In the chronology of Florida's environmental history, 1983 may well be identified as the year of the Everglades. Following on the heels of the sensationalized flooding and deer die-offs of 1982, the exceptionally rainy winter of 1982/83 continued to inundate south Florida, with the inevitable release of waters into the park. Faced with the prospect of at least 18 months of flooding and no alternatives with respect to water management practices, the park scientific staff prepared the now-famous 7-point proposal for emergency relief which was presented by Dr. Gary Hendrix to the South Florida Water Management District Board at their March 10th meeting.

In doing so, the park was pointing out the flaws in a system designed to alleviate flood waters or provide drought protection, without any consideration for the environmental needs of the park or the region. The proposal had the immediate support of scientists, environmentalists and conservation organizations and, surprisingly, from the SFWMD Board who, in a special meeting in April, agreed to implement the program.

Saying and doing are, however, two different actions, and as the weeks and months passed, very little happened. The initial problem was one of responsibility...the Corps of Engineers and the SFWMD jointly operate the system, and the Corps' legal mandate is quite narrow, leaving little latitude for experimentation with schedules, particularly in view of the fact that their actions might, according to some, induce rather than protect from flooding. In a very defensive posture due to intense public outcry and finger-pointing by other agencies, work on two points—modifications to L-28 and L-67 canal and levee systems—was begun, but on a drastically scaled-down basis.

Remembering the severe flooding of 1982, agriculture interests and East Everglades residents banded together to file legal action against the Corps to protect their interests. Negotiations faltered along, while the wading birds failed to nest, alligator nests were flooded, and vegetation exhibited visible signs of stress from the continued high water. Shark Valley remained submerged, and algae growth on the roadway virtually ended visitor use because of slippery conditions. Canoeing was the only reasonable activity in the sawgrass area.

The media sounded the death knell of the Everglades, proclaimed on a national basis. Congressional attention was focused on the issue and, in late November, legislation passed to authorize the Corps to experiment with water management practices to address the immediate problem. While the cooperative attitude has been encouraging, the concrete evidence is slow to materialize (see Exhibit A).
To add impetus to the importance of environmental issues, Governor Robert Graham announced an extensive "Save-Our-Everglades" initiative, addressing not just the park's problems, but the generic Everglades system, beginning with the restoration of the Kissimmee River, north of Lake Okeechobee, and using as his slogan a pledge "...that the Everglades of the year 2000 looks and functions more like it did in the year 1900 than it does today." As a part of publicizing this program, he held a two-day helicopter tour of the area, including a press conference at Shark Valley, which saw an amazing assembly of helicopters, media people and the attendant public assembled at the Shark Valley parking lot. Governor Graham has continued to work on this program, personally appealing to the Secretary of the Interior for assistance in completing the Big Cypress land acquisition program and support for the Kissimmee River restoration project which has considerable opposition from cattle, agricultural and development interests in central Florida.

In a culmination of a long-term project, the Trust for Public Lands successfully negotiated the sale of more than 50,000 acres to the State of Florida. The lands, purchased several years previously from the Aerojet Corporation, are in two sections located in the southeast corner and adjacent to the east boundary of the park, and represent a substantial protection from encroachment. The State has announced no management plan for the lands which will be administered by the South Florida Water Management District and Conservation and Recreation Lands. The transfer was made in an elaborate ceremony orchestrated by Joel Kuperberg, and held on the C-111 canal bank, with Governor Graham, former Assistant Secretary of the Interior Nat Reed, and a host of other dignitaries in attendance.

The following day, at a meeting of the South Florida Water Management District Board held at Flamingo, Jack Maloy announced his resignation as Executive Director, citing personal reasons. This change in leadership could profoundly affect the actions of this agency in the following months.

In addition to hydrology matters, the park also experienced several other significant events during the year. In May, the SER Operations Evaluation team visited the park. The park staff involved were unanimous in their opinion that this was the most positive, constructive and objective evaluation ever experienced. All recommendations for changes in park operations have now been implemented. Some of these (for example, the physical inventory) required extensive amounts of staff time to accomplish.

The community of Everglades City also attained nation-wide notoriety in July resulting from a sting operation by drug enforcement officers. Beginning at 3:00 a.m., the only access road to the city was blockaded and all traffic in and out of the area was halted. A staggering number of arrests were made, fishing boats and other property impounded, and word spread that over 200 sealed indictments had been handed down. The local attitude toward drug activity is generally apathetic. Most acknowledge they are aware of it, but feel it is no more reprehensible than the 'gator poaching and rum running of old. To the casual observer, very little change was evident three months later.

The restructuring of Washington and Regional offices resulted in FTE and funding for three new positions in Everglades...a staff person to assist the Chief of Maintenance, an Assistant Superintendent, and a Regional Contracting officer. Without exception, the individuals have proved to be a tremendous asset to park operations.
Persistent vacancies throughout the division, primarily in Finance, contributed to a challenging year. Staffing and recruitment activity throughout the park was active as evidenced by a 13% turnover rate versus 8% in FY 82.

The IBM PC has been a welcome addition. Certain personnel records have been developed for quicker access, and new programs will be developed to include supply, procurement, and financial data.

Parkwide staffing levels were as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>178</td>
</tr>
<tr>
<td>Less than full-time permanent</td>
<td>16</td>
</tr>
<tr>
<td>Part-time permanent</td>
<td>26</td>
</tr>
<tr>
<td>Temporary</td>
<td>68</td>
</tr>
</tbody>
</table>

Disciplinary and Adverse Actions taken:

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspensions</td>
<td>2</td>
</tr>
<tr>
<td>Reprimands</td>
<td>3</td>
</tr>
<tr>
<td>Warnings</td>
<td>2</td>
</tr>
<tr>
<td>Within-grade Increase Denials</td>
<td>3</td>
</tr>
<tr>
<td>Termination during probation</td>
<td>1</td>
</tr>
<tr>
<td>Reduction in Grade</td>
<td>1</td>
</tr>
<tr>
<td>Removals</td>
<td>1</td>
</tr>
<tr>
<td>Appeals to MSPB</td>
<td>1 (sustained)</td>
</tr>
<tr>
<td>Appeals to Office of Hearings &amp; Appeals</td>
<td>1 (sustained)</td>
</tr>
<tr>
<td>Informal Grievances</td>
<td>6</td>
</tr>
<tr>
<td>Formal Grievances</td>
<td>5</td>
</tr>
<tr>
<td>Formal EO Investigations</td>
<td>1 (outcome pending)</td>
</tr>
</tbody>
</table>

Funding levels were as follows:

<table>
<thead>
<tr>
<th>Department</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of Superintendent</td>
<td>$368,600</td>
</tr>
<tr>
<td>Administration</td>
<td>$325,200</td>
</tr>
<tr>
<td>Interpretation</td>
<td>$643,500</td>
</tr>
<tr>
<td>Resource Management &amp; Visitor</td>
<td>$1,321,800</td>
</tr>
<tr>
<td>Protection</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>$1,713,900</td>
</tr>
<tr>
<td>Research</td>
<td>$1,520,000</td>
</tr>
</tbody>
</table>

| Total budget                      | $5,893,000|

Quarters: As a result of the quarters evaluation, employee rental rates rose dramatically. The park-wide average was a 21.4% increase, ranging from a low of 10% to a high of 46%. At Fort Jefferson the average was 26%, ranging from 12% to 44%. Understandably, employees were quite dismayed by these increases; however, no organized boycott developed.
Equal Opportunity Efforts: The park's EO Committee this year has become a positive and dynamic force, instrumental in developing plans, initiating actions and supporting the concepts of equal opportunity.

Personnel: Actions implemented this year include:

--Developed the Affirmative Action Staffing Plan designed to assist supervisors with identifying staffing options.
--Developed and implemented the FEORP form which currently provides a pool of approximately 200 applicants. This program is being monitored to assess its value as an affirmative recruitment source.
--Attended 13 Job Fairs sponsored by universities, local community groups, trade schools, Dade County school system, the Hispanic and Black Councils, and Dade County's Employ the Handicapped Committee.
--Recruited for two positions having potential dual career family opportunity. Untried in the Service before, it elicited many inquiries from both personnel and EO offices and this approach has since been used by other parks.
--Actively recruited for disabled applicants to fill two laborer positions; two employees with disabilities were selected. One has been successful, but the other was terminated during the probationary period.

--Converted one coop student to a permanent full-time position following graduation.
--Established a coop agreement with Miami-Dade Community College and have made one appointment through this program.
--Expanded community outreach contacts and are currently working on a regular basis with six vocational rehabilitation counselors, the Florida State employment offices in Naples and Homestead, the South Dade Skill and Adult Education Center, the VA, the Vet Center in Miami, and five independent organizations offering employment assistance to the disabled.

Interpretation: Glades District personnel translated day-hike program information into Spanish to aid on communication with Hispanic groups. A listing of common Spanish phrases was assembled and a mini-course held for interpreters. An unsuccessful attempt to establish a stay-in-school program with the Miccosukee Tribal High School was made in October. A handicapped veteran of an under-represented group was recruited for the Glades District but was unable to accept the position on his doctor's advice.

Six division employees assisted in operating the park's career booth at the Youth Fair. Also for career fairs, a slide program showing different career opportunities in the park was developed.

In the Royal Palm District, a coop student was converted to a permanent technician position, a blind interpreter was recruited for the Main Visitor Center but did not respond to an interview request, the division car was modified with hand controls for accessibility, and scripts for vision-impaired visitors were developed for two main visitor trails.

Maintenance: Minorities presently fill 23 permanent positions (39% of the division's permanent workforce).

A handicapped person was recruited for a permanent position at Flamingo and has firmly established himself as a welcome and respected addition to that operation. It is necessary to be very specific regarding limitations of the handicapped employee due to safety concerns in use of tools, equipment and chemicals.
A VRA veteran was also recruited for a permanent position at Pine Island and is progressing through his on-the-job training program.

A policy/guideline to assist employees in planning their individual career goals was established which includes general discussion at bi-weekly squad meetings with a follow-up to identify individual personal goals. This has been followed with one-on-one counseling sessions and management recommendations for training programs, OJT, etc., to assist the employee.

Research: Developed a special student program for Ms. Ilsa Patton, a high-achievement high school student. During the spring she worked with the Research Director to observe his job and develop a seminar for her high school colleagues. A cooperative program with Dade County Junior College allowed Ms. Patton to work summers with us and part-time during the school year. The program allows interested high school students a chance by participation to examine careers in environmental research.

Six female graduate students were given special appointments during 1983. Their work will give them credit toward completion of their degrees. Several universities now require or encourage a year of experience in the student's chosen field as part of their advanced degree requirement. Graduate students, with university concurrence, may be sponsored to one year tours of research. This has been a particularly successful way to help female professionals gain work experience in environmental science. This year we sponsored women from Pennsylvania State, University of Virginia, Rutgers, Florida International University, Louisiana State University and Indiana University.

Supply: Supply Clerk Chris Cruz's election as Chairperson of the Federal Executive Board's Hispanic Council culminated a year of outstanding EO activity. The script of his slide program, "Hispanic Heritage of our National Parks" gained the approval of the NPS Chief Historian, Edwin Bearss. He participated in a conference for Regional Hispanic Employment Managers and was selected and trained as a member of the SER EEO Recruitment Team.

**INTERPRETATION**

The interpretive program was matched closely to major themes and topics related to park resources and their condition in today's environment. Division funding was essentially the same as the previous year, and could not cover some major needs for visitor contacts and curatorial work.

Physical improvements made at Shark Valley in order to accommodate joint concession-NPS operation of the tram service were completed; however, heavy rains during the dry season prevented tram operation most of the year, severely impacting the new concession and disappointing many thousands of visitors. Alternative walks were offered which partially filled the need. The new interpretive boardwalk through Bobcat Hammock was completed.

Plans have progressed to rehabilitate the exhibits in the Parachute Key and Flamingo Visitor Centers with production scheduled for FY 85.

Two research studies on Everglades interpretation completed by graduate students revealed that: 1) our personal services closely matched the interests of visitors, producing a high percentage of satisfaction; and 2) visitors were not getting enough from the Royal Palm exhibits.
Interpretive aids for vision-impaired visitors were written as scripts for tape-recorded messages keyed to several boardwalks and trails throughout the park. Two issues of the tabloid-style activities schedule were published—for summer and winter seasons.

Royal Palm District: Provided information services at the Main Visitor Center to 255,119 visitors. Interpretive contacts through programs and roving interpretation totaled 32,786 persons. This latter figure is particularly interesting because during the last quarter of 1983 the Anhinga/Gumbo Limbo Trails were completely renovated, periodically interfering with normal visitor flow through that area.

Volunteerism increased in the District with several new volunteers providing services such as bulletin board preparation, roving interpretation, and a German translation along the trail.

Gulf Coast District: Although the number of people entering the Gulf Coast Ranger/Visitor Center for 1983 increased nearly 10,000 over the previous year, approximately 2,000 fewer people rode on the concession tour boat, due, perhaps, to a competitor operating from a private marina outside the park. Park naturalists narrated on 148 concession boat trips compared to 92 trips in 1983.

The annual Seafood Festival in Everglades City (February 8 & 9) attracted some 15,000 people; over 2,200 visitors were contacted at the park booth.

Canoeing continues to be a popular activity; approximately 630 visitors went on day trips (either alone or with a naturalist), representing an increase of about 100 over the preceding year.

An important improvement in visitor services was the relocation of the public restrooms from upstairs to ground level in an extension to the visitor center, providing access for the handicapped. Two new backcountry campsites were installed along the Wilderness Waterway to relieve visitor impact on existing campsites.

Flamingo District: In FY 83 the Flamingo Visitor Center served 60,118 visitors. Attendance at interpretive activities (walks, demos, talks, canoe trips, etc.) was up by 20% from the previous year; however, evening program attendance was down 7%.

Persistent flooding around the amphitheater made visitor access difficult, and programs held in the Visitor Center lobby seldom attracted more than 50% of the norm.

Trail guides to the new Nine Mile Pond Canoe Trail and the Snake Bight Trail were written. Interpretive labels for the Visitor Center were illustrated, captioned and professionally produced.

Lead Park Technician Bobbie Pettit-Tilmant was named park curator as a collateral duty, attended two curatorial training courses, and devoted an average of one day per week working on the Research Collection throughout the spring and summer. This, together with a lengthy period of absence of the District Naturalist due to illnesses and transfers and the early departure of the summer seasonal, created a heavy workload for the technician.

The amphitheater sound system was improved, though problems associated with marine conditions and old age persist.

The writing and coordination of backcountry permits continued to be a significant Flamingo interpretive duty. Throughout the busy months (January, February and December) assistance provided by Resources Management and Protection helped tremendously.
Shark Valley: Shark Valley recorded 114,242 visits during 1983—20% of the park's total visitation. Park interpreters made 57,903 visitor contacts totaling 20,728 visitor hours.

A 12' x 20' visitor contact facility opened for operation January 13. The cost of the unit was $8,385 with $3,000 donated toward the construction by Everglades Natural History Association.

Volunteers-in-the-Parks donated a total of 824 hours visitor center duty from October 1 until December 11. NPS funds were not budgeted to staff the facility during that period.

Because of high water levels caused by above-normal rainfall and water releases from the Conservation Areas into the park, tram tours—a joint effort by the concessioner and the NPS—operated only 21 days (May 20–June 9) serving a total of 1,270 visitors. Since the completion of the Loop Road in 1966, it has been closed during the winter months (dry season) due to high water levels on three occasions—a 2½ year period between 1968 and 1971; in 1980 water releases from the conservation area curtailed service from March 3 until April 5; and again June 27, 1982, operating for only three weeks since then. High water levels presently still exist. Shark Valley was the focal point of media attention to illustrate how Everglades National Park is affected by long-term flooding. Local and national newspapers, radio and television interviewed rangers and the public and took innumerable shots of people wading through water on the road, and birds standing forlornly along the dry embankments.

Glades District: Program emphasis shifted somewhat in 1983 partly due to flooding at Shark Valley and the absence of trams. In addition, the Nest Key camping program was abandoned in favor of increased day visits to Key Largo Ranger Station where the glass-bottomed launch (newly acquired from FOJE) was used to study the marine grass flats, reducing trampling impact. A self-guiding trail system for the Key Largo hammock was developed.

The Fort Jefferson National Monument camping program was adapted to include a service project (plantings to reduce erosion) for each camp and to reach middle school student groups. A new, competitive selection system for FOJE camps was instituted based on applicant’s lesson plans.

Using volunteer labor, the Hidden Lake Interpretive Center was provided with a composting toilet.

The Loop Road Center had to suspend use of its flush toilets for three months beginning in January due to a back-up of sewage water caused by heavy rains. Due to this problem, the Center's sewer system was included in the cyclic maintenance program for FY 85. Insufficient funding precluded replacement of the residence at the Center; it remains a high priority.

The Sandfly Island day use program was not attended in early 1983 following its reinstatement by the Service due to the schools' loss of confidence in a program that was not consistent; however, the program is fully booked for FY 84 with the Collier County School Department's policy support due to concentrated efforts by the North Area ranger.

The newly established North Area 8-month technician position with residence at the Center has improved security and overtime and compensatory time have been practically non-existent. The clerk typist position has greatly improved the productivity of the District and should be retained for future seasons.
VIP Program: Everglades National Park greatly increased the number of VIP's and hours in FY 83 with 156 volunteers contributing a total of 11,075 hours. Calculated at the GS-5 level, VIP labor represented a donation of $76,199 to the park. During FY 82, 80 volunteers contributed 8,633 hours.

They were utilized in almost every aspect of park operations. They assisted with studies of wildlife ecology, plant ecology, marine biology and hydrology at the Research Center donating labor and expertise, gathering field data and assisting with the development of research publications. The Resource Management Division utilized VIP's to assist with the annual turtle survey at FOJE, fish studies and surveys, exotic plant control, data computer input, and organization of slide files. Long Pine Key Campground again was staffed with a host couple during the busy winter season. The Interpretive Division realized a savings of $14,000 by utilizing VIP labor to build tent platforms at the Hidden Lake Interpretive Center. VIP's also donated assistance staffing the visitor center desks, translating park trail guides and visitor information packages into German, cataloguing park slides and films, and performing curatorial services at FOJE. Group volunteers (Boy and Girl Scouts) donated time and effort to clear trails overgrown during the slow summer season.

LAW ENFORCEMENT & RESOURCES MANAGEMENT

Visitation: Total visitation of 579,944 continued the trend of decline of the past four years; however, the total figure also represented a significant change in the calculation process. The multiplier was reduced from 3.5 to 2.5 during the months of June through October; also, employees entering through the main park entrance are no longer included in the total as "non-recreational visitors". We believe this system reflects actual numbers of visitors more accurately. The entrance station collected $177,768 for CY 1983. Campground revenues were: Long Pine Key-$34,696 and Flamingo-$43,001.

Law Enforcement Summary:

| Violation notices written | 448 |
| Written warnings issued  | 543 |
| Part I offenses          | 33  |
| Motor Vehicle Accidents  | 30  |
| Boating accidents        | 7   |
| Controlled substances:   |     |
| Bales seized             | 51  |

(resulting in losses of $24,500 $23,925)

Fatalities for year:

| Boating accident:: | 1 |
| Heart attack       | 2 |
| Airplane crash     | 1 |
| Boating (FOJE)     | 1 |

Total 5

Commercial fishing remained a concern and 26 cases were presented to the U.S. Magistrate.

Car clouts totaled 27, resulting in $11,322 losses, $1,901 recovered, and 2 arrests.

Two airboats were seized following extended chases and charges of fleeing an officer were lodged. Two arrests were made; one individual charged with assault on a Federal officer; one guilty plea to date.
Three major inholdings removed at Alligator Bay, Lostman’s Five and Huston Bay costing 199 man hours in clean-up time.

Ranger personnel assisted with special events at Canaveral, Kennesaw Mountain, Big Cypress, Blue Ridge Parkway and Miccosukee Indian Tribe.

At Flamingo, the Buttonwood Canal plug project was in full operation during 1983. Water quality has been monitored on both sides for turbidity, temperature, salinity and conductivity. The floating dock for canoes was completed and receiving a high level of use. The fish cleaning table adjoining the north boat launch ramp was screened, and the table at the south ramp was removed; as a result, pelican mortality has been reduced.

Backcountry chickees were added at Pearl Bay, South Joe River and Oyster Bay; Wedge Point campsite has been deactivated.

In accordance with the directives contained in 36 CFR draft, the Superintendent compiled a list of all closures and public access restrictions made under that authority. These "Superintendent’s Orders", dated May 1983, were used as Service-wide guidelines. (Exhibit B)

ENP sponsored a SER Boat Captain's course in September with participants from the majority of the region's boating areas. Four ENP employees graduated from FLETC basic law enforcement.

Resource Management Plan: A review document was prepared from the project statements contained in the park's approved Resource Management Plan. These statements were updated by both Research and Resource Management. The Superintendent determined that neither the Resource Management Plan nor this document would go through the public involvement process at this time.

This document was reviewed by the park's staff and it was decided to update the existing plan and prepare new five-year programming sheets. These changes will be submitted to SER for approval.

Big Cypress National Preserve Minerals Management: The Big Cypress Swamp area was under a one-year oil and gas access moratorium imposed by the State of Florida affecting development planning in 1983 from February through December. Thus, no new plans of operation involving road construction were received. Work on four plans which were already on hand continued through approval; the process on one other plan was suspended until resolution of the access issue. These plan approvals resulted in the upgrading of approximately 13 miles of road to an "all-weather" status, construction of one mile of new road and three pad extensions. Principal in these developments was the initiation of Exxon's Raccoon Point Field project. A small oil spill occurred when a tanker carrying crude oil overturned on the 13 mile road. Exxon responded immediately and permanent damage was negligible. The review process was completed on the draft Sensitive Resource Areas Map for Big Cypress National Preserve. The comment period provided no substantive additions or changes, and the plan was approved December 1983.

Backcountry Management: The majority of backcountry use in the park centers on the water areas. The principal users are sportfishermen who visit Florida Bay and the Gulf Coast sections with approximately 37,850 boats recorded through the year. The mandatory backcountry permit system for overnight stays showed a 4% increase over the previous year with 1,203 permits issued. Visitor impact is monitored at campsites using established photopoints and quantitative measurements. Six additional campsites were established by building elevated platforms (chickees) at selected sites, with one designed to provide handicap access.
Air Quality: Threats to the park's air resources continued to develop during 1983. Comments were submitted to the State of Florida's Public Service Commission on a Department of Energy feasibility study regarding conversion of Florida Electric powerplants from oil to coal burning. Two of the sites studied were Florida Power and Light's (FPL) Turkey Point and Port Everglades plants.

The decision by the Florida Department of Environmental Regulation on the petition by FPL to designate the park a separate baseline area under the Prevention of Significant Deterioration Section of the Clean Air Act continues to be held in abeyance. The NPS initiated research aimed at determining the effects of increased emission levels on Everglades' biological resources also continues. The first phase of the Florida slash pine and bromeliad studies has been completed. The second phase of the slash pine study has been funded and is underway. The orchid study has encountered design problems and is continuing. NPS and FPL have reached agreement in principle on a cooperative agreement in which FPL will fund additional research in the amount of $200,000. FPL has also provided the park with approximately $15,000 worth of quality assurance equipment to supplement the park's monitoring program.

Adjacent Land Use: During 1983, 281 permits required under Section 404, Clean Water Act of 1977, and Section 10, River and Harbor Act of 1899, were reviewed; the primary concern being that adjacent development could affect water quality and flow into the park through the two major natural drainage systems. Permit applications range in scope from filling wetlands for single family residences, to large scale commercial development.

The area of particular concern remains the 242 square mile tract immediately adjacent to the east boundary of the park known as the East Everglades. Although a zoning overlay ordinance was adopted by Dade County defining use in this area, unauthorized dredge and fill activities continue. The park resource staff and personnel from Dade County's Department of Environmental Resources Management monitor the area with periodic reconnaissance overflights.

Marine Resources Management: In May 1983, the Assistant Secretary of the Interior instituted a cooperative studies program between NPS and USFWS to determine, by October 1985, the surplus amount of finfish/shellfish resources which could be safely taken from park waters. Under this agreement, the marine resources staff for the remainder of CY 1983 was directed to: resurrect all creel census data from 1972 to the present; analyze this data for trends in harvest/catch/effort; initiate periodic overflights of park waters to update the predictive equation for estimated boating use; begin creel sampling eastern Florida Bay waters; and, acquire all needed ADP hardware/software to accomplish the analysis tasks. The staff was also committed to continuing creel census of sportfishermen in Flamingo and Everglades City. Additionally, the staff issued 111 commercial fishing permits and 145 professional guide fishing permits in 1983.

The creel census interviewed 6,675 boats (17,355 boaters) which represents about 76,800 man-hours fishing park waters (about 18% of estimated fishing/effort). Using these values, the staff estimates that 404,062 man-hours of recreational fishing by 93,968 recreational fishermen yielded an estimated harvest of 427,196 finfish. This represents a 35% increase over 1982. The estimated catch from the guide fishery increased 142% over this period while commercial catches decreased 37%.

The creel census program using an interview was discontinued at Fort Jefferson due to lack of funds and has reverted to a voluntary, mail-in reporting format. During the sample period when fishermen were interviewed, the sample size increased by 400%.
Sea turtle population studies at Fort Jefferson continued under an MOU with the National Marine Fisheries Service. In 1983, the field work concentrated on nest monitoring and tagging female turtles at East Key. During the survey period (May-July), 18 female turtles were tagged (including the first Florida Keys record of a green turtle Chelonla mydas). Due to favorable weather conditions it is estimated that an 80% hatch rate should be expected and we feel confident that about 25 females represent the "odd year" nesting population at FOJE.

Consultation with the Department of Justice continued on the litigation (OFF, et al. VS. DOI) with the commercial fishermen. From May to October, the staff assembled the Administrative Record for this case and assisted the Solicitor and DOJ attorneys in the drafting of a Motion for Summary Judgement and subsequent replies to the Plaintiffs. The hearing on the Motion for Summary Judgement is scheduled for early January 1984.

Fire Management Program: Fire research studies were not implemented in 1983 due to lack of funds; however, these projects have been formulated and improved should funding become available.

As a cooperative effort with the Florida Division of Forestry, we prescribe burned in the East Everglades. This was the implementation year for the cooperative program. It should provide the park with substantial protection from wildfires starting in the East Everglades area. Approximately 5,000 acres (high incidence arson fire areas) were burned.

The total fire load for 1983 consisted of 24 fires (average about 50/year); eleven prescribed fires, ten lightning strike fires, and three incendiary (man-caused) fires. The incendiary rate has continued to be low due to the fuel reduction burns carried out in our prescription program and past moderate winter seasons.

A cooperative agreement was developed with the USAF regarding a lightning detection system; however, the agreement has not been finalized.

Major elements of the Fire Management Plan need review and alteration and a revision was begun with a completion date set at the end of FY 84.

In cooperation with an interagency agreement (via BIFC) Jonni Medford and Bob Doren are participating in the Interagency Fire Control effort. Jonni has been designated as a Fire Dispatcher and Bob as an FBO trainee on the SER Interagency Overhead Team.

Fire records and data for several fire related projects were card-punched for computer input for analysis in 1984.

Firepro fell into a coma and is in critical condition with a poor prognosis.

Exotic Plant Control: The Exotic Plant Control Program was evaluated and redirected in 1983. The program objectives were to identify research needs in the area of control efficacy, cost and manpower requirements; establish and monitor small herbicide feasibility study plots; insure standardized methods were used throughout the park; standardize data collection forms; and direct a limited parkwide program of exotic plant control. To meet these goals, Resource Management: co-organized an Exotic Plant Control Training session for personnel of the four adjacent NPS areas, produced a safety film on Exotic Plant Control methods, designed and implemented the use of a standardized 10-344 for reporting exotic plant control efforts, computerized all control data, produced an Exotic Plant Control Handbook, directed a limited control program, and directed two herbicide feasibility studies.
One feasibility study involved the cost effectiveness of Schinus control and is continuing. The other study was directed at the determination of the most effective treatment of Casuarina. The latter study involved study plots in the Key Largo, Pine Island, and Everglades City districts. Evaluation of this study resulted in a complete change in the method and herbicide used to control Casuarina; this "new" method is more effective, environmentally safer, faster and cheaper. Control efforts were aimed primarily at Casuarina, Melaleuca and Schinus, although other species were treated in select locations. Between control efforts and research studies, 35,886 exotic trees and shrubs were treated (killed).

In addition, Resource Management was contacted by nine agencies for information on control methods. Dade County Parks also sent over a crew to be trained in Schinus control methods.

As part of the exotic control program, a review and compilation of all past work in the Hole-in-the-Donut was begun to provide a single analytical evaluation report to include qualitative as well as quantitative information maps locating project sites, conclusions based on evaluation of work to date, and a general discussion.

Pesticide Program Administration: Eleven pesticide usages were proposed for the park and Fort Jefferson. Each request was evaluated for its intended use as to application methods, safety, and efficacy, resulting in 10 approved and one denied. Integrated Pest Management Plans were submitted and approved by SER for Exotic Plant Control, Native Fire Ant Control, and Mosquito Management.

Five park personnel were certified by the State of Florida to apply insecticides for mosquito control in public areas.

All remaining supplies of herbicides which are no longer approved for our use (2,4D) were disposed of in Hazardous Waste Disposal Sites.

**MAINTENANCE**

As in past years, construction/rehabilitation projects continue to place an extremely high demand on supervisory staff time. Prolonged delays were very evident as work continued on the new employee residences and rehab of the existing residences at Flamingo. A number of contracts beneficial to both the visiting public and the concessioner were awarded late in the fiscal year with work to commence early in FY 84. These contracts involve approximately $675,000 in expenditures as follows:

--Complete rehab of eight cottages - Flamingo
--Continued replacement of docks and pilings - Flamingo Marina
--Enlarge south boat launch ramp - Flamingo Marina
--Stabilization and resurfacing of Anhinga and Gumbo Limbo Trails - Royal Palm
--Drill new wells and rehab potable water systems - parkwide.

Other construction rehab contracts awarded in FY 83 with work commencing in FY 84 include:

--Rehab first phase of Daniel Beard Center (main structure at Missile Site)
--Construction/installation of three Octa-Structures (quarters) at Key Largo and Tamiami Ranger Stations. These units are being favorably viewed as the front-runner for eventual replacement of all trailer-type quarters in future years.
--Contract to flood coat or reroof 12 to 14 units throughout the park, including the Dan Beard Center.
Completed day-labor projects of direct benefit to the visiting public included:
construction of backcountry campsites; rehab work of grounds and facilities at both
Long Pine Key and Flamingo campgrounds; elevated wooden trails at Royal Palm and
West Lake; rip-rapping of dock area at Everglades City; extensive rip-rapping and
stone replacement along south bank of Buttonwood Canal (in cooperation with South
Florida Water Management District).

Day-labor projects that upgrade utilities and other park functions include: rehab
of Flamingo maintenance and warehouse facilities; rehab of Flamingo boat hoist; repair
at Flamingo sewage disposal plant, including major repair/replacement of motors at
various lift stations; upgrading of carpentry shop, Flamingo; and extensive rewiring
and upgrading of electrical service, main entrance station.

Continuing efforts to develop cooperative programs with other agencies has proven
to be extremely beneficial to the park. A number of projects at the down-range
missile site and at Fort Jefferson have been completed by the Air Force Reserve unit
from Homestead AFB. A program involving participation of inmates from South Dade
Correctional Institution has provided the means for accomplishing valuable labor
intensive projects.

The ongoing program to upgrade facilities for the handicapped included the construc­
tion of a ramp at the rear of the headquarters building, construction of handicapped
picnic tables for Long Pine Key Campground, handicap aids built into trail surfaces
at Gumbo Limbo and Anhinga Trails, and relocating of screen doors at the east end
of the Flamingo visitor center to provide easier access to the building. One of
the new backcountry chickees was designed for handicapped access through the efforts
and advice of Shirley Beccue.

The quality and dependability of the park's telephone system has been a major manage­
ment concern for some time. After lengthy negotiations with American Bell, the ITT
contract was terminated and a complete new system was designed to serve the head­
quartes with subsequent additions of the Research Center and Daniel Beard Center,
including tie-lines to Big Cypress. The advantages of the new system include the
latest state of the art communications features, plus the maintenance of all switching
equipment, including lightning damage, power failures, etc. The improvement in quality
was also contingent on the installation of the "Slick 76" cable and carrier system
from Homestead by Southern Bell.

The changeover has not been without problems. Delays occurred, and extended complete
failures of the system were frequent in the initial stages. Staff had to be trained
in the use of features, switchboard operation and programming of equipment. It
involved a heavy dedication of time and attention and the entire system will not be
operational until the Dan Beard Center renovation is completed.

SOUTH FLORIDA RESEARCH CENTER

A list of the 1983 publications is included as Exhibit "C".

Hydrology: Unusually heavy rainfall throughout the Everglades in January, February
and March filled Lake Okeechobee and the Conservation Areas north of the park. The
Army Corps of Engineers (COE) began extensive water releases to the park in order
to keep water levels within the Conservation Areas below their regulation levels. In
addition, the Water Management District began a program of pumping excess water out
of the Everglades Agricultural Area (EAA) into Conservation Area 3A increasing its
water levels. The park was already extremely wet from high rainfall. In fact, water deliveries to the park in the previous October ('82) had broken the record. The outlook for park wildlife was very poor as the water management system appeared able to get rid of flood water only by routing it through Everglades National Park. The park appealed to the Water Management District Board to take emergency measures to redistribute as much excess water as possible before it reached the park, requesting seven points to mitigate the flooding caused by canals, levees, and maintenance of water regulation levels.

Landowners and farmers in western Dade County objected to the park's request and threatened a law suit should any flood waters be rerouted through Northeast Shark Slough. However, restoration of water deliveries into Northeast Shark Slough are essential to mitigation of flood impacts on the park. Following inquiries of all parties by local Congressmen and Senators, a bill addressing the East Everglades was passed and signed by the President (PL 98-181) in November, providing for an experimental water release program for Everglades and extended flood protection to homeowners in the East Everglades that might be affected.

Wildlife: Wading bird nesting was extremely poor because of the rapid flooding of adult feeding areas in February. In addition, heavy rains and severe weather inhibited nest formation within the park. Eagle nesting was the poorest on record and Osprey nesting was also very low, as it has been for several years. Alligators lost approximately 57% of their eggs when water levels rose in the summer. Alligators nesting in the northern area of the park have suffered nest flooding in the majority of the last five years.

Fisheries: In May the park negotiated a cooperative research program with the U.S. Fish and Wildlife Service to evaluate the fish stocks of Everglades National Park and determine if sport and commercial fish harvest adversely affect the stocks. The park initiated a $2 million program to evaluate fish recruitment into the park, movement of fish in and out of the park, habitats essential to fish life cycles, abundance of food important to fish, fish population characteristics, and the level of sport and commercial harvest. These studies, hopefully, will provide the park with a technical basis to manage fish harvest within the park.

Research Advisory Team: The research program formed a 5-member advisory team to assess our efforts to improve water management for the park. Team members came from universities and top-level research posts in federal government. The first meeting in February was designed to acquaint team members to Everglades water management problems and the scope of our research program. It met again in July to formulate a calendar of review meetings and discuss how to involve the team in research decisions. Several of the team members have participated in reviewing our draft reports, planning research projects, and recommending long-term cooperative programs we need to develop with academic research programs.

CONCESSIONS

Sammy Hamilton, Jr.: Although the concessioner had planned to close during the summer months, the level of business substantiated keeping the service available. Another factor was the operation of a competitor, Doug House, offering sightseeing tours from a location outside the park. The atmosphere has not been one of cooperation between the two operations, although for the most part, the competition remains outside the park or offers transportation only through park waters under the auspices of a commercial use license.