

Western Cape Sable Sparrow Habitat

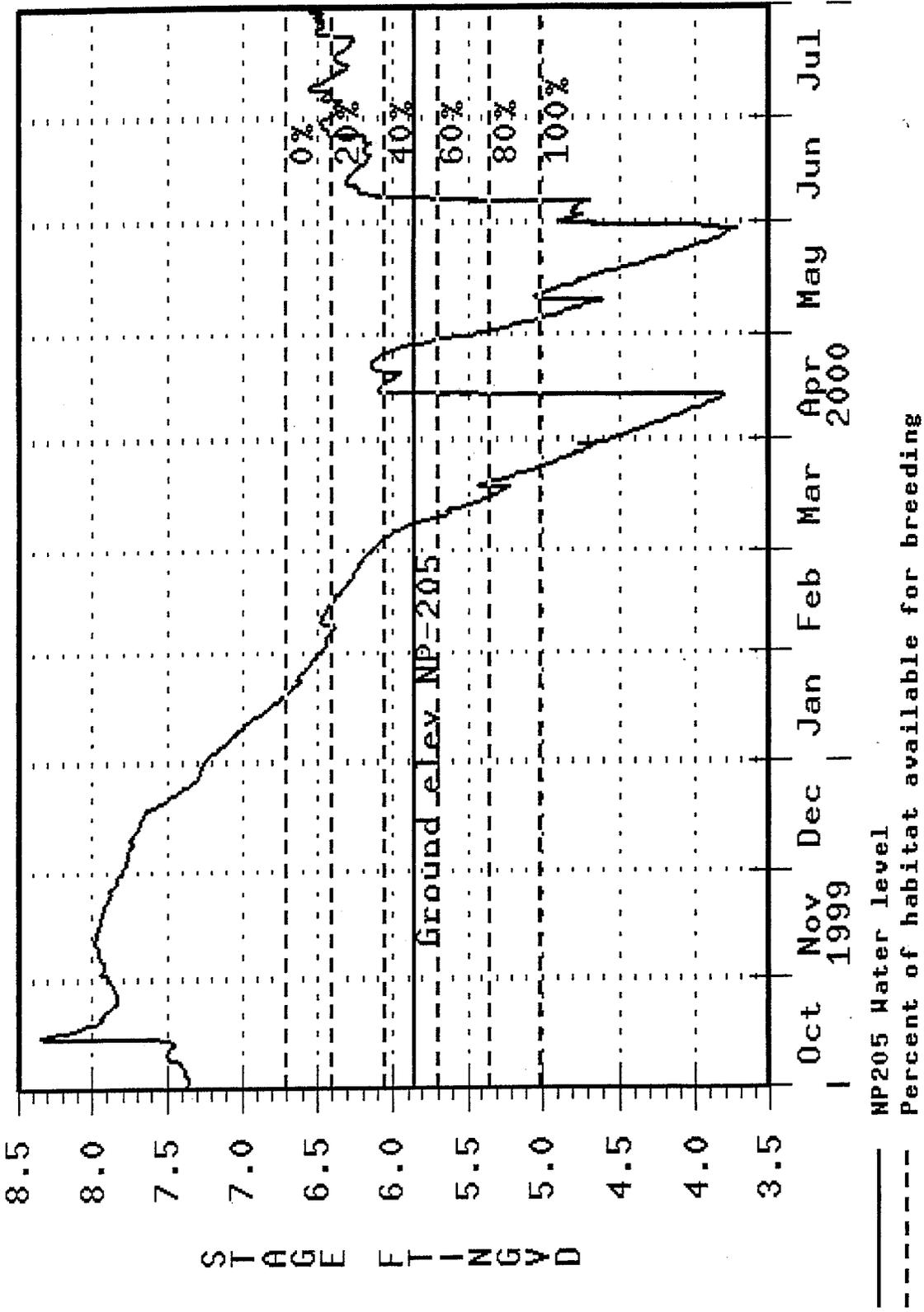


Figure 4. Water levels and percent of habitat available in subpopulation A, measured at NP-205. Data are provisional and subject to revision

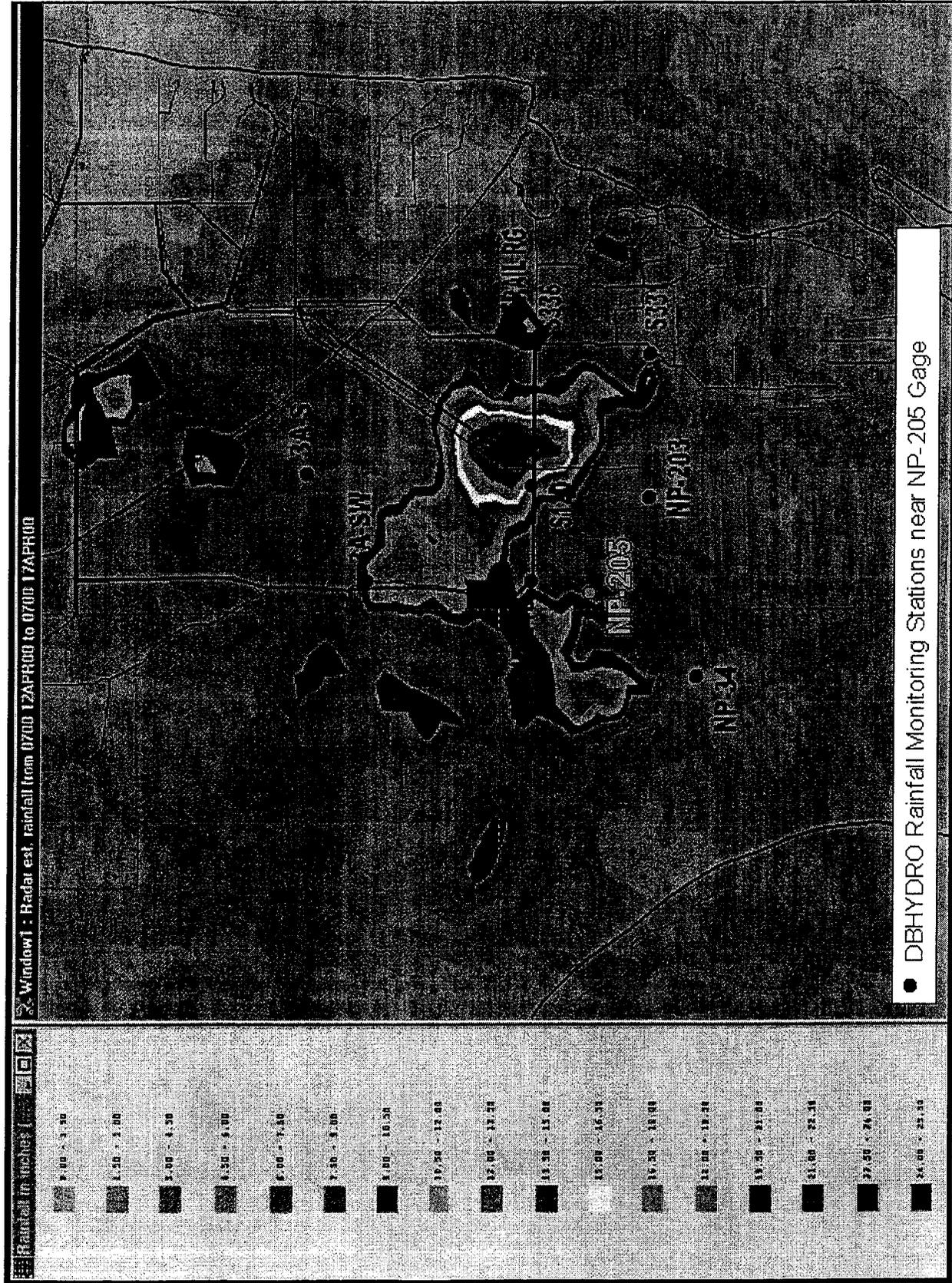


Figure 5. Radar (NEXRAD) image of total rainfall from April 12 - 17, 2000.

Drawing for illustration purposes only - not to scale

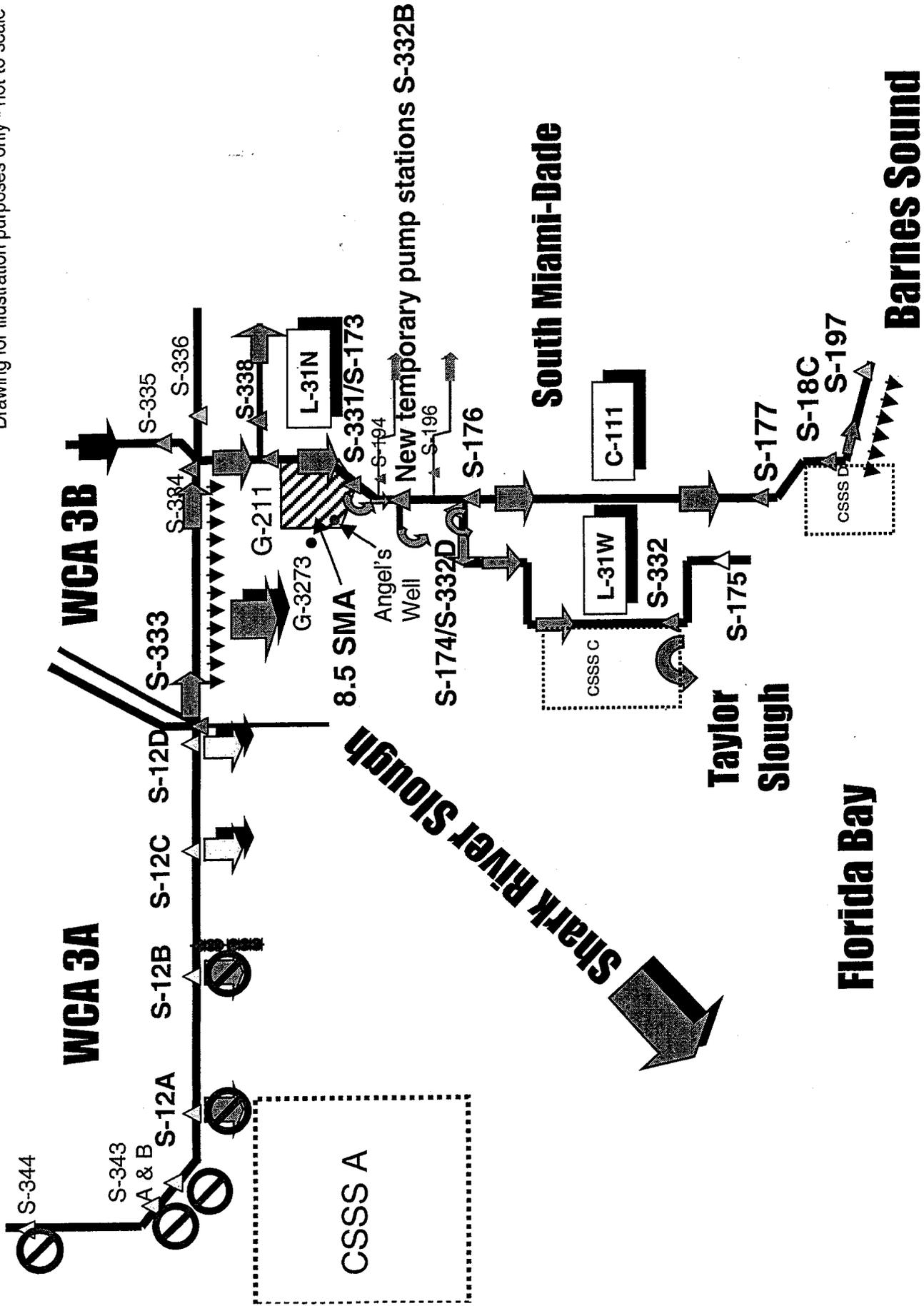


Figure 6. Schematic of the structural operations of the ISOP.

Eastern Marl Prairie Habitat, Subpopulation C

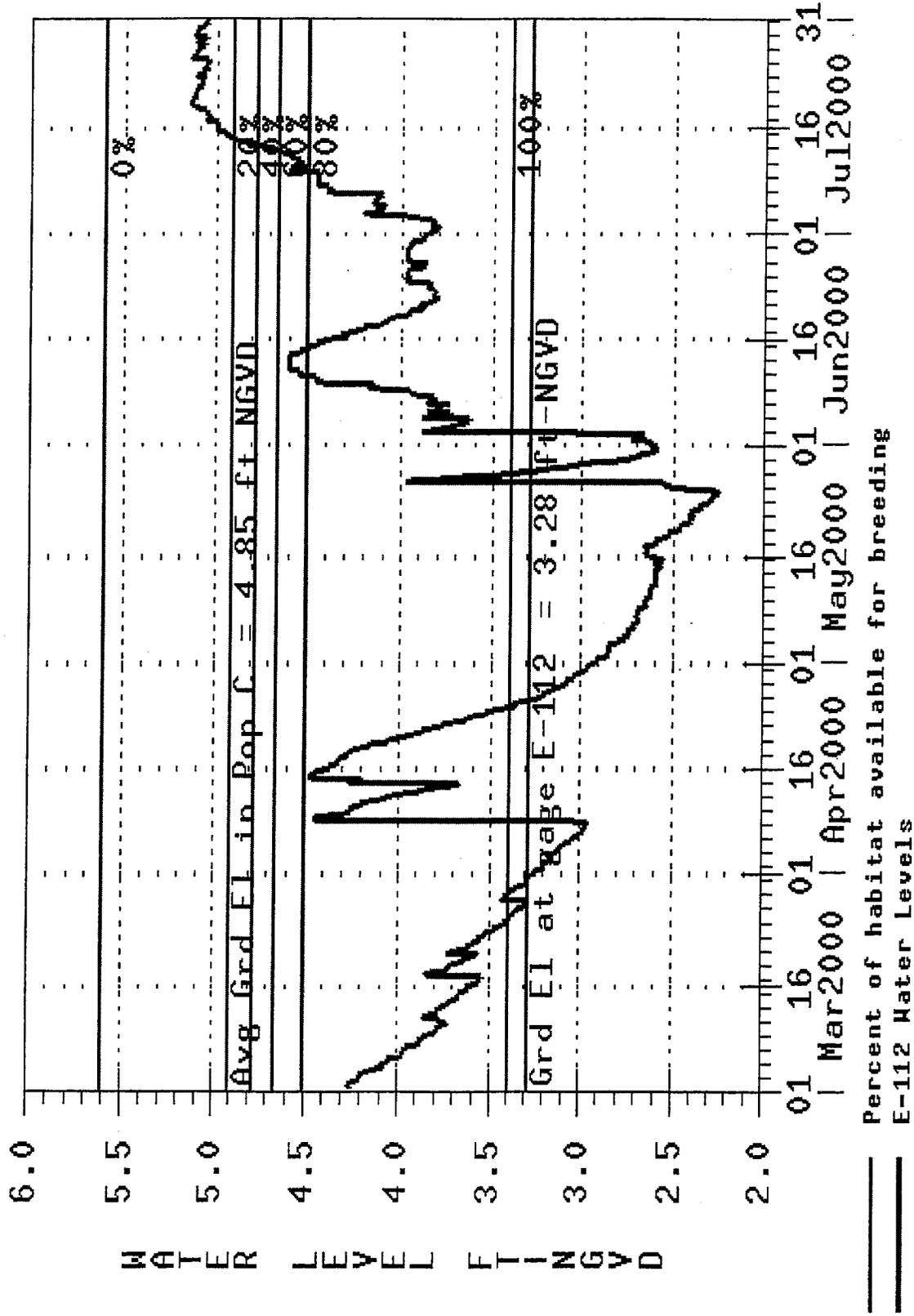


Figure 7. Eastern Marl Prairie Habitat, Subpopulation C.

Data are provisional and subject to revision

Eastern Marl Prairie Habitat, Subpopulation D

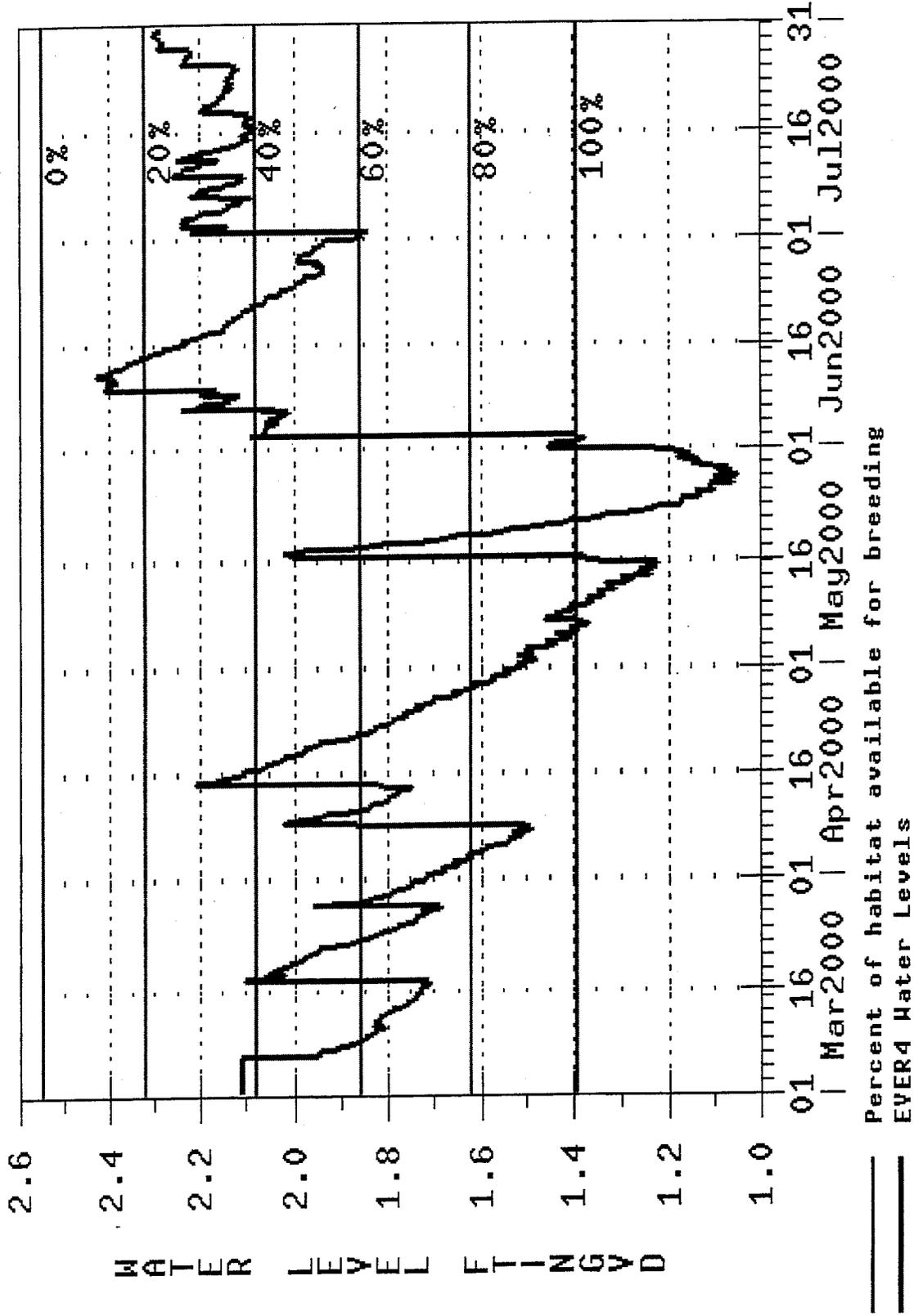


Figure 8. Eastern Marl Prairie Habitat, Subpopulation D.

Data are provisional and subject to revision

Eastern Marl Prairie Habitat, Subpopulation F

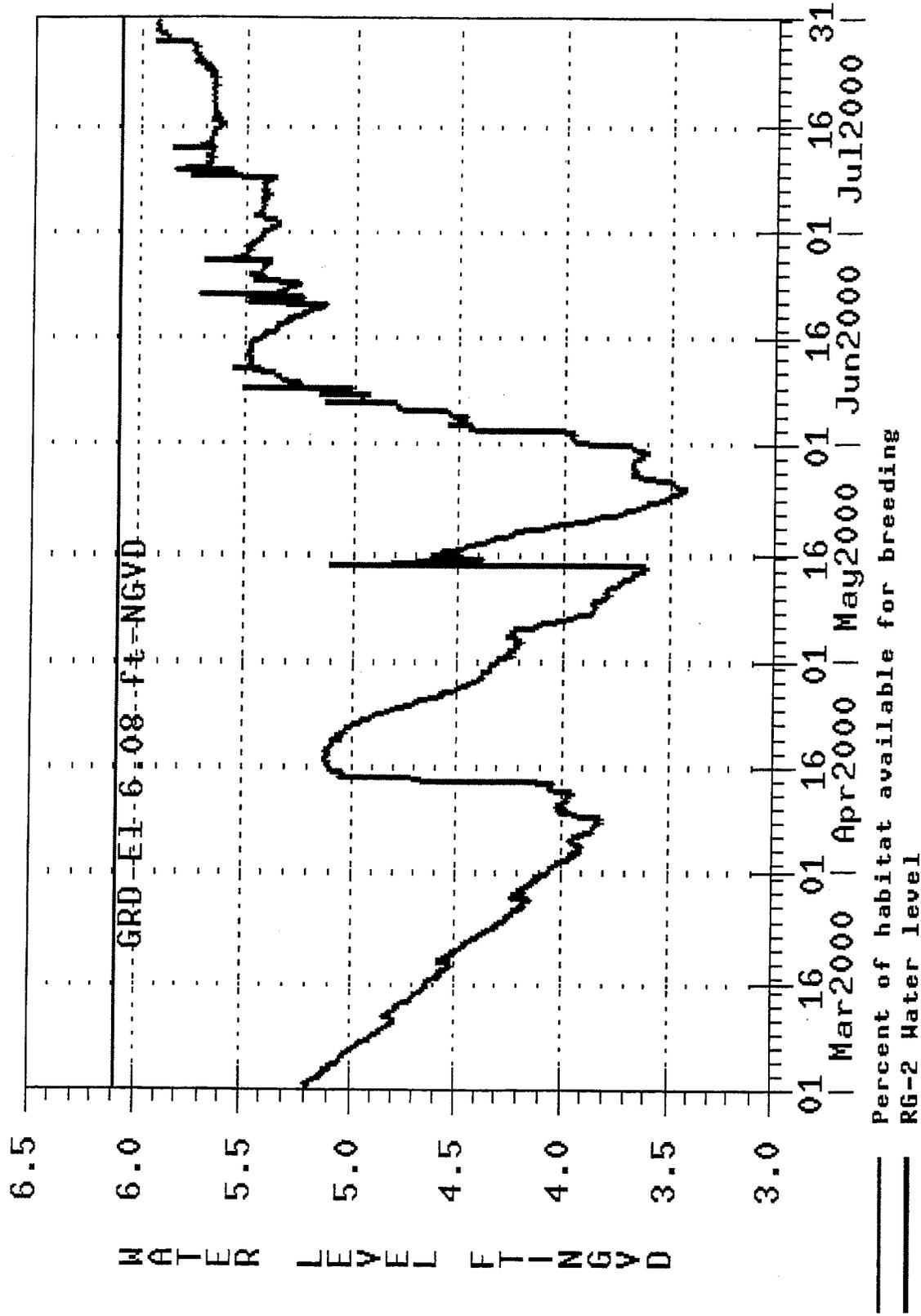


Figure 9. Eastern Marl Prairie Habitat, Subpopulation F.

2000 Nesting Season Water Levels

Sub-population A conditions represented by NPS gage NP-205

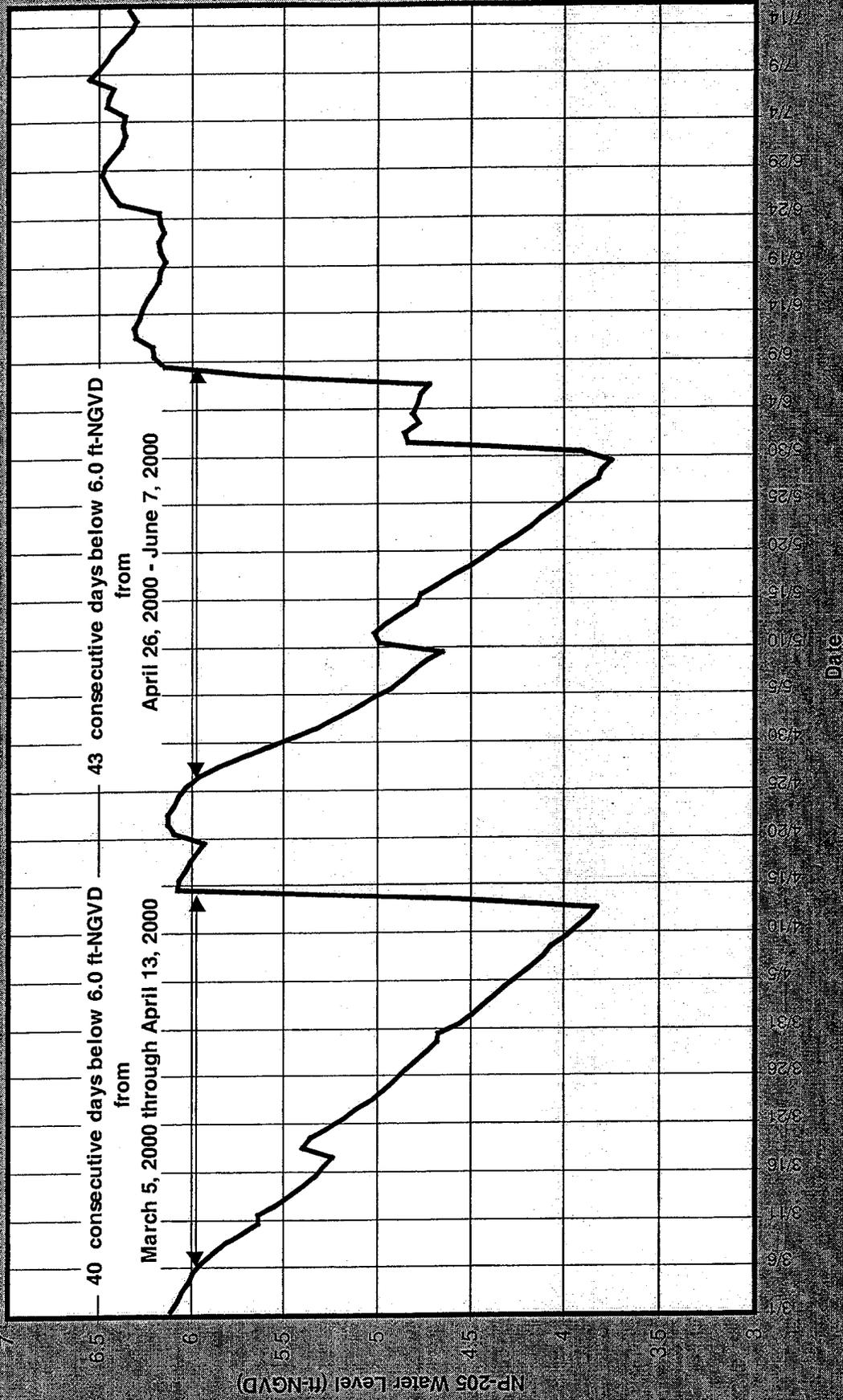


Figure 10: Sub-population A, water levels at the National Park Service gage, NP-205, during the 2000 nesting season.

Inghram Highway - Subpopulation B

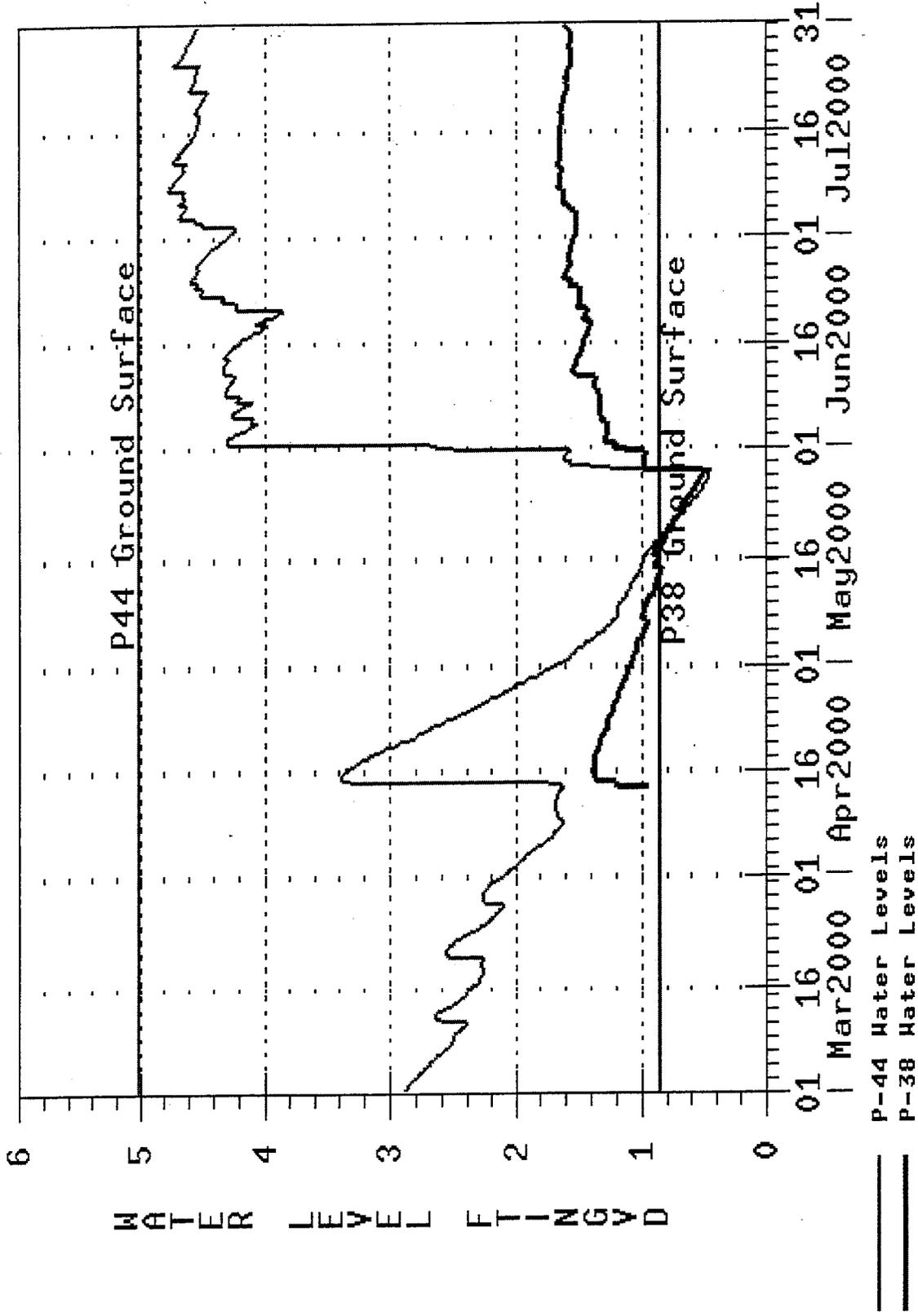


Figure 12. Water levels in Subpopulation B.

Eastern Marl Prairie Habitat, Subpopulation E

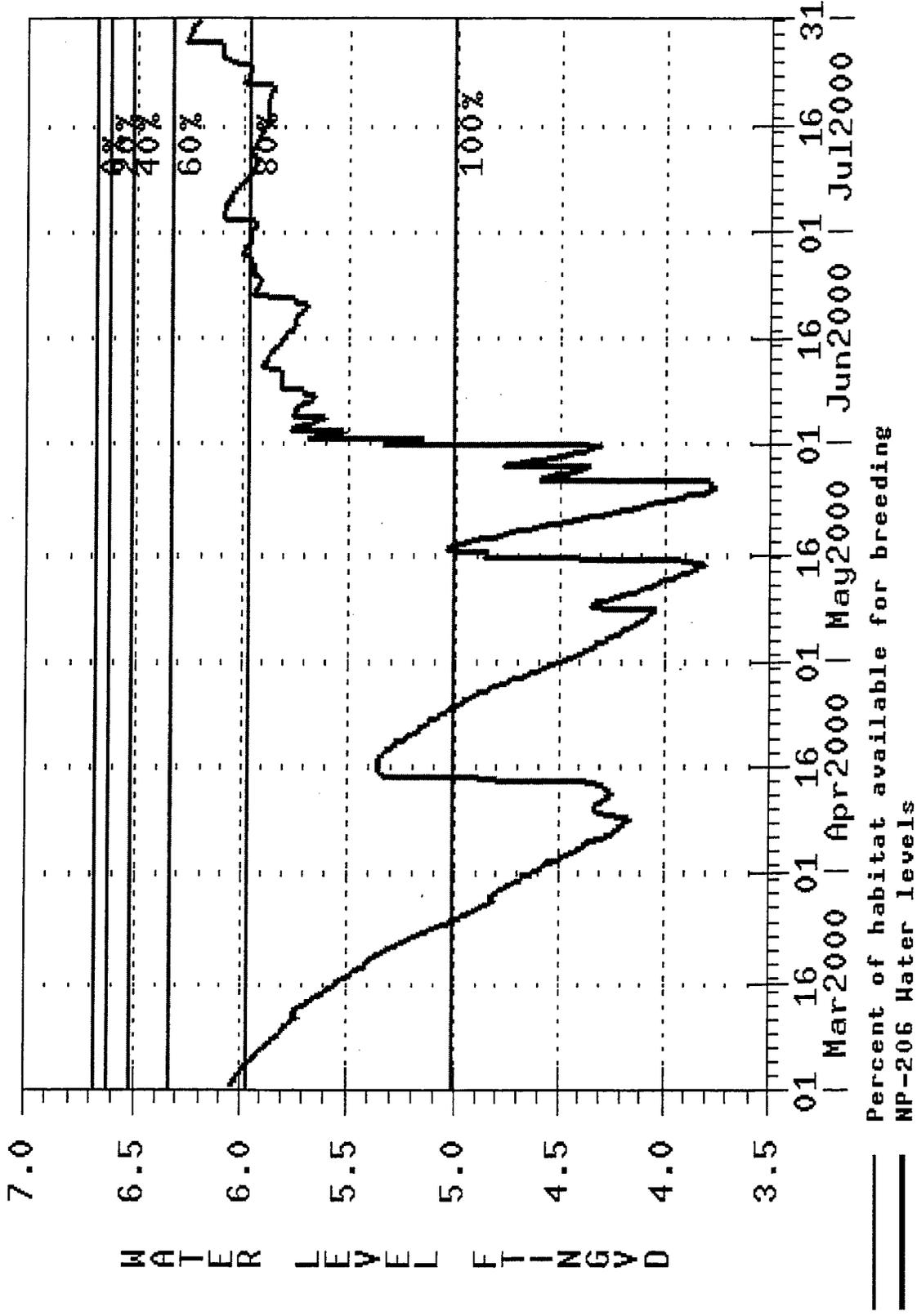


Figure 13. Eastern Marl Prairie Habitat, Subpopulation E.

Data are provisional and subject to revision

General Background Information:

The C&SF Project was first authorized by Congress in 1948 in PL 80-858 and modified in a number of subsequent Congressional Acts. Water Conservation Area No. 3, which is part of the C&SF Project, was contained in the original 1948 authorization. The Comprehensive Plan for the C&SF Project is contained in House Document 80-643. House Document 80-643 states, "The plan as whole and each of its major features are multiple-purpose in concept and design. Accordingly, each feature of the plan contributes to the realization of the primary benefits through flood protection, drainage, and the control of water....In brief, it is believed that this comprehensive water control plan and the national park plan are complimentary features of Federal activity necessary to restore and preserve the unique Everglades region." In House Document 80-643 the water conservation areas are described:

"The plan would create three interconnected reservoirs areas totaling about 1,500 square miles which would occupy portions of Dade, Broward, and Palm Beach Counties. These reservoirs would store the maximum-record rainfall on the conservation area plus the run-offs from the area north of West Palm Beach Canal, the Everglades agricultural area, and some flood discharge from Lake Okeechobee. Impoundment of these waters would prevent their flowing eastward and flooding the developed areas along the coastal ridge. Maintenance of water in the conservation area would provide water for use on the east-coast agricultural lands when needed, raise the groundwater table and improve water supply for the east-coast communities, ameliorate salt-water intrusion in the east-coast water supply well fields and streams, and benefit fish and wildlife in the Everglades... The part of the east coast protective levee which forms the eastern boundary of the conservation area is the major feature of protection of the east coast.... it appears that large parts of the Everglades should be held and protected as conservation areas which would be ideal for preservation of fish and wildlife."

The 1948 authorization covered the first phase of the project. In the 1954 Flood Control Act (PL 83-780) Congress acted to adopt the entire plan. In addition, Congress established that the Chief of Engineers had the discretionary authority to modify the plan as he deemed advisable. The 1954 Act stated:

"The authorization for the comprehensive plan for flood control and other purposes in central and southern Florida given by the Flood Control Act of June 30, 1948, as amended, is hereby modified and expanded to include the entire comprehensive plan of improvement as recommended by the

Chief of Engineers in House Document 643, Eightieth Congress, with such modifications thereof as the Congress may hereafter authorize, or, as in the discretion of the Chief of Engineers may be advisable."

In the Flood Control Act of 1968 (PL go-483) Congress authorized the Everglades National Park-South Dade Conveyance System in accordance with House Document go-369. House Document 90-369 stated that the District and Division Engineers "agree that the preservation of Everglades National Park is a project purpose and that available water should be provided on an equitable basis with other user". In 1970 Congress approved a minimum delivery schedule of waters to Everglades National Park from the C&SF Project in Public Law 91-282.

The Central and Southern Florida Project was designed and constructed by the U.S. Army Corps of Engineers. The local sponsor for this project is the South Florida Water Management District (**SFWMD**) . The Congressionally authorized project purposes for the C&SF Project include flood control, water supply, preservation of fish and wildlife, recreation, navigation, prevention of saltwater intrusion, preservation of Everglades National Park, and water supply to Everglades National Park. The Corps of Engineers operates and maintains project works on the St. Lucie Canal; Caloosahatchee River; Lake Okeechobee Levee and major spillways; and the main outlets for Water Conservation Areas No. 1, 2, and 3. The SFWMD operates the remainder of the project in accordance with operating criteria prescribed by the Secretary of the Army.

The C&SF Project involves the operation of a large, complex, multi-purpose project. Water control plans and manuals contain regulation schedules, rule curves, and operating instructions and are prepared for U.S. Army Corps of Engineers' water resource projects. Water control plans for multi-purpose projects must blend all the varied, and often conflicting, purposes; and be developed in concert with all basin interests. Compromise among conflicting purpose and objectives is a basic factor in multi-purpose water resources project design and operation. Rules to operate water resource systems are generally based on a trade-off among effects of various alternative possible decisions. Operating decisions have to be made in the context of uncertainty about future flows and rainfall.

Regulation schedules and operating criteria for the Water Conservation Areas are contained in the Water Control Plan for Water Conservation Areas-Everglades National Park and ENP-South Dade Conveyance System by the Jacksonville District dated October 1992. Regulation schedules contain instructions and guidance on how project spillways are to be operated. The regulation schedules vary from high stages in the late fall and winter to low stages at the beginning of the wet season. This seasonal range permits the storage of runoff during the wet season for use during the dry season. In addition, it serves to help maintain and preserve the vegetative regimen in

the WCA's, which is essential to fish and wildlife and the prevention of wind tides. Water levels in the Water Conservation Areas fluctuate above and below the regulation schedule depending upon hydrometeorologic conditions and project operations.

The three water conservation areas, located south and east of Everglades Agricultural Area (FAA) and west of the urbanized East Coast, comprise an area of about 1350 square miles and are shown on Attachment 1. The WCA's were constructed in the late 1950's and early 1960's as a part of the C&SF Project. The three WCA's make up a large segment of the original Everglades. Flow is generally slow across the WCA's due to flat slopes and relatively dense vegetative cover. This generally results in sloping pool conditions of water levels across the WCA's. An interior levee across the southern portion of WCA No. 2 subdivides it into WCA No. 2A and 2B. This levee reduces water losses due to seepage into the extremely pervious aquifer that underlies WCA No. 2B. Two interior levees across the southeastern portion of WCA No. 3 subdivide it into WCA No. 3A and 3B. These levees reduce water losses due to seepage into the extremely pervious aquifer that underlies WCA No. 3B.

The Water Conservation Areas (WCA) are regulated to provide flood control; water supply, for agricultural irrigation, municipalities and industry, and Everglades National Park; regional groundwater control, and prevention of saltwater intrusion; enhancement of fish and wildlife; and recreation. Another objective is the maintenance of marsh vegetation in the WCA's, which will provide a dampening effect on hurricane-induced wind tides. Levees 40, 36, 35(A), 35, 37, 33, 30, 31(N), and 31(W) form the east coast protection levee. The east coast protection levee prevents floodwaters, that historically flowed eastward from the Everglades, from flowing into the developed areas along the southeast coast of Florida.

11. The plan of regulation for Water Conservation Area No. 3 was presented in Part I, Supplement 33 - General Design Memorandum, Conservation Area No. 3 dated June 1960 by the Jacksonville District. This report recommended a regulation schedule that ranged from 9.5 feet to 10.5 feet. The schedule shown on was used since regulation of water levels began in 1963 in WCA No. 3A until 1984 when the Experimental Program of Water Deliveries to Everglades National Park began. WCA No. 3 was designed to store the runoff from the Standard Project Flood. This SPF hydrograph is shown on Plate 25 from the General Design Memorandum shown as Attachment 2. 12. In 1994 Congress in PL 98-181, and then in subsequent acts, have authorized the Corps of Engineers to modify the schedule of water deliveries to ENP and to conduct the Experimental Program of Water Deliveries to Everglades National Park. The Experimental Program has consisted of a series of iterative field tests for the purpose of collecting hydrologic and biologic data with the ultimate goal being the development of an optimum water delivery plan for ENP. In order to accomplish the goal of introducing water deliveries into Northeast Shark River Slough without

increasing the flood risk in the developed portion of the East Everglades certain restrictions were placed on the use of S-333 and modified operating criteria for L-31N Borrow Canal were implemented.

An Environmental assessment and a FONSI on the modified operating procedures for WCA No. 3A and S-333 associated with the Experimental Program was completed in June 1985. The regulation schedule for WCA No. 3 was revised as a part of the Experimental Program. In July 1985 the an agreement between SFWMD and the Plaintiffs in the Kendall et. al. V. Marsh et. al. was reached to permit the use of S-333 as a part of the Experimental Program. An **Environmental Assessment** and a FONSI on the Experimental Program was completed in June 1993 on a test to continue the water deliveries to Northeast Shark River Slough as described in the 1985 EA while adding a component to provide additional water deliveries to Taylor Slough. These actions have been coordinated with interested parties and public meetings were held.

Besides releases from S-11, the Water Conservation Area No. 3A receives inflow from Pumping Stations 8, 9, and 140; Structures 150, 190, G-155, G-204, G-205, and G-206. S-12A, B, C, and D are the main sources of outflow from Water Conservation Area No. 3A and it is through these structures that the Everglades National Park water deliveries are made. S-151 discharges into C-304 in WCA No. 3B for flood diversion and for the purpose of providing water supply to Miami area canals and the South Dade-ENP Conveyance System s-333 dscharges from WCA No. 3A for water supply to the ENP-South Dade Conveyance System. S-333 is being used to deliver water to ENP in accordance with the Experimental Program of Water Deliveries to Everglades National Park. Regulatory releases are made from S-343A & B and S-344 discharge from WCA No. 3A into the Big Cypress National Preserve through S-343A & B and S-344 when WCA No. 3A water levels are above schedule. WCA No. 3A is regulated by Structure 12; which consists of four spillways S-12A, S-12B, S-12C, and S-12D. The combined design capacity of the four spillways (S-12's) is 32,000 cubic feet per second under the SPF stages. The S-12's discharge into the western portion of Shark River Slough in Everglades National Park. Currently as a part of the Experimental Plan of Water Deliveries to ENP, the spillways are operated according to the regulation schedule is shown on Attachment 3 and operational guidelines shown on Attachment 4. The indicator gauge for regulation of WCA No. 3A consists of the average stage of gauges 3-3 (631, 3-4 (64), and 3-28 (65). In WCA No. 3B the indicator gauge is gauge 3B-2 (71). Ground elevations in WCA No. 3A generally slope downward from the northwest to southeast. Ground elevations in Shark River Slough in ENP generally slope from the northeast to the southwest to Whitewater Bay. Attachment 3 is a graph of water levels in WCA No. 3A for December 1995. This graph shows how the water levels slope downward from north to south across WCA No. 3A. The gates at the S-12's are wide open and there is virtually no difference in water levels between the upstream(north of US41) and downstream (south of US411 side. The water

levels measured by the S-12 tailwater gauges are just upstream from Everglades National Park.

ENP is located in South Florida in the southernmost portion of the historic Everglades. The historic Everglades was originally a broad, shallow wetland that flowed imperceptibly from Lake Okeechobee to the mangrove zone at the southern tip of Florida. In an effort to control flooding and better manage water in South Florida, a complex system of canals, levees, structures, pumps, and impoundments known as the Central and Southern Florida Flood Control Project (C&SF) was constructed. Congress authorized this project in 1948 and subsequent years.

Following construction of Water Conservation Areas (WCA) 3A and 3B and the southward extension of Levee 67 (L-67 Ext.) in the early 1960's, the natural flows to ENP, located in the southern portion of the project became subject to control by regulation schedule. Discharges were sporadic and based on competing needs to retain water for urban and agricultural use during the dry season, and to maintain flood control capacity during the wet season. As a result of severe impacts to ENP from droughts in the mid-1960's, Congress established a minimum water delivery schedule to protect ENP resources (PL 91-282, June 1970). This minimum delivery schedule remained intact throughout much of the 1970's.

The Flood Control Act of 1968 (PL 90-483) authorized the Everglades National Park-South Dade Conveyance System (ENP-SDCS). The act provided for modifications to the existing C&SF Project for the purposes of improving the supply and distribution of water supplies to ENP while meeting agricultural and urban water needs in south Dade County. The ENP-SDCS, which was completed in 1983, included modifications to the original levee and borrow canal L-31 (currently comprised of L-31N and L-31W) and construction of control structures S-331.

In March 1983, the ENP Superintendent issued a request, referred to as the Seven Point Plan, for actions to protect the Park. The Seven Point Plan was prompted primarily by ENP concerns for the ecological deterioration that occurred in the wake of heavy rainfall in 1982 and 1983 and subsequent regulatory releases triggered by the minimum deliveries schedule. The plan included the following components:

1. Fill in L-28 canal and remove substantial portions of the L-28 levee.
2. Fill in L-67 extension canal and remove the L-67 extension levee.
3. Restore Water Conservation Area 3B (WCA 3B) to the Everglades system.
4. Distribute WCA 3A water deliveries along the full length of Tamiami Trail between L-28 and L-30.

5. Establish a water quality monitoring program.
6. Defer implementation of any new drainage districts.
7. Field test a new schedule for delivery of water to the park.

The SFWMD and USACE subsequently made structural modifications to the L-28 and L-67 Extension canal and levee, and began a rainfall-based water delivery plan for the park. This Experimental Program of Water Deliveries to Everglades National Park (*PL 98-181, Section 1302: Supplemental Appropriations Act of 1984, 30 November 1984*) authorized the modification of PL 91-282 (Minimum Delivery Schedule) and allowed for a two-year experimental program of water deliveries to the park for the purpose of developing an improved schedule. The law also authorized the Secretary of the Army to acquire agricultural lands and construct necessary flood protection measures for the protection of homes affected by the modification of the delivery schedule.

In response to PL 98-181, the USACE completed the *General Plan for Implementation of an Improved Water Delivery Schedule to Everglades National Park, Florida* in January 1985, which was approved by the Secretary on February 28, 1985. This plan recommended (1) the preparation of a General Design Memorandum (GDM) and an Environmental Impact Statement (EIS) addressing modifications to improve water deliveries to ENP, and (2) extension of the two-year time limit specified in PL 98-181 based on a written agreement between USACE, ENP, and SFWMD. The experimental program was eventually extended to January 1, 1989, and later to January 1, 1992 under PL 99-190 and PL 100-676, respectively.

Modified Water Deliveries to Everglades National Park

AUTHORITY: Everglades Expansion Act of 1989, P.L. 101-229

DESCRIPTION: The authorized plan of improvements consists of structural modifications and additions to the existing Central and Southern Florida (C&SF) Project required to enable water deliveries for the restoration of more natural hydrologic conditions in Everglades National Park. These improvements include: (1) Structures S-349A, B, and C in the L-67A borrow canal to prevent over-drainage of the northern portion of Water Conservation Area 3A(WCA 3A), (2) Structures S-345A, B&C through L-67A to enable the discharge of water from WCA 3A to WCA 3B, (3) Structures S-355A&B in L-29 to enable the release of water from WCA 3B to Everglades National Park (ENP), (4) modifications to existing S-334, and (5) raising Highway US41 (Tamiami Trail) where it crosses L-31N. Together, these improvements will enable the re-establishment of the historic Shark River Slough flow-way from WCA 3A through WCA 3B to ENP.

In order to prevent this redistribution of water from adversely impacting existing development, several mitigation features are included in the plan. One Miccosukee Indian camp (Tigertail camp) will be raised above the anticipated flood stages. The East Everglades residential area also referred to as the 8.5

square mile area (8.5 SMA) will be provided with perimeter levees and a seepage collector canal. New pump station S-357 will remove water from the seepage collector canal to prevent increased water levels inside the 8.5 SMA after project implementation (i.e. flood mitigation). Another new pump station, S-356, will be constructed adjacent to existing S-334 near the intersection of Tamiami Trail (US41) and the L-31N borrow canal. It will remove additional seepage from ENP into the L-31N borrow canal and thereby prevent increased flood damages east of L-31N or in the downstream C-111 basin. Existing roads and borrow canals within the ENP expansion area that would act as hydrologic barriers will be degraded to natural ground.

MWD PROJECT DESIGN:

Since completion of the 1992 GDM for the Modified Water Deliveries Project, several issues have occurred that warrants a review of the original project features. These issues have resulted in the identification of three focus areas of the original project scope:

(1) Conveyance between Water Conservation Area 3A and Water Conservation Area 3B. Modeling is currently being performed on the L67A-C components as well as the seepage control provided by S-356. A link to the iteration 1 modeling results is below.

(2) Conveyance between Water Conservation Area 3B and Northeast Shark River Slough (Tamiami Trail). Modifications to the Tamiami Trail will be necessary to convey the amount of flow from WCA3B to North East Shark River Slough. A Post Authorization Change Report and supplemental NEPA is underway. This effort is being coordinated with FLDOT.

(3) 8.5 Square Mile Area Flood Mitigation. On 23 June 1999, the South Florida Water Management District, the non-Federal sponsor, requested the Corps to evaluate a full array of locally preferred options for the 8.5 SMA. A Post Authorization Change Report and supplemental NEPA is underway.

C-111

AUTHORIZATION: FCA 1962 & WRDA 1996

The project is located in the extreme southeastern portion of Florida, adjacent to Everglades National Park (ENP). Canal 111 (C-111) is a part of the South Dade County portion of the Central and Southern Florida (C&SF) project authorized in 1962 to provide flood control to agricultural lands in south Dade County and to discharge flood waters to Taylor Slough in ENP. In 1968, modifications were authorized to provide water supply to ENP and South Dade County. Environmental concerns caused construction to be discontinued before all authorized project features were completed.

C-111 separates Everglades National Park from highly productive subtropical agricultural lands to the east. Because of the extreme permeability of the Biscayne Aquifer in the Dade County area, the project canals have a direct impact on water levels in adjacent areas. The C-111 General Reevaluation Report (GRR) with integrated Environmental Impact Statement (EIS) was completed and approved in 1994. It recommended project modifications designed to maintain existing flood protection and other C&SF project purposes in developed areas east of C-111 while restoring natural hydrologic conditions in the Taylor Slough and eastern panhandle areas of ENP. Increased freshwater flows in these areas will also help conditions in Florida Bay, a part of ENP.

EXPERIMENTAL PROGRAM

The Experimental Program provides a mechanism to field-test water delivery methods to assess potential impacts on the park and other parts of the Everglades ecosystem, as well as on the authorized C&SF project functions of flood control and water supply. It consists of a series of interactive tests, each building on the results of the previous ones. These tests are aimed at furthering the goal of restoring and maintaining to the extent practicable though water management practices the natural abundance, diversity, and ecological integrity of the native plants and animals within the park, including Florida Bay.

The Jacksonville District of the U.S. Army Corps of Engineers initiated a series of tests of modified water deliveries to Everglades National Park. The first five tests were iterations in the Experimental Program and involved water deliveries into Shark River Slough. Test 6, referred to as the Taylor Slough Iteration (or Taylor Slough Demonstration Project), involved operating practices for the existing structural features of the C&SF project that affect water deliveries to, and hydrologic conditions in, Shark River Slough and Taylor Slough, within the expanded boundaries of the Park.

The C-111 General Reevaluation Report, approved in July 1994, recommends the development of an operational plan for Shark River Slough and Taylor Slough as part of the Experimental Program.

At this stage in the program, ecological restoration planning is guided by the objective of hydrological restoration because hydrology is the driving ecological force in the park, and a hydrologic model that simulated historical water flow is available for use in plan evaluation. Hydrologic monitoring of each test leads to model improvement and insight into future management practices that would lead to more natural hydrology in the park. As ecological models are developed they will become increasingly more important as a tool in restoration.

For more information on Modified Water Deliveries, C-111 and the Experimental Program of Water Deliveries, see the Jacksonville District's Internet site at: <http://www.saj.usace.army.mil/dp/MWDC111.htm>

Eight and one-half (8.5) Square Mile Area

PL 101-229, 13 December 1989 (Section 104). Section 104(a) of the Everglades National Park Protection and Expansion Act authorized the Secretary of the Army to modify the Central and Southern Florida (C&SF) Project to improve water deliveries to ENP and to take steps to restore its natural hydrological conditions.

Section 104(b) – (h) also authorized and directed the Secretary to construct a flood mitigation system for the residential area in the East Everglades and adjacent agricultural areas, if the Secretary determines those areas will be adversely affected by operations of the project. To protect agricultural areas, the Secretary must find that there is a substantial reduction in the area's present economic utility that is attributable solely to the project modification or the residential flood mitigation system. The Secretary was directed to review the operation of the modified project within 18 months, and periodically thereafter, to determine whether agricultural areas are being adversely affected and to protect these areas if necessary. However, any preventive measure shall be implemented in a manner that presents the least prospect of harm to the natural resources of ENP. The Secretary was also directed to coordinate the construction program with the Secretary of the Interior to permit the Park's expansion (land acquisition) program to proceed concurrently.

The project area encompasses the 8.5 Square Mile Area (8.5 SMA). The 8.5 SMA, also known as the East Everglades Agricultural and Residential Area, is located about 20 miles southwest of Miami and about 10 miles north of Homestead, in the East Everglades area (Figure 1). The 8.5 SMA is bounded on the east the L-31N flood protection levee, on the west by the ENP expansion area, on the north by SW 104th Street, and on the south by SW 168th Street (Richmond Drive). US 41 (Tamiami Trail) is located about 6.6 miles to the north. The 8.5 SMA is situated immediately east and south of Northeast Shark River Slough (NESRS) and north of the Taylor Slough headwaters.

The 8.5 SMA, for present purposes, encompasses approximately 10 square miles. The area in excess of 8.5 square miles results from the inclusion of lands along the north and west periphery of the 8.5 SMA which were acquired by the USACE in anticipation of constructing the proposed levee and canal system authorized in the 1992 Modified Water Deliveries GDM plan (USACE 1992).

The 8.5 SMA is prone to frequent flooding due to its location along the eastern periphery of the historical Everglades. Because this area is west of the protective levee system of the C&SF Project, it is not provided authorized flood protection. Although the 8.5 SMA was initially settled during the 1940s, much of the residential and agricultural development occurred during the 1970s, made possible by reduced groundwater levels resulting from the southward extension of the L-31N Canal and a protracted dry spell. Since that decade, floods from

heavy rains and periodic high ground water have caused damage to property and crop loss.

The Everglades National Park Protection and Expansion Act of 1989 (PL 101-229 Section 104) authorized the USACE to construct modifications to the C&SF Project. The specific directive relative to the 8.5 SMA was to build a flood mitigation project for the residential areas in the East Everglades that were going to be adversely affected by the increased water stages and durations due to the MWD Project. Alternatives to restore natural hydrologic conditions in the Park were evaluated in a General Design Memorandum (GDM) and Environmental Impact Statement on Modified Water Deliveries (MWD) to Everglades National Park, which was published in 1992. Specifically, the GDM addressed the NESRS portion of water deliveries of the C&SF Project.

The proposed action presented in the GDM included a flood mitigation system for the 8.5 SMA. Implementation of the recommendations for the water deliveries in the GDM would result in an increase in water flows through NESRS. These flows were expected to raise ground water levels and increase the areal extent and frequency of flooding in the 8.5 SMA. The flood mitigation system would prevent this area from being subjected to increased flood risk from higher stages in NESRS as a result of the MWD project. As originally designed, the flood mitigation component of the MWD project consisted of a levee and berm system with a seepage canal to one side. The canal would convey seepage water north and east to a proposed pump station (S-357) at Canal L-31N at the northeast corner of the 8.5 SMA. S-357 would pump the water north to another proposed structure (S-356, not a part of this project) at the junction of Canal L-31N with Canal L-29 adjacent to US 41. S-356 would then pump the water west for eventual discharge back into NESRS via two additional proposed structures (S-355A and S-355B). During the process of obtaining a Water Quality Certification permit, the Florida Department of Environmental Protection (FDEP) requested that the seepage canal be placed between the outer (larger) levee and the inner (smaller) levee. The inner levee could then function to prevent stormwater runoff from the 8.5 SMA from entering the seepage canal and adversely affecting water quality.

In June 1992, the MWD GDM was approved by the Chief of the Engineering Division, Directorate of Civil Works. This approval fulfilled the requirements of Section 104 of the 1989 ENP Protection and Expansion Act, which directed the Secretary of the Army to select the plan that accomplished the goals of MWD to the maximum extent practicable. A Record of Decision was executed by the USACE in May 1993.

Following project authorization in 1992, there have been several reevaluations of the 8.5 SMA flood mitigation component. Significant improvements to hydrologic modeling capabilities have enhanced our understanding of the restoration requirements of the Everglades ecosystem. The need to integrate the MWD

project with the C-111 Project, which has been designed and partially implemented, became evident. The SFWMD, ENP, and others suggested other potential engineering designs that would meet the needs of the 8.5 SMA community while ensuring environmental restoration of NESRS. Consequently, the SFWMD, ENP, and others have suggested the flood mitigation system approved by the Corps in 1992 may no longer represent the best alternative for attaining full restoration of NESRS while simultaneously meeting the need for a flood mitigation system in the 8.5 SMA. The need to reevaluate this plan also can be attributed to an expanded scientific understanding of the ecosystem function and structure that was not available during the preparation of the 1992 GDM.

The SFWMD, as the local sponsor, reviewed the subsequent analysis of the cost of construction, operation, and maintenance of the authorized flood mitigation components, along with new information and technologies. This evaluation prompted the SFWMD Governing Board to request that the USACE evaluate additional alternatives with respect to the 8.5 SMA. Various alternatives were suggested for consideration, which would ensure the natural hydrology of the NESRS is restored while meeting the needs of the residents of the 8.5 SMA.

In December 2000, the Corps signed a Record of Decision realigning the structural features to protect the 8.5 SMA from the increased water levels caused by the MWD Project and adopting a partial-buy-out of property as well.

See the Jacksonville District web site at <http://www.saj.usace.army.mil/dp/mwdc111-1.htm> for more information.