negative environmental impacts on DoD's ability to conduct their military mission.

*GCPEP Staff activities:*

- Led Oak Ridge Laboratory ecologists on reconnaissance site visits on Eglin AFB for the SERDP gopher frog (*Rana capito*) research projects. The gopher frog, which is a federally Threatened species, uses aquatic systems for breeding.

**Project Greenshores**

Project Greenshores, winner of the 2004 Gulf Guardian Award, is located along the northwest side of the Pensacola Bay Bridge in downtown Pensacola, Florida. This habitat restoration effort is a partnership that The Nature Conservancy and numerous local agencies, businesses, and volunteers have joined in together in a community-based effort to establish an oyster reef and salt marsh within the Pensacola Bay ecosystem (see Figures 3-5). Restoring a bayfront estuary to its historic habitat stabilizes shorelines and provides the essentials for wildlife propagation and conservation. During and after all of the recent storm events in the Gulf Region, Project Greenshores has remained stable and has thrived with very little damage.

Guiding the restoration activities for Project Greenshores is a team which consists of local citizen volunteers who bring an interest in community resources and a wide variety of expertise in coastal ecosystems and construction to the planning process. As the Project Greenshores restoration site becomes an established ecosystem with productive marsh grasses and oyster reefs, aquatic life has multiplied and visiting bird species have grown, providing recreational opportunities to local Florida residents and visitors. Canoers and kayakers can often be seen paddling along the project's inshore waterways. Fishermen, birdwatchers, wildlife photographers and scuba divers enjoy the benefits of this now thriving coastal habitat.

*GCPEP Staff activities:*

- During the interim period between Phase I and Phase II of Project Greenshores, the GCPEP staff were important contacts for resource sharing on many coastal and inland waterway projects.



*Next steps for the GCPEP staff:*

- Investigate possible future funding opportunities from aquatic related sources within the Conservancy and GCPEP for Phase II of this highly visible and successful Project Greenshores.

**Figure 3: Aerial View of Project Greenshores**



**Figure 4: Planting of Native Sea Grasses at Project Greenhores**



**Figure 5: Current View of Project Greenhores**



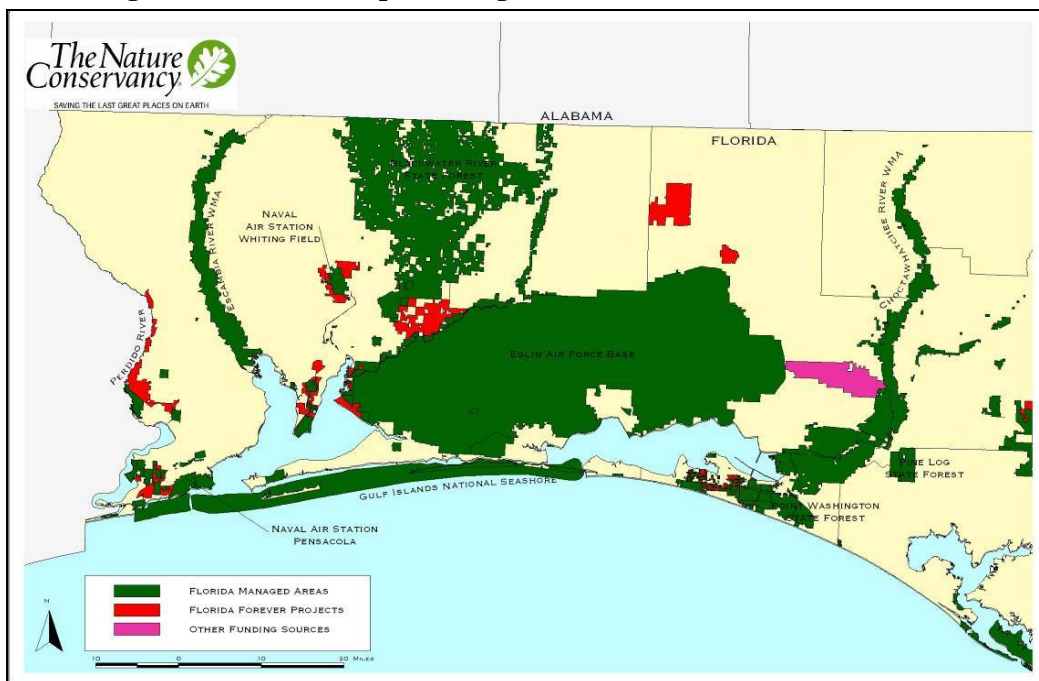
## CHAPTER 4. LAND AND WATERSHED PROTECTION

Several of the counties in the GCPEP landscape continue to rank in the top tier of fastest growing counties in the State of Florida. Property values have escalated dramatically over the past two years, and speculative interest in undeveloped or damaged areas increased after the recent hurricanes. The GCPEP Steering Committee identified incompatible development and growth as a major threat to conservation targets. It was also recognized that incompatible development and encroachment would have a negative impact on partner management activities and mission capacity. In particular, partners were concerned about watershed protection, prescribed burning, and management of rare and imperiled species. As more natural lands become developed, habitat on partner lands becomes increasingly important. The work being accomplished by The Nature Conservancy and GCPEP partners to protect wildlife corridors and buffer lands has never been as important and timely as the next several years.

### Florida Forever Projects

Florida Forever is the most successful state land conservation program in the nation. Purchase and sustainable management of lands from willing sellers can lead to protection of important conservation, recreation, and water-resource lands. The Nature Conservancy has worked closely with GCPEP partners to propose several critical projects in and around Eglin AFB, Naval Air Station – Pensacola, and Naval Air Station – Whiting Field. These projects include the Yellow River Ravines, Perdido Pitcher Plant Prairie, Escribano Point, Nokuse Plantation, and Clear Creek/Whiting Field (see Figure 6). Each of these projects were approved and ranked as “A” or “B” projects and negotiations continue on portions of each of the projects. If negotiations are successful, over 70,000 acres of critical buffers, corridors, and connectors will be protected and managed in a compatible and sustainable manner. Additional priority parcels are being pursued by individual partners in areas selected as priorities by the GCPEP Steering Committee.

Figure 6: GCPEP Map Showing Current Land Protection Activities



## *GCPEP staff activities:*

### Yellow River Ravines

- The Yellow River Ravines project (see Figure 7) is recognized as one of the most important in the State of Florida due to the critical connection made between two significant natural areas, Blackwater River State Forest (BRSF) and Eglin AFB. Corridors such as this one are essential to the survival of wide-ranging species like the Florida Black Bear. The project consists of 16,652 acres in 41 parcels held by five owners, with the major ownership being that of International Paper (IP), another GCPEP partner. Over the past two years, successful negotiations were completed on a critical section of the Yellow River Ravines project. The largest in-holding in BRSF, at 4,620 acres, was acquired by the Florida Division of Forestry with assistance from The Nature Conservancy (TNC). The purchase of this land helps protect the Blackwater River and several rare species. It also helps prevent development encroachment into the forest which would have made forest management, particularly prescribed fire, much more difficult. The parcel also fills another gap in the wildlife corridor between BRSF and Eglin AFB.
- In addition to the IP lands, TNC has assisted and facilitated the process of purchasing and transferring of in-holdings and additions to the Division of Forestry as a part of BRSF. Several of these parcels are within the Yellow River Ravines and were highly vulnerable to development due to proximity to I-10 and State Highway 90. Others include lands that TNC and the Florida Division of Forestry continue to work together on in the central and western portion of BRSF, including land along Juniper Creek. As development pressures move northward in Santa Rosa and Okaloosa Counties, pressures will continue to escalate to develop these lands that have been historically timber or agriculture lands.
- Negotiations continue on the remainder of the Yellow River Ravines project and BRSF in-holdings and additions.

### Upper Yellow River

- GCPEP staff assisted in a land and water review of a land protection project that involves approximately 8,330 acres on northern Yellow River in Florida. This Florida Forever Proposal was submitted by TNC and DEP Division of Recreation and Parks in July 2002. The land was owned by Rayonier. The Northwest Florida Water Management District (NFWFMD) negotiated with Rayonier but, was unsuccessful in reaching an agreement. The property has since sold to a private company. Staff will work with the private landowner to discuss potential conservation options.

### Escribano Point

- This parcel includes 2,914 acres, with the majority of remaining land on west side of Eglin and connected to NFWFMD and DEP lands (see Figure 8). TNC and the NFWFMD completed and presented the project proposal and Division of State Lands is negotiating. This project is "A" ranked and in funding. Approximately 1,100 acres of land has been purchased and is being managed by the Florida Fish & Wildlife Conservation Commission (FWCC). This does not include the actual Escribano Point. A portion of the Escribano Point project area was purchased by a private developer, but remains on the Florida Forever list as an "A" ranked project. The area contains relatively intact examples of wetland communities, hammocks, and wet prairies. These communities provide habitat for numerous rare and threatened plants and

animals. The project area also provides an important buffer to the west side of Eglin AFB, including 10.4 miles of shoreline along East Bay and Blackwater Bay. To date, 2,338 acres of the project area has been protected.

#### Nokuse Plantation

- More than 18,800 acres of land within Nokuse Plantation, another GCPEP partner, have been permanently protected since the beginning of 2005. The state of Florida purchased a conservation easement over 16,750 acres in Walton County on the east side of Eglin AFB. In addition, M.C. Davis, the owner of Nokuse Plantation, generously donated 2,126 acres by conservation easement, prohibiting development in perpetuity. The Department of Defense contributed \$1 million dollars toward the purchase of conservation easements on these lands that are an important part of the Northwest Florida Greenway. Nokuse Plantation now stands at over 50,000 acres between Eglin AFB and the Choctawhatchee River.

#### Clear Creek/Whiting Field

- Project was approved in early 2005 as a “B” ranked Florida Forever project (see Figure 9). Application was completed by TNC. GCPEP Staff continue to work with Santa Rosa County, Naval Air Station – Whiting Field, and the Florida DEP to secure additional funds needed for this “B” ranked Florida Forever project. Progress also continues with the Office of Greenways & Trails “A” ranked project area, land immediately adjacent to Whiting Field. Successful negotiations with this project would protect 1,143 acres of land for conservation and recreation. 1900 acres of the “B” ranked project area were recommended for movement to an “A” ranked project by the Acquisition and Restoration Council in late 2005. The Governor and Cabinet of Florida will consider for approval at a February 2006 meeting. The focus of a portion of these holdings would include potential development of a controlled Off-Highway-Vehicle (OHV) area.

#### *Next steps for the GCPEP staff:*

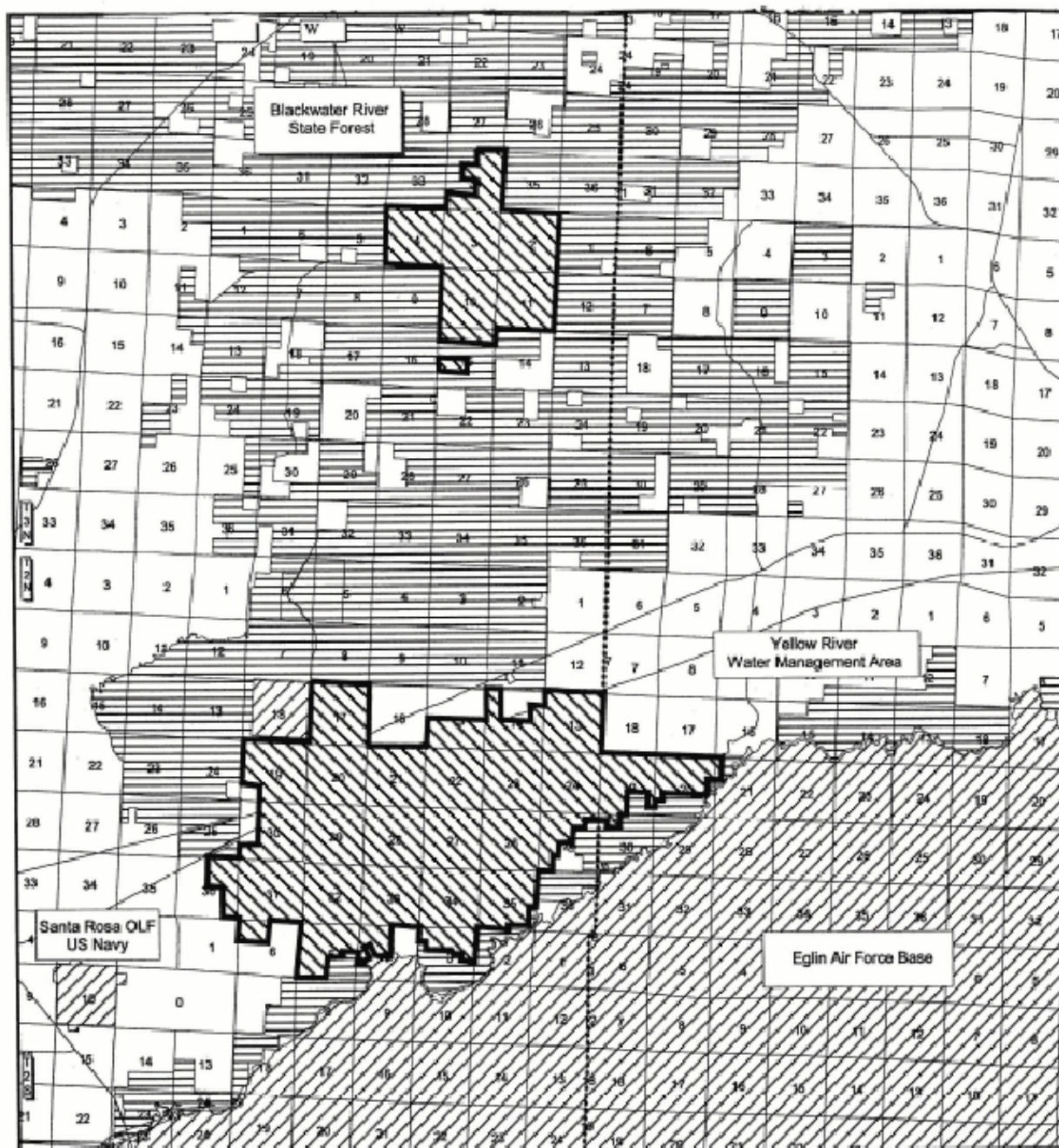
- Continue to assist with GCPEP land acquisition negotiations;
- Pursue additional federal, state, and private dollars needed for protection of key buffers and in-holdings across the GCPEP landscape;
- Support and assist with the creation of a new Florida Forever program for the next ten year period beginning in 2010;
- Increase cooperation with Alabama partners to protect corridors along priority watersheds; and
- Continue efforts with community leaders and select community groups to improve support for needed land acquisitions and funding.

#### **Additional GCPEP Partners’ Florida Forever Projects**

Additional Florida Forever projects are being negotiated by GCPEP Partners to protect other priority areas (see Figures 10 – 12). These include the Garcon Ecosystem (Northwest Florida Water Management District), South Walton County Ecosystem (Florida Department of Environmental Protection and Florida Division of Forestry) and the Upper Shoal River (Florida Fish & Wildlife Conservation Commission, Florida Department of Environmental Protection, and Florida Division of Forestry). The Garcon Ecosystem is currently an “A” ranked project, while the South Walton County Ecosystem and Upper Shoal River are both “B” ranked projects.


**Figure 7: Yellow River Ravines Florida Forever Project**

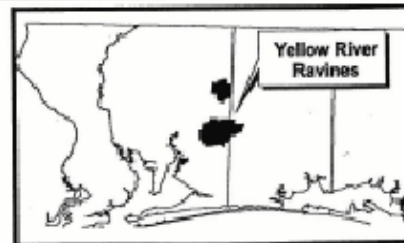
# Yellow River Ravines - Group A/Full Fee



## Yellow River Ravines Assessment Boundary

SANTA ROSA AND OKALOOSA COUNTIES

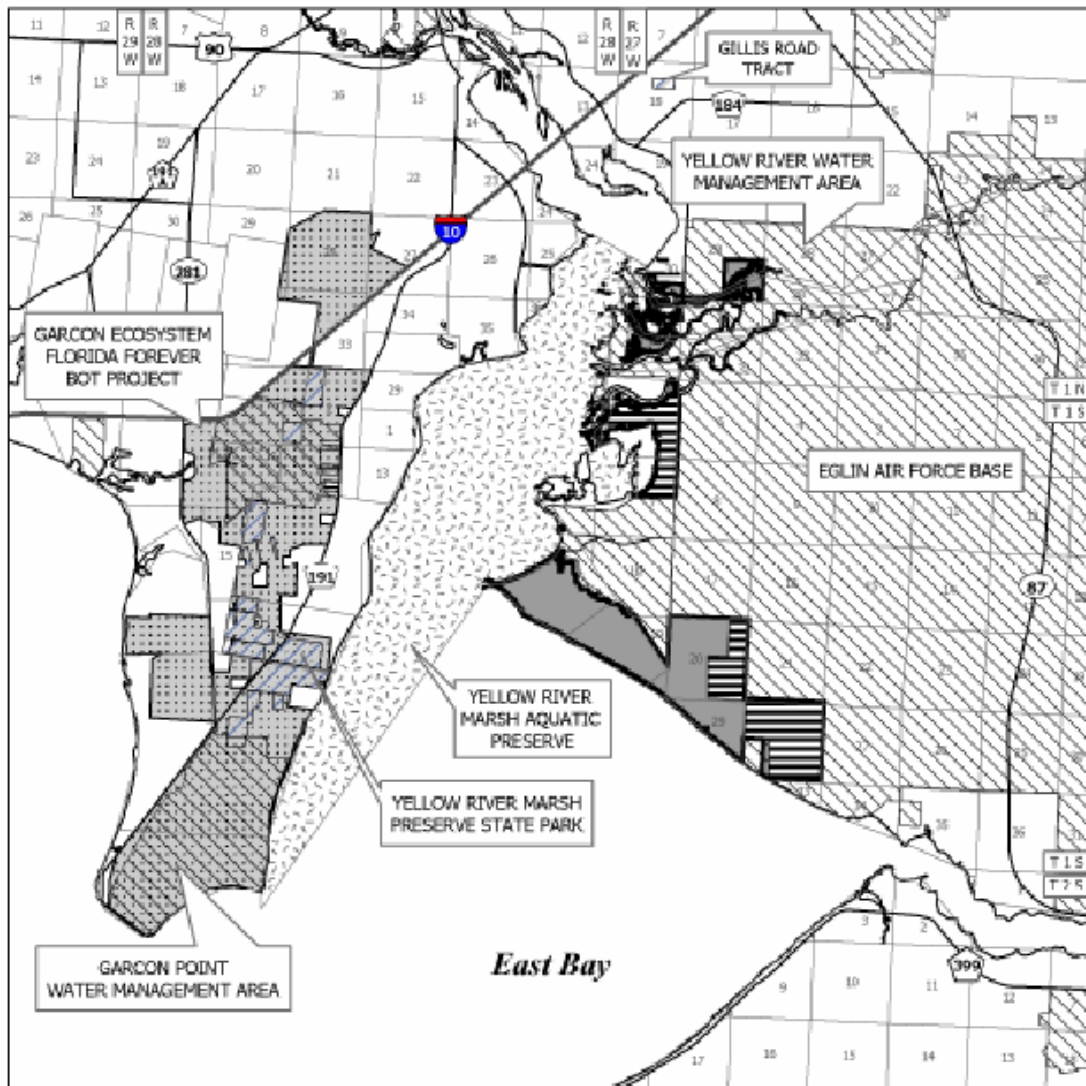
-  Florida Forever Proposal Boundary
-  Other Florida Forever Projects
-  Federal Land
-  State Land
-  Local or Private Managed Area



**Figure 8: Escribano Point Florida Forever Project**



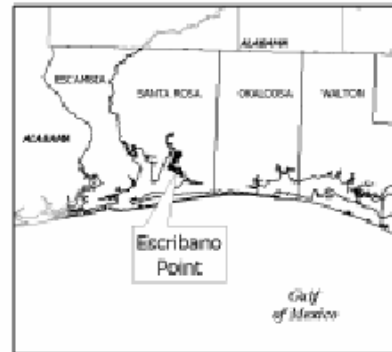
# Escribano Point - Group A/Full Fee



## ESCRIBANO POINT

### SANTA ROSA COUNTY

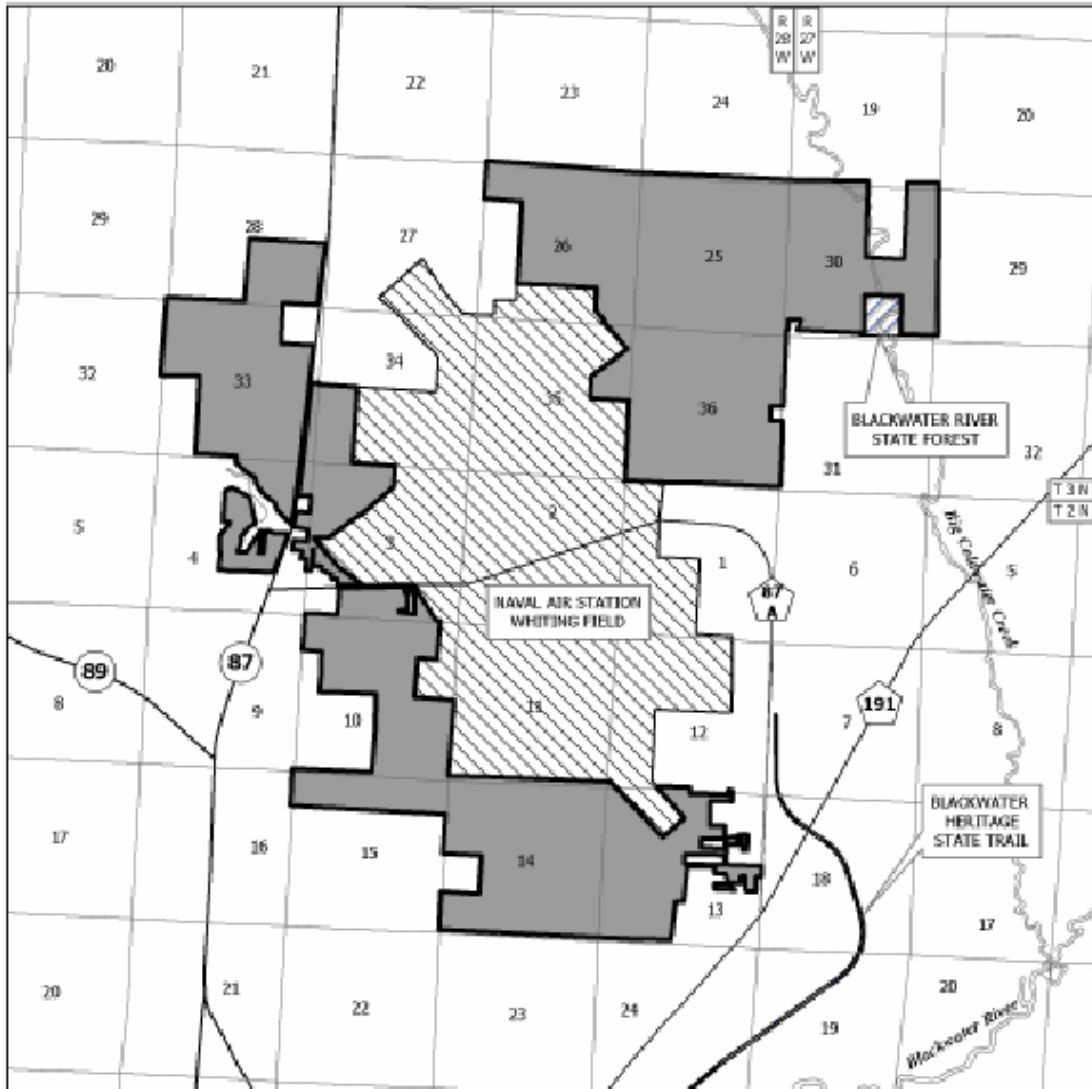
-  Florida Forever Project Boundary
-  Essential Parcel(s) Remaining
-  Acquired
-  Other Florida Forever BOT Projects
-  State Owned Lands
-  Other Conservation Lands
-  State Aquatic Preserve



APRIL 2005

**Figure 9: Clear Creek / Whiting Field Florida Forever Project**

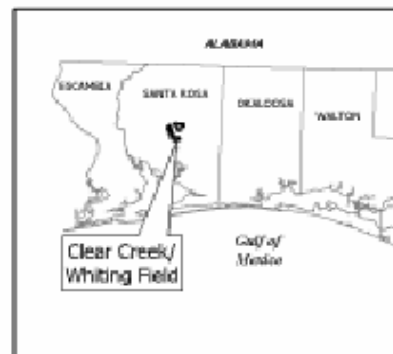
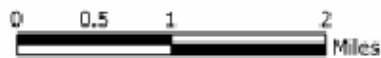
Clear Creel/Whiting Field - Group B/Full Fee



**CLEAR CREEK/WHITING FIELD**

**SANTA ROSA COUNTY**

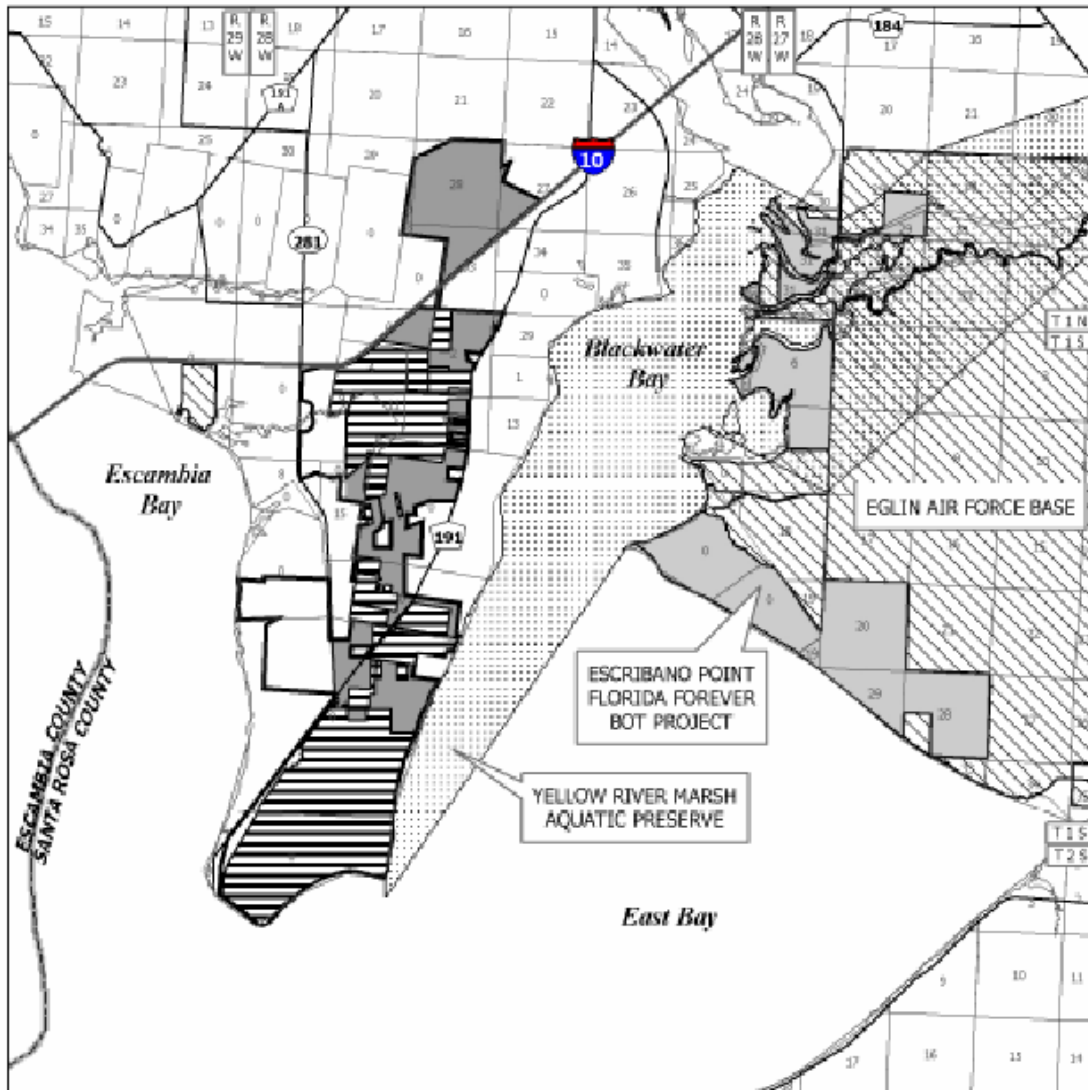
-  Florida Forever BOT Project Boundary
-  Essential Parcel(s) Remaining
-  State Owned Lands
-  Other Conservation Lands



JUNE 2004




**Figure 10: Garcon Ecosystem Florida Forever Project**

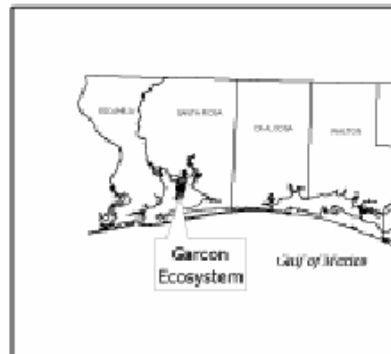
Garcon Ecosystem - Group A/Full Fee



**GARCON ECOSYSTEM**

**SANTA ROSA COUNTY**

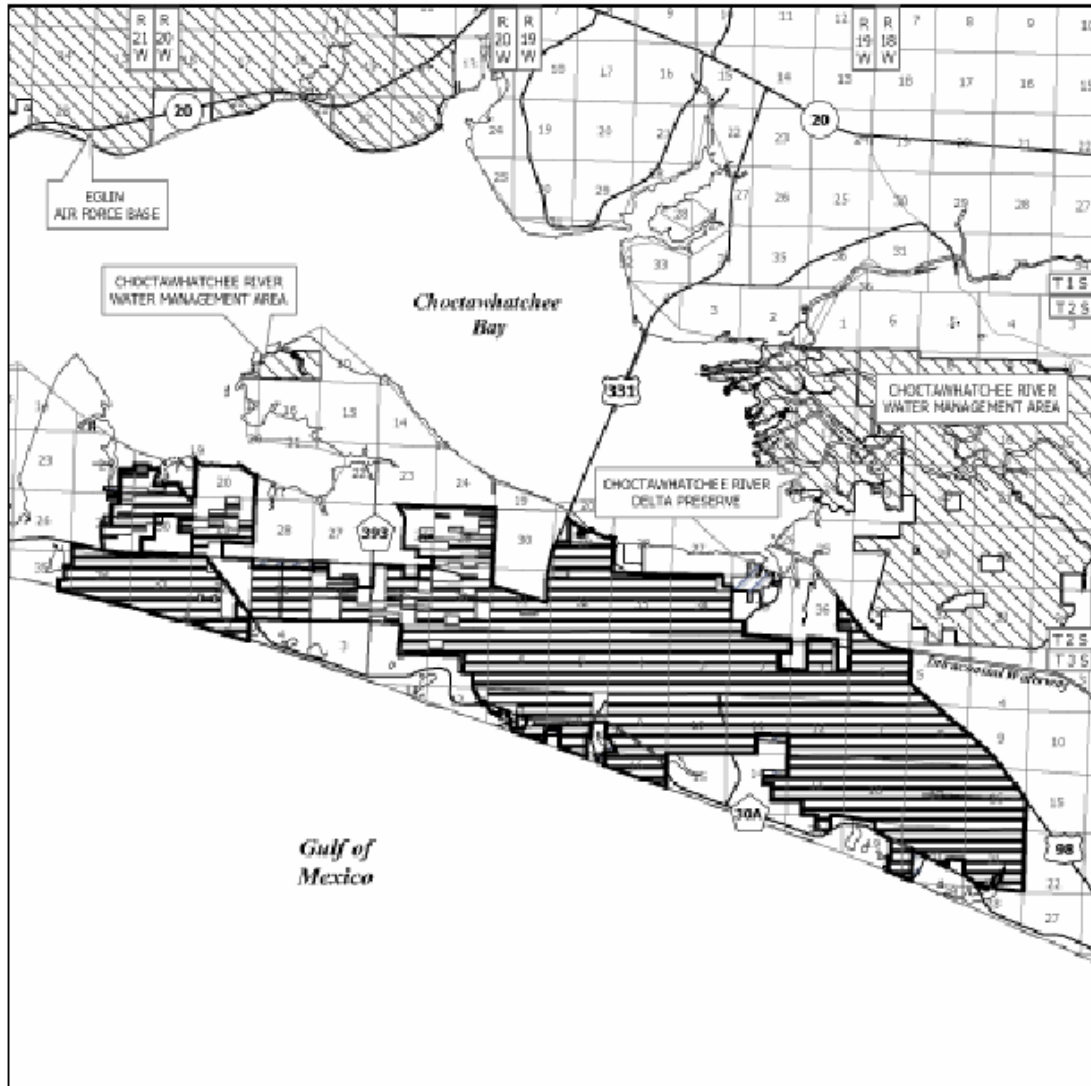
-  Florida Forever Project Boundary
-  Acquired
-  Essential Parcel(s) Remaining
-  Other Florida Forever BOT Projects
-  Other Conservation Lands
-  State Aquatic Preserve



JANUARY 2003





**Figure 11: South Walton County Florida Forever Project**

# South Walton County Ecosystem - Small Holdings/Group B



## SOUTH WALTON COUNTY ECOSYSTEM

### WALTON COUNTY

-  Florida Forever Project Boundary
-  Acquired
-  State Owned Lands
-  Other Conservation Lands

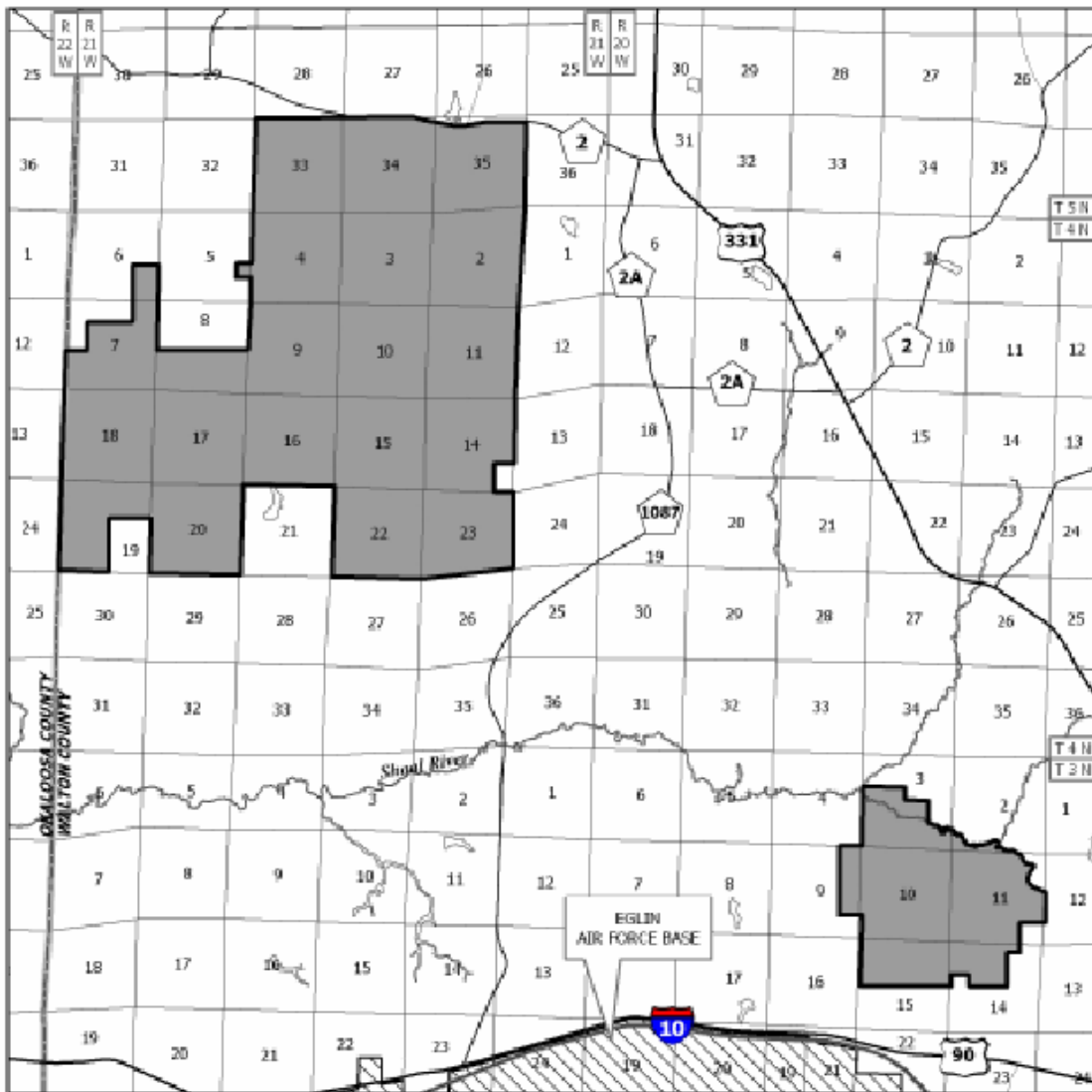


MARCH 2003

**Figure 12: Upper Shoal River Florida Forever Project**






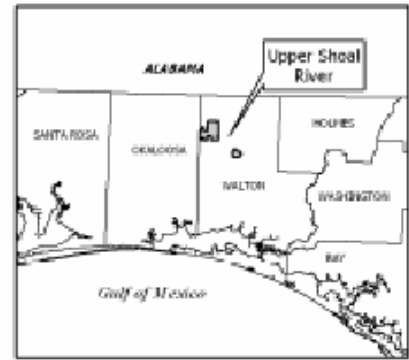
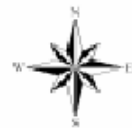
# Upper Shoal River- Full Fee/Less Than Fee/Group B



## UPPER SHOAL RIVER

### WALTON COUNTY

-  Florida Forever BOT Project Boundary
-  Essential Parcel(s) Remaining
-  Other Conservation Lands



DECEMBER 2003

## **Northwest Florida Greenway**

This project, if successful, would protect water supplies, critical conservation parcels, and would assist in protecting the Eglin AFB military mission and the flight space. There has been strong support for this project from the Governor of Florida, Department of Defense, the Florida Department of Environmental Protection, and The Nature Conservancy. This significant project has received political and community support across the region and the nation.

The Northwest Florida Greenway Project will provide up to a 10-mile wide and 100-mile long linkage between Eglin AFB, Apalachicola National Forest, and the Gulf of Mexico. This corridor would prevent encroachment of incompatible residential and commercial development on military testing and training areas, protect the regions' important biodiversity and water resources, link existing protected areas, and provide recreational opportunities for a growing population.

### *GCPEP staff activities:*

- Led and actively engaged in numerous meetings and activities presenting the Northwest Florida Greenway Project including community presentations, discussions, and targeted public relation efforts;
- Continued to pursue additional funds for the project through other partners who support the Greenway, such as the Florida Trail Association. The Florida National Scenic Trail (FNST) is one of only eight National Scenic Trails and is administered by the US Forest Service. The FNST when completed would traverse the Panhandle through the NW FL Greenway Project area. The Florida Trail Association has lobbied for federal funds to protect lands through which the trail would pass. Over 11 million dollars has been secured for this purpose over the last several years. The majority of these funds would be used to protect land within the Northwest Florida Greenway and within the Yellow River corridor north of Eglin AFB;
- Assisted in gaining additional support for the NW FL Greenway Project by obtaining new partner signatures on a Memorandum of Agreement (MOA). Partners on the MOA include the United States Department of Defense, Eglin Air Force Armament Center, United States Forest Service, the Florida Department of Environmental Protection, the Florida Department of Community Affairs, the Florida Department of Agriculture and Consumer Services, the Florida Fish and Wildlife Conservation Commission, the Northwest Florida Water Management District, and The Nature Conservancy; and
- Participated in several meetings to complete a Conservation Area Plan for the Northwest Florida Greenways, identifying targets, threats, and viability to date.

### *Next steps for the GCPEP staff:*

- Staff continue to assist with completion of Northwest Florida Greenway through community education and updating of the Conservation Area Plan;
- Pursue additional funding to support land acquisition within the greenway corridor;
- Work to maximize leveraging of state and federal funding to provide for fastest protection of Northwest Florida Greenway; and
- Work to ensure that road improvement and/or development projects that pass through the Northwest Florida Greenway have as a high priority safe wildlife passage through the road corridors.

## **Perdido River Florida and Alabama**

The Perdido River is the boundary line between Florida and Alabama. As surrounding populations grow, this area is experiencing a dramatic increase in development. This significant conservation region is ranked a priority area with numerous protection efforts underway.

### *GCPEP staff activities:*

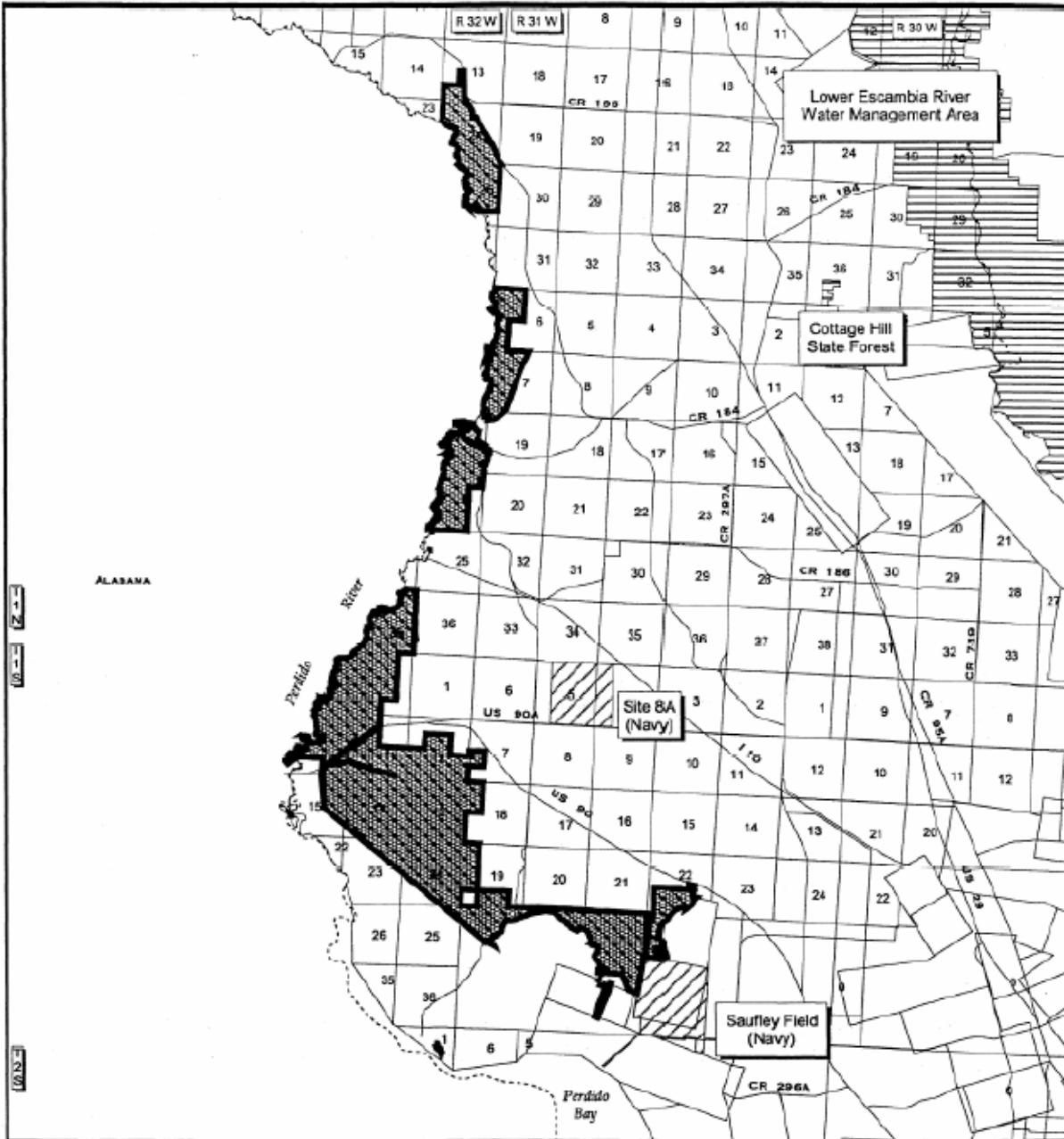
- The Betty and Crawford Rainwater Perdido River Nature Preserve includes 2,331-acres featuring seven miles of riverfront along the lower Perdido River, just above Perdido Bay. The Preserve experienced severe damage due to Hurricane Ivan, which damaged many timber stands, and left extensive debris and boats in fragile areas. Additional, though lesser damage was subsequently incurred in two tropical storms and from Hurricane Katrina. Considerable time has been devoted to timber salvage, road repairs, and restoration activities;
- The Lower Perdido River Buffer (see Figure 13) is a proposed conservation easement on up to 7,800 acres along the Perdido River north of the Perdido River Nature Preserve. Negotiations are continuing on this parcel between the Northwest Florida Water Management District and a leading non-profit environmental organization with the current owner, International Paper Company; which announced its intentions in 2005 to sell all domestic timberlands within an 18 month period; and
- The Perdido Pitcher Plant Prairie (see Figure 14) negotiations continue for critical remaining parcels. At the current time over 60% of the prairie is protected. Escambia County and the Navy cooperated together on the purchase of one important parcel near NAS-Pensacola. TNC and DEP are continuing protection efforts within the project area.

### *Next steps for the GCPEP staff:*

- Support the development of a prescribed burning plan for Tarkiln Bayou State Park, and the eventual plan implementation by DEP;
- Support efforts to protect additional key conservation lands on the Alabama side of the Perdido River; and
- Work with planners and developers of announced projects in Alabama to minimize environmental impacts of future construction.







**Figure 13: Lower Perdido River Buffer Florida Forever Project**

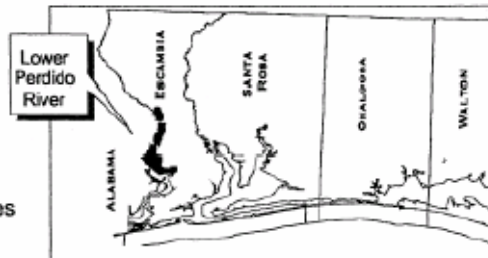
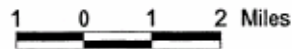
Lower Perdido River Buffer - Group B/Less Than Fe



**Lower Perdido River Buffer**

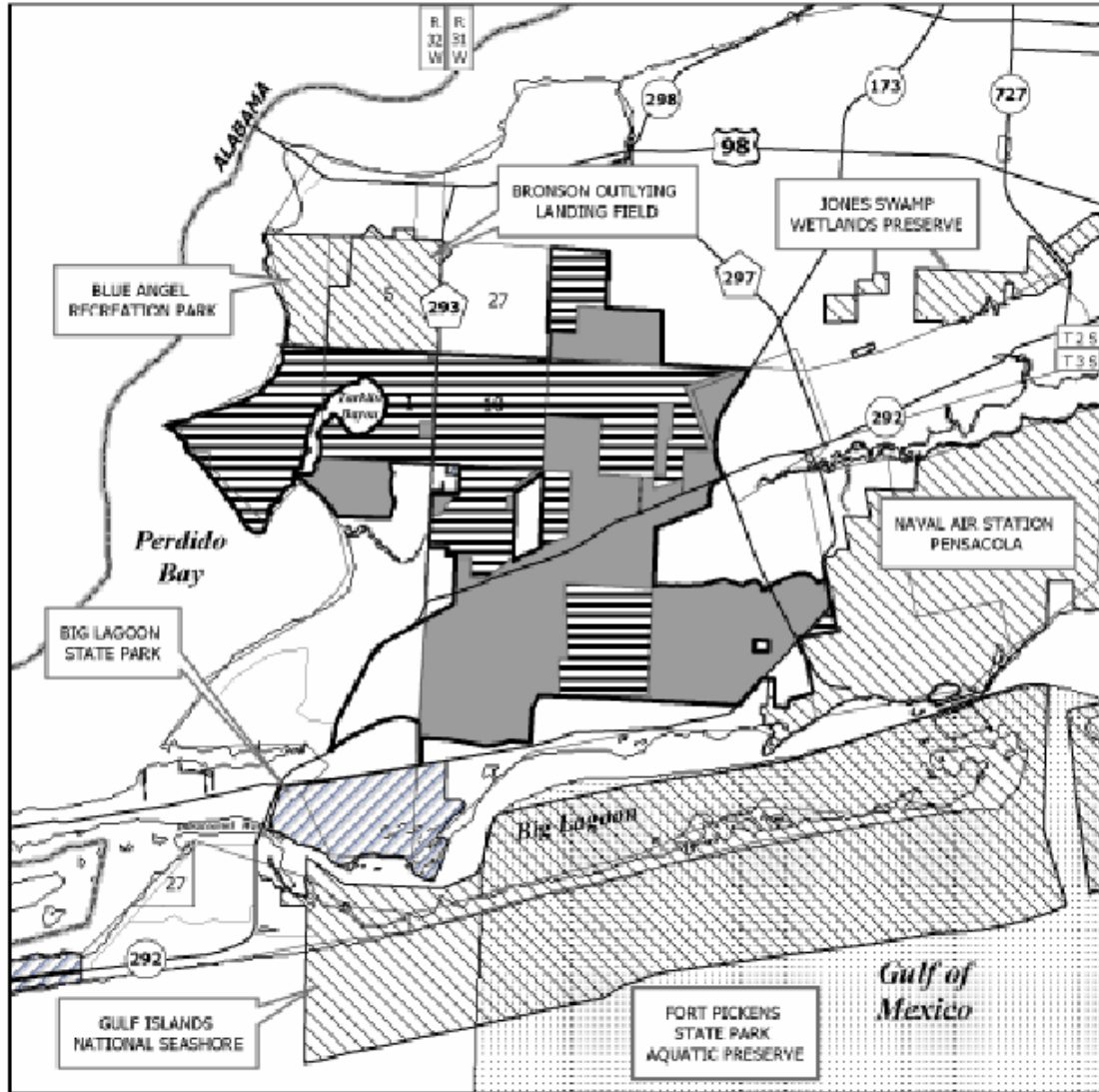
**ESCAMBIA COUNTY**

-  Florida Forever Proposal Boundary
-  Essential Parcels
-  Other Florida Forever Projects
-  Federal Land
-  State Land
-  Local or Private Managed Area



**Figure 14: Perdido Pitcher Plant Prairie Florida Forever Project**

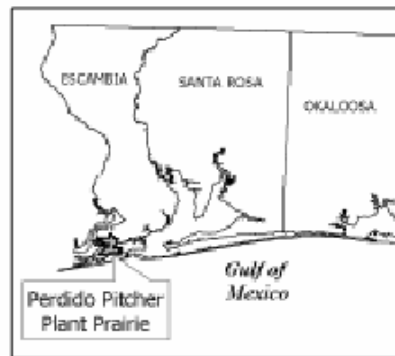
Perdido Pitcher Plant Prairie - Group A/Full Fee



PERDIDO PITCHER PLANT PRAIRIE

ESCAMBIA COUNTY

-  Florida Forever Project Boundary
-  Acquired
-  Essential Parcel(s) Remaining
-  State Owned Lands
-  Other Conservation Lands
-  State Aquatic Preserve



APRIL 2003

## **Betty and Crawford Rainwater Perdido River Nature Preserve**

This project is included in the section of land protection as an example of a successful land and water protection effort. This significant donation enabled TNC to acquire a key parcel of approximately 2,331 acres of land featuring some seven miles of riverfront along the Perdido River just above Perdido Bay, called the Betty and Crawford Rainwater Perdido River Nature Preserve (see Figures 15 and 16). This largely pristine stretch along one of the last undeveloped blackwater rivers in Florida provides habitat for numerous terrestrial and aquatic conservation target species.

### *GCPEP staff activities:*

- Assisted in the process of obtaining this parcel;
- Coordinated and hosted a dedication event that announced the donation of this land, which provided an opportunity to educate attendees about the cooperative efforts of the GCPEP partners and landowners, and specific actions to be taken on the Preserve to ensure protection and conservation of lands and waters;
- Hired a Preserve Manager who has over 25 years of professional forestry experience;
- Developed a relationship with the existing lessees, the Perdido River Sportsman Association, to inform this large group of the management goals of the Preserve, and successfully involved them in volunteer work projects to accomplish property improvements and significant hurricane recovery efforts; and
- Supported management activities on the Preserve and assisted the Preserve Manager in development of the initial management plan.

### *Next steps for the GCPEP staff:*

- Support the Preserve Manager in planned prescribed burning, monitoring, and restoration activities in 2006; and
- Continue aquatic sampling and monitoring efforts on Perdido River and key tributaries.



**Figure 15: Kayaker Enjoying the Perdido River Nature Preserve**



**Figure 16: Tidal Creek on the Perdido River Nature Preserve**



## CHAPTER 5. DIRT ROAD MANAGEMENT

Dirt roads, when present in excessive amounts and inadequately managed or left unmanaged, may provide significant amounts of sediment to aquatic systems and can significantly alter the natural hydrologic regime, which indirectly results in an increase in sediment inputs through bank erosion and stream bed scouring. In addition, various road crossing structures, including structures associated with dirt road crossings of aquatic systems, may be incompatible with maintaining natural sediment transport and can alter the hydrology of aquatic systems. Therefore, increased and improved management of dirt roads and waterway crossings was singled out as a priority strategy for improving the sediment and hydrologic regimes of GCPEP watersheds (see Figure 17).

**Figure 17: Example of Dirt Road Issues within the Perdido River Floodplain**



### Unpaved Roads Interagency Team

The Unpaved Roads Interagency Task Force is a volunteer, self organized body of government and non-government representatives charged with the design and implementation of unpaved road stream crossing technology programs that will promote the enhancement and restoration of wetland and aquatic environments while supporting road transportation needs. The GCPEP Aquatic Ecologist will address dirt road and public access management issues through cooperation with the task force, review and participation in management plan reviews, and pursuit of grants to improve dirt road management in the GCPEP landscape.

*GCPEP staff activities:*

- Used resulting information to assist partners with dirt road and public access management issues.

*Next steps for the GCPEP staff:*

- Aquatic Ecologist continue involvement in Unpaved Roads Interagency Team and Bay Area Resource Council emphasizing appropriate dirt road management techniques;
- Continue efforts to secure needed funding with partners to repair/restore roads causing environmental damage to wetlands and rivers/creeks; and
- Provide partners with latest information and science related to low water crossings and other management tools to improve management of riparian areas associated with road crossings.

### **Blackwater River State Forest Road Management**

The Division of Forestry at Blackwater River State Forest is addressing road and sediment issues for the entire 157,000 acre forest. Erosion and sediment are the biggest issues faced on Blackwater River State Forest and when the work is completed, which will take a considerable length of time, there will be 500 – 600 miles of roads closed, restored, repaired, and/or paved. Blackwater is nearly complete on naming and numbering all of the roads in the forest. Finally, only legal roads in the designated areas will be available for recreational users to travel on. Prior to this project, more than 40% of the forest roads were not named and numbered. This project will continue in segments until all of the roads on Blackwater are completed. There are many paving projects, which will also be completed in the near future.

*GCPEP Staff activities:*

- Assisted the Blackwater River State Forest Staff on identifying needed road closures and the restoration of severe gullies.

*Next steps for the GCPEP staff:*

- Work with the Blackwater River State Forest staff on implementing action items within the GCPEP Aquatic Management Plan that directly relate to this threat.

## **CHAPTER 6. INVASIVE / EXOTIC SPECIES MANAGEMENT & NATIVE PLANT RESTORATION**

Invasive and/or exotic plant and animal species were identified by the GCPEP Steering Committee as a primary threat to many conservation targets. Not all non-native species are invasive and harmful, but many can completely take over and entirely change whole established ecosystems. It has been estimated that the total costs of invasive species in the United States amount to more than \$100 billion each year and more than \$240 million has been spent in Florida by state, federal and local agencies since 1980 to control invasive species on public owned waterways and lands. In addition, invasive species impact nearly half of the species currently listed as Threatened or Endangered under the US Federal Endangered Species Act.

Restoring watershed and riparian corridor conditions across the GCPEP landscape to a natural environment consisting of native plant communities was identified by GCPEP partners as a priority action. Restoration involves understanding the past, current, and desired future conditions and implementation of strategies to achieve desired conditions. Restoration of native vegetation, if successful, will contribute to the abatement of several critical threats facing conservation targets including altered fire regime, altered sediment regime, habitat degradation, and increased competition and predation.

### **GCPEP Invasive/Native Species Subcommittee**

The GCPEP Invasive and Native Species Subcommittee was modeled after the other GCPEP subcommittees with strategies that will include identifying areas in need of increased management and restoration containing aggressive invasive species. Assistance will be given with the development of a GIS database which will, among other things, provide necessary information useful to the newly formed GCPEP Invasive/Native Species Subcommittee such as develop a GCPEP invasive species work plan, prioritize native habitat restoration projects, and implement native seed collection programs.

An internal GCPEP invasive species and native plants subcommittee meeting will be conducted for the purpose of developing a strategic work plan that includes goals and objectives with the identification and prioritization of partnership actions to abate the persistent threat of invasive species and expansion of native species management (see Figure 18). Long-term goals will include conducting public native plants workshops with a broader scope to include, in addition to the GCPEP partners, community leaders, and the general public.

#### *GCPEP staff activities:*

- Worked with the partners to finalize the appointments to the subcommittee;
- Coordinated speakers and designed the agenda for an “Herbicides for Longleaf Restoration” workshop in September; and
- Began work on the next DoD Legacy project, “Actions to Abate Critical Threats, such as Encroachment and Invasive Species, Using GIS and Conservation Area Planning Across the Gulf Coastal Plain Ecosystem Partnership (GCPEP) Landscape Phase I”. This next Legacy project will involve working with the GCPEP partners to gather datasets needed to begin development of the GIS database, and to begin to identify areas in need of increased

management and restoration, particularly areas with aggressive invasive species and encroachment priorities.

*Next steps for the GCPEP staff:*

- Schedule a GCPEP Invasive/Native Species Subcommittee meeting.
- Continue work on the invasive species component of the next Legacy project.

**Figure 18: Native Plant Garden at Jackson Guard, Eglin**



### **Panhandle Upland Invasive Exotic Plant Working Group**

The Upland Plant Management Program within the Department of Environmental Protection (DEP) incorporates ecosystem management concepts involving "place-based management" that brings together regionally diverse interests to develop flexible, innovative strategies to address local upland invasive plant management issues in Florida. The Upland Plant Management Section of the bureau funds individual invasive plant removal projects on public conservation lands throughout the state. Projects are considered based on recommendations from Regional Invasive Plant Working Groups.

A statewide network of eleven Regional Invasive Plant Working Groups has been established comprising federal, state, and local government public conservation land managers and non-governmental organizations throughout the state. These working groups have an active role in selecting projects for upland invasive plant management at a local level. In order to better serve the partners and area cooperators, the Conservation Ecologist serves as the Liaison for the Panhandle Working Group, one of the eleven regional working groups. This enables the partners and cooperators to stay better informed on financial support opportunities and provide a local voice to defend Panhandle proposals at the statewide level.

*GCPEP staff activities:*

- Acted as the lead representative of the Panhandle Upland Invasive Exotic Plant Working Group at the statewide level;
- Assisted DEP staff in holding a working group meeting in order to review and rank proposal submittals for DEP's cooperative upland invasive-exotic plant control program; and
- Represented the Panhandle Working Group at a statewide meeting for the purpose of presenting, reviewing, and selecting ranked proposals to fund. Through this meeting, all proposals submitted by the Panhandle Working Group received funding including Eglin AFB's proposal to control several exotic species.

*Next steps for the GCPEP staff:*

- Schedule a meeting consisting of selected members of the Panhandle Upland Invasive Exotic Plant Working Group to revise the scoring process for proposals submitted to the Panhandle Working Group.

### **Conecuh National Forest Monitoring Study**

Monitoring is a critical component in a project to determine conservation success, which is defined as substantial progress towards the long-term abatement of critical threats and the sustained maintenance or, as in the case of restoration, enhancement of biodiversity health at a site. During the development of the GCPEP Conservation Area Plan, surveying, mapping, and monitoring was identified by many partners as a critical need within their own agency/ organization as well as across the GCPEP landscape.

With assistance from Troy State University and the GCPEP staff, the Conecuh Monitoring Project has completed the monitoring and the analysis is being conducted at the University of South Alabama. This project will provide the foundation for Conecuh National Forest to establish long-term restoration activities in the forests.

*GCPEP staff activities:*

- Administered a grant to achieve the task of evaluating the effects of restoration efforts in the Conecuh National Forest on the overall condition and population of conservation species targets by monitoring several habitat community types including longleaf pine, seepage slopes, and xeric sand ridges;
- Provided guidance and recommendations during the development of the monitoring and assessment strategy for the above-mentioned funded project;
- Assisted with implementing statistical analysis of data collected from monitoring plots; and
- Provided information to include additional support and implementation from the Ecosystem Support Team in the project proposals to be available for monitoring, surveying and invasive species removal.

*Next steps for the GCPEP staff:*

- Coordinate the use of the EST to assist with monitoring and
- Continue coordination, administration, and guidance of the overall project.

## **CHAPTER 7. NATURE-BASED TOURISM AND RECREATION MANAGEMENT**

Given the abundant and outstanding natural resources and biological diversity across the GCPEP landscape, it is not surprising that many recreational activities in this area are associated with the enjoyment and use of natural areas. Recreation involving the natural environment is extremely valuable in achieving sustainable biological diversity and integrity by allowing users to come to appreciate the importance of our natural environment and gain a sense of place and ownership of our unique, complex, and fragile ecosystems in their natural state. However, as with any use of land and water, recreational activities should be encouraged and fostered in the context of compatible utilization of natural resources that places emphasis on uses that will not harm the very nature of what is being enjoyed, but rather will continue to sustain the economic and environmental benefits gained from the value of maintaining ecosystems in their natural and unaltered state. As additional lands and connectors are protected in the GCPEP landscape area it will be important to plan for recreational uses. GCPEP staff continues to pursue actions that encourage sustainable and compatible recreational uses of our natural resources, as a vital strategy in achieving outlined conservation goals surrounding identified conservation targets.

Recreational assets and infrastructure were battered across the GCPEP region by Hurricane Ivan in 2004. Some partners, such as Gulf Islands National Seashore and several state parks lost the majority of their recreational infrastructure. Recovery of these areas will be a long and tedious process dependent upon funding and staff/contractors for rebuilding purposes. Other assets such as developed and primitive recreational areas and trails were severely damaged by the loss or damage of trees. Staff, partners, and volunteers will be worked to clear the damaged areas as soon as possible so that they were available for public and visitor use again.

Recreational assets and infrastructure were battered again across the GCPEP region by several Tropical Storms and then Hurricane Dennis in 2005. Some partners, such as Gulf Islands National Seashore and several state parks had not been able to recover their infrastructure from the serious damage caused by Hurricane Ivan in 2004. Recovery of these areas will be a long and tedious process dependent upon funding and staff/contractors for rebuilding purposes. Other assets such as developed and primitive recreational areas and trails were severely damaged by the loss or damage of trees. Staff, partners, and volunteers will be working to clear the areas newly damaged by recent 2005 storms as soon as possible so that they can be available for public and visitor use again.

### **Off Highway Vehicles (OHV) and Recreation Act**

The OHV Advisory Committee was formed to make recommendations concerning off-highway vehicle recreational opportunities in Florida. The committee is charged with serving in an advisory role concerning Off Highway Vehicle recreation in Florida. Funds are being generated through the sale of license tags for off-highway vehicles.

#### *GCPEP staff activities:*

- Chaired the Site Identification and Resource Working Group of the State of Florida Off-Highway Vehicle Advisory Committee;

- Suggested the formation of regional site review teams and successfully assisted in the formation of the first team which was the Northwest Florida Region covering the area from Pensacola east to Tallahassee. All of the OHV Regional Site Review Teams are now setup;
- Participated in the development of site identification and evaluation criteria to be used during the process of locating areas for OHV recreation including stand condition, restoration potential, listed species, soil stability, rider containment, archaeological/historical concerns, adequate acreage, parking and restrooms, all-weather access, user conflicts, adjacent landowner conflicts, proximity to other OHV sites, habitat connectivity, and wildlife habitat area; and
- Regional Site Review Teams continue to pursue additional potential sites for off-highway recreation. There are five teams across the state of Florida. Project Director serves as the Chair of the Northwest Florida Site Review Team.

*Next steps for the GCPEP staff:*

- Participate in efforts to secure appropriate OHV recreation area in Northwest Florida that will not harm GCPEP conservation targets;
- Work closely with state agencies to insure selected recreation area serves as a model managed area, including development of a management plan; and
- Continue role on Off Highway Vehicle Advisory Group.

**Florida/Alabama Transportation Planning Organization (TPO) Citizens Advisory Committee (CAC)**

Road development and/or expansion have an impact on GCPEP conservation targets and management, such as use of prescribed fire. Roads also fuel development. The CAC reviews and makes recommendations on transportation and enhancement projects for presentation to the Florida/Alabama TPO (elected officials).

*GCPEP staff activities:*

- Project Director serves as Chair of the committee. Participation in this committee allows GCPEP to remain cognizant of any road issues. It also provides an opportunity for input on issues such as wildlife corridors, including overpasses and underpasses, and recreation connections such as bike and pedestrian issues. Nokuse Plantation is currently working to ensure that wildlife passage is a consideration during any upgrades to State Highway 331 separating Eglin Air Force Base from Nokuse Plantation. Securing such a passage will be important for safer passage of Florida Black Bear between the two natural areas and
- The Florida/Alabama TPO recently completed a regional Bicycle/Pedestrian Plan. The plan is a 10-year plan and guides funding for bicycle and pedestrian projects. Many of these projects may ultimately connect to partner lands, providing for important public access and increased educational opportunities while at the same time offering alternatives to citizens and visitors to automobile dependent travel.



*Next steps for the GCPEP staff:*

- Continue staff involvement in the transportation planning process being cognizant of GCPEP conservation target protection and needs;
- Work to incorporate wildlife corridors and passages associated with major road improvement/development projects; and
- Continue efforts to incorporate public access to natural areas through trails and linkages in the transportation planning process.

**North Santa Rosa Tourism Committee (NRSTC)**

Promoting environmentally friendly ecotourism for the area's natural resources are the goals for the NRSTC. Key issues for the committee have been sustainability, public education, and offering opportunities for both local citizens and visitors alike. It is important for citizens to learn about our natural systems by getting out on the land and water, to build support for management, funding, and priority issues such as land protection and access management.

*GCPEP staff activities:*

- Acted as Chairman of the North Santa Rosa Tourism Committee;
- Attended and facilitated a North Santa Rosa Tourism Committee Board Retreat, at which, one and five year goals were set for the committee;
- Participated in the development and printing of the first comprehensive trails brochure for Northwest Florida, ensuring that equestrian, hiking, biking, canoeing/kayaking, and multiple use trails were all identified and Leave No Trace principles and landowner rules and regulations were applied;
- Continued assistance with the 2005 Beaches to Woodlands Tour. Experts will leads educational hikes discussing natural communities found on Gulf Islands National Seashore, Eglin Air Force Base, and Blackwater River State Forest;
- Began outreach to Okaloosa County to assist with development of Okaloosa County Greenway Plan. Focus to include highlighting GCPEP recreational strategies and actions and protection of natural resources; and
- Facilitated a day long tour of natural areas of Santa Rosa County for Leadership Santa Rosa, a class of future community leaders. Natural areas visited included Blackwater River State Forest, Blackwater River State Park, and Eglin Air Force Base. Class members were also provided with a manual showcasing important local natural resources and brochures/maps highlighting trails and other public access opportunities.

*Next steps for the GCPEP staff:*

- Continue staff efforts in the tourism planning process to ensure protection of GCPEP conservation targets and needed public access/education opportunities;
- Emphasize sustainability and protection of natural resources in all tourism planning and projects;

- Incorporate information on conservation targets, including species and natural communities, into tourism brochures, websites, and media releases; and
- Educate tourism community leaders on conservation targets, management needs, and partner rules and regulations.

### **Blackwater Heritage Trail Citizen Support Organization**

In January 2004 the jurisdiction and operation of the Blackwater Heritage Trail was transferred to the FL Department of Environmental Protection's Office of Greenways and Trails (OGT). The OGT is working to establish a statewide system of greenways and trails for recreational and conservation purposes. Their efforts are guided by a legislatively adopted plan titled "Connecting Florida's Communities." OGT provides grants for the development of both motorized and non-motorized recreational trail projects through the Recreational Trails Program. They also administer the \$4.5 million Florida Greenways and Trails Land Acquisition Program under the Florida Forever Act. The Blackwater Heritage Trail, part of the OGT is guided locally by a board called the Citizen Support Organization.

#### *GCPEP staff activities:*

- Served on the Citizen Support Organization (CSO) for the Blackwater Heritage Trail and the Blackwater River State Park;
- Worked closely with the new manager of the Blackwater Heritage Trail and the Office of Greenways and Trails (OGT) on the Bagdad Mill Park Site on the Blackwater River and the Clear Creek/Whiting Field Florida Forever project;
- Several projects to extend the Blackwater Heritage Trail south and then eastward to Blackwater River State Forest and Blackwater River State Park are in process. The southern extension was completed in 2005 (see Figure 19). The eastward extension was ranked as the top transportation enhancement project in the area. The top ranking allowed for the Florida Department of Transportation to begin the planning process for this project. Completion of these projects will allow for greater public access to public lands. It is hoped that this access, of which the perceived lack of is seen as a negative by some, will lead to greater support for land acquisition and to a greater understanding of partner land management decisions; and
- Assisting with the development of the Blackwater Heritage Trail Speaker Series. GCPEP Staff led the June Speaker Series at Blackwater River State Park, focusing on the identification of natural communities and plants.

#### *Next steps for the GCPEP staff:*

- Staff continue support of establishment of multiple-use trails that allow citizen/visitor access to GCPEP natural areas providing needed educational opportunities and improving appreciation of public lands and private greenspaces and
- Pursue federal and state recreational funding that will protect additional important natural areas in the GCPEP landscape, including those that will buffer military lands.

**Figure 19: Ribbon Cutting for the Blackwater River Heritage Southern Extension Trail**



**Bagdad Mill site – DEP (OGT) and Santa Rosa County**

This site includes 22 acres on Blackwater River and Pond Creek. DEP Office of Greenways and Trails (OGT) has leased this historical site with a sublease to Santa Rosa County.

*GCPEP staff activities:*

- The County has agreed to Blackwater River Foundation being the Citizen Support Organization to assist with completing a management plan for the proposed park;
- County agreed to sign sublease for parcel from the Office of Greenways and Trails. County had already agreed to the land being developed as a passive recreation park;
- Staff has assisted several organizations in the completion of grants that would provide for additional land protection, planning, restoration and management associated with key parcels;
- The Blackwater River Foundation has begun work on completing a management plan for the proposed park. Staff have provided assistance through sharing examples of other good management plans and continuing natural assessments of the site; and
- Staff continues to assist several organizations in the completion of grants that would provide for additional land protection, planning, restoration and management associated with key parcels along the Blackwater River. These include lands associated with both the Blackwater River Water Management Area and Blackwater River State Forest. Recently an 80 acre site on Juniper Creek was donated to the Blackwater River Foundation for conservation purposes.

*Next steps for the GCPEP staff:*

- Staff assist with management planning, removal of exotic species, and restoration of native plants and
- Staff work with partners to establish educational opportunities on the site

### **Florida Trail Association**

The Florida Trail has been working to complete trail connections in the GCPEP landscape, including two focal areas. These are Nokuse Plantation North, providing for a connection between the Choctawhatchee River and Eglin AFB, and the Yellow River Ravines Florida Forever Project, providing for a connection between Eglin AFB and Blackwater River State Forest.

An extension of the Florida National Scenic Trail south from Blackwater River State Forest to the community of Harold has been approved by Blackwater River State Forest. Construction on this section began in Fall 2005.

#### *GCPEP staff activities:*

- Staff assisted the local chapter of the Florida Trail Association in hosting a regional trail conference October 14-16 at Adventures Unlimited on Coldwater Creek. Emphasis of the conference was on exploring and explaining the natural communities found along the trail at Eglin Air Force Base and Blackwater River State Forest. Initial plans had included Gulf Islands National Seashore, but these plans were changed due to damages and recovery associated with recent hurricanes.

#### *Next steps for the GCPEP staff:*

- Staff continue efforts with local trail user groups to provide additional public access to natural areas;
- Staff assist with development of public education materials increasing understanding of GCPEP conservation targets and strategies to protect them; and
- Staff assist with pursuit of federal and state funds to acquire needed natural areas of priority to GCPEP that will close gaps in trail systems.

### **Gulf Coast Beach Restoration for Tourism Recovery**

The Gulf Coast beaches, which were impacted by numerous hurricanes and tropical storms during the past two highly active hurricane seasons, have long been the major recreational destination in Northwest Florida. The recent storms and heavy rains have caused, and are continuing to cause, the area beaches significant and extensive damage and erosion including the barrier island being breached in several locations.

The entire area from Alabama east across the Florida Panhandle is receiving a significantly increasing number of visitors annually. The beaches and dunes are crucial to the economy of the entire region, and are vital to the protection of homes, buildings, and roads. All of the beaches and dunes in Escambia, Santa Rosa, Okaloosa, and Walton Counties were severely damaged and altered by the storms.

Numerous sections of the shoreline required extensive clean-up and rebuilding efforts in order to restore the quality, aesthetic value, and accessibility for the public to the beaches. The natural areas of the beaches will require reconstructing and replanting with natural vegetation.

With the already existing Gulf Coastal Plain Ecosystem Partnership, a well-established and highly successful method is available to provide the necessary expertise and management tools to restore the beaches in the natural areas of the region. Using various methods, including removing hurricane debris, and installing sand fencing and native plants, rebuilding of the dunes and beaches would be significantly accelerated providing the crucial recreational, economic, and environmental recovery to the region at a much faster rate.

The Gulf Coastal Plain Ecosystem Partnership Ecosystem Support Team could coordinate, administer, and manage numerous projects to assist existing land managers with the restoration of the natural beach areas in Escambia, Santa Rosa, Okaloosa, and Walton Counties which were impacted by Hurricanes Ivan, Dennis, and Katrina, including, but not limited to, Perdido Key, Johnson Beach, Pensacola Naval Air Station Beach, Fort Pickens, Escambia County Beach, University of West Florida Beach, Gulf Islands National Seashore, Navarre Beach, and Eglin Air Force Base Beaches.

Important Gulf Coast beach restoration points include:

- It is widely recognized that the beaches of the Gulf Coast are exceptionally beautiful and provide the greatest economic tourism benefits of all to the region bringing approximately \$364,000,000 annually with 3.5 million visitors and providing 7,500 jobs just to Escambia County Florida alone. The beaches provide unmatched tourism and recreational opportunities unavailable by any other means;
- Hurricanes and tropical storms caused severe beach economic impact, which continues to dramatically affect tourism, in part due to the inaccessibility to natural beach areas. Tremendous damage was caused to all of the beaches in Escambia, Santa Rosa, Okaloosa, and Walton Counties in Florida. Rebuilding and restoring the aesthetic and recreational quality of the beaches and dunes in the highly-used, natural beach areas is crucial to reestablishing the unsurpassed tourism value of the region and protecting the natural communities of the coastal dune system;
- Using existing successful partnerships with beach land managers, coordinating with counties, universities, state parks, and national parks will provide effective and successful beach clean-up, rebuilding, and restoration; and
- Protect public health and safety in the highly used natural beach areas.

Action steps would include:

- Coordinate with beach land managers and assist with beach recreational area restoration;
- Implement beach and dune rebuilding projects to restore recreational quality of highly used natural beach areas; and
- Develop and submit funding proposals for implementing projects.

## CHAPTER 8. PUBLIC EDUCATION AND FINANCE

As the partnership has grown, productive and effective communication and dissemination of information remains a vital component in the continued success of the partnership and the conservation, management, protection, and restoration of natural resources and biological diversity across the GCPEP landscape. Documentation of the partners' cooperative restoration projects and of the methods used is critical to circulating the information between partners, to supervisors, decision-makers, and to the interested public. Communication is vital to the effectiveness of the partnership and was established as a priority by the GCPEP Steering Committee. Communication of GCPEP goals, objectives, activities, resources, and successes are summarized below.

### **GCPEP Steering Committee Meetings**

GCPEP Steering Committee meetings were held bi-annually during Phase I and Phase II of this project. Important decisions were made as the result of these meetings based on the agreement that all partnership projects and changes require consensus.

The GCPEP Steering Committee meetings are crucial to the partnership operations (see Figure 20). The Memorandum of Understanding (MOU) was signed by the partners in 1996. The MOU serves as the foundation of the Partnership. The Steering Committee agreed upon the following operating guidelines to ensure efficient operation of the partnership:

1. Each partner organization chooses representatives. The Steering Committee consists of one primary and at least one alternate contact for each partner. A designee chosen by the primary contact may represent the alternate contact. Representation at the Steering Committee meetings by one of the contacts from each partner organization is encouraged.
2. Consensus is desired in reaching agreements among the partners to ensure an equal voice for all. If there is minority dissent, then the majority is charged with finding an alternative solution acceptable to all. The goal is to always maintain productivity while keeping the consensus process efficient.
3. The GCPEP staff is present to provide information and assistance to the partnership, and they do not vote on issues. Decisions are based upon Steering Committee voices only. The Steering Committee functions best when everyone participates and ensures input from their organization in all decisions.

### *GCPEP Steering Committee Meeting FY 2003-2005 Decisions*

- The GCPEP Steering Committee voted to include the Naval Air Station as a partner in GCPEP. The parcels that the Navy enrolled in the partnership are important areas in the Blackwater River and Perdido watersheds;
- The GCPEP Steering Committee voted to enroll the Florida Department of Environmental Protection's Tarkiln Bayou, Perdido Key State Park, and Big Lagoon State Park as additional lands for this GCPEP partner. The Tarkiln Bayou lands include the Perdido Pitcher Plant Prairie, which is now over 60% protected and is critical habitat for the federally endangered white top pitcher plant;

- The GCPEP Steering Committee voted to include the Florida Fish and Wildlife Conservation Commission (FWCC) as a partner in GCPEP;
- The Escribano Point parcel managed by the FWCC was enrolled in the partnership;
- The Betty and Crawford Rainwater Perdido River Nature Preserve owned by The Nature Conservancy was enrolled in the partnership; and
- The GCPEP Steering Committee voted to enroll the National Park Service (NPS) and Gulf Islands National Seashore (GINS) as a partner in GCPEP. The lands that NPS enrolled in the partnership are important areas for the barrier island complex conservation target.

**Figure 20: GCPEP Steering Committee and GCPEP Staff**



### **GCPEP Steering Committee Manual**

Documenting the successful and progressive projects achieved and the topics being addressed by the individual partners and the partnership has been effective for tracking the innovative methods used. The GCPEP Steering Committee Research and Information Manuals summarize and contain information on the substantial projects that are accomplished by the partners and additional important information related to GCPEP Conservation Targets. Material made available to partners in the manuals include, but is not limited to, news articles and research papers regarding: GCPEP awards and events, land protection, prescribed fire, aquatic resources, forestry, nature-based tourism, and endangered species.

*GCPEP staff activities:*

- Provided Steering Committee Manuals to all agencies representatives and
- Discussed methods of transferring and expanding Steering Committee Manual to GCPEP Website to provide wider access and greater range of resource, research, and reference links for the partners use.

*Next steps for the GCPEP staff:*

- Catalog and make available electronically all previous GCPEP Steering Committee Manuals from 1998-2005 including resource, research, and reference material for distribution amongst partner representatives and
- Begin coordinating transfer of past and current Steering Committee Manuals to the GCPEP Website to allow for wider access and greater range of resource, research, and reference links for the partners use.

**GCPEP Memorandum of Understanding (MOU)**

According to the decision by the GCPEP Steering Committee, the final partner was enrolled in GCPEP during 2005. The GCPEP MOU was updated to include all of the latest partner enrollments and is currently being circulated through the lengthy signatory process amongst the 10 partners' agencies.

**Public Education**

The GCPEP staff continues to produce various communication materials for use while giving presentations to community groups and advisory committees to utilize the opportunity for positive communication regarding GCPEP conservation targets. Effective education of partner organizations, community leaders, stakeholders, and the general public on the importance of GCPEP conservation targets, threats facing these targets and strategies to abate threats is vital to ensuring long term and lasting results with regard to identified conservation goals and objectives.

Public education forums provide effective opportunities for conveying extensive information related to the GCPEP partners' successful conservation projects. Producing various communication materials, PowerPoint presentations, and continuously participating in public community events and advisory committees provide excellent community relations which ultimately lead to better opportunities for protection of GCPEP conservation targets.

*GCPEP staff activities:*

- Began implementation of a GCPEP Website with both internal and external capabilities to provide greater access to information and data sharing, in response to a request for this resource by the Steering Committee;
- Developed and revised GCPEP PowerPoint presentations on the partnership projects and goals that was used during a wide range of community meetings and workshops including the DoD Conservation Conferences and the Joint Land Use Meetings;
- Gave presentations to a variety of community groups regarding partnership projects and goals;



- Continued involvement with various advisory committees in order to stay current on critical issues and to have input with important community conservation topics;
- Develop the layout for the GCPEP Aquatic Management Plan;
- Made educational presentation to the Gulf States Mycological Society on the subject of the Plant Communities of Eglin AFB;
- Updating the GCPEP map, brochures, and displays, which will include the most recently enrolled partners' lands with updated acreage and boundaries;
- Updating the Blackwater River Report publication and expanding to include additional GCPEP watersheds;
- Aided in the coordination of a local school group tree planting for an erosion control site near Ten-mile Creek on Eglin, AFB;
- Submitted and was accepted for publication the manuscript, "Protecting Red-cockaded Woodpecker Cavity Trees Predisposed to Fire-Induced Mortality" in the *Journal of Wildlife Management*; and
- GCPEP highlighted impressively in a chapter in a book to be published about management of longleaf pine.

### **Forestry Conclave and Lumberjack Festival**

The Annual Conclave festival provides an opportunity for nature exhibits, free tree seedlings (see Figure 21), firefighting helicopter aerial demonstration and information about the environmental degree programs offered at Pensacola Junior College and the University of Florida at the Milton campus.

#### *GCPEP and EST staff activities:*

- Participated in the forestry competitions;
- Provided a GCPEP display; and
- Assisted with the free tree seedling give away along with providing information on the importance of natives and how to properly plant trees.

**Figure 21: GCPEP Exhibit at the Forestry Conclave**



### **Arbor Day**

During Arbor Day, International Paper (IP) donates over 10,000 trees in the Pensacola and Navarre area. The trees are a wide variety of species that are adaptable to many different landscape uses and soil types as well as valuable food sources for wildlife. Planting instructions and information on the benefits of natives are also provided. This event is particularly important now due to the number of trees lost because of the recent severe storms.

#### *GCPEP staff activities:*

- Provided assistance to International Paper in their annual Arbor Day celebration by giving away trees to the public.

### **FINANCE**

The GCPEP staff ensured that all of the required deliverables including: Quarterly Progress Reports, Annual Reports, Materials, Training, Management Plans, and all products required for each of the Grant Agreements and Awards for GCPEP were met and delivered in a timely manner.

#### *GCPEP staff activities:*

- Progress Reports submitted during the FY 04 and 05, Phase I and Phase II Legacy Project included: Legacy Resource Management Program Quarterlies and Annual Report;
- Pre-proposals and full proposals which were submitted included: DoD Legacy, National Fish and Wildlife Foundation Longleaf Pine Restoration, Division of Forestry / National Fire Plan Fire Equipment, and Federal Emergency Management Agency Disaster Assistance;
- GCPEP was awarded the Division of Forestry / National Fire Plan Fire Equipment grant; and
- GCPEP has received generous private donations to support GCPEP conservation activities.

## **CHAPTER 9. OTHER GCPEP PROJECTS AND ACTIVITIES**

### ***COUNCILS, COMMITTEES, MEETINGS, AND WORKING GROUPS***

Communication, learning, and gathering and disseminating information are a critical part of the overall GCPEP function. The GCPEP staff has been and will continue to be involved in a variety of councils, committees, and working groups. Information, both conveyed by and received by GCPEP staff, plays an integral part in the success of the partnership. All staff members regularly attend meetings, sit on advisory boards, and participate in or facilitate working groups. The GCPEP staff views all such activities as an opportunity to interact towards a common landscape-wide goal, the conservation of our natural resources.

#### **Eglin AFB Working Group for Ecological Management (EWGEM)**

The goal of the EWGEM is to work with experts in the conservation field and, by using the best scientific information available, provide active leadership to ensure the implementation of a model integrated monitoring program and management/decision support system at Eglin AFB.

##### *GCPEP staff activities:*

- Participated and provided input in a series of workshops and meetings of EWGEM for the purpose of addressing specific issues regarding Eglin AFB's Aquatic Monitoring and Assessment Program and Okaloosa darter sampling, analysis, recovery, and integration with larger scale aquatic conservation and monitoring efforts;
- Assisted in coordination and facilitation of a workshop of conservation professionals to review and critique the aquatic monitoring program at Eglin AFB and to develop a conceptual model of aquatic systems on Eglin AFB lands;
- Recorded minutes of the aquatic workshop and model components and developed and distributed a summary of the meeting with recommended next steps to Eglin AFB aquatic management staff;
- Coordinated with the Regional Conservation Ecologist to prepare for and co-facilitate the March 2005 EWGEM joint terrestrial and aquatic meeting;
- Presented to the group an overview of GCPEP and the potential of an MOA between the aquatic programs of the US Fish and Wildlife Service, the Florida Fish and Wildlife Conservation Commission, Eglin Air Force Base, and The Nature Conservancy within the GCPEP area;
- Composed and distributed the meeting minutes from the March meeting; and
- Attended and participated in a EWGEM meeting which focused on the Special Natural Areas at Eglin AFB – Issues of Management and Conservation and the next INRMP.

#### **Bay Area Resource Council (BARC)**

The Bay Area Resource Council (BARC) was established for the purpose of directly addressing some of the most critical regional aquatic issues and providing highly effective and educational outreach to the community. The BARC includes well-respected agencies and decision-makers who contribute expertise for numerous important strategies and actions for solutions to threats facing GCPEP aquatic targets. GCPEP staff is actively engaged in the BARC and the Aquatic

Ecologist serves as a member of the Technical Advisory Committee (TAC), which oversees specific goals and objectives of the BARC and provides technical guidance to the direction of the BARC. Through participation in the BARC at various levels, GCPEP staff contributes to achieving education goals and objectives with regard to GCPEP conservation targets.

*GCPEP staff activities:*

- Attended the BARC annual symposium on addressing community growth readiness from the watershed perspective. The purpose of this symposium was to address some of the most critical regional aquatic issues and provide highly effective educational outreach for the community. Attendees at the workshop learned about the impacts of urbanization on aquatic systems, the role of impervious cover on local water quality and quantity, the benefits of watershed-friendly development including savings in storm water treatment, TMDL implementation, cost-savings for developers, and increased property values;
- Involved in updating the Pensacola Bay Area Watershed Management Plan and focused on including GCPEP strategies and actions agreed upon by the Steering Committee and then distributed the finalized plan to the partners; and
- Attended and participated on the Technical Advisory Committee monthly meetings.

**Best Management Practices (BMP) Advisory Committee**

The State of Florida has established a Best Management Practices Technical Advisory Committee (TAC). BMP's were established to protect Florida's streams, rivers, and lakes from potential sources of pollution associated with forestry activities. The Technical Advisory Committee includes representatives from state and federal government, universities, environmental organizations, and forestry industry.

The TAC reviews the BMP Manual when necessary to reflect scientific, social, and economic changes. The Committee met in March 2005 with an agenda that included the BMP Implementation and Monitoring Program, a TMDL update, and a discussion on Sentinel Pines and Cypress Leave Trees. The Florida Department of Environmental Protection expressed satisfaction with the forestry BMP program and indicated that forestry BMPs have been shown to be effective. Compliance rates have continued to be high with early 2005 Compliance Survey data showing a compliance rate of 98% statewide. This success in BMP implementation has been attributed to the increased extensive statewide BMP outreach and workshops.

*GCPEP staff activities:*

- Served as a member of the State of Florida BMP Advisory Committee and assisted in the completion of updates to the BMP Manual;
- Participated in a national review of the Florida Best Management Practices; and
- The Division of Forestry hired several BMP Foresters to assist with monitoring and education. One of the positions is stationed at Blackwater River State Forest.

### **GCPEP Fire Subcommittee Meeting(s)**

The purpose of the GCPEP Fire Subcommittee is to bring GCPEP Fire Managers together to discuss and find solutions to fire management needs, concerns and issues that affect the partners both individually and collectively. This subcommittee is also assisting in the development, expansion, and utilization of the Ecosystem Support Team (EST), which first started out as a burn team and has since expanded.

*GCPEP and EST staff activities:*

- Facilitated the GCPEP Fire Subcommittees.

### **Arson Alert Meeting**

The Florida Forestry Arson Alert Association is a direct support, non-profit organization created by the Florida Legislature under the auspices of the Florida Department of Agriculture and Consumer Services. Its primary mission is to reduce the incidence of wildfire arson by serving as a vehicle to offer rewards for information leading to the arrest of an arsonist and increasing public awareness about wildfire arson.

*GCPEP staff activities:*

- Serve on the Statewide Board representing the Blackwater District.

### **North Florida Prescribed Fire Council**

The North Florida Prescribed Fire Council is an interagency group of federal, state, industry, NGO, and private prescribed fire practitioners that were established to promote an understanding and education about prescribed fire. The mission of the North Florida Prescribed Fire Council is to encourage the exchange of information, techniques, and experiences among practitioners of prescribed fire in North Florida and to promote public understanding of the importance and benefits of prescribed fire.

*GCPEP staff activities:*

- Attend and participate in the bi-annual meetings.

### **The Nature Conservancy Southeast Regional Fire Meeting**

This was a meeting of lead TNC fire staff in the Southeast Region and the main focus was assessing the value and objectives of a fire management network for the region. Discussions included updates and overviews on the Landfire Project, the Fire Learning Network, the Fire Data Management System, and a report on the Duff Management Research.

*GCPEP staff activities:*

- Attended the meeting and represented the GCPEP project and
- Began discussions on how to re-engage the Fire Learning Network and utilize the program within the GCPEP area.

## **Division of Forestry’s “Future of Florida’s Forests”**

The Division of Forestry (DoF) held six public meetings across Florida entitled the “Future of Florida’s Forests”. The purpose of the meetings was to provide a forum for public input into how the Florida DoF should plan future management of Florida’s forests, both public and private. The meetings were designed as a workshop in which participants discussed and drafted desired future conditions for Florida’s forests, obstacles to realizing future conditions, and strategies for overcoming obstacles. The public’s ideas and comments will be incorporated into a statewide long-term DoF plan for managing Florida’s forests.

### *GCPEP Staff activities:*

- Attended and participated in the workshop held within the GCPEP area.

## **CONFERENCES AND WORKSHOPS**

Attendance and presentation at conferences and workshops is a key function of the GCPEP staff. Conferences and workshops are an excellent venue for presenting and highlighting GCPEP activities and to learn from other participants that share the same common goal, the conservation of our natural resources. The GCPEP staff participated, both as presenters and consumers of natural resources information. Because of the valuable information delivered and gained at such gatherings, the GCPEP staff will continue to participate in all appropriate conferences and workshops.

### **DoD Conservation Conference**

During the poster session at the Department of Defense Conference, the GCPEP and NW Florida Greenway poster presentations highlighted the proof of concept surrounding the natural resource and range readiness projects being led by Eglin AFB and their involvement in the partnership. GCPEP projects, which were included in the poster presentations, were: land protection, wetlands restoration, native plantings, species monitoring, endangered species management, invasive species removal, reforestation, and prescribed burning. The GCPEP and Eglin AFB were highlighted on a DoD / US Fish and Wildlife Service brochure entitled Protecting Endangered Species on Military Lands: Conservation Partnerships as an example of the successful results which take place when coordination of resources and methods occurs between partners with different individual missions with shared goals.

The participants of the conservation conference included DoD employees and contractors, natural and cultural resource managers, facility planners, and military trainers. The conference provided extensive coverage of the numerous aspects required for effective cooperative projects with military bases. The Integrated Natural Resource Management Planning (INRMP) workshop emphasized integrating natural resource management with mission readiness and adaptive management to address conservation and encroachment concerns.

### *GCPEP staff activities:*

- Developed conference materials and attended the DoD conference.

### **Joint Services Environmental Management Conference**

The Joint Services Environmental Management Conference & Exposition entitled “Sustaining Our Mission and the Environment” showcased the Department of Defense’s commitment to environmental management and sustainability. The Project Director presented in a Technical Breakout Session titled “Supporting the Military Mission Through Conservation Partnerships & Initiatives, Chaired by Pamela Behm and Pedro Morales. Both the Gulf Coastal Plain Ecosystem Partnership and the Northwest Florida Greenway were highlighted. Other presentations included “Using Partnerships to Enhance the Military Mission”, the “Onslow Bight Conservation Initiative”, the “Sonoran Desert Ecosystem Initiative” and “Managing Species at Risk”.

### **White House Conference on Cooperative Conservation**

The White House Conference on Cooperative Conservation was held in August 2005 in St. Louis, MO. The NW Florida Greenway Director was invited to the conference to present a poster highlighting the Northwest Florida Greenway and the GCPEP.

### **Natural Areas Training Academy**

To meet the great demand for trained natural areas managers in Florida, the Natural Areas Training Academy has been developed by a partnership between The Nature Conservancy and the University of Florida. The training and certification benefits anyone involved in planning land management activities on protected natural areas, whether in public or private ownership. The Workshops include: Conservation Site Assessment and Planning; Managing for Diversity Across Florida’s Unique Landscape; Working Across Boundaries to Protect Ecosystems; Managing Visitors and Volunteers in Natural Areas; and the Interagency Prescribed Fire Training Course.

#### *GCPEP staff activities:*

- Taught a course on partnerships and the importance of communications. The presentation highlighted both GCPEP and the NW Florida Greenway and
- Assisted in the development and co-instructed the workshop “Plant Communities of North Florida and the Panhandle.

### **Comprehensive Wildlife Conservation Strategy Workshop**

Because of additional new funds from Washington, D.C. for fish and wildlife resources conservation, Florida has prepared a Comprehensive Wildlife Conservation Strategy (CWCS) in order to participate fully in receipt of these new funds, and to help decide how the new monies should be spent. All states are preparing a CWCS which, when assembled, will provide the first ever comprehensive look at the needs and opportunities for fish and wildlife conservation across the Nation. In Florida, the Fish and Wildlife Conservation Commission (FWC), in collaboration with other state and federal agencies, land owner groups, conservation and sportsmen’s groups, academic professionals and other Floridians, created the CWCS that addressed the needs of all fish and wildlife species in the state.

#### *GCPEP staff activities:*

- Attended and participated in the workshops and break-out sessions developing the CWCS.

## **Longleaf Pine Groundcover Restoration Symposium**

The symposium was a forum for exchange of information about practical and economical aspects of native groundcover restoration in the longleaf pine ecosystem. Restoration techniques that have been successfully implemented in the tri-state border region of Florida, Georgia and Alabama were highlighted.

### *GCPEP staff activities:*

- Attended the field trip to Apalachicola Bluffs and Ravines Preserve. The field trip included discussions of on-the-ground examples of native groundcover restoration efforts by The Nature Conservancy and
- Attended the symposium presentations and moderated discussions. Sessions included a Primer on Native Groundcover Restoration within Longleaf Pine Ecosystem Management, Native Groundcover Restoration Strategies, Biology and Economics of Native Groundcover Seed Production, Financial Aspects of Longleaf Pine Ecosystem Conservation and Groundcover Restoration, and Research Needs and Steps Needed to Advance Longleaf Pine Ecosystem Groundcover Restoration.

## **Public Land Acquisition and Management Partnership Conference**

The purpose of the Public Land Acquisition and Management Partnership Conference was to provide an opportunity for the Florida Department of Environmental Protection and the five Water Management Districts to meet with one another and other federal, state, local and private landowners. While both the acquisition and management of lands was discussed, an emphasis was placed on the partnerships that are formed to enable both agency and private landowners to conduct land management activities in the best possible way.

Sessions included: Restoration of Mitigation and Natural Lands: Tools and Techniques; Fragmentation of the North Florida Landscape: Timber Company Divestitures, Ownership Fragmentation, New Partnership and Implication; Wildland-Urban Interface: Adjacency and Control of Exotic Infested Properties; Groundcover Restoration: Challenges and Opportunities Including Donor Site Network; Partnering with Local Governments; Achieving Land Management Objectives Through Conservation Easements; and National Defense Corridors: Partnering to Achieve Success.

### *GCPEP staff activities:*

- Attended the conference and provided GCPEP materials for handouts.

## **Fire Weather Workshop**

The purpose of this workshop, usually held in January, is to cover operational details that can be helpful for regional agencies planning prescribed fire for the upcoming burn season. General topics cover updates from the previous workshops, improvements and status reviews from the area forecasting offices, and climate information needs for fire management planning. Following presentations, a roundtable discussion among the attending prescribed fire representatives takes place to facilitate a better understanding of regional issues and concerns.



*GCPEP and EST staff activities:*

- Assisted in the distribution of the workshop announcement to all GCPEP partners and
- Attended the workshop hosted by Eglin AFB.

### **Wildland Fire Training Conference**

Florida's 4<sup>th</sup> Wildland Fire Training Conference was held in Ocala and focused on "Managing the Risks". The conference provided the opportunity for participants to attend a variety of sessions dealing with fire prevention tactics, and incident management so that they can do a better job "managing the risks."

*GCPEP staff activities:*

- Attended the conference and participated in several NWCG courses and seminars.

### **Atlantic Conservation Region Science and Conservation Strategies Workshop**

The purpose of the workshop was to identify issues and formulate an implementation strategy regarding the strengthening of science capacity and more efficiently and effectively infusing science into The Nature Conservancy's (TNC) major operations and actions. End products were a draft three-year action plan for forestry and freshwater ecosystem components that impact every state and country program in the Atlantic Conservation Region of TNC.

*GCPEP staff activities:*

- Assisted in the planning and implementation and attended and participated in the workshop.

### **Coastal Alabama Conservation Planning Workshop**

The Coastal Alabama Nature Conservancy Program hosted a conservation planning workshop for the purpose of identifying conservation targets, threats to the targets, strategies to abate the threats and measures of success to be used to gauge progress of resulting efforts with regard to several watersheds draining southern Alabama, including the Perdido River, located in the GCPEP landscape. The results of these workshops were used in the development of the GCPEP Aquatic Management plan and will be used in development of the Preserve Management Plan for the Perdido River Nature Preserve.

*GCPEP staff activities:*

- Participated and provided input with regard to GCPEP conservation targets, threats and strategies during the two conservation planning workshops.

### **Marine Ecoregional Planning in Florida**

The Nature Conservancy Science Department hosted a meeting to review the marine component of the Florida Comprehensive Wildlife Strategy. During the meeting the items discussed included site prioritization, threat assessment, and strategy development components. This statewide view of marine conservation threats, needs, and potential priorities may assist in establishing and refining conservation priorities for each area of focus. Because the threat and strategies

components are fully integrated with the terrestrial and freshwater components, this provides a method of viewing cross system linkages. All of the various marine activities within the TNC Florida Chapter as well as other statewide marine projects were discussed.

### ***PRESCRIBED FIRE***

During the development of a comprehensive planning document for the entire GCPEP landscape, one of the highest threats to be identified by the partners was various stages of an altered fire regime landscape causing negative ecological impacts to a majority of the conservation targets. This threat is largely due to challenges, such as lack of resources including available personnel, which have led to incompatible/inadequate fire management issues. These issues include such things as insufficient acreage burned and insufficient return intervals. Therefore, a priority conservation objective identified in the GCPEP CAP is the re-introduction of appropriate fire regimes to protect key ecosystems, embedded communities, and species. This threat has even increased within the GCPEP landscape during the last year because of the two catastrophic hurricanes, Hurricanes Ivan and Dennis, interrupting burn seasons and increasing fuel loads.

### **National Interagency Prescribed Fire Training Center**

The National Interagency Prescribed Fire Training Center (PFTC) is a unique program blending maximum field prescribed burning experience with a flexible curriculum of classroom instruction on topics of interest to prescribed fire practitioners. During courses at the PFTC, trainees travel to several remote sites during their stay to take advantage of field prescribed burning opportunities with a variety of agencies.

#### *GCPEP staff activities:*

- Serve as the Panhandle Coordinator when PFTC crews are in the area in order to better route the crews to areas where they are most needed and to maximize burning on GCPEP partner and cooperators' lands.

### **Fire Management of Tarkiln Bayou Preserve State Park**

Tarkiln Bayou Preserve State Park is an expanding state park with an active acquisition component. The majority of the park is wet flatwoods (fire frequency 3-10 years) and wet prairie (fire frequency 2-4 years). Nearly all plants and animals inhabiting these two communities are adapted to periodic fires, and several species depend on fires for their continued existence. Few quality and intact examples of the wet prairie with the pitcher plant component remain. These natural community types that comprise Tarkiln Bayou are target communities for the GCPEP partnership. It is widely recognized that this area has been fire suppressed for several years and is in need of periodic fire necessary to maintain its ecological health and to reduce the fuel loads for potential catastrophic wildfires. However, land managers face challenges including the difficulty of getting needed fire to this area due to several boundaries of wildland/urban interface in and around the Perdido area.

Within the GCPEP Conservation Area Plan, incompatible/inadequate fire management is one of the top threats to many GCPEP conservation targets. Included in identified strategies to abate this threat are action items that pertain to assisting partners with their fire management needs, including assisting with the development and review of fire management plans.

*GCPEP staff activities:*

- Assisting in the development of the Fire Management Plan and working with the GCPEP Fire Subcommittee on input and guidance into the plan.

***GCPEP ECOSYSTEM SUPPORT TEAM***

In order to further the landscape scale conservation efforts of the partnership and to assist in supporting and expanding the Threatened and Endangered species and biological diversity work that the GCPEP partners currently conduct, the GCPEP Steering Committee ranked the development of a GCPEP Ecosystem Support Team (EST) as one of the top priorities. The primary purpose of the EST is to aid partners in accomplishing high priority action items such as assisting with fire management; decreasing data gaps through surveying, mapping, and monitoring; and invasive species work. Primary tasks performed by the EST staff will be to participate and assist partners on prescribed burns, ecological monitoring, invasive species work, and natural resource management practices.

*GCPEP and EST staff activities:*

- During this reporting period, hired a total of two full-time Team Members, three Seasonal Team Members and five On-call Team Members;
- Assisted several of the GCPEP partners with aquatic and terrestrial monitoring projects. One of the monitoring projects was the establishment of a baseline for feral hog damage to steephead wetlands and then perform a second-year monitoring of feral hog control in seepage slopes;
- Participated in numerous prescribed fires and burn preparations for ecosystem restoration. A majority of the burning was on Eglin AFB;
- Assisted the partners with numerous and varied hurricane recovery efforts;
- Worked with the partners on several exotic invasive species control projects and native restoration projects;
- Attended and completed various training opportunities in order to continue to increase staff capabilities and safety; and
- Worked on increasing the equipment cache and maintaining the existing equipment.

## **CHAPTER 10. CONCLUSION**

Phases I and II of this project involved working with GCPEP partners to develop actions to abate emerging aquatic threats and to eventually fill data and information gaps by developing the GCPEP Aquatic Management Plan. The GCPEP staff and partners will continue to work to further restore and protect the aquatic communities of the region by beginning to implement the identified action items. The Aquatic Management Plan serves as the culmination of GCPEP Staff efforts and will assist with needed future GCPEP advances in aquatic management.

The GCPEP Aquatic Management Plan will also assist in further improving and implementing the Eglin AFB Integrated Natural Resources Management Plan (INRMP). The INRMP will continue to assist Eglin AFB and GCPEP in reaching and sustaining meaningful protection and restoration of aquatic systems, communities, and species. The GCPEP cooperative projects have led to increased health and viability of GCPEP conservation targets, thus increasing management and mission flexibility. Land protection efforts are increasing the potential of protecting key buffers and connectors within the GCPEP landscape, including priority areas around Eglin AFB.

Hurricane recovery assistance will continue for the indefinite future and will include prescribed fire to reduce increased fuel loads, Threatened and Endangered species assessments, natural communities assessments, clearing hiking and canoe trails in recreation areas, clearing fire lines and roads, invasive species control projects, and other needs as they develop.

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We thank the many individuals, and the governmental and non-governmental agencies, which are too numerous to mention, that contribute generous amounts of time, expertise, and resources to make the Gulf Coastal Plain Ecosystem Partnership an effective tool for conservation.