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L GULF ISLANDS NATIONAL SEASHORE
ANNUAL NARRATIVE
October, 1995 through September, 1996

MANAGEMENT:

Hurricane Recovery

For the entire park staff, fiscal year 1996 has been a year spent trying to recover as much as possible from the effects of two devastating hurricanes. The fiscal year began with us just beginning to become fully operational after Hurricane Erin hit the Florida District on August 3. On October 4 Hurricane Opal delivered the same area it's second direct hit--this time with a tidal surge of 14 feet. This closed down all of our operations on the barrier islands from Perdido Key to Okaloosa, including the entire district office functions at the Fort Pickens area of the Seashore.

The eastern most portion of Perdido Key reopened within a few days of Opal, and the remainder--along with the Okaloosa area--in the Spring of 1996. Fort Pickens area was reopened Memorial Day weekend with the district staff moving back at the same time. Telephone service to the area was not restored until about three months later.

The most visited portion of the Seashore--the Santa Rosa area--was closed until December 5, 1996--when State Road 399 which travels through the Santa Rosa area was reopened to public travel after a complete reconstruction of the road. Reconstruction of facilities in the Santa Rosa area will not be completed for at least another year.

In total, we suffered between 15 and 20 million dollars in damages from the storms. Funding for repairs is being covered by National Park Service (NPS) storm damage appropriations and Federal Highway Administration (FHWA) emergency money made available to us and the Florida Department of Transportation (DOT).

Operations

Closed the entire Fort Pickens area at night to all users except campers to help eliminate vandalism to historic features.

Eliminated roadside parking to prevent trampling of dunes and vegetation and elimination of safety hazards associated with roadside parking.

We have gone to considerable effort to cooperate with the State of Mississippi, while making known our concerns about the possibility of leases being issued to allow for natural gas drilling in waters near the Seashore's two Wilderness areas (Horn and Petit Bois Islands).

We have made plans, publicized them, and are committed to going on the Destin Reservation System for the Fort Pickens Campground beginning October 15, 1996.

25th Anniversary of the Seashore

Appreciation for the Seashore's existence has been evidenced during this 25th anniversary year [1996] of the Seashore by expressions from those

who were here during the formative years of controversy, and others who speculate what might have been if the area had been left unprotected.

Cultural Resources:

Masonry Preservation and Restoration Work on Fort Pickens: The partnership work with the U.S. Bureau of Prisons continues for the Fort Pickens preservation and restoration work. The counterscarp wall preservation is in its final stages. A piazza has been reconstructed on the north front officers quarters. Columns have been constructed at the entrance into Fort Pickens. Ceiling restoration for Bastion B has been completed. Safety preservation has been completed. The Fort Pickens project is expected to terminate in June 1997.

106 Compliance: 106 Compliance obtained for: Santa Rosa and Fort Pickens Road Reconstruction; Lime Rock Storage at Fort Pickens; Naval Live Oaks Fire Break; Fort Pickens Maintenance Complex; Erosion Control at Fort Massachusetts; Addendum to Road Construction at Santa Rosa; University of West Florida Archeological School; Naval Live Oaks Submarine Cable (Gulf Power); Santa Rosa Northside Parking Lot.

Concessions: On December 13, 1996, the concessions prospectus issued January 27, 1995 for the Okaloosa Area was canceled, and Concession Permit CP-GUIS006-89 for the Okaloosa Area was terminated. Volunteer efforts by Deckhand Marina (park neighbor) fulfilled the daily maintenance for the grounds and facilities and the opening and closing of the gates.

The Santa Rosa Boardwalk concessions operation was withdrawn from the Dudley Food and Beverage, Inc. concessions operation by mutual agreement.

Employee Assistance Program (EAP):

During the period October 1, 1995 through September 30, 1996, one EAP supervisory training session was conducted in the Mississippi District and attended by 3 supervisors. The supervisory session for the Florida District was canceled due to Hurricane Opal. One EAP seminar for non-supervisory personnel was held in the Mississippi District and attended by 10 employees. A seminar on Stress was conducted for 14 Law Enforcement rangers during their 40-Hour Law Enforcement Refresher training. Two seminars on dealing with the after effects of Hurricane Opal were conducted in the Florida District and attended by 11 employees. Two seminars dealing with Change were conducted for 22 employees. There were 5 self referrals and no supervisory referrals made to the EAP in FY 96.

Volunteers in Parks (VIP) Program:

During FY 96, a total of 24,449 hours were contributed to Seashore projects and programs by 894 volunteers. Beach cleanup activities accounted for 2,354 hours worked by 535 volunteers; 22 Campground Hosts worked 5,569 hours; and 337 other volunteers contributed 16,526 hours of their time.

INTERPRETATION:

Programs and exhibits for Gulf Islands National Seashore's 25th anniversary and for National Park Week in April highlighted the year. The 25th anniversary was also recognized in community events, such as Mardi Gras parades in Mississippi and Florida, displays at libraries in Gautier, MS, and St. Martin, MS, and the presentation of plaques to recognize community partners, as well as special news releases and media coverage.

Both districts held daily activities for National Park Week in April.

In Mississippi monthly theme programs were interspersed with special events to serve greater numbers of visitors. Special events included an Earth Day Festival that attracted more than 1,200 visitors to Davis Bayou on April 20, Founder's Day in August recognizing the 80th anniversary of the National Park Service with an updated display and birthday party with cake, and a Thanksgiving Open House.

Special tours of Fort Massachusetts were presented for local coastal leaders and for Mississippi legislators during the year.

In November the interpretive program theme of "Changes in the Wilderness" was enhanced by a special trip to Horn Island for the media. The result was good media coverage about the wilderness islands.

In late fall, a major new exhibit on Ship Island history was completed and installed in the Cistern Room of Fort Massachusetts.

A new community-based Scout patch program was initiated in Mississippi. At the Davis Bayou Visitor Center, new interactive children's exhibits in art and Junior Ranger activities were produced, as well as an island exhibit redone. The staff prepared and printed "Camping on a Wilderness Barrier Island" booklet and a summer notebook for Junior Rangers. The West Ship Island site bulletin was updated and printed.

The video "shop" from the Southeast Region's Public Affairs office was transferred to Gulf Islands National Seashore under the care of Mike Hobbs and Gail Bishop in the Mississippi District. Mike Hobbs has professional experience in operating video equipment.

In Florida, Hurricane Opal in October, 1995 closed Fort Pickens Area to the public until Memorial Day weekend in 1997. During the closure period, programs, exhibits and a site bulletin were prepared on the 1995 hurricanes with great interest on the public's part. Due to damage from Hurricane Opal, the Santa Rosa facilities, including the exhibit room, will be demolished. The new exhibits designed for this exhibit room were altered and installed at Fort Pickens Museum and Campground Registration Office in early January, 1997.

A new natural history exhibit was installed at Battery Cooper's barrier island discovery room.

A manuscript for the Fort Barrancas booklet was completed and sent as a publication request to Eastern National. We also prepared a publication request for a Gulf Islands Guide.

Resource Management

Team effort among Interpretive employees and volunteers completed resource management projects at Fort Barrancas/Advanced Redoubt,

painting and vegetation cleaning at Battery Worth, painting the walls in Battery Pensacola and trail work on the Florida National Scenic Trail.

Beach cleanups in May/September in Mississippi and in September in Florida were held for the public and Adopt-A-Beach and Adopt-A-Shore groups.

In the Mississippi museum collection, care of metal objects are being worked on by priority. University of Southern Mississippi volunteers painted the 15" Rodman cannon at Fort Massachusetts in the spring. Maintenance division planned repair work on the fiberglass shutters at Fort Massachusetts. Kitty Weaver shared a historic diary and photographs of Ship Island with the park and allowed a copy to be made for the park's reference files. Her photographs are primarily of the Louisiana Native Guards.

In Mississippi Interpreters helped look for turtle crawls during the Resource Management flyovers of the islands. They also helped with the Red Wolf media coverage and assisted rangers with relocating the new female Red Wolf on the island.

Cooperating Associations

The Eastern National Unit Manager position at Gulf Islands became vacant in February. A part-time EN employee in Mississippi and full-time EN employee were hired to replace the unit manager position. New accessible bookshelves were installed at Davis Bayou Visitor Center. Eastern National sold a medallion to recognize the 25th anniversary of Gulf Islands. However, it was not a good sales item.

Training

H. O. Simpson was trained as the National Park Service Interpretive curriculum certifier/coordinator for the cluster.

Gail Bishop completed the Fundamentals of Training course for National Park instructors.

Dr. William Lewis presented an 8 hour course on communication for visitor use assistants and rangers from Jean Lafitte, Natchez Trace, Gulf Islands and Florida State Parks in Mississippi in February, 1996.

Cooperative Activities

Internet access was obtained through the University of West Florida and a memorandum of understanding with the University of West Florida for this access was signed in May, 1996.

Chevron Refinery-Pascagoula donated a 2 x 3 foot photograph of Horn Island to the Jackson County Board of Supervisors in recognition of Gulf Islands' 25th anniversary.

ADMINISTRATION:

Human Resources

During the first quarter of fiscal year 1996, the GUIS Human Resources Office assumed the Servicing Personnel Office (SPO) functions for Jean Lafitte NHP & Preserve, the newly established Louisiana Parks, New Orleans Jazz NHP and Cane River Creole NHP and Heritage Area, and the

Lower Mississippi Delta Region. Advisory service and/or performance of all associated duties were provided in the areas of classification, employee benefits, staffing, employee relations, maintenance of official personnel records, processing employee actions, payroll, and other functions as needed. Services included all positions under the federal wage system and through GS-14. These duties were assumed with no additional staffing in human resources. In December, 1995, the personnel office staff and Administrative Officer traveled to New Orleans for a site visit.

The Personnel Officer and Personnel Assistant provided training to the JELA staff on personnel procedures, and the Federal Personnel/Payroll system requirements. In addition, the Personnel Officer provided one week of training to the new Personnel Management Specialist assigned to the Gulf Coast Cluster System Support Office in September, 1996. The Personnel Officer also assisted the Appalachian Cluster System Support Office in a classification audit and determination for a Civil Engineer position and the Southeast Archeological Center in the classification of several positions including Supervisory Archaeologists.

In March, 1996, the Personnel Officer participated in a 6(c) Task Force in Washington D. C. with the WASO Personnel Office and the Ranger Activities Division. The purpose of the task force was to review claims for 6(c) coverage to make initial determinations so packages could be forwarded to the Department for approval.

The Personnel Officer and Personnel Assistant attended OPM sponsored Delegated Examining Unit (DEU) training at the Pensacola Naval Air Station in July, 1996. Completion of this training allows our personnel office staff to perform open competitive examining for vacancies. This function has only been performed by the Office of Personnel Management prior to revision of regulations governing the competitive examination process. Numerous other personnel regulatory changes including abolishment of many excepted appointing authorities were implemented.

Additional delegations of authority were made during FY 1996 based on government reinvention, and Southeast Field Area reorganization. These included full employee relations authority, including adverse actions, employee benefits, on the job injuries, and labor relations, as well as all other actions previously approved in the former Regional Office including noncompetitive promotions, payment of travel and transportation expenses for pre-employment interviews, etc.

A position management review was completed for the Florida District Maintenance Division. This resulted in the abolishment of the Maintenance Fiscal Assistant position and redescription of that position to a Masonry Worker, the redescription of a vacant WG-5 Maintenance Worker position to a WG-7 Maintenance Worker, and the realignment of several other field positions (some changes to be made as positions become vacant).

Administrative Careers was implemented, with position reviews for all affected administrative positions for application of benchmark position descriptions. Budget, personnel, procurement and contracting positions were placed under benchmarks as a result. The new DOI Performance Management System which consists of a two-level rating program, and the new DOI Awards and Recognition Program were implemented during FY 1996. Training and instruction for supervisors was accomplished.

The Personnel Office provided training to Big Cypress National Preserve personnel employees concerning Servicing Personnel Office (SPO)

functions. Big Cypress requested this training in anticipation of their assuming SPO authority.

Training: Two maintenance employees were selected and are continuing to participate in the two year Preservation and Skills Training (PAST) program. Other training included law enforcement refresher, computer skills, OSHA Safety Training for the MS District maintenance employees, Fee Collection, Administrative Skills, and various job-related training both on and off site.

Eighteen awards were given to employees during 1996: 1 Fast Track; 3 Special Act; 1 On-The-Spot; and 12 Non-Monetary Awards.

Equal Opportunity (EO)

No formal or informal EO complaints were investigated during FY 1996. One grievance was filed informally and not resolved; it was submitted under the formal process and is pending.

EO accomplishments for 1996 included the appointment of one minority female into a permanent position. In addition, two minority males were appointed to temporary summer lifeguard positions; one female to a temporary maintenance position; one minority male to a temporary maintenance position; and one minority male to a temporary Park Ranger position.

Contracting

The park Contract Specialist provided WASO approved warrant training to the Administrative Officer at JELA and Purchase Card training to GUIIS employees. The Park Purchasing Agent provided on the job training in Property and Small Purchasing to JELA Administrative Assistant.

The Park refuse contract was modified to include recycling requirements.

The Contract Specialist has assisted the Southeast Archeological Center (SEAC) with contracting needs and attended a Cooperative Agreement and Grant course with the SEAC staff.

Request for Quotations: 12
Formal Solicitations: 4
Formal Contract Transactions: 20
Coop/Interagency Agreements: 8
>\$25K Purchase Order transactions: 4
Purchase Orders: 416

Property

Both the Office Automation Clerk and the Purchasing Agent attended PROPS property course training.

Annual Property Inventories were completed.

The Board of Survey convened on 2 motor vehicle accidents. 40 Reports of Surveys and Certificates of Unserviceable Property, 2 Transfers of Property and 9 Receiving Reports of new property were completed.

Fiscal

The park continues to proceed with the Fort Massachusetts Erosion Control project. \$200,000 was used for emergency sand replenishment. \$594,000 was received to continue the project.

\$188,600 in FLHP funds was received and allocated for the realignment of the Santa Rosa Road, and \$245,000 from FLHP was received for other road repairs.

Storm Damage funding continued to be expended in support of Hurricane Opal restoration efforts in the park.

The park continued to enter all the fiscal and program authorization documents and authorized amounts into FFS and to use AFSII in planning and reconciling expenditures.

Quarterly and Annual Impress Fund Reviews were accomplished.

Established a Federal Depository at Pen-Air Credit Union to be used for park fee collection deposits.

Other

The Park Administrative Division continued to support the Cluster by providing administrative guidance to parks within the Cluster. Administration also provides administrative support to the SEFA Lands Officer stationed at GUIIS.

The park Housing Management Plan was updated and the annual inspections completed.

The Administrative Officer was a participant in the WASO Budget Office Budget Impact Analysis Workgroup. The Administrative Officer was one of the Finance Section Chiefs during the 1996 Olympics providing administrative and logistical support for the incident.

The park participated in the local area Combined Federal Campaign.

FACILITY MANAGEMENT:

Contracts were completed by State of Florida contractors for the Fort Pickens and Santa Rosa roads.

Initial language and scope of work were completed for an Interagency Agreement (IA) with the U. S. Army Corps of Engineers to design and construct a new fishing pier at Fort Pickens.

Gulf Coast Cluster personnel began basic design work for Santa Rosa and carpentry shop re-construction.

Four roofs replaced at Fort Pickens from storm damage.

Boardwalks replaced at Fort Pickens and Perdido Key with recycled plastic composite lumber.

New entrance station completed for Fort Pickens.

New entrance sign completed and installed for Fort Pickens.

New signs installed on Santa Rosa and Fort Pickens roads.

Parking lot rehab completed at Okaloosa Area.

Road rehab completed at Perdido Key.

New Chief of Maintenance, Robert Greer, reported for duty on January 20, 1996.

Maintenance Fiscal Assistant position was abolished and a field position established (Masonry Worker).

Personnel Management long range plans were written for both districts.

One employee transfer (Penny Lundgren), and one retirement (Jim Leonard).

Warren Martz was promoted to Mississippi District Maintenance Foreman.

RESOURCE MANAGEMENT AND VISITOR PROTECTION:

Administration

The Mississippi islands joined the technological age this year. Both Horn and Petit Bois Island Ranger Stations received a computer, printer, and fax/modem. All computers were hooked up to cc-mail and are in the process of getting CIRS connected. These time saving features will enable Rangers to input criminal reports, statistics, and other requested data and send them electronically to their supervisor.

Lands

The park is working to resolve several lands issues which surfaced this year. A critical issue involves the State of Mississippi's proposal to lease tracts surrounding the offshore islands for oil/gas development. The Office of Geology, a division of the MS Department of Environmental Quality, has proposed leasing tracts immediately adjacent to Petit Bois and Horn Islands for petroleum development. The park and a representative from NPS Mining and Minerals Branch attempted to work out compromise lease stipulations with the Office of Geology, but were unable to come to agreement on the issues of structure size, structure proximity to our boundary, and structure density.

Following those unsuccessful efforts, the park and numerous support groups were able to raise the issue to the political arena. Both the State Legislature and the Department of Environmental Quality are involved, but have not yet made any decisions. The issue continues unresolved at this time.

A second issue involves a neighboring home owner who built his swimming pool immediately adjacent to the park boundary. The pool's concrete apron crosses over the boundary into park property. In an effort to work with the home owner, a Special Use Permit was issued in 1992, to allow the owner time to resolve the encroachment. This year, the owner built a fence around the pool, further increasing his encroachment into the park. The park and the region's Lands Office met with the owner and informed him that he would have to resolve this problem before the current permit expires in 1997 or the NPS would file a notice with the County Recorder's Office, thus clouding his title and preventing any sale of the property.

Although it was an active year for hurricanes they tended to veer away from the northern gulf coast this year. Only one tropical storm came close enough to require evacuations. Impacts were limited to overwash on the tips of Spoil and W. Ship Island, and damage to the Horn Island and Ship Island piers.

Law Enforcement

RM&VP Staff include the Chief Ranger, a park-wide Resource Management Specialist, two District Rangers, two district Resource Management Specialists, twelve Rangers (LE), one secretary, two dispatchers, and five fee collectors.

Due to budget restrictions, a permanent law enforcement position in each district was lapsed last year, along with three seasonal law enforcement positions. Additionally, the loss of the Subdistrict Ranger positions, which resulted from the 1994 reduction in supervisors, continues to cause problems for district operations.

Rangers continue to enforce the Federal commercial fishing ban around the Mississippi islands. This year, nine shrimpers, gill netters, crabbers,

and bait fisherman were found in violation. A long liner and several shrimpers were warned just outside the boundary. Many other shrimpers were seen heading rapidly (and suspiciously) away from the Park's boundaries as rangers approached. Rangers in the Florida District made one commercial fishing case this year which was dismissed by the Magistrate Judge. Additional efforts by Florida District rangers have been hampered by lack of an appropriate patrol vessel and the lack of a boat storage location which would provide a rapid response capability.

The fourth annual "Mississippi Gulf Coast Boaters Rendezvous", usually held at West Ship Island, was canceled by the park and the U.S. Coast Guard when weather forecasts predicted 20+ knot winds and rough seas. Organizers moved the event to Deer Island, located just across a channel from the mainland. Organizers and participants were unhappy with the new location and intend to seek a permit to hold the event on Ship Island again next year.

Memorial Day Weekend crowds were down significantly over previous years due to the effects of Hurricane Opal, which shut down access to the Santa Rosa Area for the first time in its history.

Rangers were involved with two felony DUI cases, one search for a drowning victim in the park, one RV fire in the campground, one recovery of female attire worn by a male involved in an armed bank robbery, four medical evacuations via helicopter, and four jet ski accidents.

Significant Law Enforcement incidents are as follows:

Assaults	04	
Burglaries/Larcenies	63	
Disorderly Conduct		18
Motor Vehicle Accidents	11	
Vandalism	27	
Fugitives	4	

These figures reveal fairly significant reductions in several categories, primarily due to the closure of much of the park following the hurricanes and due to cancellation of the Boaters Rendezvous which brings over 5000 people and hundreds of law enforcement violations to one spot in one day. Additionally, the reduction in law enforcement staffing has reduced the amount of patrol and detection capability of the park.

The Florida Crime Information Center (FCIC) system at the Florida District radio dispatch office was upgraded in FY 96 in preparation for going online in CY 97. Once the system is online we will have a direct communication link with the FCIC system in Tallahassee. This will enable us to provide quicker and more reliable information to law enforcement rangers in the field. A recent inspection by the Florida Department of Law Enforcement showed that we were in compliance with all applicable state and federal regulations and policies.

Computer Aided Dispatch (CAD) software was developed by a local vendor for use in our radio dispatch operations. The software will enable us to better track criminal activity within the park and provide our protection staff with current information regarding incidents occurring throughout the area.

Resource Management

Fish Kills: During the summer (June/July) a fish kill comprised largely of the sea catfish, *Arius felis*, occurred along the upper Gulf of Mexico coast. Several thousand dead fish were documented on the north and south

shorelines of all the islands. Similar fish kills were reported throughout the Gulf of Mexico.

GIS Support of Park Planning: Following hurricane impact, resource assessments were made utilizing GIS and GPS technology. The accurate and almost immediate mapping of existing resources was indispensable in successful restoration planning and prevention of additional impacts. Additionally, the park's previously acquired GIS data was cataloged and developed by Dr. Williams, University of Southern Mississippi.

Nesting Sea Turtle Monitoring Program: The park managed an extensive sea turtle nesting and propagation monitoring effort this year. Resource Management personnel, rangers, and as many as 15 volunteers worked on this project. Forty six nests were documented and nine nests were relocated to higher ground to ensure protection from flooding caused by shoreline changes in the aftermath of Hurricane Opal.

Sea Turtle-Friendly Lights: Prior to sea turtle hatching season, the park installed several low-emittance lights and disconnected other unnecessary lights in the Fort Pickens Area to reduce the amount of artificial light reaching the beach. Artificial light is one of the most significant impacts to sea turtle hatchlings. In addition, the park was instrumental in the shielding and removal of numerous street lights at Pensacola Beach by Gulf Power. The park has also joined efforts to develop beach front lighting ordinances for beach communities.

Marine Mammal and Marine Turtle Strandings Monitoring: Five Kemps Riddle sea turtles and seventeen loggerhead sea turtles were stranded in 1996. Twenty-six bottlenose dolphin were stranded in the same time period.

Dune Revegetation Project: In cooperation with the Natural Resource Conservation Service and Escambia High School, sea oat seeds collected from the park were propagated and transplanted to hurricane-impacted dune sites within the park. Since no source of local sea oats existed, this project was undertaken to test the feasibility of "home grown" plants, prevent the introduction of non-native plant materials, and develop protocols for propagation.

Dune Protection Program: Sand fencing was erected in the Fort Pickens and Perdido Key areas to protect developed and emerging dunes from visitor foot traffic.

Protection of Water Quality in Park Waters The park played a pivotal role in the prohibition of several proposed sewage effluent percolation ponds adjacent to the park and Santa Rosa Sound. An engineering analysis by the NPS Water Resources Division and determination by park staff that the ponds posed unacceptable risks to park waters led to strong opposition by the park. As a result, county approval was denied.

Emergency Sand Renourishment at Fort Massachusetts: The Army Corps of Engineers contracted and completed the emergency placement of 50,000 cubic yards of sand fill around the fort.

Shoreline Monitoring: A mapping program was set up to document changes to the lands on Santa Rosa Island, Petit Bois Island and both East and West Ship Islands as a result of Hurricane Opal. This was accomplished by using a Geographic Positioning System (GPS) and working with Geographic Information System (GIS) experts to produce maps of park lands that were impacted by Hurricane Opal's storm surge.

Fire Trail Maintenance and Fuel Reduction: Extensive efforts by park staff resulted in the cleanup and removal of downed trees on fire trails and along the park boundary, which resulted from Hurricane Erin.

Colonial Shorebird Nesting Activity: 1996 was a banner year for nesting water birds in the Fort Pickens Area of the Seashore. With the increased habitat caused by the redistribution of sand along Santa Rosa Island, the Little Terns and Black Skimmers took advantage of the available habitat and returned to the barrier island in significant numbers during the spring of 1996. Signs were put in place to protect the birds from human disturbance while a program to monitor the numbers and species of birds was established.

A significant number of shorebirds nested on the Mississippi islands also, with significant populations at East and West Ship Islands. Unfortunately, many of the nests were inundated by strong tides, destroying the nests. Spoil Island, also in the Mississippi District, was the site of the largest nest colony of shorebirds in the past five years. This was the first documented nesting of royal terns, sandwich terns and gull-billed terns in the same time period. The nesting population of chicks and adults grew to approximately 2,000 individuals.

Removal of Exotic Plant Species: Park personnel conducted limited removal of exotic vegetation, including bladderpod and Sesbania species from the Fort Pickens and Perdido Key areas.

Winter Water Birds Survey: Winter Water birds Surveys were conducted bimonthly from October 1995 through March 1996.

Nesting Osprey Productivity Monitoring: For the second year, the Horseshoe area on Horn Island was closed to the public during the osprey nesting season. Nesting data and observations for 1996 are being compiled. Generally, it appears that the number of active nest is similar to 1995, with about 50 - 60 nests total on Horn and East Ship Islands.

Davis Bayou Pine Savanna Ground Water Level Monitoring: Water level data continues to be collected by the park in the ongoing analysis of the impact of residential development adjacent to the park boundary on pine savanna wetlands.

Bald Eagle Nesting Activity: During the hurricanes, the eagle nest at Horn Island was destroyed. The eagles rebuilt in an adjacent site and fledged one chick.

Research

Monitoring of Wave/Current Interactions and Sand Transport along the Soundside of Santa Rosa Island (FL) and West Ship Island (MS) to determine scope and effect of winter storms on sand transport systems of the barrier islands.

Hurricane Effects on Perdido Key Beach Nourishment: Researchers from the University of Florida conducted beach profiles on the eastern end of Perdido Key (onshore and offshore) to determine physical changes to the beach nourishment and spoil areas as a result of the hurricane. These new profiles were conducted on the same transects as the 5-year Perdido Key project for direct comparisons.

Survey of Bird Populations: A survey of bird populations including nesting, migrant, and wintering species on selected hurricane sites was implemented by the University of West Florida. A full assessment of habitat alteration or destruction will be included.

Limnological Survey of Freshwater Ponds: The ponds on Santa Rosa Island will be surveyed for water quality, flora, and fauna by the University of West Florida. Stability and alteration of the ponds will be examined over several time periods.

Hurricane Impacts on Seagrass Resources: The Dauphin Island Sea Lab will continue quantitative monitoring of seagrasses to determine hurricane effects on spatial coverage and growth. A "functional assessment" of all park seagrass beds will also be conducted.

Post-Hurricane Assessment of Biotic Pond Communities: The Gulf Coast Research Lab will revisit study sites used during a 1994 survey to assess hurricane impact to macroinvertebrates, fish composition, parasitological relationships, and fish feeding habits.

Post-Hurricane Assessment of Subtidal Macroinvertebrates: The Gulf Coast Research Lab will repeat a 1993 survey to assess the impact and recovery of macrobenthic communities in shallow subtidal habitats one year following two direct hurricane hits.

Hurricane Effects on the Distribution and Status of Amphibians and Reptiles: Southeastern Louisiana University will conduct a follow-up survey to a recent comprehensive inventory of park reptiles and amphibians. The survey will determine the current status of park populations and ascertain the short-term effects of two consecutive hurricanes.

Analysis of Plant Succession in a Post-Storm Surge Environment: The succession and rate of recovery of plant communities on Santa Rosa Island following Hurricane Opal will be evaluated by the University of West Florida. The study will focus on plant species, vegetation density, specific density, biomass/plant productivity, and vegetative cover. Specific impacts to plant species will also be determined.

Population Assessment of Red Fox on Perdido Key: A graduate student at the University of West Florida conducted a population study of red fox on Perdido Key. The study provided population indices for future trend analysis, habitat and carrying capacity determination, and physical location of active burrows. The study was the initial step of a population control program for this non-native predator.

Assessment of Bacterial and Nutrient Pollution: A two-year study was undertaken by the University of West Florida to determine water quality conditions of park waters, evaluate threats and impacts to public health and park resources, and identify possible sources of pollution. Preliminary surveys have indicated unusually high bacterial counts and nutrient-loadings. Area water quality degradation, often associated with extensive development, has been observed and documented.